



5TH GRADE

**ARROW OF
LIGHT SCOUT
HANDBOOK**

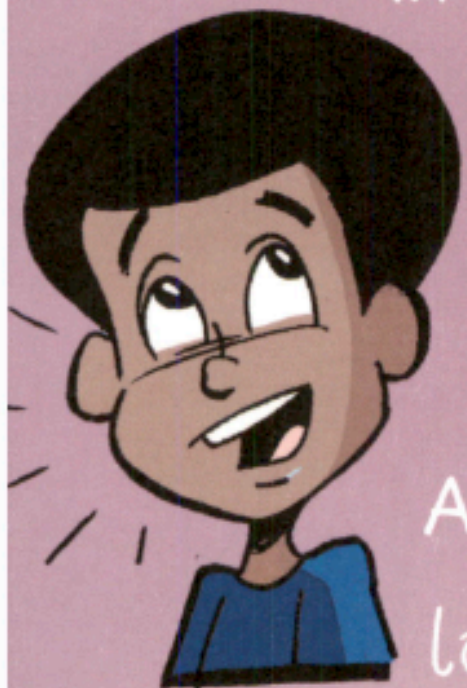
ARROW OF LIGHT

THIS BOOK BELONGS TO



BOY SCOUTS OF AMERICA

Q: What do you get
when you cross
a giraffe
and an
Arrow of
Light
Scout?



A: Someone
everybody
looks up to.



HA!
HA!

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WELCOME TO THE ARROW OF LIGHT ADVENTURE TRAIL

The purpose of the Arrow of Light Adventure trail is to prepare you to join a Scouts BSA troop. As you're having fun, you'll complete a group of activities called **Adventures**. After completing each Adventure, you'll receive an Adventure pin that is worn on special ribbons called the Adventure Colors that attach to the right sleeve of your Cub Scout uniform shirt. You may complete as many Adventures as you like, but to earn the Arrow of Light badge of rank, you must complete all six required Adventures and at least two elective Adventures. When you complete the Arrow of Light and you are at least 10 years old, you can join a Scouts BSA troop and start on your Scouts BSA journey.



CUB SCOUT PARENT GUIDE

(This section is for your parent or legal guardian.)

Your child will get the most out of their Arrow of Light experience when you take an active part. The Arrow of Light is designed to prepare your child to join a Scouts BSA troop. This means you will interact with both the Cub Scouts and Scouts BSA programs. Cub Scouting is led by volunteer parents just like you. They come together to plan Cub Scout activities, meetings, and special events. For many, this is a great way to get to know the other families in the community. Chances are, you have a lot in common. Your children may attend the same school and may even have the same teachers. You may shop at the same grocery store, play at the same park, or even live within walking distance from each other.



GETTING STARTED AS A CUB SCOUT PARENT

1. ***Find out who your contact person is for Cub Scouting.*** The contact person may have a specific title like **den leader** or **Cubmaster**, or they just may be an active parent. This is the person whom you can contact to ask questions as you are getting started.
2. ***Confirm the details of the den meetings,*** pack meetings, and other activities. Add them to your personal and family calendars.
3. ***Plug into the communication channel*** that your pack and your den use. Each Cub Scout pack has different ways they communicate with parents; some have multiple ways. It may be as simple as a text message group, a communications app, or a social media page. Make sure that the contact information you give to the Cub Scout pack is accurate.
4. ***Download the free Scouting app*** from the Apple App Store® and Google Play™ store. The Scouting app gives parents an easy way to stay connected with their Cub Scout's progress and official records.
5. ***Read the remainder of this chapter,*** Cub Scout Parent Guide and the Essential Cub Scout Family Activities chapter.

WHAT IS THE ARROW OF LIGHT?

Cub Scouting is BSA's program for youth in kindergarten through fifth grade. BSA's mission is to prepare young people to make ethical and moral choices over their lifetimes by instilling in them the values of the Scout Oath and the Scout Law. This is accomplished through Scouting's aims — what we want to teach — and methods — how we teach.

The four aims of Scouting are: character, leadership, personal fitness, and citizenship.

The seven methods of Cub Scouting are: living the ideals, belonging to a den, advancement, family involvement, activities, serving the neighborhood, and the uniform.

Your child wanted to join and will stay in Scouting because it's fun. Scouting has been described as "a game with a purpose." The activities in Scouting serve a purpose deeper than just having fun, though. Activities are designed to meet the mission of the BSA.

As an Arrow of Light Scout, your child will be transitioning into Scouts BSA. Scouts BSA has the same aims as Cub Scouting, the same Scout Oath, and the same Scout Law. The methods, or how the program is delivered, are different.

The eight methods of Scouts BSA are: the ideals, patrols, outdoor programs, advancement, adult association, personal growth, leadership development, and the uniform.

For over 100 years, Scouts BSA has helped create generations of leaders and outstanding citizens by allowing boys and girls to explore their interests, serve their communities, and discover their talents through youth-led activities like hiking, camping, and volunteering.



PREPARING FOR SCOUTS BSA

Scouts BSA is led by the youth in the troop. Adult leaders provide supervision, guidance, and coaching. When you visit a Scouts BSA troop, you will find that it's different from Cub Scouting. Get to know the adult leaders of the Scouts BSA troop, and don't be afraid to ask questions. You will find that being a parent of a Scout in Scouts BSA is different. Just as your child is growing up and seeking greater independence at home, they are also expected to do things on their own in Scouts BSA.

At first it may be hard to watch your child struggle when they are trying to figure things out. Adult leaders in Scouts BSA are trained in specific methods that are safe and allow for your child to become resilient, to develop their character, and to problem-solve. They cannot solve problems if they are always presented with the solutions.

HOW SCOUTING IS ORGANIZED

Later in this book, we describe how Cub Scouting is organized in a way your Arrow of Light Scout can best understand. As an adult, we want you to have a deeper understanding of the BSA.

Think of the BSA as an upside-down pyramid. At the base of the pyramid — the smallest part — is the national organization of the BSA. It is designed to support the sections above it. The **National Council** of the BSA is led by a volunteer group called the National Executive Committee along with the chief executive officer, or the **Chief Scout Executive**. Additional volunteers and staff members make up the National Council, which includes departments such as Scout shops, program development, information technology, and safety.



The next part of the pyramid is your local council, a geographic territory that the National Council has granted permission to deliver Scouting programs within that area. The local council is also led by a volunteer group and a council executive committee, along with a chief executive officer called the **Scout executive**.

On the left sleeve of the Cub Scout uniform is a patch that identifies your local council.

Some councils create geographic areas called **districts**. Districts are designed to provide service and support to local Scouting programs in the designated area. A district committee made up of volunteers does this work and is often supported by a staff member called a **district executive**.



At the top of the pyramid — the largest part — are the local Scouting programs. Local councils partner with community organizations, called chartered organizations, to deliver Scouting

programs. Chartered organizations have an annual agreement with the local council to sponsor one or more Scouting programs.

If a chartered organization wants to have a Cub Scout program, it organizes what is called a Cub Scout **pack**. Packs are organized to best serve the families to whom the chartered organization is looking to deliver the program. Often, this is a school, neighborhood, or community. Your Cub Scout pack is identified with a number. On the Cub Scout uniform, there is a place to put your pack number on the left sleeve under the council patch.

The **chartered organization representative** is just that, the person designated to represent the organization that has an agreement with the local council to deliver the Scouting program. The chartered organization approves all those who volunteer to be leaders in the pack, usually parents of Cub Scouts. Each pack has a pack committee made up of leaders and parents led by the **pack committee chair**. This volunteer, usually a parent, organizes the adults to plan and deliver the Cub Scouting program.

The **Cubmaster** is a volunteer, usually a parent, who coordinates the delivery of the program to the youth of all ages at the pack level, with the help of **assistant Cubmaster(s)** and other parents. In a Scouts BSA troop, the **Scoutmaster** is a volunteer, usually a parent, who works with the troop's youth leadership to deliver the program.



A Cub Scout pack is made up of small groups called **dens** though Arrow of Light Scouts form small groups called **Arrow of Light patrols** to prepare them for Scouts BSA. How dens are formed is up to the pack. Packs ultimately form dens and patrols in a way that best serves the families in the pack. While dens may be co-ed, Arrow of Light patrols are single-gender to prepare

Arrow of Light Scouts to join the single-gender programs of Scouts BSA.

Dens and Arrow of Light patrols are led by a volunteer **den leader** and **assistant den leader**, usually a parent. The den leader coordinates meetings and activities centered around Cub Scout **Adventures**. Adventures are made up of a group of activities. When the required activities for each Adventure are completed, the Cub Scout receives an Adventure pin that attaches to a group of ribbons called the **Adventure Colors**, worn on the uniform.

A Scouts BSA troop creates small groups called **patrols**. How patrols are formed is up to the youth in the troop. A troop may form a patrol of all new Scouts, or they may place new Scouts into existing patrols. Patrols are led by a youth who is elected by the other members of the patrol; this position is called the **patrol leader**. How patrol leaders are elected and how often elections are conducted is determined by the youth in the troop.

Advancement refers to the progress your Cub Scout is making toward their badge of rank. Cub Scouts work only on the badge of rank associated with their grade level. For fifth grade, this is the **Arrow of Light** badge of rank. Your Scout earns their Arrow of Light badge of rank by completing the six required Adventures and two elective Adventures. Scouts may not work on a badge of rank for an earlier grade level.

In Scouts BSA, advancement no longer progresses by grade. Instead, each Scout works at their own pace with support from youth leaders and adult volunteers. Advancement in Scouts BSA is progressive, meaning your Scout must earn ranks in the proper order, each building on what was learned before. In Scouts BSA, parents may not sign off or approve requirements.

Your Arrow of Light Scout may not work on any requirements for Scouts BSA, the Scout badge of rank, or merit badges until they have joined a Scouts BSA troop.

The **crossover ceremony** is a special ceremony the Cub Scout pack plans with the Scouts BSA troops that the Arrow of Light Scouts are joining. The program is designed for this to happen in January, February, or March. This time period allows for you and your child to become familiar with the leadership and membership of the Scouts BSA troop and to fully participate in preparing for Scouts BSA summer camp.

Scouts BSA summer camp is a weeklong camping experience conducted by a local BSA council. Scouts BSA troops often plan what summer camp they are attending a year in advance. The camp your Scouts BSA troop decides to attend may be local or in another state. Payments are often required for each Scout to attend. Troops may provide fundraising opportunities for Scouts. **As soon as possible, ask about your Scouts BSA troop's plan for summer camp and what you can do to prepare physically and financially.**

For an adult to attend a **Scouts BSA camping** activity, they are required to register in a fully-paid position as a volunteer with the Scouts BSA troop and complete Youth Protection training. The purpose of Scouts BSA camping is different from Cub Scout camping. Scouts BSA camping is focused on youth developing their skills and leadership. This is done using the **patrol method**. In addition to completing Youth Protection training, adults on Scouts BSA campouts need to be familiar with the patrol method and understand their role during the campout. While registered volunteers are often parents, their role in Scouts BSA is to provide supervision and guidance to the entire troop's youth. Adults sleep in separate tents than the youth, who set up their campsites by patrols.

ESSENTIAL CUB SCOUT FAMILY ACTIVITIES

The Cub Scout program is designed for you to share adventures together. Be active, have fun, and enjoy the moments you have together. As an adult, you will also make new friends and have opportunities to try new things.

Cub Scouting is a holistic program; the positive impact works best when incorporated into your home. One way to do this is to be familiar with the Scout Oath and the Scout Law and look for ways to recognize your Cub Scout when they are following these values.



ADVENTURE REQUIREMENTS TO DO AT HOME

Most Adventure requirements will be completed with your Arrow of Light patrol or pack, but the following requirements are designed to be done at home. Let your den leader know when you have completed them with your Scout.

BOBCAT

Requirement 7 — At home, with your parent or legal guardian, do the activities in the booklet "How to Protect Your Children from Child Abuse: A Parent's Guide."

PERSONAL FITNESS

Requirement 4 — Review your BSA Annual Health and Medical Record with your parent or legal guardian. Discuss your ability to participate in pack and patrol activities.

DUTY TO GOD

Your den leader may ask that you complete all requirements for this Adventure at home. See the requirements on page 133.

THE ARROW OF LIGHT

The Arrow of Light is a symbol that shows a Cub Scout's willingness and preparedness to join a Scouts BSA troop and a commitment to live by the Scout Oath and the Scout Law. The arrow on the Arrow of Light badge of rank represents being true, an arrow that is straight and flies where it is aimed. A Scout aims to live by the Scout Oath and the Scout Law and stays true to



them. The seven rays from the arrow represent the seven days of the week and are a reminder that a Scout lives by the Scout Oath and the Scout Law all the time, not just during Scout meetings. When a Scout is true and lives by the Scout Oath and the Scout Law, they are a light of hope and inspiration to others.



When you join a Scouts BSA troop, you'll continue to wear the Arrow of Light as a symbol of your commitment to living by the Scout Oath and the Scout Law every day. If you continue as an adult leader in Scouting, you may wear the Arrow of Light as a square knot with a yellow border with one red string and one green string to form the knot.

YOUR CUB SCOUT PACK

You and your family are part of a Cub Scout pack. A pack is made up of several families that are part of Cub Scouting in your community. A pack includes Cub Scouts who are in kindergarten through fifth grade. Packs will get together for activities, meetings, and outings. The adult leader of the pack is called the **Cubmaster**. To make Cub Scouting more fun, packs form small groups called dens.



YOUR ARROW OF LIGHT PATROL

To prepare you for Scouts BSA, instead of forming a den like the other Cub Scouts in your pack, you'll form a patrol. Your patrol must be a single-gender group to prepare you for joining a Scouts BSA troop.



Your patrol is your group where you make new friends and earn Adventures as you work toward earning your Arrow of Light badge of rank. Each Arrow of Light patrol is a little different. In the Bobcat Adventure you will learn more about patrols. Most of your activities will be with your patrol, and you'll also start to know a local Scouts BSA troop. The adult leader of the Arrow of Light patrol is called the **den leader**.

YOUR SCOUTS BSA TROOP

When you join Scouts BSA, you will become part of a Scouts BSA troop. A troop is made up of Scouts in your community who are as young as 10 and under 18 years old. The troop will plan and conduct campouts, activities, and meetings. Patrols are formed to give youth leadership opportunities and experience. The lead adult volunteer, selected to guide and advise the troop's youth leadership, is called the **Scoutmaster** and is assisted by other adult volunteers called **assistant Scoutmasters**. The youth leader of a troop is called the **senior patrol leader**. A troop forms small groups called patrols to make planning and conducting Scouting activities easier and to give you opportunities to practice leadership.



YOUR SCOUTS BSA PATROL

A patrol is a small team of normally six to eight Scouts who learn skills together, share responsibilities, and take on leadership roles. A Scouts BSA troop is made up of several patrols. Each patrol elects a member to serve as their patrol leader. The patrol leader represents the patrol at the patrol leader's council, where they and the senior patrol leader meet regularly to plan campouts, meetings, and other activities with the guidance of the adult Scoutmaster and assistant Scoutmasters.



YOUR ARROW OF LIGHT AND SCOUTS BSA SCOUTING ADULT LEADERS

You will see adults in Cub Scouting and Scouts BSA; some you'll be able to recognize right away because they are wearing a uniform. Other adults may be part of the Cub Scout pack or Scouts BSA troop but do not wear a uniform. As a Scout, always be respectful to adults in your Cub Scout pack and Scouts BSA troop.

At no time is any adult, other than your parent or legal guardian, to be alone with you.



YOUR ARROW OF LIGHT AND SCOUTS BSA UNIFORM

Wearing your uniform shows everyone that you're a Scout. Think of it as being part of one of the largest teams in America. Wear your uniform to pack meetings, patrol meetings, and special activities when you're with other Scouts. There are times when you're going to get dirty in Scouts; for those times, it's OK to wear a Scout T-shirt.

To prepare you for Scouts BSA, the Arrow of Light uniform includes the tan Scouts BSA shirt, green Scout bottoms (shorts, pants, or skort), a green Scout belt, and green Scout socks.

There is no Arrow of Light hat or neckerchief; instead, your Arrow of Light patrol will decide if you

want to have a hat and/or a neckerchief as part of your uniform.

As an Arrow of Light Scout, you also get to wear Adventure Colors, a group of yellow, green, and red ribbons attached to a metal clasp. As you earn your Arrow of Light Adventure pins, you'll attach them to the Adventure Colors. There is no order or specific color as to where you place the Adventure pins. The Adventures Colors go on your right sleeve.





The pictures below show you where to put badges of rank and patches on your tan Scouts BSA shirt. You might receive a patch for attending a special event like a campout or for selling popcorn. These are examples of "temporary insignia" and should be worn centered on the right pocket. Sometimes these patches come with a button loop so you can hang your patch from your pocket button.



THE ARROW OF LIGHT ADVENTURE TRAIL

The Cub Scout activities that you do with your patrol, pack, or family are called Adventures. Each Adventure has a number of things you do to complete that Adventure, called requirements. You'll have fun completing the requirements with the help of your patrol, pack, and family.

When you complete a requirement for an Adventure, have your den leader confirm that you did your best by initialing the requirement in your handbook like in the sample below.

REQUIREMENTS

1. Get to know the members of your den.

Approved by

JGP

When you complete an Adventure, you'll receive a special pin to place on your Adventure Colors. It's fun to earn as many Adventures as you can.

Most of the Adventures you do will be with your patrol. Your Cub Scout pack may also plan some activities that will help you earn an Adventure. You can complete requirements for Adventures at home with your family, but your den leader approves the completion of the requirement(s).

If you complete an Adventure, or a requirement for an Adventure outside of your patrol meeting, inform your den leader. Your den leader must approve all Adventure requirements, after which you'll be recognized for earning them.

To earn your Arrow of Light badge of rank, you must complete the six required Adventures and at least two elective Adventures.

that appear in this book. There are 16 elective Adventures to choose from.

Once you and your patrol complete your Arrow of Light badge of rank, your pack, with the assistance of the Scouts BSA troop you join, should conduct a crossover ceremony for you and your fellow Arrow of Light Scouts. This special event will highlight your experiences in Cub Scouting, recognize your accomplishments, and celebrate you joining a Scouts BSA troop.

REQUIRED ADVENTURES

Every Cub Scout Adventure Trail starts with the required Bobcat Adventure. All Arrow of Light Scouts earn the Bobcat Adventure.

Must complete each of the six required Adventures



Bobcat

(Character & Leadership)



Outdoor Adventure

(Outdoors)



Personal Fitness

(Personal Fitness)



Citizenship

(Citizenship)



First Aid

(Personal Safety Awareness)



Duty to God

(Family & Reverence)

ELECTIVE ADVENTURES

There are 16 Arrow of Light elective Adventures.
You can earn as many electives as you want, but
you do need at least two in addition to the six required
Adventures to earn your Arrow of Light badge of rank.

Must complete at least two elective Adventures



Champions
for Nature



Cycling



Engineer



Estimations



Fishing



High Tech
Outdoors



Into the Wild



Into the
Woods



Knife Safety



Paddle Craft



Race Time



Summertime
Fun



Swimming



Archery*



BBs*



Slingshot*

Special Elective Adventures

* These Arrow of Light elective Adventures can be earned only at an event sponsored by the local council or district.

THE BUDDY SYSTEM

The buddy system is when two Cub Scouts work together, share, and keep each other safe. Your den leader decides how buddies are paired. If there is an odd number of Cub Scouts, you can have a buddy group of no more than three.

Having a buddy is especially important when you are doing an activity outdoors, particularly near or on the water.

When you have a buddy, you are not to let your buddy out of your sight. As buddies you are friends, so remember the points of the Scout Law to be friendly, courteous, and kind to each other. You keep each other safe by following any rules or instructions for the activity.



THE SCOUT BASIC ESSENTIALS

The Scout Basic Essentials can make every outdoor adventure better. In an emergency, they can help you get out of a jam.

POCKETKNIFE

As an Arrow of Light Scout, you must complete the Knife Safety Adventure before you may carry a pocketknife, even if you completed the Whittling Adventure as a Bear Cub Scout and/or the Chef's Knife Adventure as a Webelos. A pocketknife truly is a multipurpose tool with hundreds of uses. It can cut a rope, open a can, whittle a tent stake, punch a hole in a belt, or slice a biscuit for breakfast at a campsite. It's also handy for tightening a screw on a pack frame or camp stove and for making wood shavings to start a fire. Pocketknives come in a variety of sizes and styles. A good general-use pocketknife has a can opener, a screwdriver, and one or two blades for cutting, but some knives also include scissors, magnifying glasses, and other tools. A multitool is an elaborate version of the pocketknife that unfolds to reveal a dozen or more tools. Bigger is not always better. On most campouts, you're unlikely to need a wire stripper, magnifying glass, hex screwdriver, or fish scaler — and it's not much fun to carry around a knife



that weighs half a pound. When you join a Scouts BSA troop, you will be required to earn the Totin' Chip before you can use a pocketknife during a Scouting activity. The Totin' Chip requirements also include knowing and understanding the proper use of a saw and axe.

RAIN GEAR

Even when there is no chance of rain, you should pack rain gear. Like your other Scout Basic Essentials, you should always have them packed and ready to go. Staying dry in the outdoors is an important part of being comfortable and having a good time.

Wearing or carrying rain gear such as a poncho or rain parka, rain pants, gaiters, and a hat can also add to your safety, because dry clothing will keep you much warmer than shirts, pants, and jackets that have become wet.

Poncho — A poncho is a waterproof cape that can protect you from summer rains. Because a poncho is loose-fitting and can flap in the wind, it may not be the best choice for severe weather or for winter travel. On the plus side, many ponchos are big enough to also cover your backpack.



Rain Parka — A rain parka is a long jacket that repels rain, sleet, and snow. It should have a hood that you can pull over your head.

Rain Pants — Rain pants extend the protection of a poncho or parka down to your ankles.

Gaiters — Gaiters can shield your feet and lower legs from rain. During winter hikes, they'll help keep snow out of your boots.

Hat — A broad-brimmed hat protects your face and neck from sun and from storms. If you wear eyeglasses, the brim of a hat can keep them clear when it's raining.

TRAIL FOOD

A small bag of granola, some raisins and nuts, or a couple of energy bars can give you a boost when you get hungry on the trail. High-energy foods are especially important if you are out longer than you had expected.



FLASHLIGHT

If you are going out for a walk during the day, you may think that having a flashlight isn't that important. A flashlight is part of the Scout Basic Essentials because it is better to have it and not need it than it is to need it and not have it.

When deciding what kind of flashlight to bring, remember you have to carry it. There are some you carry in your hands, some that you wear on your head, and even some that you wear around your neck.

You also want to consider how your flashlight is powered. If it uses batteries, what type does it need? Do the batteries come with the flashlight? Is it easy to replace the batteries?

An LED flashlight will cast a strong beam with just one or two AA batteries. LED headlamps are a good option, too, because they leave your hands free. It's a good idea to carry spare batteries with you, and reverse the



batteries in your flashlight during the day to prevent the light from accidentally turning on in your pack and draining the power.

When using your flashlight, remember to keep it pointed down and not at someone's face.



EXTRA CLOTHING

Layers of clothing allow you to adjust what you wear to match the weather. During an afternoon hike, a jacket might provide all the extra warmth you need. On camping trips, bring along additional clothing to deal with changes in temperature. Always have at least one extra set of clothes that is appropriate for the season packed in a waterproof container, like a dry bag. Don't plan to use these

clothes unless it's necessary.

If you don't use them on a campout, you can just keep them packed.

FIRST-AID KIT

Your patrol leader or a Scouts BSA troop adult volunteer will bring a group first-aid kit on most Scout trips, but you should also carry a few personal supplies to treat blisters, small cuts, and other minor injuries.

Carry a personal first-aid kit on hikes and campouts. You can put everything in a resealable plastic bag and take it with you whenever you set out on a Scout adventure. Here are some important things to have:

- ▶ 6 latex-free adhesive bandages in assorted sizes
- ▶ 2 sterile 3-by-3-inch gauze pads
- ▶ A small roll of latex-free adhesive tape
- ▶ A 3-by-6-inch piece of moleskin
- ▶ A small bar of soap or small bottle of alcohol-based hand-sanitizing gel
- ▶ A small tube of triple first-aid ointment* (optional)
- ▶ A small tube of hydrocortisone cream* (optional)
- ▶ Scissors
- ▶ Tweezers
- ▶ Disposable latex-free gloves
- ▶ CPR breathing barrier
- ▶ Pencil and paper or small notebook

*Some people are allergic to antibiotics and hydrocortisone creams. Be sure to ask permission before applying either of these ointments for first aid.

Why use latex-free gloves, adhesive bandages, and other supplies? Because some people are allergic to latex. Touching it can cause them to experience mild to severe allergic reactions ranging from itching and skin redness to difficulty breathing and even anaphylactic shock.



SUN PROTECTION

Just like you need water when it's hot or cold outside, you need sun protection in all types of weather. You can protect yourself from the sun by wearing appropriate clothing and using sunscreen.

Sunscreen and some clothes indicate a sun protection factor, or SPF. The higher the SPF number, the more protection the sunscreen or clothing will provide from the sun's damaging rays. The SPF number is not related to how long you can stay out in the sun. The effect the sun has on your skin can be different based on the time of year, time of day, and what type of skin you have.

Guard your skin by applying a good sunscreen (SPF 30 or greater) and wearing a broad-brimmed hat, sunglasses, and lip balm that contains sunscreen ingredients. To provide good sun protection, your hat should cover not only your head, but also your ears and neck. If your hat doesn't cover your ears or neck, make sure to apply sunblock to those areas.

When using sunscreen, always follow the directions on the container, and know if your sunscreen is waterproof or sweatproof. Apply sunscreen 20 minutes before you hit the trail and every two hours after that — more often if you get wet or sweat a lot. Most sunscreen will wear off after a while, and you'll need to apply more if you're outside for a longer period of time.





MAP AND COMPASS

A map and a compass can show you the way in unfamiliar areas. Learn the basics and then enjoy practicing with a compass and a map when you are in the field.

Maps we use today are often digital, and as long as you have a signal, they're great. You may find yourself on a trail that has little or no signal. In those situations, you want to have available a printed map of the trail you're going to follow.

Compasses are basic tools that work with the Earth's natural magnetic field and will make the compass needle point north. A compass doesn't tell you where you are; it only tells you what direction north is. A good compass has a needle that is encased in fluid and has a dial that easily rotates. It should have a baseplate that has scales and a direction-of-travel arrow on it that will allow you to easily place it flat on a map. A good compass will also have orienteering lines (parallel lines) that help you orient the compass with a map. Finally, a good compass will have a cord attached to it so you can wear it around your neck or attach it to your backpack.

MATCHES AND FIRE STARTERS

Before a Scout can use or carry matches they must earn the Firem'n Chit. This certification grants a Scout the right to carry fire-lighting devices (matches, lighters, etc.) to build campfires. With strike-anywhere matches or a butane lighter, you can light a stove or kindle a fire in any weather. Fire starters can be store-bought, homemade, or collected from a campout. Protect matches and other fire starters from moisture by storing them in a self-sealing plastic bag or canister.



Before you can use matches or fire starters you must first earn the Firem'n Chit. You may want to ask for help from your local Scouts BSA Troop. If you earn this certification as an Arrow of Light

Scout you will be required to earn it again in Scouts BSA before you are permitted to use matches or fire starters in Scouts BSA.

Firem'n Chit Requirements – The Scout must show their Scout leader, or someone designated by their leader, an understanding of the responsibility to do the following:

- ▶ I have read and understand use and safety rules from the *Scouts BSA Handbook*.
- ▶ I will build a campfire only when necessary and when I have the necessary permits (regulations vary by locality).
- ▶ I will minimize campfire impacts or use existing fire lays consistent with the principles of Leave No Trace. I will check to see that all flammable material is cleared at least 5 feet in all directions from fire (total 10 feet).

- ▶ I will safely use and store fire-starting materials.
- ▶ I will see that fire is attended to at all times.
- ▶ I will make sure that water and/or a shovel is readily available. I will promptly report any wildfire to the proper authorities.
- ▶ I will use the cold-out test to make sure the fire is cold out and will make sure the fire lay is cleaned before I leave it.
- ▶ I follow the Outdoor Code, the Guide to Safe Scouting, and the principles of Leave No Trace and Tread Lightly!

The Scout's "Fireman's Rights" can be taken away if they fail in their responsibility.

WATER BOTTLE

Always take along at least a 1-quart bottle filled with water. On long hikes, on hot days, in arid regions, and at high elevations, carry two bottles or more.

No matter the weather or activity, your body always needs plenty of water to keep it going. You always carry water with you when you're going outside to replace the water your body loses by sweating and even just breathing. Have you ever seen your breath when it's cold outside? That's water your body has lost!

When your body has lost too much water, it will tell you it needs water in different ways. You'll feel thirsty, get a headache, or even get a stomachache.

Get in a good habit of drinking water when you plan to be outside. Drink before you start an activity, take small drinks during your activity, and drink again when you're finished. It is better to take a lot of small drinks than to drink a large amount all at once.

How do you know if you're drinking enough water? One way is by checking your urine (pee).

Your urine should be clear and light.

If it's yellow, your body could use more water. If it's dark yellow, your body needs more water.



Plastic water bottles are the most popular way to carry water. These come in all shapes and sizes. When choosing a plastic water bottle, think about how you'll carry it and how much water it will hold. Another important part of a plastic water bottle is how you drink from it. Some have straws, some have a valve, and others have just an opening with a screw cap.

Some backpacks are designed to carry a water bladder with a flexible straw attached. These make drinking water easy and gives you a place to carry your other Scout Basic Essentials.

It is best to keep water only in your water bottle or water bladder. Make sure to wash it after each use to keep it fresh and clean so your water always tastes good.



Depending on your destination, the length of your trip, and the season, other essential items may include insect repellent, a whistle, and other items, such as water treatment tablets. Remember the Scout motto and Be Prepared.

WHAT TO DO IF YOU GET LOST — STOP

One day you might accidentally wander off a trail and be unsure how to find it again. Or you may take a wrong turn and not know which way to go. If you think you're lost, stop where you are and follow the four steps that spell STOP.

STAY CALM. THINK. OBSERVE. PLAN.

Stay calm. Sit down and have some water and something to eat. If you're cold, put on a jacket or sweater. Breathe slowly and relax.

Think. Try to remember how you got where you are. If you have a map, open it and see what you can learn from the symbols and contour lines.

Observe. Look for your footprints in soft ground or snow. Notice any landmarks that can be clues to your location. Listen for sounds of other Scouts.

Plan. If you're convinced that you know which way to go to get back on track, move carefully. Use a compass to set a bearing in the direction of your destination. Then clearly mark the way you're going with broken branches, piles of stones, or whatever else is handy in case you need to find your way back to the spot where you've been sitting. If you don't have a clear idea where you are, though, stay right where you are. People will start looking for you as soon as someone realizes you're missing.

THE OUTDOOR CODE

The outdoors is a focus of Cub Scouting. For more than 70 years, the Outdoor Code has been a guide for Scouts in the outdoors. Remember to do your best by showing respect for the outdoors and by learning and upholding the Outdoor Code.

As an American, I will do my best to:

- **Be clean in my outdoor manners.**

A Cub Scout takes care of the outdoors and keeps the outdoors clean. A Cub Scout knows that putting marks on buildings, trees, or natural objects causes permanent damage.

- **Be careful with fire.**

A Cub Scout may enjoy a campfire only with adult leaders. A Cub Scout knows not to play with matches and lighters.

- **Be considerate in the outdoors.**

A Cub Scout shares our outdoor places and treats everything on the land and in the water with respect.

- **Be conservation-minded.**

A Cub Scout works to restore the health of the land so others may enjoy, live, and learn from it as a part of the Web of Life.



LEAVE NO TRACE PRINCIPLES FOR KIDS

As a Cub Scout, you'll learn to use the Leave No Trace Principles for Kids to help you take care of the outdoors.



1. KNOW BEFORE YOU GO

- Be Prepared! Don't forget clothes that protect you from cold, heat, and rain.
- Use maps to show you where you'll be going so you won't get lost.
- Learn about the area you visit. Read books and talk to people before you go. The more you know, the more fun you'll have.

2. CHOOSE THE RIGHT PATH

- Stay on the main trail to protect nature, and don't wander off by yourself.
- Steer clear of flowers or small trees. Once hurt, they may not grow back.
- Use existing camp areas and camp at least 100 big steps from roads, trails, and water.

3. TRASH YOUR TRASH

- Pack it in, pack it out. Put litter, even crumbs, in trash cans or carry it home.
- Use bathrooms or outhouses when available. If you have to "go," act like a cat and bury poop in a small hole 4-8 inches deep and 100 big steps from water.
- Place your toilet paper in a plastic bag and put the bag in a garbage can back home.
- Keep water clean. Do not put soap, food, or poop in lakes or streams.

4. LEAVE WHAT YOU FIND

- Leave plants, rocks, and historical items as you find them so the next person can enjoy them. Treat living plants with respect. Hacking or peeling plants can kill them.
- Good campsites are found, not made. Don't dig trenches or build structures in your campsite.

5. BE CAREFUL WITH FIRE

- Use a camp stove for cooking. It's easier to cook on and clean up than a fire.
- Be sure it's OK to build a campfire in the area you're visiting. Use an existing fire ring to protect the ground from heat. Keep your fire small. Remember, campfires aren't for trash or food.
- Do not snap branches off live, dead, or downed trees. Instead, collect loose sticks from the ground.
- Burn all wood to ash, and be sure that the fire is completely out and cold before you leave.

6. RESPECT WILDLIFE

- Observe animals from a distance and never approach, feed, or follow them. Human food is unhealthy for all animals, and feeding them starts bad habits.
- Protect wildlife and your food by storing your meals and trash.
- Control pets at all times, or leave them at home.

7. BE KIND TO OTHERS

- Make sure the fun you have in the outdoors does not bother anyone else. Remember that other visitors are there to enjoy the outdoors.
- Listen to nature. Avoid making loud noises or yelling. You will see more animals if you are quiet.

Remember – you'll enjoy nature even more by caring for your special place.



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BOBCAT

CHARACTER & LEADERSHIP



SNAPSHOT OF ADVENTURE



The Bobcat Adventure will get you and your patrol off to a great start. In this Adventure, you'll learn about things like the Scout slogan and the patrol method. And you'll visit a Scouts BSA troop.

REQUIREMENTS

Approved by _____

1. Demonstrate the patrol method by choosing a patrol name and electing a patrol leader. Discuss the benefits of using the patrol method. _____
2. Get to know the members of your patrol. _____
3. Recite the Scout Oath and the Scout Law with your patrol. _____
4. With your patrol, create a code of conduct. _____
5. Demonstrate the Scouts BSA sign, Scouts BSA salute, and Scouts BSA handshake. Show how each is used. _____
6. Learn the Scouts BSA slogan and motto. _____
7. With your patrol, or with your parent or legal guardian, visit a Scouts BSA troop. _____
8. At home with your parent or legal guardian, do the activities in the booklet "How to Protect Your Children From Child Abuse: A Parent's Guide." _____



- Required Adventure
- Scan for this Adventure page

REQUIREMENT 1

Demonstrate the patrol method by choosing a patrol name and electing a patrol leader. Discuss the benefits of using the patrol method.



Your patrol is the basic team you'll work with in a Scouts BSA troop. Your patrol will work together, cook together, camp and hike together, and celebrate successes together.

Your patrol will select its own name, make its own flag, come up with its own yell, and elect its own leader. In a Scouts BSA troop the patrol leader represents the patrol to a group called the patrol leaders' council. The council is the group that plans the troop meetings and outings. If your patrol wants to learn about geocaching, for example, your patrol leader will take that idea to

the patrol leaders' council, which will vote on it. Your patrol can also plan its own activities. Sometimes, these will be part of a bigger troop outing, like a day hike during a weekend campout.

A well-functioning patrol is what makes a Scout troop work.

PATROL SPIRIT

Patrol spirit is the glue that holds the patrol together and keeps it going. Your patrol will develop spirit as you enjoy experiences together. Your name, flag, and yell help give your patrol a unique identity.

- ▶ **Patrol name** — Every patrol needs a good name, one that really describes what the patrol is all about. If your members like to swim, you might become the Sharks. If you're all into science fiction, you might become the Alien Patrol.
- ▶ **Patrol flag** — Your flag is your trademark. It shows your patrol name, emblem, Scouts BSA troop number, and the names of your members. As you win competitions, you can hang ribbons from it as reminders of your accomplishments.
- ▶ **Patrol yell** — Your yell lets other patrols know you've arrived. It should be short and fun and reflect your patrol's goals. Some patrols also have a patrol song. It's easy to make one up if you use a melody that everyone already knows.

Arrow of Light Patrol Leader

As an Arrow of Light patrol leader, you assist the den leader during patrol meetings and other activities. Your den leader is still in charge, and at no time is the Arrow of Light patrol leader to be given responsibility over other youth. Your den leader will decide how the patrol leader will be elected.

The den leader decides what the Arrow of Light patrol leader will help with, and that may change for each meeting. Here are some examples of things that an Arrow of Light patrol leader may be asked to do:

- ▶ Arrive early to help set up the meeting.
- ▶ Welcome everyone when they arrive at the patrol meeting.
- ▶ Lead the patrol in reciting the Scout Oath and the Scout Law.
- ▶ Carry the United States flag during the opening.
- ▶ Pick a game for the patrol to play.
- ▶ Help hand out supplies for an activity.
- ▶ Stay after the meeting to help clean up.

If you're elected to be the Arrow of Light patrol leader, do your best to set an example for the other Scouts by acting by the Scout Oath and the Scout Law. This is the greatest responsibility of an Arrow of Light patrol leader. This is called leadership by example. One way you can do this is to be friendly to everyone in the patrol and offer to help another Scout who may need it.

REQUIREMENT 2

Get to know the members of your patrol.

Getting to know others is one way to live by the Scout Oath and the Scout Law. When you get to know other people, you're being friendly. It is also a way to practice being courteous, kind, cheerful, and even brave.

Your Arrow of Light patrol may have Scouts who you know from last year, there may be some new Scouts, or you may be new to Scouting. These are all good reasons why one of the first things you should do is get to know everyone in your patrol. If you have a new Scout join your patrol later on, you and everyone in the patrol should make sure to make them feel welcome and get to know them, too.



If you don't know someone in your patrol, here are some things you can do to get to know them:

Introduce yourself. "Hi, my name is _____. What is your name?"

Ask them, "What are some things that you like to do?"

Tell them about the things you like to do.

Some people are shy. They may find it hard to interact with others and tend to stay away from the group. Be respectful of that, being friendly and inclusive with that person as best as you can. You may find that they may eventually decide to join you.

Remember a Scout is friendly and kind. Next thing you know, you may have a new friend.

REQUIREMENT 3

**Recite the Scout Oath and the Scout Law
with your patrol.**

Scouts learn an amazing number of things about camping, nature, first aid, and more. Some of the most important things are on the next few pages. The Scout Oath and the Scout Law will guide your steps long after you hang up your hiking boots.

SCOUT OATH

On my honor I will do my best
To do my duty to God and my country
and to obey the Scout Law;
To help other people at all times;
To keep myself physically strong,
mentally awake, and morally straight.



On my honor ... Honor is the core of who you are — your honesty, your integrity, your reputation, the ways you treat others, and how you act when no one is looking. By giving your word at the outset of the Scout Oath, you are promising to be guided by its ideals.

I will do my best ... Do all you can to live by the Scout Oath, even when you are faced with difficult challenges. Measure your achievements against your own high standards, and don't be influenced by peer pressure or what other people do.

To do my duty ... Duty is what others expect of you, but more importantly, it is what you expect of yourself.

to God ... Your family and religious leaders teach you about God and the ways you can serve. You can do your duty to God by following the wisdom of those teachings and by defending the rights of others to practice their own beliefs.

and my country ... Help the United States continue to be a strong and fair nation by learning about our system of government and your responsibilities as a citizen. When you do all you can for your family and community, you are serving your country. Making the most of your opportunities will help shape our nation's future.

and to obey the Scout Law; ... In your thoughts, words, and deeds, the 12 points of the Scout Law will lead you toward doing the right thing throughout your life. When you obey the Scout Law, other people will respect you for the way you live, and you will respect yourself.

To help other people at all times; ... Your cheerful smile and helping hand will ease the burden of many who need assistance. By helping out whenever you can, you are making the world better. "At all times" is a reminder to help even when it is difficult and even if you haven't been asked.

To keep myself physically strong, ... Taking care of your body prepares you for a lifetime of great adventures. You can build your body's strength and endurance by eating nutritious foods, getting enough sleep, and being active. You should also avoid tobacco, alcohol, illegal drugs, and anything else that might harm your health.

mentally awake, ... Develop your mind both in and outside of the classroom. Be curious about everything around you, and never stop learning. Work hard to make the most of your abilities. With an inquiring attitude and the willingness to ask questions, you can learn much about the world around you and your role in it.

and morally straight. Your relationships with others should be honest and open. Respect and defend the rights of all people. Be clean in your speech and actions and faithful in your religious duties. Values you practice as a Scout will help you shape a life of virtue and self-reliance.

THE SCOUT LAW

A Scout is trustworthy, loyal, helpful, friendly, courteous, kind, obedient, cheerful, thrifty, brave, clean, and reverent.

The Meaning of the Scout Law

The Scout Law has 12 points. Each is a goal for every Scout. A Cub Scout agrees to live by the Scout Law every day, not just when they are at a Cub Scout meeting. It's not always easy to do, but a Cub Scout always does their best.

A Scout is trustworthy. A Scout tells the truth. A Scout is honest and keeps promises. People can depend on a Scout. Trustworthiness will help you make and maintain good friendships. As you demonstrate that you are trustworthy, you are showing your character — the person you are on the inside. If your judgment fails and you make a mistake, your good character will be what helps you quickly admit it and make good on any damage. Adults and your peers alike will know that they can rely on you to do your best in every situation. Living in this way also means that you can trust yourself.

A Scout is loyal. A Scout is loyal to those to whom loyalty is due. Loyalty can be shown everywhere: at home, in your Scouts BSA troop and patrol, among your classmates at school. You can also express loyalty to the United States when you respect the flag and the government. Give real meaning to your loyalty by helping to improve your community, state, and nation.

A Scout is helpful. A Scout cares about other people. A Scout helps others without expecting payment or reward. A Scout fulfills duties to the family by helping at home. Scouts want the best for everyone and act to make that happen. While a Scout might work for pay, a Scout does not expect to receive money for being helpful. A Good Turn that is done in the hope of getting a tip or a favor is not a Good Turn at all.

A Scout is friendly. A Scout is a friend to all other Scouts. A Scout offers friendship to people of all races, religions, and nations, and a Scout respects them even if their beliefs and customs are different. If you are willing to be a good friend, you will find friendship reflected back to you. Friends also are able to celebrate their differences, realizing that real friends can respect the ideas, interests, and talents that make each person special.

A Scout is courteous. A Scout is polite to people of all ages and positions. A Scout understands that using good manners makes it easier for people to get along. Being courteous shows that you are aware of the feelings of others. The habits of courtesy that you practice as a Scout will stay with you throughout your life.

A Scout is kind. Scouts treat others as they want others to treat them. A Scout knows there is strength in being gentle. A Scout does not harm or kill any living thing without good reason. Kindness is a sign of true strength. To be kind, you must look beyond yourself and try to understand the needs of others. Take time to listen to people and imagine being in their place. Extending kindness to those around you and having compassion for all people is a powerful agent of change to a more peaceful world.

A Scout is obedient. A Scout follows the rules of the family, school, and troop. Scouts obey the laws of their communities and countries. If a Scout thinks these rules and laws are unfair, then change is sought in an orderly way. Many times, rules are put in place to keep you safe, to help you learn, or simply to create order. Being obedient when an authority such as your parents, teachers, or government imposes rules is your way of helping them achieve success. Trust your beliefs and obey your conscience, though, if you are told to do something that you know is wrong.

A Scout is cheerful. A Scout looks for the bright side of life. A Scout cheerfully does assigned tasks and tries to make others happy, too. You know that you cannot always have your way, but a cheerful attitude can make the time seem to pass more quickly and can even turn a task you dislike into a lot of fun. You have a choice whether to enjoy life's experiences and challenges. It is always easier and much more enjoyable to decide from the start to be cheerful whenever you can.

A Scout is thrifty. Scouts work to pay their own way and to help others. Scouts save for the future. A Scout protects and conserves natural resources and is careful in the use of time, money, and property. Paying your own way with money you have earned gives you independence and pride. Even if you have only a few dollars, you have enough to save a bit for the future and even to share a bit with others — although what you share doesn't have to be in cash. Volunteering your time and talent can be just as valuable as donating money.

A Scout is brave. A Scout faces danger even when afraid. A Scout does the right thing even when doing the wrong thing or doing nothing would be easier. Bravery doesn't have to mean saving someone's life at risk to your own. While that is definitely brave, you are also being brave when you speak up to stop someone from being bullied or when you do what is right in spite of what others say. You are brave when you speak the truth and when you admit a mistake and apologize for it. And you show true courage when you defend the rights of others.

A Scout is clean. Scouts keep their bodies and minds fit. A Scout chooses friends who also live by high standards. Scouts avoid profanity and pornography. A Scout helps keep the home and community clean. A Scout knows there is no kindness or honor in tasteless behavior, such as using profanity or ethnic slurs, or in making fun of someone who is different from themselves. A Scout avoids that kind of behavior in words and deeds. Scouts keep their character clean by carefully monitoring what is viewed on television and the internet or read in books and magazines.

A Scout is reverent. A Scout is reverent toward God. A Scout is faithful in fulfilling religious duties. A Scout respects the beliefs of others. Wonders all around us remind us of our faith in God, and we show our reverence by living our lives according to the ideals of our beliefs. You will encounter people expressing their reverence in many ways. It is your duty to respect and defend their rights to their religious beliefs even when they differ from your own.

REQUIREMENT 4

With your patrol, create a code of conduct.



To create a code of conduct, think about how you should act during a patrol meeting and how you expect everyone else to act.

The first step is to have everyone give their ideas on what should be part of the code of conduct. Then find the codes that everyone agrees upon. If you can, make it a list of things you should do instead of a list of things you shouldn't do. It is also best to keep the list short and simple.

To get you started, here are two things you may want to add to your patrol code of conduct:

- ▶ Everyone will do their best to live by the Scout Oath and the Scout Law.
- ▶ We will do our best to make everyone feel welcome in our patrol.

REQUIREMENT 5

Demonstrate the Scouts BSA sign,
Scouts BSA salute, and Scouts BSA handshake.
Show how each is used.



The Scouts BSA Sign

The Scout sign is a universal symbol of Scouting. To make it, hold up the three middle fingers of your right hand, and cover the nail of your little finger with your thumb. Hold your elbow at a right angle. And stand up straight; you are a Scout!

The Scout sign is used to get people's attention. When you see a leader holding up the Scout sign, get quiet and hold up the Scout sign, too. Pretty soon, everybody in the room will do the same.



The Scouts BSA Salute

The Scout salute is used to salute the United States flag when you are in your Scout uniform. You can also use it to salute other Scouts and leaders. To make the salute, form the Scout sign with your right hand, then bring your hand up, palm down, so your forefinger touches the brim of your hat or the tip of your right eyebrow.

We use the Scout salute when the United States flag is being raised or lowered.

We use the Scout salute when the United States flag is passing by, like in a parade.

We use the Scout salute when someone is saying the Pledge of Allegiance.

The Scouts BSA Handshake

Unlike most people, Scouts shake hands with their left hands. The left hand is closer to the heart, so the

Scout handshake symbolizes friendship. It's a special handshake shared by millions of Scouts around the world. According to a story Scouting's founder Lord Robert Baden-Powell told, some warriors he met in Africa shook hands with their left hands. To do that, they had to put down their shields, thus showing trust in the people they were greeting.



REQUIREMENT 6

Learn the Scouts BSA slogan and motto.

SCOUT MOTTO

Be Prepared. That's the Scout motto.

"Be prepared for what?" someone once asked Robert Baden-Powell, the founder of worldwide Scouting.

"Why, for any old thing," he replied.

The skills you learn in Scouting will help you live up to the Scout motto. Because you know first aid, you will be prepared if someone gets hurt. Because you will have practiced lifesaving skills, you might be able to save a nonswimmer struggling in deep water. Whenever leadership is needed, you will understand what to do.

Baden-Powell wasn't thinking only of being ready for emergencies. His idea was that Scouts should prepare themselves to become productive citizens and strong leaders and to bring joy to other people. He wanted each Scout to be ready in mind and body and to meet with a strong heart whatever challenges lie ahead.

You'll face plenty of decisions in your life. How will you spend your time? Who will your friends be? What will you do after high school? Remembering the Scout motto can help you make those decisions a little more easily.

SCOUT SLOGAN

Do a Good Turn Daily.

The Scout slogan is Do a Good Turn Daily. That means doing something to help others each day without expecting anything in return. It means doing your part to care for your community and the environment, too.

A Good Turn is more than simple good manners. It is a special act of kindness. From recycling to helping conserve America's natural resources, opportunities for Good Turns are everywhere. Some Good Turns are big — providing service after floods or other disasters, rescuing someone from a dangerous situation, recycling community trash, or completing conservation projects with your patrol. Good Turns also can be small, thoughtful acts — helping a disabled person safely cross a busy street, going to the store for an elderly neighbor, cutting back weeds blocking a street sign, or doing something special for a sibling.

REQUIREMENT 7

With your patrol, or with your parent or legal guardian, visit a Scouts BSA troop.

As part of this Adventure, you will visit a Scouts BSA troop meeting. You might even visit the meetings of more than one troop so you can see how they are



different and which one you want to join. The troop you visit may be chartered by the same organization as your Cub Scout pack and may even meet right down the hall from your patrol. If so, you'll see a lot of familiar faces. But you may visit a troop in a different part of town where you don't know anybody. If you're feeling a little nervous, that's normal! Some of the Scouts you will meet were Arrow of Light Scouts not long ago and they felt that way too. They'll be excited to meet you and help you feel comfortable.

Inside a Scouts BSA Troop Meeting

Scouts BSA troop meetings are a lot different from your pack meetings, so you may not know exactly what is going on at first. In fact, you may not even think the Scouts know what is going on. They really do, however. So, what is going on?

Here's what a typical Scouts BSA troop meeting looks like:

First, the senior patrol leader — that's the top elected youth leader — calls the troop to order using the Scout sign. One of the patrols — they are like dens or an Arrow of Light patrol — leads a flag ceremony, and everybody recites the Pledge of Allegiance or the Scout Oath and the Scout Law.

Next, one of the Scouts (or a registered adult volunteer) teaches the group a skill like how to navigate using a compass. After the Scouts practice that skill for a while, they break up into patrols. One patrol might work on advancement requirements, another might decorate its patrol flag, and a third might make plans for an upcoming patrol hike. During this time (and really during the whole meeting), individual Scouts may be working on advancement, doing their troop jobs, or meeting with the Scoutmaster.

After the patrol meetings, everybody comes back together to play a game. This may be a game just for fun, or it may give the Scouts a chance to practice the skill they learned earlier. For example, they might navigate a compass course outside their meeting place.

Finally, the whole troop gets back together for the closing ceremony. The senior patrol leader makes a few announcements. The Scoutmaster gives some words of wisdom — called a Scoutmaster's Minute. The patrol that led the flag ceremony retrieves the colors. And just like that, the meeting's over.

The Scouts run the troop meeting themselves. If things are going well, the only time an adult should say anything during a troop meeting is when the Scoutmaster gives the Scoutmaster's Minute. The same thing is true for hikes, campouts, service



projects, and everything else. Adult leaders are there to supervise, mentor, and coach the Scouts.

The Scoutmaster and assistant Scoutmasters train the youth leaders and then stand on the sidelines watching them in action.

Who Runs the Scouts BSA Troop?

You can identify the youth leaders by the badges of office they wear on their left sleeves. Adult volunteer leaders also wear badges of office. When you visit a troop meeting, look for some of these leaders:

Youth Leadership

- ▶ **Senior patrol leader:** leads the troop.
- ▶ **Assistant senior patrol leader:** supports the senior patrol leader.
- ▶ **Troop guide:** helps a patrol of young Scouts, much like a den chief helps a Cub Scout den.
- ▶ **Quartermaster:** takes care of the troop's equipment.
- ▶ **Scribe:** takes care of the troop's records.
- ▶ **Instructor:** teaches skills.
- ▶ **Patrol leader:** leads a patrol.
- ▶ **Assistant patrol leader:** assists the patrol leader.



Adult Leadership

- ▶ **Scoutmaster:** an adult who coaches the senior patrol leader and other youth leaders.
- ▶ **Assistant Scoutmaster:** an adult who supports the Scoutmaster.



If you get a chance at the troop meeting, ask some youth and adult leaders what they do. Be on the lookout for other badges of office, and find out about those leadership roles, too.

REQUIREMENT 8

At home, with your parent or legal guardian, do the activities in the booklet "How to Protect Your Children From Child Abuse: A Parent's Guide."

Your parent(s) or legal guardian must read the booklet that is in front of your handbook. They can also find the online version by scanning this QR code.



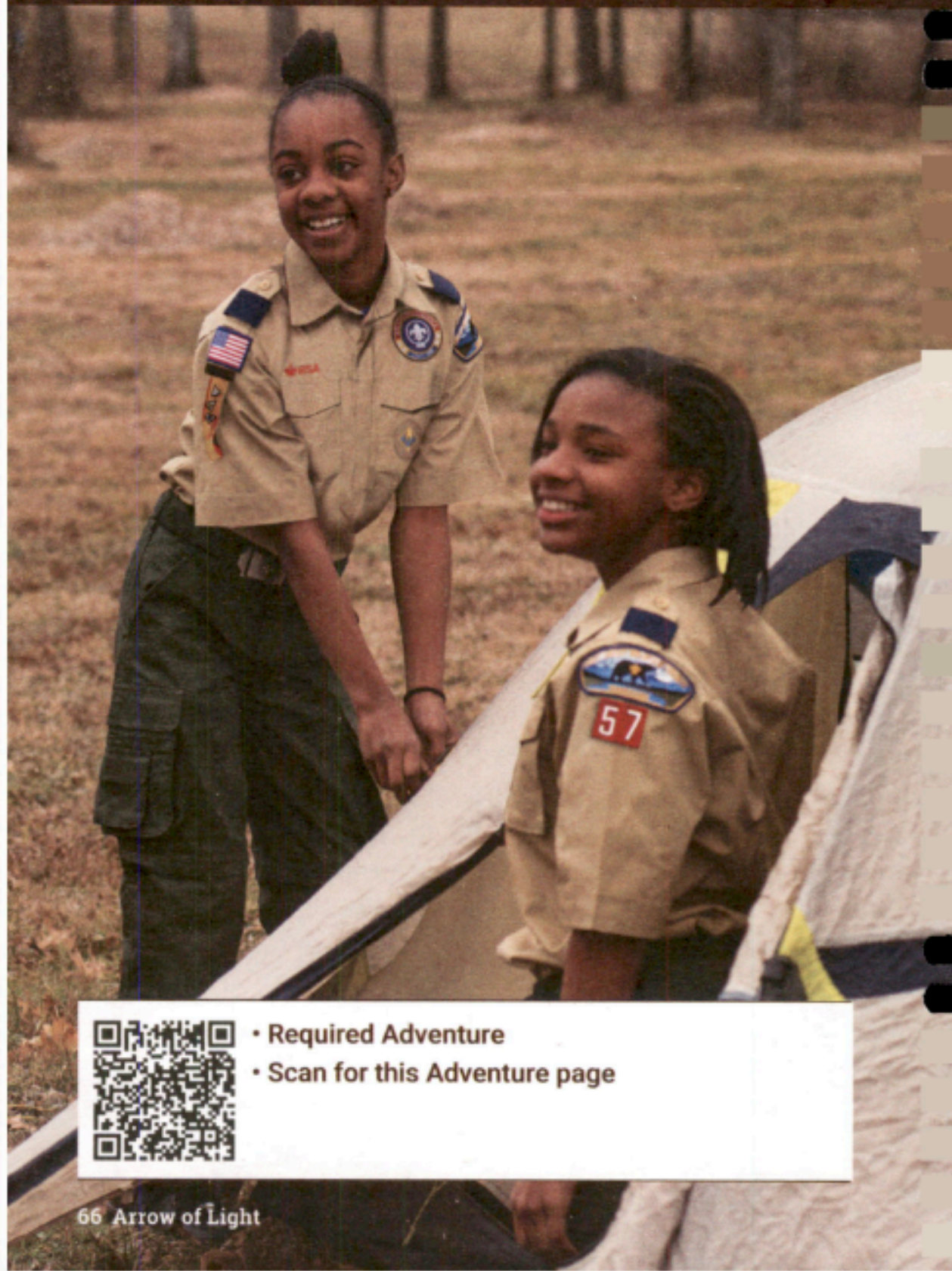
CONGRATULATIONS!

**You have completed your first required
Arrow of Light Adventure!**

You may now earn any of the other Arrow of Light Adventures.

OUTDOOR ADVENTURER

OUTDOORS



- Required Adventure
- Scan for this Adventure page

SNAPSHOT OF ADVENTURE



There's nothing like the great outdoors. In this Adventure, you will plan and participate in a campout with your Arrow of Light patrol or a Scouts BSA troop. You'll learn how to pack, help plan using the BSA SAFE Checklist, set up camp, and discover how Scouts camp.

REQUIREMENTS

Approved by _____

1. Learn about the Scout Basic Essentials. _____
2. Determine what you will bring on an overnight campout — including a tent and sleeping bag/gear — and how you will carry your gear. _____
3. Review the four points of the BSA SAFE Checklist and how you will apply them on the campout. _____
4. Locate the camp and campsite on a map. _____
5. With your patrol or a Scouts BSA troop, participate in a campout. _____
6. Upon arrival at the campout, determine where to set up your campsite: kitchen, eating area, tents, and firepit. Help the patrol set up the patrol gear before setting up your own tent. _____
7. Explain how to keep food safe and the kitchen area sanitary at the campsite. Demonstrate your knowledge during the campout. _____
8. After your campout, discuss with your patrol what went well and what you would do differently next time. Include how you followed the Outdoor Code and Leave No Trace Principles for Kids. _____

REQUIREMENT 1

Learn about the Scout Basic Essentials.

Be Prepared. That is the Scouts BSA motto.

Be prepared for what?

For anything.

Cub Scouts have the Cub Scout Six Essentials. Scouts BSA members have the Scout Basic Essentials, which are the things Scouts bring on every outdoor activity, especially a campout.



Pocketknife. A pocketknife or multitool could be the most useful tool you can own. Keep yours clean, sharp, and secure, and don't pick one so heavy that it pulls your pants down.

In order to carry a pocketknife as an Arrow of Light Scout, you must first earn the Knife Safety Adventure, even if you earned the Whittling Adventure as a Bear Cub Scout and/or the Chef's Knife Adventure as a Webelos.

Rain Gear. A poncho or a rain parka can protect you from light showers and heavy storms. It can also block the wind and help keep you warm.



Trail Food. A small bag of granola, some raisins and nuts, or a couple of energy bars can give you a boost when you get hungry on the trail. High-energy foods are especially important if you are out longer than you had expected.



Flashlight. An LED flashlight will cast a strong beam with just one or two AA batteries. LED headlamps are a good option, too, because they leave your hands free. Carry spare batteries in case you need them.

Extra Clothing. Layers of clothing allow you to adjust what you wear to match the weather. During an afternoon hike, a jacket might provide all the extra warmth you need. On camping trips, bring along additional clothing to deal with changes in temperature.



First-Aid Kit. Your patrol leader or a Scouts BSA troop leader will bring a group first-aid kit on most Scout trips, but you should also carry a few personal supplies to treat blisters, small cuts, and other minor injuries.

Sun Protection. Guard your skin by applying a good sunscreen (SPF 30 or greater) and wear a broad-brimmed hat, sunglasses, and lip balm that contains sunscreen ingredients. Apply sunscreen 20 minutes before you hit the trail and every two hours after that — more often if you sweat a lot.



Map and Compass. A map and a compass can show you the way in unfamiliar areas. Learn the basics, and then practice using a compass and a map when you're in the field.

Matches and Fire Starters. With strike-anywhere matches, a butane lighter, or a ferro rod and striker, you can light a stove or kindle a fire in any weather. Protect matches and other fire starters from moisture by storing them in a self-sealing plastic bag or canister.

Before you can use matches or fire starters you must first earn the Firem'n Chit. You may want to ask for help from your local Scouts BSA Troop. If you earn this certification as an Arrow of Light Scout you will be required to earn it again in Scouts BSA before you are permitted to use matches or fire starters in Scouts BSA.

Firem'n Chit Requirements – The Scout must show their Scout leader, or someone designated by their leader, an understanding of the responsibility to do the following:

- ▶ I have read and understand use and safety rules from the *Scouts BSA Handbook*.
- ▶ I will build a campfire only when necessary and when I have the necessary permits (regulations vary by locality).
- ▶ I will minimize campfire impacts or use existing fire lays consistent with the principles of Leave No Trace. I will check to see that all flammable material is cleared at least 5 feet in all directions from fire (total 10 feet).
- ▶ I will safely use and store fire-starting materials.
- ▶ I will see that fire is attended to at all times.
- ▶ I will make sure that water and/or a shovel is readily available. I will promptly report any wildfire to the proper authorities.
- ▶ I will use the cold-out test to make sure the fire is cold out and will make sure the fire lay is cleaned before I leave it.
- ▶ I follow the Outdoor Code, the Guide to Safe Scouting, and the principles of Leave No Trace and Tread Lightly!

The Scout's "Firem'n Rights" can be taken away if they fail in their responsibility.

Water Bottle. Always take along at least a 1-quart bottle filled with water. On long hikes, on hot days, in arid regions, and at high elevations, carry two bottles or more.

Learn more about the Scout Basic Essentials in the front of this handbook.

REQUIREMENT 2

Determine what you will bring on an overnight campout — including a tent and sleeping bag/gear — and how you will carry your gear.

PERSONAL CAMPING GEAR CHECKLIST

Use this checklist every time you go on a Scout outdoor trip. Use a pencil to check off each item as you pack it.

The Scout Basic Essentials

- ☐ Pocketknife
- ☐ Water bottle
- ☐ Matches and fire starters
- ☐ First-aid kit
- ☐ Flashlight
- ☐ Sun protection
- ☐ Extra clothing
- ☐ Trail food
- ☐ Map and compass
- ☐ Rain gear
- ☐ Clothing appropriate for the season and the weather
- ☐ Backpack with rain cover

Sleeping gear

- ☐ Sleeping bag
- ☐ Sleeping pad
- ☐ Ground cloth

Eating kit

- ☐ Eating utensils
- ☐ Plate
- ☐ Bowl
- ☐ Cup

Cleanup kit

- ☐ Soap
- ☐ Dental floss
- ☐ Toothbrush
- ☐ Comb
- ☐ Toothpaste
- ☐ Small camp towel

Optional personal items

- ☐ Personal medications
- ☐ Watch
- ☐ Fishing pole and gear
- ☐ Camera
- ☐ Pencil or pen
- ☐ Insect repellent
- ☐ Small notebook
- ☐ Swimsuit
- ☐ Bible, testament, or prayer book, according to your faith
- ☐ Other gear for specific activities

Choosing a Backpack

For most camping trips you can carry your gear, clothing, and food in a backpack. Your pack should be comfortable enough for a long day on the trail.

Most backpacks have a stiff internal frame. Outside pockets on many packs are ideal for storing water bottles, maps, and other items you might want to reach quickly. Another useful feature is a daisy chain that lets you attach gear (or wet socks) to the outside with carabiners.

A hip belt shifts much of the weight of a pack from your shoulders to the strong muscles of your legs, while a sternum strap keeps the shoulder straps in the right position. Compression straps on the sides or back of internal frame packs help keep the load from shifting. Investing the time to properly adjust the straps and hip belts will make your pack much easier to carry.

Many backpacks will have either external water-bottle pockets or ports that let you run a drinking tube from a water reservoir inside the pack. These features help ensure that you drink enough water while you're hiking.

Shop for packs at stores with salespeople who know how to match you with the right pack for your height, experience, and the kinds of adventures you are planning. One of the most key factors is your torso length — the distance from your shoulder blades to the top of your pelvis; an experienced salesperson will measure your torso and steer you to the right sized pack. If you're still growing, choose a pack that you can adjust as you get taller.

Packing

Your backpack should be a bag of bags. Instead of dumping everything into your pack, sort your personal gear and clothing into nylon stuff sacks or resealable plastic bags. Stuff sacks and

plastic bags will help keep everything dry and organized inside your pack. When you get home, store the bags in your pack so you can use them on future trips.

Place softer items in your pack so that they will cushion your back. Keep your rain gear, flashlight, first-aid kit, water bottle, map, and compass near the top of the pack or in outside pockets where they will be easy to reach.

Stuff your sleeping bag into its storage sack, then put it inside your pack if there is room. If not, tuck it under the pack's top flap or strap it to the frame.

For maximum comfort, balance the weight in your pack carefully. If the center of gravity is too high, or too far from your back, you'll feel top-heavy. If it's too low, you'll feel like the pack is dragging you down.

Along with your personal gear, expect to carry some of your patrol's equipment and food. Your share might include a pot, the dining fly and poles, a camp stove, and ingredients for a breakfast.

You and your patrol will come up with the best way to divide up group gear, but here are a few suggestions.

- ▶ Divide up your tent so that one Scout carries the tent itself and another Scout carries the rain fly, poles, and stakes.
- ▶ Give stronger Scouts heavier items like cook pots and fuel bottles.
- ▶ Keep like items together as much as possible. For example, one Scout should carry all the cooking utensils.
- ▶ As you use up food and fuel, rebalance the loads among patrol members.

A rain cover will shield your pack when bad weather catches you on the trail. Put the cover over your pack to protect it from nighttime rains and morning dew.

Keeping Your Pack Light

Comfortable pack weights vary based on physical condition, age, and experience. However, a fully loaded backpack should rarely exceed 25-30% of your body weight. Consider these tips to keep your backpack light.

- ▶ Start with a light pack. Choosing a 3-pound pack instead of a 6-pound pack makes a significant difference when your total weight allowance is 25 pounds.
- ▶ Remember that ounces add up to pounds. Every ounce you save makes a difference — for example, by choosing a flashlight or lantern that uses AAA batteries or solar power instead of D batteries.
- ▶ Share items. On most backpacking trips, one pocketknife is probably sufficient for your whole patrol.
- ▶ Look for multiuse items. Your water bottle can double as a cup. A flying disc can double as a plate. A jacket stuffed with clothes can double as a pillow.
- ▶ Don't forget food and water. The water in your pack weighs a lot whether it's in your water bottles or in your food. A gallon of water weighs more than 8 pounds! Choose dehydrated food and plan to treat water along the trail.

Tents

When choosing a tent, consider sleeping capacity, cost, and weight. (The ideal per-person weight is 3 pounds or less.) The best tents tend to have abundant windows and vents, as well as rain flies that extend to the ground. Many tents are three-season models, which means they can stand up to only moderate snow and wind. For adventures in more rugged weather conditions, choose a sturdier four-season tent.

Tents range in size from one-person bivy sacks that are barely bigger than a sleeping bag to multiroom cabin tents big enough to stand up in. For most Scout outings, the best tent is an A-frame or dome tent that sleeps two or three Scouts. It will be roomy enough to stretch out inside, but light enough to take backpacking.

Most Scout tents are made of nylon that allows moisture from your breath to escape rather than being trapped inside the tent, which would make it feel damp and clammy. Large windows let summer breezes blow through to keep you cool, while a waterproof rain fly that fits over the body of a tent sheds rain and snow and blocks winter wind.

Sleeping Bags

When you sleep at home, a mattress beneath you and blankets on top trap your body heat and keep you warm. A sleeping bag and a pad can become a bed you can carry anywhere. They are easy to pack and to use. Most sleeping bags fit closely around your body and will keep you warmer and more comfortable outdoors than blankets.

The cloth part of a sleeping bag is called the shell. Inside the shell is fill material made of synthetic fibers or the down and feathers of ducks and geese. Air pockets in the fill trap your body heat and hold it close to you.

Sleeping bags are rated by temperature. For example, a 30-degree bag should keep you comfortable when the temperature drops just below freezing — assuming you're wearing a hat and long underwear and have a sleeping pad underneath you.



Sleeping bag ratings are just a starting point. As you become a more experienced camper, you might discover that you sleep colder than average and need a bag rated to a lower temperature than what you expect.

Adding a wool blanket or a sleeping-bag liner made of polar fleece will help a summer-weight sleeping bag keep you warm during cool nights. On hot summer nights, a sleeping-bag liner might be all you need.

On winter campouts, a mummy-style sleeping bag will keep you warmer than a rectangular sleeping bag. A mummy bag's integrated, adjustable hood makes it much harder for body heat to escape and for cold air to rush in.



REQUIREMENT 3

Review the four points of the BSA SAFE Checklist and how you will apply them on the campout.



The BSA SAFE Checklist is used for all activities. Review the four points with your den leader and patrol and discuss how each of the four points will be applied to your campout.

Supervision — Youth are supervised by qualified and trustworthy adults who set the example for safety.

Assessment — Activities are assessed for risks during planning. Leaders have reviewed applicable program guidance or standards and have verified the activity is not prohibited. Risk avoidance or mitigation is incorporated into the activity.

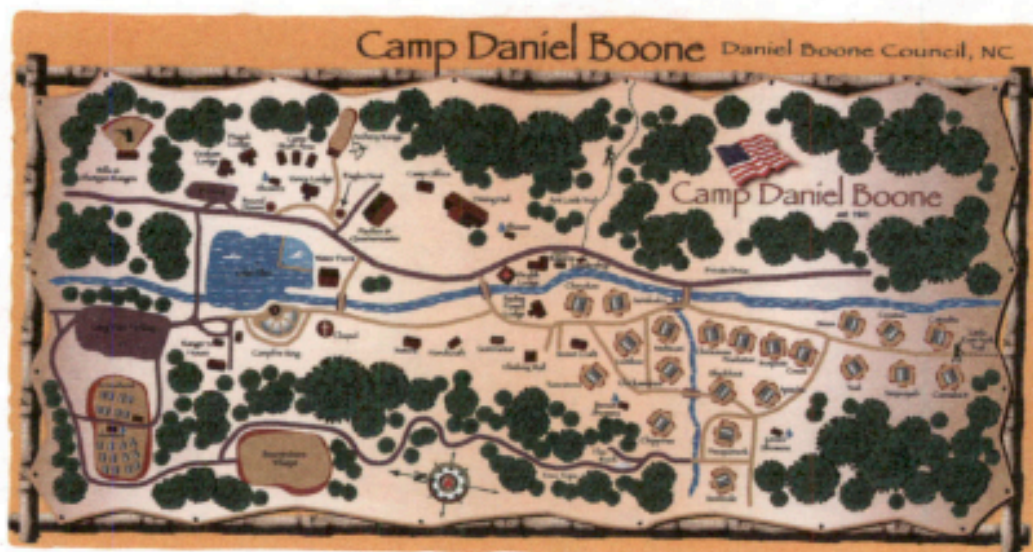
Fitness and Skill — Participants' BSA Annual Health and Medical Records are reviewed, and leaders have confirmed that prerequisite fitness and skill levels exist for participants to take part safely.

Equipment and Environment — Safe and appropriately sized equipment, courses, campsites, trails, or playing fields are used properly. Leaders periodically check gear use and the environment for changing conditions that could affect safety.

REQUIREMENT 4

Locate the campsite where you will be camping on a map.

A good camp will have a map of the overall campsite that identifies campsites, buildings, and program areas. Campsites are often named or numbered. Know the name or number of the campsite you will be camping in, and then identify it on the map.



REQUIREMENT 5

With your patrol or a Scouts BSA troop, participate in a campout.

"Camping" is a term that covers all sorts of activities, from pitching a tent in your backyard to venturing deep into a wilderness area. In Scouting, camping means staying overnight in a temporary shelter such as a tent, lean-to, or snow cave. Depending on your interests, you might spend all your time in or near your campsite or use it as a trailhead for other activities.

Before going on a campout, Scouts plan. We ask the following questions: where, when, who, why, what, and how. Answer these six questions as your Arrow of Light patrol gets ready for a camping trip, and you'll be prepared for whatever you meet along the way.

The experience of filling out a trip plan will guide you to make good decisions before setting out on a camping trip.



CAMPING TRIP PLAN

Before you begin your plans, check out the Campout Safety Checklist at www.scouting.org/health-and-safety/gss/gssax.

Name of this trip: _____

WHERE are we going and how will we get there? _____

WHEN will we go and return? _____

WHO is going with us? Adult leaders: _____

Patrol members: _____

WHY are we going? (Write a sentence or two about the purpose of the camping trip.) _____

WHAT do we need and what are we taking? (Attach a copy of your camping checklists and a copy of your menus/food list.)

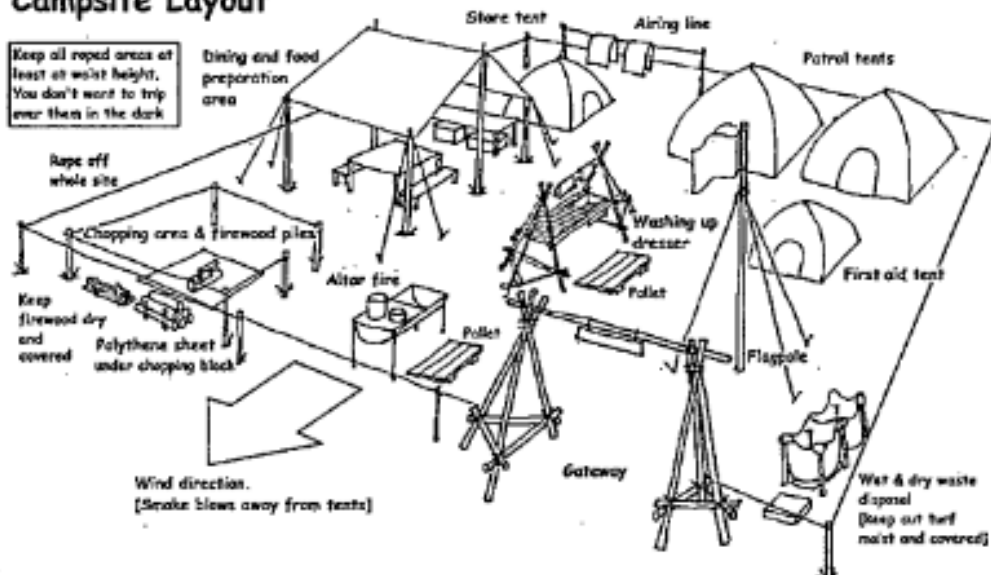
HOW will we respect the environment by following the principles of outdoor ethics? _____

Finally, check with those in charge of your destination for regulations you'll need to follow on matters including group size, campfire regulations and restrictions, and permits your Scouts BSA troop or patrol must have.

REQUIREMENT 6

Upon arrival at the campout, determine where to set up your campsite: kitchen, eating area, tents, and firepit. Help the patrol set up the patrol gear before setting up your own tent.

Campsite Layout



A good campsite is more than a convenient place to sleep and eat. Its setting offers you safety and comfort and takes advantage of features like great views and natural windbreaks. Keep the following information in mind as you decide where to spend the night.

ENVIRONMENTAL IMPACT

The principles of outdoor ethics will help guide you as you select a campsite. Use established campsites whenever you can, or camp on durable surfaces — that is, surfaces that won't be harmed by tents and footsteps. Good campsites are found, not made. If you must move a log, a few rocks, or anything else as you pitch your tents, return everything to its original location before you leave.

SAFETY

Pitch tents away from dead trees or trees with limbs that might fall in a storm. Stay out of ditches or depressions in the ground that could fill during a flash flood and other areas that could fill with water. (If you see debris caught in underbrush or if all the grass is bent over in the same direction, choose another site.) Avoid lone trees, the tops of hills and mountains, high ridges, and other targets of lightning. Camp away from hiking and game trails, especially in bear country. (Look for animal tracks and worn pathways that are too low or narrow for humans.)

SIZE

A campsite must be large enough for your Arrow of Light patrol to set up its tents and cook its meals in separate areas. Also, make sure there is enough space to move around without tripping over tent stakes and tent guylines.

COMFORT

In the summer, look for a shady site where breezes can help cool your tent and chase away mosquitoes. In the winter, find a site where trees and hillsides provide a natural windbreak. Regardless of the time of year, place your tent on the flattest spot possible. (If the ground slants a bit, sleep with your head uphill and the opening downhill.) Consider the sun as well; the morning sun will help dry out your tent, while evening sun can be uncomfortably hot in the summer.

WATER

Each Scout in your patrol will need several gallons of water every day for drinking, cooking, and cleanup. Treat water you take from streams, rivers, lakes, and springs. In dry regions, you might need to carry all your water to camp. That information will be important when you put together the trip plan.

STOVES AND CAMPFIRES

Where fires are not allowed, where wood is scarce, or when you want to prepare your meals quickly, plan on using a camp stove to heat water and cook food. As part of Scouting's commitment to preserving the outdoors, stoves are the preferred method for cooking.

Where fires are permitted, appropriate, and desired, look for a campsite with an existing fire ring. Only use wood that is dead, on the ground, and no larger around than your wrist. Never cut live trees. For more information on using stoves and campfires, see the Unit Fireguard Plan Chart, No. 33691.



You must first earn the Firem'n Chit certification before you are permitted to use matches, fire starters, or start campfires.

PRIVACY

A Scout is courteous. Show respect by selecting campsites away from other campers. Trees, bushes, and the shape of the land can screen your camp from trails and neighboring campsites. Keep noise down so you won't disturb nearby campers, and respect quiet hours at public campgrounds and Scout camps.

PERMISSION

Well ahead of the date of a camping trip, contact rangers or other managers of public parks and forests to let them know you're coming. They can issue the permits you need and suggest how you can fully enjoy your campout. Get permission from owners or managers of private property, too, before camping on their land.

REQUIREMENT 7

Explain how to keep food safe and the kitchen area sanitary at the campsite. Demonstrate your knowledge during the campout.

Before you start to cook, make sure you wash your hands, wipe down any surfaces that may come in contact with food, and check that all kitchen tools and utensils are clean.



Only those who are cooking should be in the camp kitchen when food is being prepared.

Plan how you will store food while you're on the campout. Fresh meats, dairy products, and other perishable items can be kept chilled by stowing them with chunks of ice in an insulated cooler. Other foods won't need to stay cold but could require protection from mice, raccoons, and even bears.

If your camp is near a cabin or other building that is safe from animals, you might be able to store your food inside. Some campgrounds have metal boxes where you can leave your food and know it's protected from wildlife and weather. You also can keep food out of reach of animals by hanging it 20 feet in the air from a tree.

Whether you cook with a stove or over an open fire, put on a pot of water before you serve a meal. You'll have hot water for cleanup by the time you finish eating. As your meal is cooking, you can also do some other things to make cleanup easier.

- ▶ Separate clean and dirty pots and utensils. Put the clean items away.
- ▶ Scrape excess food into a trash bag.
- ▶ Pour some water in the pots you've used if they contain stuck-on food.
- ▶ Throw away food wrappers, vegetable peels, and other waste.
- ▶ Close and put away food packages you've opened.

Begin cleanup by setting out three pots:

Follow these steps to wash a pot:

1. Scrape excess food into a garbage bag so the pot is as clean as possible.
2. Dampen a scrub pad with water from the wash pot and scrub the pot to loosen the remaining food.
3. Dunk the pot in the wash pot to remove the loosened food. If food is still stuck to the pot, scrub some more.
4. Use hot-pot tongs to dip the pot in the hot-rinse pot. Be sure no soap bubbles remain on the pan.
5. Dunk the pot in the cold-rinse pot. If the pot is too big, dip some water from the cold-rinse pot into the pot and slosh it around.

Lay clean dishes, pots, and utensils on a plastic ground sheet or hang them in a mesh dish hammock and let them air dry. Dispose of dirty wash water properly, either in a designated area such as a drain or by dispersing 200 feet away from camp and water sources.

Each Scout can wash and rinse their own plate, cup, and utensils. If everyone also does one pot, pan, or cooking utensil, the work will be finished in no time.

REQUIREMENT 8

After your campout, discuss with your patrol what went well and what you would do differently next time. Include how you followed the Outdoor Code and Leave No Trace Principles for Kids.



You can do this requirement as an Arrow of Light patrol. If you're camping with a Scouts BSA troop, you should do this together. After each campout, Scouts will identify those things that went well and those things that could be improved. Here are two common methods to do this.

1. When conducting a discussion, give everyone the opportunity to contribute. Even if something has already been identified by someone else, it's good to hear how many other people felt the same way.

2. **Start, Stop, Continue**

Gather everyone to identify the things you should start doing, things you should stop doing, and things you should continue to do. You can gather this by having everyone name one item to start, one to stop, and one to continue, or you can lead a group discussion. This works best when the list is written in a place everyone can see.

Here is an example of what a start, stop, and continue list may look like after a campout.

Start: Checking that each patrol has a duty roster before the campout.

Stop: Bringing Dutch ovens when no one is planning to use them.

Continue: Having patrol competitions and patrol time during the campout.

PERSONAL FITNESS

PERSONAL FITNESS



SNAPSHOT OF ADVENTURE



In the Scout Oath we promise to keep ourselves physically strong. Proper nutrition, staying active with group activities, and personal exercises are key to being physically strong. You will also review your personal BSA Health and Medical Record.

REQUIREMENTS

Approved by _____

1. Plan a balanced meal that you would eat when camping. Prepare that meal using the gear you would use on a campout. _____
2. Examine what it is to be physically fit and how you incorporate this in your life. Track the number of times you are active for 30 minutes or longer over a 14-day period. Share with your patrol or family what you enjoyed and if you feel you are living up to the Scout Oath of being physically fit. _____
3. Be active for 30 minutes with your patrol, a younger den, or at least one other person in a way that includes both stretching and moving. _____
4. Review your BSA Annual Health and Medical Record with your parent or legal guardian. Discuss your ability to participate in Arrow of Light patrol and pack activities. _____



- Required Adventure
- Scan for this Adventure page

REQUIREMENT 1

Plan a balanced meal that you would eat when camping. Prepare that meal using the gear you would use on a campout.



Great meals are planned. Work with your family or other members of your patrol to plan a delicious menu for breakfast, lunch, or dinner. Remember to include at least three different food groups whenever possible.

Make a shopping list and decide how much money you can spend on food. Then head to the grocery store and start shopping. Work to stay within your budget by checking prices as you go. If you need to make adjustments, that is OK.

Here are some things to consider when you go shopping:

- ▶ Store brands are often less expensive than brands you see advertised on TV or online.
- ▶ Foods you make from scratch usually cost less (and are tastier) than processed foods.
- ▶ You should compare the price of fresh, canned, and frozen fruits and vegetables to find the best price.
- ▶ To really be sure you're getting the best deal, compare the price per ounce, pound, or serving of different products.

Before using a knife you must first earn the Knife Safety Adventure.

SAMPLE CAMP MENU

BREAKFAST

Eggs in a bag: For each Scout, crack one or two eggs into a sealable, quart-sized, boil-safe cooking bag. Add 1 tablespoon milk and other ingredients — bacon bits, cheese, chopped green pepper, chopped onion, salt, pepper — to taste. Seal the bag, removing excess air, and then shake it. (Don't shake it before you seal it!) Place the bag into boiling water and cook for three to four minutes or until fully cooked. Use tongs to remove the bag from the hot water.

Fruit salad: Cut up apples, bananas, oranges, grapes, or other favorite fruits. Mix together and toss with a little lemon juice to prevent browning.

Biscuits: Arrange canned biscuits on a metal plate or pie pan. Carefully place the plate on several rocks in the floor of a preheated Dutch oven. Cook until golden brown.

Juice and milk

LUNCH

Peanut butter and jelly sandwiches

Carrots, apples

Juice boxes

DINNER

Dutch-oven pizza: Spread pizza dough on a metal plate. Cover with pizza sauce, sautéed vegetables, cooked meat, cheese, and other favorite toppings.

Carefully place the plate on several rocks in the floor of a preheated Dutch oven. Cook until the cheese is melted and the crust is golden brown.

Salad

Drinks

OUTDOOR COOKING METHODS

Camp food can be delicious, and camp cooking is fun. As part of this Adventure, you'll get to try some really cool ways to cook food. Just don't try them all at home.

Camp Stove: A camp stove is a tabletop stove that uses propane. Camp stoves work just like your cooktop back home. Be careful, however, because some can tip over easily. Always have an experienced adult help you light a camp stove.

Dutch Oven: A Dutch oven is a cast iron (or aluminum) pot that is heated by charcoal or hot coals. A camping Dutch oven has legs on the bottom and a rim around the lid. For baking, put 10 to 12 coals underneath and enough coals on top to cover the lid. For boiling, put more coals underneath. Either way, you can add or remove coals to adjust the temperature.

Box Oven: A box oven is like a homemade Dutch oven. It is a foil-lined cardboard box that sits on top of a cookie sheet that is propped on four empty vegetable cans. Between the cans is a bed of coals, which provides the heat.

Solar Oven: A solar oven is a pizza box that is lined with aluminum foil and covered with black construction paper. It uses the sun's rays to cook what is inside.

Open Campfire or Charcoal: Open fires are good for roasting marshmallows and grilling things like burgers. For the best results, wait until the flames die down, and cook over the coals. If using charcoal, let it burn down until it is covered with white ash. Charcoal is a useful tool for learning outdoor cooking because it is easy to light and keeps a steady, even heat.

FOOD SAFETY

As you cook, you need to do some things to keep from getting sick and making other people sick:

- ▶ Clean hands and surfaces frequently. Wash your hands with warm water and soap for at least 20 seconds before and after you handle food and after you use the bathroom. Wash your cutting boards, dishes, utensils, and countertops with hot, soapy water after you prepare each food item and before you go on to the next food.
- ▶ Don't cross-contaminate. That's a fancy way to say you should keep raw meat, poultry, seafood, and eggs separate from each other and from other foods in your shopping cart, grocery bags, refrigerator, and ice chest. Also, never place cooked food on a plate that has held raw meat, poultry, seafood, or eggs.
- ▶ Cook to proper temperatures. Use a food thermometer, which measures the temperature inside cooked meat, poultry, and egg dishes, to make sure the food is fully cooked. Stick the thermometer into the middle of the food and don't let it touch the pan. Most recipes include the correct temperatures for different kinds of food.
- ▶ Chill/refrigerate promptly. Never let food sit out for more than two hours before putting it in the refrigerator, freezer, or ice chest. Never thaw frozen food at room temperature. Instead, thaw it in the refrigerator, in cold water, or in a microwave oven using the defrost setting. Food thawed in cold water or in the microwave should be cooked immediately.
- ▶ Maintain proper temperatures. Keep cold foods in an ice chest or refrigerator until you're ready to use them. If you're going to use an insulated container to keep food warm, fill it with hot water, wait a few minutes, then empty it and fill it with hot food.

REQUIREMENT 2

Examine what it is to be physically fit and how you incorporate this in your life. Track the number of times you are active for 30 minutes or longer over a 14-day period. Share with your patrol or family what you enjoyed and if you feel you are living up to the Scout Oath of being physically fit.

Being active continuously for 30 minutes or longer is a good way to keep your muscles in good condition, your heart pumping, and your lungs working well. You can choose to do the same activity, or you can rotate through different activities.



DAY	1	2	3
ACTIVITY			
DURATION			
DAY	4	5	6
ACTIVITY			
DURATION			
DAY	7	8	9
ACTIVITY			
DURATION			
DAY	10	11	12
ACTIVITY			
DURATION			
DAY	13	14	
ACTIVITY			
DURATION			

REQUIREMENT 3

Be active for 30 minutes with your patrol, a younger den, or at least one other person in a way that includes both stretching and moving.

Are you on a sports team at school or with a club? If so, you know that you spend more time practicing than you do playing in an actual game. Practice includes stretching and conditioning your body for the type of the game you play, and then you spend time practicing. If this is what your sports team does, then share it with your den leader or parent to complete this requirement.



Your patrol could also choose to play a game as a patrol, with a younger den, or with the whole pack. A great game that can include everyone, even parents, is kickball.

Kickball

If you're familiar with the rules of softball or baseball, then you already know the basics of kickball. Kickball is played on a baseball field (or a field can be set up in a similar fashion), and the distances to the bases can be adjusted based on the players. The distance between bases on a Little League baseball diamond is 60 feet; this is a good distance to start off with.

Create two teams. One team starts off kicking and the other starts off in the field. If you have an odd number of players, you may want to have someone who is not on either team serve as the pitcher.

The kicking team will decide the order in which players will kick. Only one kicker approaches home plate at a time. The pitcher rolls the ball in front of home plate. In this version, there are no strikes or balls like in baseball or softball. Slow to moderate pitches only. If the kicker requests a slower pitch, then the pitcher is obligated to do so. The pitcher should try their best to give the kicker a pitch that they feel most comfortable kicking. The kicker kicks the ball and then starts to run the bases.

The team in the field tries to get the kicker out. They can do this by either catching the kicked ball before it touches the ground or by throwing the ball to a teammate who is touching the base that the kicker is running to before the runner gets there. In this version, there is no throwing the ball at the kicker to get them out.

The team in the field must stay out of the way of a kicker who is running the bases. The straight line that connects the bases is called the baseline. If a member of the field team gets in the way of a kicker who is running the bases, the runner advances



to the next base. If the runner was not the kicker, the kicker is also automatically safe at first base even if the field team caught their kick.

Any player who deliberately crashes into a defensive player holding the ball, waiting to apply a tag, will have to sit out for the rest of the game. On an overthrow, the runner may advance at their own risk. They are allowed to run more than one base if they want.

The play ends when the pitcher has control of the ball and is near the mound/pitching circle. Any runner who interferes with the ball on its way back to the pitcher will be called out.

Kickball is designed to focus on fun and being active. Consider the points of the Scout Law that are important to good sportsmanship.

REQUIREMENT 4

Review your BSA Annual Health and Medical Record with your parent or legal guardian. Discuss your ability to participate in Arrow of Light patrol and pack activities.

Everyone who participates in a Cub Scout activity is required to have a BSA Annual Health and Medical Record on file with the pack. The adults in your pack can learn more about the BSA Annual Health and Medical Record on Scouting.org or by scanning the QR code below.

The image shows a sample of the BSA Annual Health and Medical Record form. It is a multi-section document with columns labeled A, B1, B2, and C. Section A contains personal information and medical history. Sections B1 and B2 are for emergency contacts and allergies. Section C is for additional information. The form is titled 'BSA Annual Health and Medical Record' and includes a header for 'Scout Name' and 'Pack Number'.

Your parent or legal guardian will complete the BSA Annual Health and Medical Record for you. It does not require a doctor's appointment. The form asks for an emergency contact and collects basic information about you and your health history.

Is there something that your den leader should know about you that may help keep you safe? For example, are you allergic to certain foods, insect bites, medications, or latex? This information should be recorded on your BSA Annual Health and Medical Record.

This form is also required to participate in Scouts BSA. When you join a Scouts BSA troop, make sure to inform the troop's adult leadership of anything that may help keep you safe, and give them a copy of your form.

CITIZENSHIP

CITIZENSHIP



100 Arrow of Light

SNAPSHOT OF ADVENTURE



Volunteering to make your community and country better is part of being both a Scout and a good citizen. This Adventure may only have two requirements, but the goal is for you to take an active part in identifying and planning a service project, not just participating in one. This will help you in the future as you learn how to plan and conduct service projects in Scouts BSA.

REQUIREMENTS

Approved by _____

1. Identify a community service project that your patrol or pack could accomplish. Use the BSA SAFE Checklist and develop a plan to conduct the service project safely. _____
2. Participate in a service project for a minimum of two hours or multiple service projects for a total of two hours. _____



- Required Adventure
- Scan for this Adventure page

REQUIREMENT 1

Identify a community service project that your patrol or pack could accomplish. Use the BSA Safe Checklist and develop a plan to conduct the service project safely.

The BSA SAFE Checklist is used for all Scouting activities. For service projects, a special BSA SAFE Checklist has been created. You can find this form at scouting.org or by following this QR code.

Here is what the BSA SAFE Checklist for service projects looks like.





Service Project Planning Checklist

The intent of our checks, questions, warnings, and reminders is to keep safety the number one priority. This checklist can be used for all Scouting service projects. Check off the items, and the checklist is not an added requirement for an Eagle Scout service project. If it is not practical to meet these standards, do not conduct the activity in wilderness.

Service Project Description: _____

Project Plan/Steps to Complete: _____

Supervision – Youth are supervised by qualified and trustworthy adults who set the example for safety.

- ☐ On-site supervision
- ☐ Required training, certifications, experience, and skills
- ☐ Monitor all youth throughout trip

Assessment – Activities are assessed for risk during planning.

- ☐ Site research (terrain, trees, weather, insects, etc.)
- ☐ Personal protective equipment (PPE)
- ☐ Site access, material delivery, parking, permission/consents
- ☐ Map/terrain/compass/contingencies and communications
- ☐ Work hours, including breaks
- ☐ First Aid/First Aid Kits

Fitness and Skills – Participants' Annual Health and Medical Records are reviewed, and leaders have confirmed that participants know and will abide by the rules for the project.

- ☐ Annual Health and Medical Records
- ☐ Training needed
- ☐ BSA's Project Task List

Equipment and Environment – Safe and appropriate used equipment (tools, ropes, compasses, maps, or playing fields) are used properly. Leaders periodically check gear use and the environment for changing conditions that could affect safety.

- ☐ Personal protective equipment (PPE)
- ☐ Tools and equipment available
- ☐ First aid supplies
- ☐ Weather forecast and conditions
- ☐ Communications
- ☐ Project area reviewed for safety concerns

If there are any incidents:

1. Stop use of the equipment or site.
2. Preserve and document the evidence. Take pictures if appropriate.
3. Immediately complete an incident report and notify your local council.

For more information go to www.scouting.org/safe/ and submit a [SAFETY](http://www.scouting.org/safe/) report.

Resources:

Guide to Safe Scouting (<http://www.scouting.org/safe/>) and additional guides (<http://www.scouting.org/safe/>) and additional guides (<http://www.scouting.org/safe/>)

BSA-107
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REQUIREMENT 2

Participate in a service project for a minimum of two hours or multiple service projects for a total of two hours.

You may choose to follow through with the service project you planned in requirement 1 or you may participate in one or more other service projects with your patrol, pack, or family.



FIRST AID

PERSONAL SAFETY AWARENESS



SNAPSHOT OF ADVENTURE



In this Adventure, you will learn how to protect yourself and how to help others when they have been hurt. The skills you learn in this Adventure could help someone in trouble or even save a life.

Your patrol may have a trained professional like an emergency medical technician (EMT), medical doctor, or registered nurse provide instruction for this Adventure.

REQUIREMENTS

Approved by _____

1. With permission from your parent or legal guardian, watch the *Protect Yourself Rules* video for the Arrow of Light rank. _____
2. Explain what you should do if you encounter someone in need of first aid. _____
3. Demonstrate what to do for hurry cases of first aid: serious bleeding, heart attack or sudden cardiac arrest, stopped breathing, stroke, and poisoning. _____
4. Demonstrate how to help a choking victim. _____
5. Demonstrate how to treat shock. _____
6. Demonstrate how to treat the following: cuts and scratches, burns and scalds, bites and stings of insects and animals, and nosebleeds. _____
7. Make a personal first-aid kit.
Demonstrate the proper use of each item in your first-aid kit. _____



- Required Adventure
- Scan for this Adventure page

REQUIREMENT 1

With permission from your parent or legal guardian, watch the *Protect Yourself Rules* video for the Arrow of Light rank.

In the *Protect Yourself Rules* video for Arrow of Light rank, you will meet Darius and Mia, who will share with you their experiences and the six Protect Yourself Rules.



You can watch the video by going to [Scouting.org](https://www.scouting.org) or by following the QR code below.



REQUIREMENT 2

Explain what you should do if you encounter someone in need of first aid.

When people get hurt, they need help right away. That help is called first aid. It's the quick help someone receives before professional help can arrive. You might be the only person at the scene of an accident who can provide first aid, so it's important to know the right way to help.

The Scouts BSA motto is Be Prepared. One way to be prepared is to learn how to do first aid before an emergency occurs.

First aid is what happens when you remove a tick that's burrowed into your skin. First aid is what happens when, after you scrape your knee, a caring adult cleans and bandages the wound. First aid is what happens when a server in a restaurant saves a choking victim by giving abdominal thrusts. First aid is what happens when a Scout performs CPR while waiting for an ambulance to arrive. First aid is what you will learn during this Adventure.

What to Do After an Accident

If you come across an accident or medical emergency, do these things:

- ▶ **Check.** Make sure the scene is safe before approaching. You can't help anyone if you become a victim yourself.
- ▶ **Calm down and think.** Take a couple of seconds to assess the situation and decide what needs to be done. Staying calm may be hard to do, but it's important. The victim will feel better knowing you are in control, and you will be able to make better decisions than if you were panicked.

- ▶ **Call.** If the victim seems badly hurt, send someone to call for medical help. If no one is there to do that, call for help and offer to assist the victim.
- ▶ **Care.** Explain that you know first aid and get permission to treat the victim before doing anything else. When sending someone to get help, point at a specific person and say something like, "Juan, go call 911 and ask for an ambulance." Don't assume everybody knows what to do.
- ▶ **Do not move a badly hurt person unless they are in further danger.** It may be necessary to move a person if there is a nearby fire or if the person is lying in the road. But never move an injured person unless it is absolutely necessary.
- ▶ **Check the victim for "hurry cases."**
- ▶ **Treat the victim for shock.**

How to Get Help in an Emergency

In 98% of the United States, you can dial 911 to get help for all kinds of emergencies, including medical problems. A few communities may have different phone numbers for the police, fire department, emergency medical services (EMS), or rescue squad, so ask your parent or den leader if 911 is correct for your community or if there are different numbers.

When you call for help in an emergency, remember the three W's: who, what, and where.

- ▶ **Who:** Give your name and the phone number you're calling from. (Some 911 systems can trace your phone number and location, but others can't.)
- ▶ **What:** Explain the situation. Is it a fire? A car accident? How many people are hurt? What are their injuries?
- ▶ **Where:** Give your exact location, using either the street address or the names of both streets at the nearest corner.

Never hang up until the operator tells you to because they may need more information. Don't worry; the operator can still send help.

Never call 911 except in actual emergencies. Calling in non-emergency situations is dangerous because it could prevent real emergency calls from getting through.

How to Get Help in Other Situations

At times, you may need to get help in non-emergency situations. You may want to report a suspicious car nearby or a broken traffic light. You may need help with a family problem. Find out how to get help where you live and make a list of the phone numbers. Post the list on your refrigerator so everyone can find the numbers quickly. It's also a clever idea to put your list on a card and carry it with you.



Our home address _____

IMPORTANT PHONE NUMBERS

Keep a list of numbers for:

- ▶ Police or sheriff's department

- ▶ Fire department

- ▶ Ambulance or emergency medical services

- ▶ Utility companies (electricity, gas, water)

- ▶ Your family doctor

- ▶ Poison control center **800-222-1222**

- ▶ Your religious institution (church, synagogue, mosque, etc.)

- ▶ Your parent's or guardian's cellphone

- ▶ Your parent's or guardian's workplace

- ▶ A trusted adult who can help you

REQUIREMENT 3

Demonstrate what to do for hurry cases of first aid: serious bleeding, heart attack or sudden cardiac arrest, stopped breathing, stroke, and poisoning.

A sprained ankle needs first aid, but it's not a life-threatening injury. Other medical problems — called "hurry cases" — require immediate help. Unless someone acts fast, gets help, and gives the right first aid, the victim can die within a few minutes.

THE THREE C'S

When dealing with hurry cases, remember the three C's.

- ▶ **Check:** Make sure the area is safe for you. Then check the victim to identify the problem. Is the victim breathing or moving? Tap the victim's shoulder and ask, "Are you OK?" Does the victim respond?
- ▶ **Call:** Call 911. Call out for help or send two people (if possible) to get help.
- ▶ **Care:** Care for the victim to the best of your ability while you wait for help to arrive. Some of the steps in treating hurry cases require special training to perform, but it's important to know what they are.

The five hurry cases are:

- ▶ **Serious bleeding.** When blood is spurting from a wound, it must be stopped quickly.
- ▶ **Heart attack or sudden cardiac arrest.** If someone's heart has stopped, it must be restarted quickly.

- ▶ **Stopped breathing.** If breathing has stopped, it must be restarted quickly.
- ▶ **Stroke.** If someone has a stroke (a blockage of blood flow to the brain), they must get medical attention quickly.
- ▶ **Poisoning.** If someone has swallowed poison, it must be made harmless quickly.

PROTECTIVE MEASURES TO TAKE WHEN GIVING FIRST AID

Treat all blood as if it contains germs that can make you sick. Do not use bare hands to stop bleeding; always use a protective barrier. If you have any cuts or scrapes, cover them with a bandage. Always wash your hands and other exposed skin with hot water and soap immediately after treating the victim. When possible, don't use a kitchen sink as that may contaminate the sink and expose others.

The following equipment should be included in all first-aid kits and used when giving first aid to someone in need:

- ▶ **Disposable, latex-free gloves** — to be used when stopping bleeding, dressing wounds, performing CPR, or treating a victim who is choking.
- ▶ **Plastic goggles or other eye protection** — to prevent a victim's blood from getting into the rescuer's eyes in the event of serious bleeding or other bodily fluids.
- ▶ **Antiseptic** — for use in cleaning exposed skin areas, particularly if soap and water are not available.

HURRY CASE: Serious Bleeding

In a bad accident, you might see blood spurting out of a wound. If blood gushes out of a wound like a fountain rather than oozing or flowing slowly, it must be stopped immediately.

Activate the 3 C's

Put on disposable, latex-free gloves and eye protection (not just eyeglasses), then grab the wound with your gloved hand. Press hard. With your free hand, grab your neckerchief, handkerchief, or another cloth. Fold it into a pad and press it on the wound. If you can, wrap the wound with gauze to hold the pad in place. If not, keep applying pressure with your hand. Don't remove the pad if it gets soaked with blood. Instead, put another pad and bandage over the first.

If the wound is on the arm or leg, raise that limb above the level of the victim's heart. That can help slow the bleeding. (Don't do this if there are other injuries such as a broken bone.)



HURRY CASE: Heart Attack and Sudden Cardiac Arrest

Heart attacks are the No. 1 cause of death in the United States. Most heart attacks happen to adults, but sometimes even young people can experience them. The most common symptom of a heart attack is pain in the center of the chest, but people can have other symptoms as well, including:

- ▶ Pain that radiates to the arms, back, neck, or jaw.
- ▶ Sweating when the room is not hot.
- ▶ Feeling like throwing up.
- ▶ Feeling weak.
- ▶ Sudden, sharp chest pain outside the breastbone.
- ▶ Dizziness or lightheadedness.

Activate the 3 C's

If you think a person is having a heart attack, call for medical help at once. If the person becomes unresponsive, begin chest compressions immediately as described below.

Another serious heart problem is sudden cardiac arrest, which occurs when the heart stops pumping. In seconds, the victim will become unresponsive and will stop breathing or will gasp for breath. If you suspect sudden cardiac arrest, call for medical help, begin chest compressions, and locate an automated external defibrillator (AED) if available.

Circulation

Cardiopulmonary resuscitation (CPR) is a way to keep the heart beating until medical help arrives. It requires instruction from a certified instructor. Your den leader can help you find more information.

The steps of CPR for adults include a cycle of 30 chest compressions followed by two rescue breaths.

1. Place the heels of your hands on the center of the victim's chest, one on top of the other. Lace your fingers together.
2. Position yourself over the victim with your shoulders over your hands and your arms straight.
3. Give 30 compressions. Push hard and fast. Let the chest rise completely before pushing down again.
4. Perform two rescue breaths as described in the breathing section on page 116.



5. Continue the cycle until one of the following happens:
 - a. The victim shows signs of life (breathing).
 - b. A trained adult or medical help arrives to take over.
 - c. You are too exhausted to continue.
 - d. An AED is ready to use.
 - e. The scene becomes unsafe.



Defibrillation

Find out if there is an AED near the victim. If there is, you can help by retrieving it and turning it on. An AED is a special device that can shock the heart into beating normally again. AEDs are found in schools, shopping malls, airports, houses of worship, and other places where people gather. You have to complete training to use an AED; this training is usually part of CPR training.

HURRY CASE: Stopped Breathing

In drowning cases, electric shock, and some other accidents, the victim's breathing may stop. It must be started again quickly or the person's heart will stop beating and



the person will die. You can help with these problems by providing care until professional medical help arrives.

Activate the 3 C's

Here are the steps you can take:

Airway

With the victim lying on their back, open the airway by pressing down on the forehead and lifting up on the chin. This will keep the tongue from blocking the flow of air. Don't do this if you suspect a neck injury. If the victim starts to vomit, roll them onto the side away from you so the vomit doesn't get inhaled into the lungs. Be sure to roll the body as a unit — not just the upper body. You'll need help to do this.

Breathing

When the victim's airway is open, check for breathing. Place your cheek 1 to 2 inches above the victim's mouth. Look, listen, and feel for movement and breathing. If the person is breathing, you will feel and hear the airflow on your cheek and see and feel the chest rising and falling. If there are no signals that a person is breathing, give two rescue breaths using the following procedure.

Rescue Breathing

Step 1: Place a CPR breathing barrier over the victim's mouth to protect both of you from any diseases that could be spread.

Step 2: While continuing to tilt the head, pinch the victim's nostrils, seal your mouth over their mouth, and blow into it to fill the lungs. The breath should last about one second. Watch to see if the person's chest rises. Remove your mouth, and then give another rescue breath.

Step 3: (For an adult victim) If the victim does not start breathing again after two rescue breaths, their heart may stop beating, too. Immediately begin CPR. (Ask a certified instructor about how to do this for children.)

HURRY CASE: Stroke

Stroke occurs when the blood supply is cut off to part of the brain. Brain damage and death can result if the victim doesn't get medical help.

Stroke can cause:

- ▶ Numbness or weakness in the face, arm, or leg — especially on one side.
- ▶ Trouble walking, speaking, understanding, or seeing.
- ▶ Dizziness.
- ▶ Headache.



Activate the 3 C's

- ▶ A good way to remember the signs of stroke is with the acronym **FAST**:
- ▶ **Face drooping:** Does one side of the person's face droop? Is the person's smile uneven?
- ▶ **Arm weakness:** Is one arm weak or numb?
- ▶ **Speech difficulty:** Is the person's speech slurred? Does the person have a tough time speaking or repeating a simple sentence?
- ▶ **Time to call for help:** If you see these signs, call 911 immediately.

HURRY CASE: Poisoning

Activate the 3 C's

Poisoning can be caused by many things, including:

- ▶ Eating certain wild mushrooms or berries.
- ▶ Swallowing household cleaning supplies, weed killers, insect poisons, or even things like nail polish remover.
- ▶ Taking too much medicine.
- ▶ Breathing in toxic fumes.

If someone has swallowed or breathed in poison, call 911 or 800-222-1222 (the National Poison Help Line) immediately. Tell the operator what the poison is, if you know it, and follow the directions.

Save the poison container so professionals can identify the poison. If a person has breathed in smoke, gas, or other fumes, try to move them to fresh air. Be careful that you do not become a victim yourself, however. Make sure the area is safe first.

It is important always to keep all household cleaners, medicines, weed killers, and insect poisons out of the reach of small children. Locked cabinets are best because children are curious and quickly learn to climb.

REQUIREMENT 4

Demonstrate how to help a choking victim.

Choking on food or a foreign object can lead to unconsciousness and death. If you see someone choking, act immediately. When you see a person holding their hands to their throat and turning blue, ask if they are choking. If they can speak, cough, or breathe, encourage them to try to cough up what they have swallowed. If not, call 911, or ask someone else to call 911. Tell the person you know first aid and ask if you can help. If they nod yes, give back blows:

- ▶ Give five back blows between the shoulder blades with the heel of your hand.
- ▶ If the object is not removed, give abdominal thrusts:
 - ◆ Position yourself behind the person and reach your arms around their waist.
 - ◆ Make a fist with one hand just above the person's belly button. Cover the fist with your other hand.
 - ◆ Make a series of five quick thrusts inward and upward to force air from the lungs. (Pretend like you're trying to pick the person up.)
- ▶ Alternate between abdominal thrusts and back blows until the object is dislodged, the person becomes unconscious, or medical help arrives.

Because of the possibility of injury, do not practice actual back blows or abdominal thrusts unless you are using a special simulator.



REQUIREMENT 5

Demonstrate how to treat shock.



When a person is injured or under great stress, the circulatory system might not provide enough blood to all parts of the body. That is called shock. This is a medical term and does not

mean being surprised or scared. The person will feel weak. Their face may get pale. Their skin will feel cold and clammy. They may shiver or vomit.

Do not wait for these signals to appear. Give any severely injured person first aid for shock:

- ▶ Call 911 for emergency help immediately.
- ▶ Have the person lie down on their back.
- ▶ Raise the feet slightly, unless you think there are injuries to the head, neck, back, hips, or legs. If you do not know, have the person lie flat.
- ▶ If the person is not awake, turn them on their side. But first, be sure the person has no injuries to the head, neck, or back.
- ▶ If the weather is cool, cover the person with a sheet. If it is hot, do not.
- ▶ Do not give the person anything to eat or drink.
- ▶ Stay with the person until help arrives.

REQUIREMENT 6

**Demonstrate how to treat the following:
cuts and scratches, burns and scalds, bites and
stings of insects and animals, and nosebleeds.**

Cuts and Scratches

Cuts and scratches are openings in skin. They can let in germs that cause infections. When treating cuts and scratches, be sure to wear disposable, latex-



free gloves and eye protection. Wash your hands thoroughly with soap and water after treating any wounds.

For small wounds, wash the wound with soap and water. Then apply first-aid ointment to help prevent infection if you have the victim's permission and know that they do not have an allergy to the medicine. Keep the wound clean with an adhesive bandage. Change the bandage as often as needed but at least once daily.

For larger cuts, first stop the bleeding by applying direct pressure. Keep the wound as clean as possible to limit infection. Cover an open wound with a sterile gauze pad or a clean cloth folded into a pad. Hold the pad in place with tape or a bandage made out of a neckerchief. Any bandage should be loose enough that you can slide two fingers between it and the person's body. An adult leader should evaluate any large wound. Once the bleeding has stopped, clean the wound as described above.

Anyone suffering a serious wound should be treated for shock and seen by a physician.

Burns and Scalds

Burns and scalds range from simple sunburn to extremely dangerous third-degree burns. The kind of first aid to give depends on the severity of the burn.

First-Degree Burns

First-degree burns only affect the outer surface of the skin, which gets red and sore. Put the burned area in chilly water until the pain stops. If you don't have any water, cover the burn with a clean, dry, loose dressing.



Second-Degree Burns

With second-degree burns, which are also called partial-thickness burns, blisters form on the skin. Put the burned area in chilly water until the pain stops. Gently dry the burned area. Cover it with a sterile gauze pad and hold the pad loosely in place with a bandage. Be careful not to break open blisters as that could cause infection. Don't apply creams, ointments, or sprays. If needed, treat for shock.

An adult should evaluate second-degree burns to determine the need for additional medical help.

Third-Degree Burns

With third-degree burns, which are also called full-thickness burns, the skin may be burned away, and the flesh may be charred. The victim may feel no pain because nerve endings

have been burned. You will definitely need to call 911 or local emergency responders and have an adult evaluate the situation. Don't remove clothing from around the burn.

Wrap the victim in a clean sheet. Cover them with blankets if the weather is cool. Treat for shock if needed and stay with the victim until professional medical help arrives.

Sunburn

Sunburn is a common injury among people who enjoy being outdoors. Most sunburns are first-degree burns, although severe sunburn is a second-degree burn and should receive prompt medical attention. All sunburns are dangerous because they can lead to long-term skin damage and even skin cancer when you get older.

No one is immune from sunburn. You can prevent sunburn by using plenty of broad-spectrum sunscreen with a sun protection factor (SPF) of at least 30. Put it on 20 minutes before you go outside and every two hours while you're outside. Reapply it after swimming or if you're sweating a lot.

A broad-brimmed hat, long-sleeved shirt, and long pants will give you even more protection. You should wear sunscreen even on cloudy days. The ultraviolet radiation from the sun that causes a sunburn can pass through clouds. It can also bounce off water and snow and cause damage to your skin.



Frostbite

Frostbite happens when the skin gets cold enough to freeze. A sure sign of frostbite is grayish-white patches on the skin. Some

victims will complain that their ears, nose, fingers, or feet feel painful and then numb. Others won't notice anything.



If you suspect frostbite, get the person into a tent or building, then gently warm the affected area and keep it warm. If an ear or cheek is frozen, remove your glove and warm the injury with the palm of your hand. Slip a frostbitten hand under your clothing and tuck it beneath an armpit. Treat frozen toes by putting the victim's bare feet against the warm skin of another person. Avoid rubbing frostbitten flesh. That can damage tissue and skin.

You can also warm a frozen part by holding it in warm — not hot — running water. Have the person exercise injured fingers or toes, and don't let the injured area freeze again. Get the victim to a doctor.

What is the best way to avoid frostbite? Stay warm and dry. Wear warm gloves, socks, and a hat. Wool and synthetic materials will keep you warm when they get wet; cotton will not. Dress in layers so you can regulate your body temperature by adding or removing articles of clothing.

Bites and Stings

Tick Bites

Ticks are small hard-shelled arachnids that bury their heads in your skin. Protect yourself whenever you're in tick-infested woodlands and fields by wearing long pants and a long-sleeved shirt. Button your collar and tuck your pant legs into your socks. Insect repellents can help too.



Inspect yourself daily, especially the warm and hairy parts of your body, and immediately remove any ticks you find. If a tick has attached itself, ask an adult to help you. The adult will grasp

the tick by its head with tweezers close to the skin and gently pull until it comes loose. It's important not to squeeze, twist, or jerk the tick, which could leave its mouth parts in the skin.

Wash the wound with soap and water and apply first-aid ointment. After dealing with a tick, thoroughly wash your hands. If you develop a rash or flu-like symptoms or otherwise feel ill in the next days or weeks after being bitten, talk to your doctor.

Bee and Wasp Stings



Scrape away a bee or wasp stinger with the edge of a card or ask an adult to help. Another method is to put a piece of tape on top of the area to pull out the stinger. Don't try to squeeze it out. That will force more venom into the skin from the sac attached to the stinger.

An ice pack might reduce pain and swelling. Some people have severe allergies to bee and wasp stings. If someone has trouble breathing after being stung or feels their throat swelling or closing up, seek medical help immediately and alert an adult. Find out if the person is carrying a kit for treating anaphylactic shock and help them administer the medication.

Chigger Bites

Chiggers are almost invisible. Their bites cause itching and small welts. Try not to scratch chigger bites. You might find some relief by covering chigger bites with calamine lotion or hydrocortisone cream.



Spider Bites

Most spider bites cause only minor pain and itching that go away in a fairly short amount of time. Only a few types of spiders' bites cause

serious reactions. Victims of these spider bites should be treated for shock and seen by a doctor as soon as possible. When possible, try to identify the spider or take the dead spider to the physician's office. Be sure that you don't put yourself in danger to do so.

The bite of a female black widow spider can cause redness and sharp pain at the wound site. The victim might suffer sweating, nausea and vomiting, stomach pain and cramps, severe muscle pain and spasms, and shock. Breathing might become difficult. The bite of a brown recluse spider doesn't always hurt right away, but within two to eight hours there can be pain, redness, and swelling at the wound. An open sore is likely to develop. The victim might suffer fever, chills, nausea, vomiting, joint pain, and a faint rash.



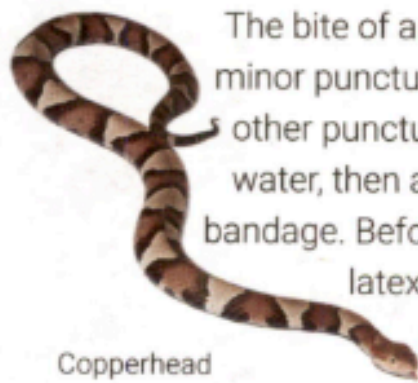
Black widow



Brown recluse

Snakebites

Snakes are common in many parts of the country, but bites from them are rare. Snakes try to avoid humans and normally strike only when they sense danger. Snakebites seldom result in death. Use a hiking stick to poke among stones and brush ahead of you when you walk through areas where snakes are common. Remember to stay on the trails. Watch where you put your hands as you collect firewood or climb over rocks and logs.



Copperhead
snake

The bite of a non-venomous snake causes only minor puncture wounds. You can treat these like other puncture wounds: Just wash with soap and water, then apply first-aid ointment and an adhesive bandage. Before applying medicine, put on disposable, latex-free gloves; ask about any drug allergies; and get permission. Get medical attention if you see signs of an infection.

The bite of a venomous snake can cause sharp, burning pain. The area around the bite might swell and become discolored. If you think a person has been bitten by a venomous snake, call for help, and follow these steps:

- ▶ Keep the person calm and still.
- ▶ Do not let the victim walk unless it is unavoidable — for example, if you have to evacuate the area. If possible, have an adult carry the victim to a safer area or to medical help.
- ▶ Immobilize the part of the body that was bitten and position it below the level of the heart.
- ▶ Remove any rings or jewelry from the bitten extremity.
- ▶ Clean the wound with antiseptic and cover it with a clean bandage.
- ▶ Do not apply ice or a tourniquet.
- ▶ Do not cut the wound or try to suck out the venom.
- ▶ Do not give the victim caffeine or alcohol.
- ▶ Try to remember the snake's shape and color pattern so you can describe it later, but do not try to capture it.

Nosebleeds

A nosebleed can look bad, but it will usually stop in just a few minutes. Have the victim sit up and lean forward to prevent blood from draining into the throat. Pinch the nostrils together for 10 minutes to maintain pressure on the flow and stop the bleeding. Apply a cool, wet cloth to the victim's nose and face above where you are pinching. (As always, wear latex-free, disposable gloves.) Watch for symptoms of shock and treat if needed. Call for help if the bleeding doesn't stop after 15 minutes.

REQUIREMENT 7

Make a personal first-aid kit. Demonstrate the proper use of each item in your first-aid kit.



Personal First-Aid Kit

You should make a first-aid kit to carry on outings. Include these items:

- ▶ Adhesive bandages
- ▶ Moleskin
- ▶ First-aid ointment
- ▶ Latex-free gloves



In addition to the basic items above, consider including:

- ▶ Gauze pads
- ▶ Adhesive tape
- ▶ Soap
- ▶ Scissors
- ▶ Mouth barrier
- ▶ Pencil and paper
- ▶ Antiseptic wipes



Every car and home should have a first-aid kit so that supplies will be there when you need them.

Car First-Aid Kit

All the items listed above plus:

- ▶ Small flashlight and spare batteries
- ▶ White handkerchief (to attach to the car so you can attract attention if the car is disabled)
- ▶ Blanket
- ▶ Large red and white sign that reads "Send help!" (Place in the front or rear window in an emergency.)

Home First-Aid Kit

Here are the things you should include:

- ▶ Tweezers
- ▶ Box of latex-free adhesive bandages (assorted sizes)
- ▶ 12 each of 3-by-3-inch and 4-by-4-inch sterile pads
- ▶ Roll of 1-inch and roll of 2-inch latex-free adhesive tape
- ▶ Scissors
- ▶ Safety pins
- ▶ Two 1-inch roller bandages
- ▶ Two 2-inch roller bandages
- ▶ Three cravat, or triangular, bandages
- ▶ Two 17-inch splints of thin board
- ▶ First-aid ointment
- ▶ Calamine lotion
- ▶ Latex-free, disposable gloves
- ▶ Mouth-barrier device
- ▶ Goggles
- ▶ Hand sanitizer



AS SEEN IN SCOUT LIFE MAGAZINE!



A TRUE STORY OF SCOUTS IN ACTION

They
Saved A
Bleeding
Man!

Nathaniel Attardi, 16, was with his dad, Michael Attardi Sr., at a store in Sea Girt, New Jersey, when they saw an elderly man in distress with blood dripping from his shirt.

Nathaniel helped the man sit down and tried to figure out what was wrong.

Nathaniel and his dad found a bleeding incision in the man's chest from a recent surgery. They applied pressure to the area and told the store manager to call 911. Mr. Attardi then went to their car to retrieve a first-aid kit.

Nathaniel and his dad applied gauze bandages to control the bleeding. They took the man's pulse, and the manager relayed the information to the 911 operator.

Nathaniel and his dad were able to calm the man, lowering his heart rate and slowing the bleeding.

Paramedics arrived, and Nathaniel and his dad gave them the information on the man's condition. They continued applying pressure to the incision before an ambulance took him to a hospital. They later learned the man was stable and recovering.

Life Scout Nathaniel J. Attardi (top) and his dad, Assistant Scoutmaster Michael D. Attardi Sr., both members of Troop 59, chartered to Elks Lodge #2534 in Manasquan, N.J., each received a Heroism Award for their actions.

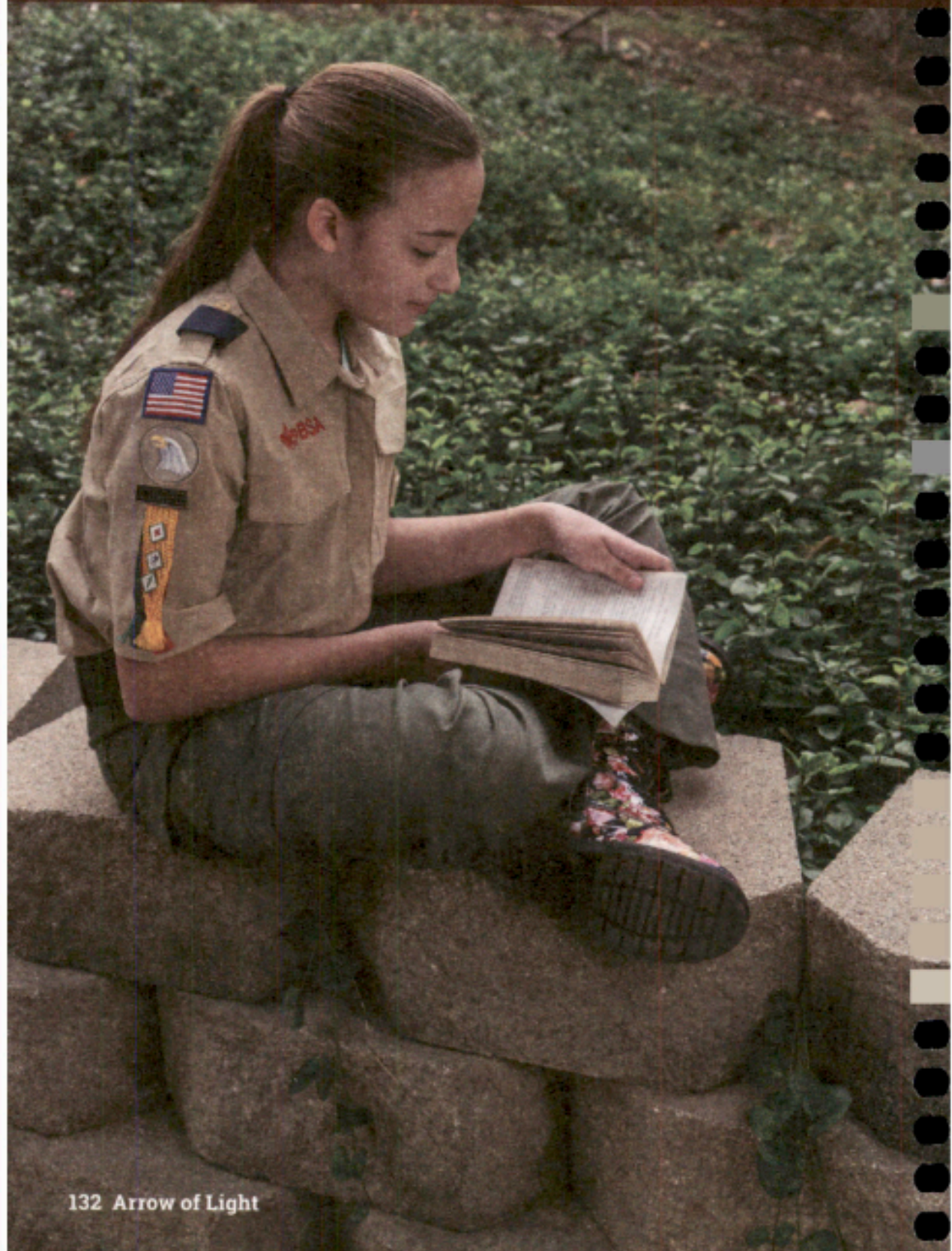


"Scouts in Action" subjects come from the National BSA Court of Honor. If you know of an act of heroism that should be recognized, contact your local BSA council office for a lifesaving or meritorious award application. Note: Consult approved safety guidelines, as actions depicted here may not precisely follow standard procedures.

S.I.A. ON THE WEB
go.scoutlife.org/sia

DUTY TO GOD

FAMILY AND REVERENCE



SNAPSHOT OF ADVENTURE



Duty to God ... Your family and religious leaders teach you about God and the ways you can serve. You can do your duty to God by following the wisdom of those teachings and by defending the rights of others to practice their own beliefs. Reverent means that a Scout is faithful in their religious duties and respects the beliefs of others. This fundamental of good citizenship should be kept before them.

REQUIREMENTS

Approved by _____

1. Discuss with your parent or legal guardian your family's faith traditions or one of your choosing. Choose a view or value of that faith tradition that is related to the Scout Law. Discuss with your family how each family member demonstrates this value. _____
2. Meet with a representative of a faith-based organization in your local community who provides a service that assists people in crisis regardless of their faith. Identify who they help and how. _____
3. Discuss with your parent, legal guardian, or an adult leader what "Duty to God" means to you. Tell how you practice your Duty to God in your daily life. _____



- Required Adventure
- Scan for this Adventure page

REQUIREMENT 1

Discuss with your parent or legal guardian your family's faith traditions or one of your choosing. Choose a view or value of the faith tradition that is related to the Scout Law. Discuss with your family how each family member demonstrates this value.



What does your family's faith tradition say about how you should treat other people?



Are there connections between the values of the Scout Law and your faith that are the same or similar?

REQUIREMENT 2

Meet with a representative of a faith-based organization in your local community who provides a service that assists people in crisis regardless of their faith. Identify who they help and how.

Communities that we live in have problems such as homelessness, poverty, and hunger. Our local, state, and federal government may have programs to assist with solving or easing these problems, but at times a government agency's ability to do so is not enough. In many communities, faith-based organizations can help fill gaps in services.

You may discover a faith-based organization through your participation in a service project, or you may conduct research on a social issue in your community and identify services that are available.



REQUIREMENT 3

Discuss with your parent, legal guardian, or an adult leader what "Duty to God" means to you. Tell how you practice your Duty to God in your daily life.

Based on your religion and family faith traditions, discuss what you feel your duty to God is. What responsibilities do you have to your religion and family faith traditions?

- ▶ What are things you currently do to meet these responsibilities?
- ▶ What are some things you could start doing to meet these responsibilities?
- ▶ Are there responsibilities to your religion or family faith traditions you don't yet have but will have when you become an adult?



CHAMPIONS FOR NATURE

ELECTIVE ADVENTURE



SNAPSHOT OF ADVENTURE



About half of the land on Earth is being used for some type of agriculture. Agriculture is often in the form of a farm. How we farm, either growing crops or raising animals for food, has an impact on our planet. The country of India has the most land mass used for agriculture. The United States is second. Combined, these two countries account for 22% of the land on the planet being used for agriculture. How the United States grows, distributes, and uses food has an impact on the world. In this Adventure, you will explore food and ways to conserve it, and the resources used to produce food.

REQUIREMENTS

Approved by _____

1. Identify foods grown or processed in your state. _____
2. Determine the benefits of purchasing food that is locally grown or processed. _____
3. Explore the concept of a food desert. _____
4. Explore the concept of a food oasis. _____
5. Learn how individuals can reduce food waste. _____
6. Participate in a conservation service project. _____



- Elective Adventure
- Scan for this Adventure page

REQUIREMENT 1

Identify foods grown or processed in your state.

Every state in the United States has some type of agricultural activity. Large states like Texas are known for cattle, which require a lot of land. Grapes grown in parts of California require a certain type of soil and climate. The smallest state, Rhode Island, has dairy farms. You may even have a fishery, a farm that grows and raises fish in a controlled environment.

One way to identify foods grown or processed in your state is to see if there is a farmers' market near you. Farmers' markets provide local farmers a chance to sell what they grow directly to the public. The United States Department of Agriculture has an online tool to help you find a farmers' market near you. With an adult, visit www.usdalocalfoodportal.com, enter your city and state, select **Farmers Market** in the directory, and click **Search**.



REQUIREMENT 2

Determine the benefits of purchasing food that is locally grown or processed.

A farmer usually sells their crops or animals to a food distributor. The food distributor may sell the product to a company that processes the food. That company then sells to the grocery store, and that is where the product is sold to the public. The further away the farm is from the market where you buy the food, the more resources it takes to get it to you. For example, to ship fruit from Florida to New York, it takes special packaging, shipping containers that can preserve freshness, and a lot more gas than it takes to go to a nearby town and buy it from a farmer. When we buy products that are locally grown, it can lower the cost of those products and our impact on our environment.

Another benefit to buying food that is locally grown is that it helps your local economy, or how people make and spend money. When you buy products grown or made in your local community the money you spend stays in your community. The money a local farmer makes is spent at local businesses and used to pay local taxes. Local taxes pay for or help maintain roads you drive, parks you visit, and schools you attend.

If you visit a farmers' market or go to the produce department at a grocery store, you can find out a lot more about the benefits of purchasing food that is locally grown or processed.



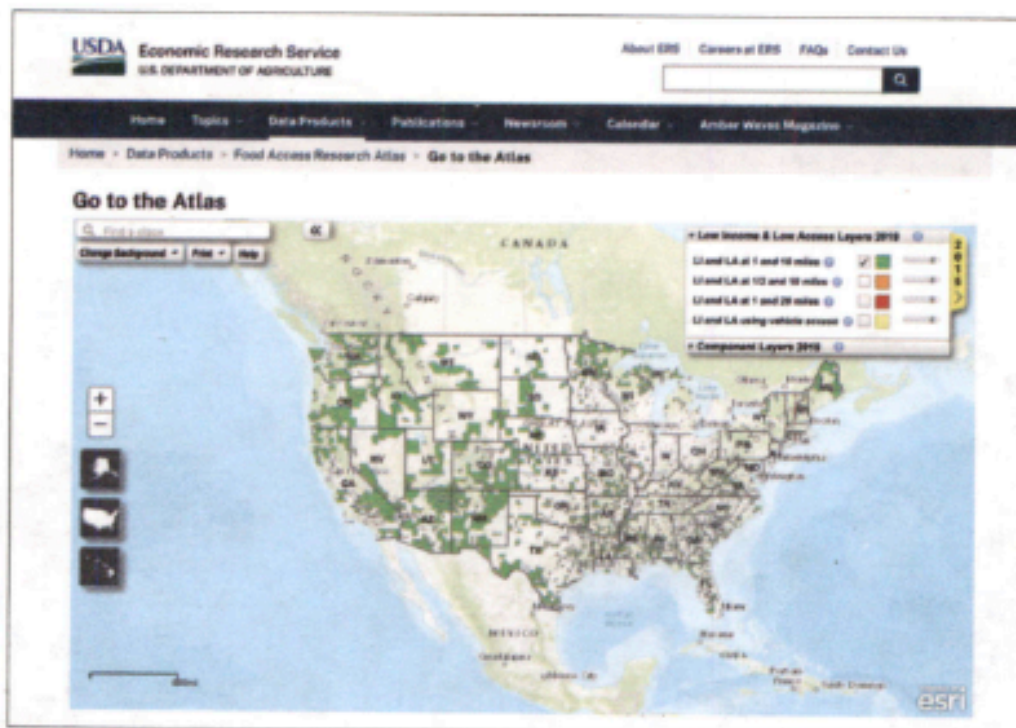
REQUIREMENT 3

Explore the concept of a food desert.

A food desert is an area that has limited access to affordable and nutritious food. In some communities people walk, ride their bikes, or rely on public transportation to get around. If affordable and nutritious food can't be reached with these means of transportation, it can create a food desert.

The foods that are available in food deserts are likely to be less healthy, such as fast food or prepackaged foods, and more expensive than fresh, nutritious foods. As a result, food deserts may put people who live in these communities at increased risk of health problems and other problems related to poor nutrition.

To locate food deserts in the United States, visit the United States Department of Agriculture's website at www.ers.usda.gov/data-products/food-access-research-atlas.aspx, where you'll find the Food Access Research Atlas.



REQUIREMENT 4

Explore the concept of a food oasis.

A desert is a large, extremely dry area of land with little vegetation. A desert oasis happens when water from an aquifer or underground river comes to the surface of a desert allowing vegetation to grow.

Like a desert oasis, a food oasis happens when affordable and nutritious food is available in the middle of a food desert. A food oasis is one solution to reduce food deserts. The good news is that there are several ways to form a food oasis.

Neighborhoods or communities that have access to land may come together to form a community garden that can become a food oasis. A community garden may have a section that is assigned to an individual or there may be a rotation of volunteers who tend to the garden. When the garden produces fruits or vegetables, they may be offered for free to the community or sold to cover the costs of maintaining the garden.

A community garden can be established just about anywhere. In cities, they can be on rooftops using raised garden beds. They can be in a local park or even at your school.

Another form of a food oasis is a farmers' market. A farmers' market brings those who grow food directly to the community. It may be a temporary market that is held for a couple of hours on a weekend. There are even some farmers who have created farmers' market food trucks that they drive around to sell fresh fruits and vegetables.

The ideal situation is for a food oasis to become permanent. When food markets in a food desert start to carry fresh and nutritious foods or new, accessible food markets open in communities in food deserts, the food oasis can take a community out of being in a food desert.

REQUIREMENT 5

Learn how individuals can reduce food waste.

Take what you want, but eat what you take. Keep this in mind not only when you're at home, but also when you go out to eat at restaurants. When you go out to eat, consider the amount of food you're ordering. If you have leftovers, will you eat them the next day?

You can reduce food waste when you buy food from a grocery store. Planning your meals before you go food shopping can reduce excess waste from food spoiling. Planning meals can also help you save money by creating a weekly menu that uses the same ingredients. That's because you can usually get more for your money when you buy a larger quantity of something rather than just a small amount of it.



What are some other ways you can reduce food waste?



REQUIREMENT 6

Participate in a conservation service project.



With your patrol, pack, or family conduct a conservation service project. Maybe you can conduct a project that will help with your local agriculture.

Here are some projects that can help reduce food waste.

- ▶ In the fall, collect pumpkins to donate to local cattle or livestock farms.
- ▶ Start a community garden where families can grow a garden together and share the fruits and vegetables they grow.

CYCLING

ELECTIVE ADVENTURE



SNAPSHOT OF ADVENTURE



Are you ready for a 10-mile bike ride? Gather your Scout Basic Essentials, check your bike and safety gear, and get ready to hit the open road or trail. Cycling is a wonderful way to travel and a great hobby to stay physically strong.

REQUIREMENTS

Approved by _____

1. Decide on gear and supplies you should bring for a long bike ride. _____
2. Discover how multi-gear bicycles work and how they benefit a rider. _____
3. Show how to lubricate a chain. _____
4. Pick a bicycle lock that you will use.
Demonstrate how it locks and unlocks, how it secures your bicycle, and how you carry it while you are riding your bicycle. _____
5. Repair a flat tire. _____
6. With your patrol, pack, or family, use a map and plan a bicycle ride that is at least 10 miles. _____
7. With your patrol, pack, or family and using the buddy system, go on a bicycle ride that is a minimum of 10 miles. _____



- Elective Adventure
- Scan for this Adventure page

REQUIREMENT 1

Decide on gear and supplies you should bring for a long bike ride.

The Scout Basic Essentials (page 29) are a must for a long bike ride. You'll need a few other items to be prepared for a cycling activity, as well. Some of the gear is personal, and some will benefit your group. As a group, you'll need to decide how to divide up the group gear and who will carry which pieces of the group gear.



Personal bike gear

- ▶ Bike helmet and gloves
- ▶ Proper shoes
- ▶ Appropriate clothes



Group gear

- ▶ Bike pump
- ▶ Tire patches
- ▶ Group first-aid kit

REQUIREMENT 2

Discover how multi-gear bicycles work and how they benefit a rider.

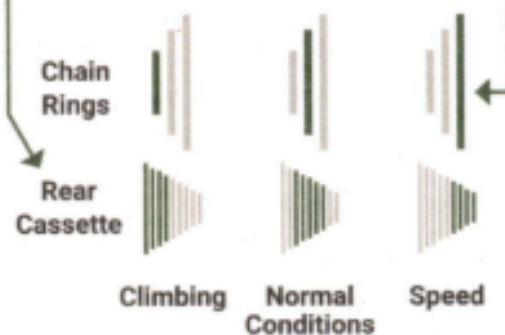
Gears are considered simple machines. Gears on a bike allow the rider to keep pedaling at a steady rate whether going uphill or downhill.

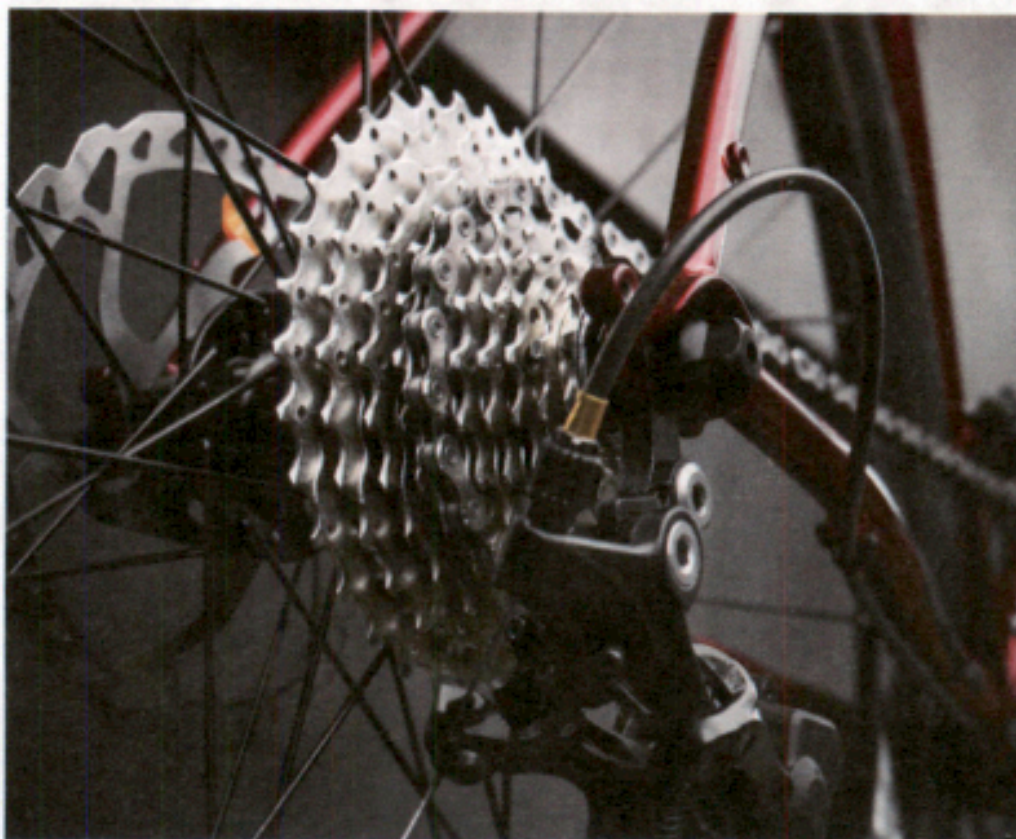
There are several different-sized gears on the back of your bike, and the bike chain goes around one of them. When you shift gears, a device pushes the chain off one gear and onto another.

On a bike that has no gears, every rotation you make with your pedals makes one rotation on the back wheel. Bikes with gears can change the number of rotations you make with your pedals to equal one full rotation of your back tire.



High gears are the larger gears and when you make one full rotation with your pedals, the wheel will complete more rotations. If the gear is large enough, the back wheel may make more than a full rotation with a full





rotation of your pedal. This would mean when you pedal once, the back tire will go around more than once. This makes it harder to pedal. High gears are used when you want to go fast on flat areas or when you're going downhill.

Low gears are smaller and when you make one full rotation with your pedals, the wheel will complete less rotation. This makes it easier to pedal but it takes more rotations of your pedal to make the back wheel go around just once. Low gears are used to go uphill.

When you're riding and get into a good rhythm of pedaling, you want to keep that rhythm. As your bike path changes, you adjust your gears so you can keep the same rhythm.

REQUIREMENT 3

Show how to lubricate a chain.

It is best to use oil that is designed for bike chains. Most of these products will come in a small bottle that has a small hole for the oil to come out when you squeeze it. Avoid using lubrication in spray cans as it can get onto other parts of your bike that need to stay dry, like your brake pads.

Make sure your bike is secured properly. (Maybe your buddy can hold it still.) With your hand, back-pedal the bike so the chain is moving, but the back tire is not. With your other hand, apply the oil to the chain as it is moving. Make sure to apply enough oil so it covers the complete chain. Stop applying the oil and continue to pedal with your hand to allow the oil to work into the chain.



REQUIREMENT 4

**Pick a bicycle lock that you will use.
Demonstrate how it locks and unlocks, how it
secures your bicycle, and how you
carry it while you are riding your bicycle.**

There are three main types of bike lock – **chain**, **cable**, and **D-lock**.

Chain locks are metal chains that have a type of lock connecting the two ends of the chain. The lock may be a padlock that requires a key or one that requires a combination code to unlock it.



Cable locks are similar to chain locks but instead of chain, they're made of a strong metal cable. Cable locks weigh less and are more flexible than chain locks.



Like the lock on a chain lock, a cable lock typically requires a key or a combination code to unlock it.

D-locks are made from a thick metal bar bent in the shape of a U. A straight bar connects the two ends and creates a lock that looks like the letter D. D-locks usually require a key to unlock them.



When using a lock on your bike, you want to make sure that you secure the lock around a part of the bike that is solid and that you attach the lock to something solid. Most bike stands are designed for attaching a bike lock.

If your bike has tires that can come off easily, it may be using a pinch bolt system. A pinch bolt looks like a lever. You pull the lever back to loosen the wheel, allowing you to remove the wheel from the frame. If your bike uses this system, make sure that your lock can secure your wheels in addition to the frame.



REQUIREMENT 5

Repair a flat tire.



When repairing a flat tire, always read and follow the owner's manual of your bike and read and follow the instructions of any products you are using to repair your flat tire.



First, remove the wheel with the flat tire. Make sure to release your brakes, then the wheel. Once the wheel is off, remove any air that is still in the tire and use a tire lever to remove the outer tire and get to the tire tube.



Now look for the cause of the flat by inspecting the wheel, tire, and tube for the location and causes of tears or punctures. Patch or replace the





tube. Follow the directions on the bike patch. Most patches are simply rubber that is applied with special glue. If you're repairing a tire while on a bike ride, you may want to replace the tube with a new one and fix the damaged one later. That means you may need to carry a spare tube with you. Now place your wheel back on your bike.



If you're repairing a flat at home, one way to check for punctures in the tire or tube is to fill the tire up with air and listen for hissing where the air is escaping. If this doesn't work, spray the tire with soapy water and look for bubbles that form where the air is escaping.



REQUIREMENT 6

With your patrol, pack, or family, use a map and plan a bicycle ride that is at least 10 miles.

It may take an hour or more for you to bike 10 miles. A professional cyclist can travel 25 miles per hour or more on a flat trail. For this Adventure, it's recommended that you find a designated bike trail that is flat, especially if you have younger Scouts or family members who will be joining you.

When planning your path for your bike ride, consider these questions:

- ▶ Is the trail paved or rugged?
- ▶ Can everyone who will be on the bike ride handle the conditions?
- ▶ Is the trail flat or will there be inclines and declines?
- ▶ Are there sites or things you want to stop and see?
- ▶ Are there areas where you can rest?

Make sure to tell a responsible adult who is not going on the bike ride the path you plan to take, when you will start, any stops you plan on making, and when you plan to get back.



REQUIREMENT 7

With your patrol, pack, or family and using the buddy system, go on a bicycle ride that is a minimum of 10 miles.

Grab your Scout Basic Essentials, complete a bike safety check, wear your helmet and safety gear, and grab a buddy. It's time to go for a ride!

Bike rides are most enjoyable when taken on paths or trails designed for bikes, away from vehicle traffic and free of hazards. During your 10-mile bike ride, take a break and drink some water if you feel the need.

Cycling with your patrol, pack, or family gives a sense of friendship and motivation. When riding as a group, here are some things to keep in mind:

- ▶ **Remember to ride close to your buddy.** You want to be the first person there if they fall or need help.
- ▶ **Have a ride leader.** This is the person who is at the front of the group. They set the speed or pace of the ride, but make sure that they do not ride so far ahead of others in the group that some struggle to keep up. The ride leader can switch out as needed.
- ▶ **Have a ride sweeper.** This is the person who is at the back of the group. They do not let anyone get behind them to ensure that no one gets left behind. If the group is riding too fast for some riders, the sweeper asks the faster riders to slow down. They also decide who the ride leader is so they can switch



a ride leader who is going too fast with one who has a pace that is comfortable for everyone.

- ▶ **Communicate.** Talking and signaling to group members about what you plan to do (like stopping or turning) and about possible obstacles is important to keep the group safe. If you're uncomfortable taking one hand off your handlebar to signal, speak up and use your voice to communicate to other riders. Remember, everyone in the group must signal, not just those at the front. Point out and vocalize obstacles on the road that could cause flat tires or crashes if not avoided and communicate if you need to stop for any reason.

Here are some personal responsibilities to keep in mind whenever you ride a bike:

- ▶ Always wear your helmet and other safety gear.
- ▶ Follow all rules of the trail and/or road.
- ▶ Let the group know if everyone is going too fast for you.
- ▶ Let the group know if you need to stop for any reason.
- ▶ If someone has to make a repair or just needs a break, be patient.
- ▶ Never overlap wheels with another rider.
- ▶ Leave enough distance between your front wheel and the rider in front of you so you can safely stop if they have to use their brakes.



ENGINEER

ELECTIVE ADVENTURE



SNAPSHOT OF ADVENTURE



Lots of people have great ideas: flying to the moon, tunneling under rivers, building robots that walk and talk, or making triple-loop roller coasters. Engineers turn those ideas into reality. They use science, math, and creative thinking to improve people's lives. In this Adventure, you will learn what engineers do. Even better, you can do some engineering projects of your own. So put on your thinking cap and get ready to think like an engineer!

REQUIREMENTS

Approved by _____

1. Learn the focus, related sciences, and products of civil, electrical, and mechanical engineers. _____
2. Pick one of the engineering fields from requirement 1 to complete the following requirements. _____
3. Examine a set of blueprints or specifications used by your choice of engineer. _____
4. Identify a project that you would like to build. _____
5. Using the engineering process, build your project. _____



- **Elective Adventure**
- **Scan for this Adventure page**

REQUIREMENT 1

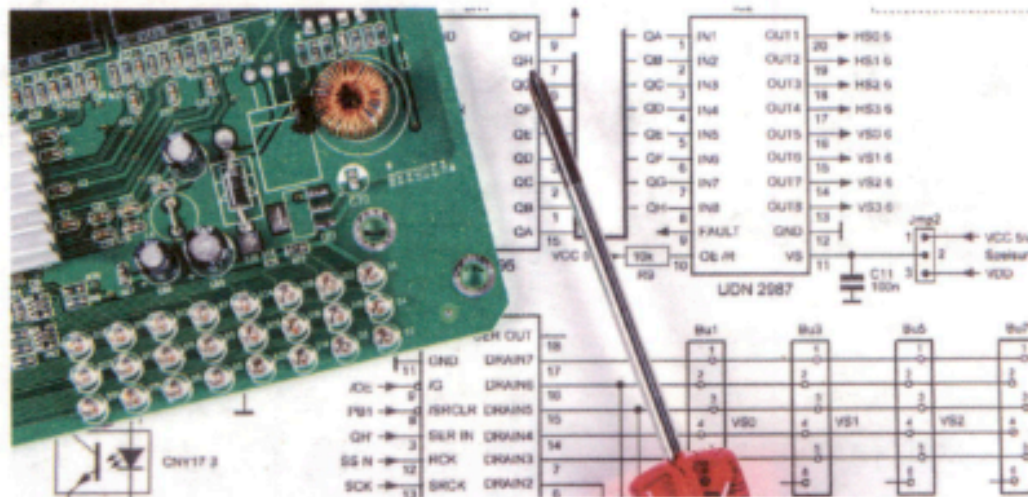
Learn the focus, related sciences, and products of civil, electrical, and mechanical engineers.

Engineers design everything from tiny materials you can see only through a microscope to spacecraft powerful enough to escape the Earth's gravity. Most engineers work in an area (called a discipline) that focuses on a specific type of project.

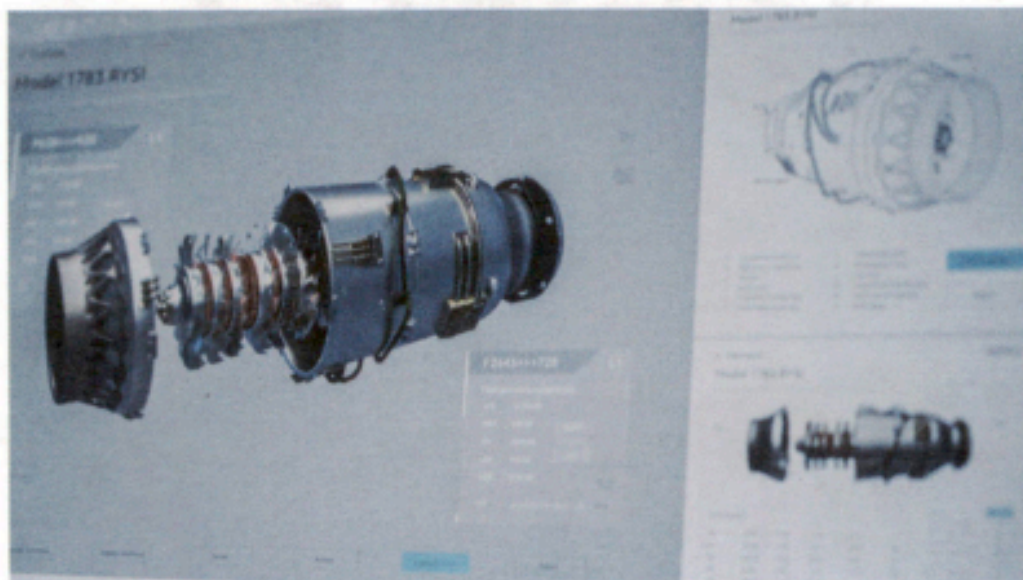
Engineers from different disciplines work together on many projects. For example, if you were building a spaceship, you would need aerospace engineers, computer engineers, electrical engineers, mechanical engineers, and several other types of engineers that aren't listed here.



Civil engineers plan, design, construct, maintain, or operate infrastructure — like roads, bridges, and water plants — while protecting the public and environmental health. Civil engineers may also work on improving or repairing existing infrastructure. Highways, bridges, water plants, and other things that civil engineers work on are often owned and operated by the federal, state, or local government.



Electrical engineers design, develop, test, and supervise the manufacture of electrical equipment, such as electric motors, radar and navigation systems, communications systems, or power generation equipment. Electrical engineers also design the electrical systems of automobiles and aircraft.



Mechanical engineers plan, design, construct, maintain and/or operate machines that use power, generate power, or involve force or movement. Mechanical engineers may work to improve existing machines, or they may invent new machines. Mechanical engineers often specialize in a specific area like engines, robotics, or even biotechnology.

REQUIREMENT 2

Pick one of the engineering fields from requirement 1 to complete the following requirements.

Think about which engineering discipline interests you, and choose from civil, electrical, or mechanical to complete the rest of the requirements.

Civil Engineering



Mechanical Engineering



Electrical Engineering

REQUIREMENT 3

Examine a set of blueprints or specifications used by your choice of engineer.

BLUEPRINTS

A written and/or picture design of a project is called a blueprint. Structural, civil, and electrical engineers are a few of the engineers who use blueprints to assist them with their projects. Why are these designs called blueprints? When they were first introduced in the 19th century, they were made with a process that resulted in white lines on a blue background.

Before you design your own project, look at a set of blueprints. You may use your local library, the internet, or an individual you know who is an engineer or works in the construction field to find blueprints. House plans are good examples because many of the pictures they contain will be familiar to you.

Depending on the project, blueprints can be very complicated. Some include hundreds of pages of information. You will find pictures that show the finished project from every side, measurements of every part of the project, and a list of materials to be used in the project. Blueprints are designed to be so complete that a qualified builder could complete the project without any other information.



REQUIREMENT 4

Identify a project that you would like to build.

Here is a project you might consider building.

Have you ever been on a roller coaster? Constructing a roller coaster requires several types of engineers to work together. Here's a roller coaster you can build, and it won't take a team of engineers. Use the engineering process to design and build your paper roller coaster.

PAPER ROLLER COASTER

Materials

- ☐ Sturdy square of cardboard for a base
- ☐ Construction paper or cardstock (it needs to be flexible)
- ☐ Pencil
- ☐ Ruler
- ☐ Tape
- ☐ Scissors
- ☐ Marbles

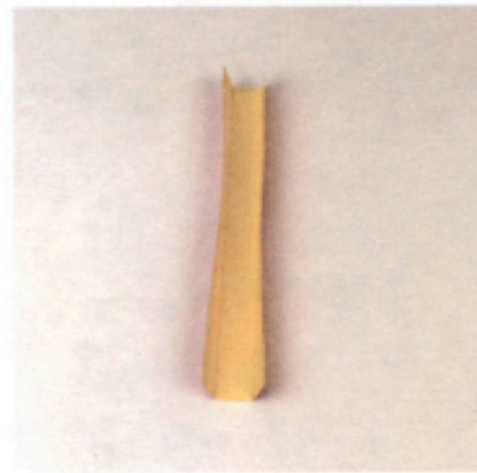
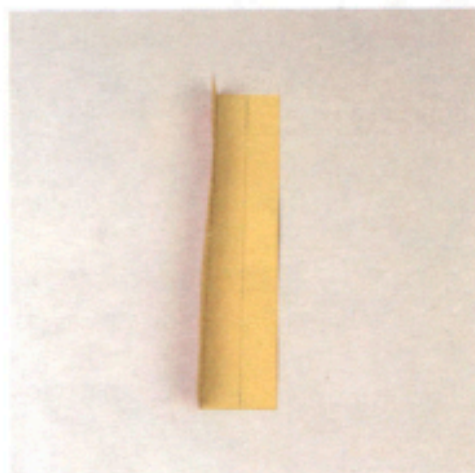
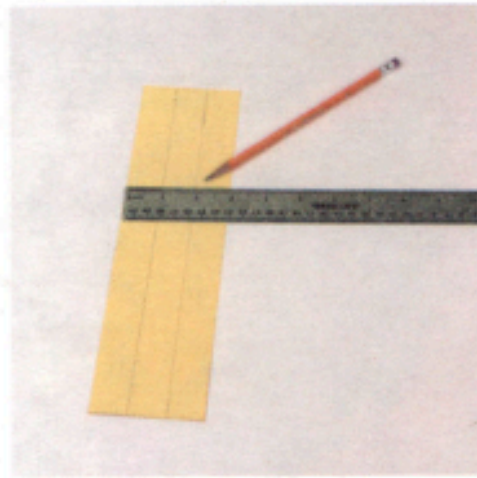
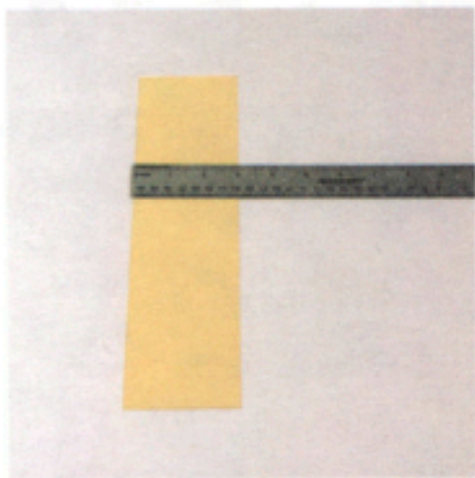


Instructions

Before you try building an entire roller coaster, practice building the individual track segments. Follow the instructions to draw with a pencil and ruler and cut out each segment. You can always use your segments in your final construction; this will also help you when you design your coaster.

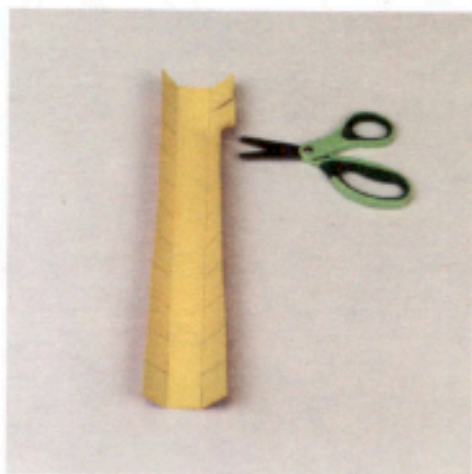
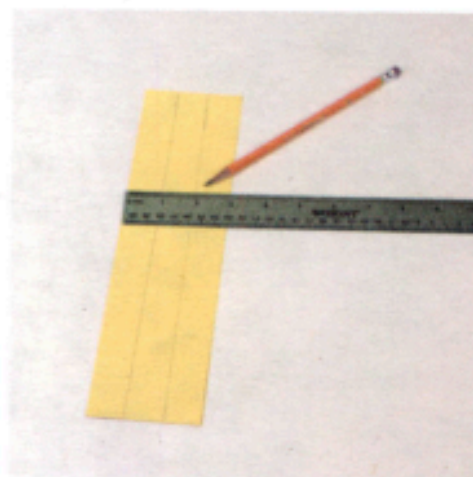
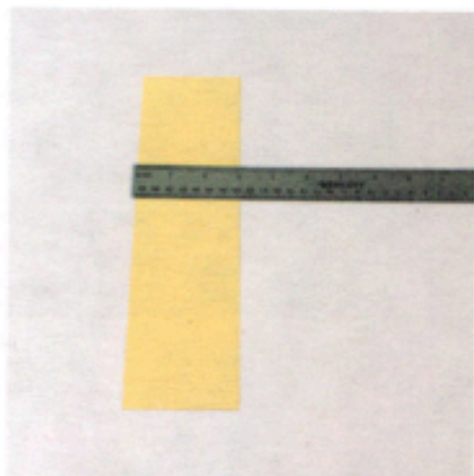
To build a straight segment:

1. Cut a 3-inch-wide strip of paper.
2. Draw two parallel lines that divide it into three 1-inch-wide strips.
3. Fold the two sides up 90 degrees along those lines to form walls.



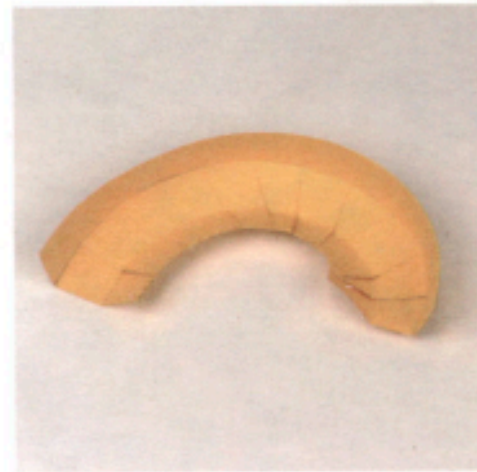
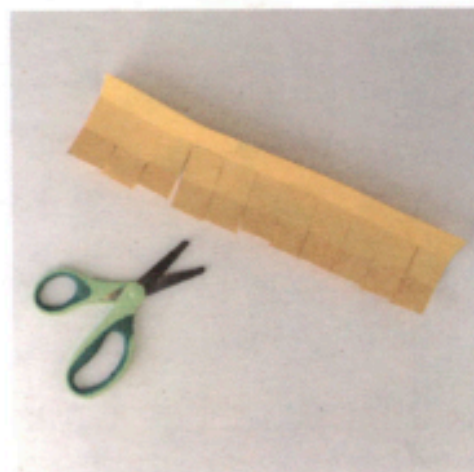
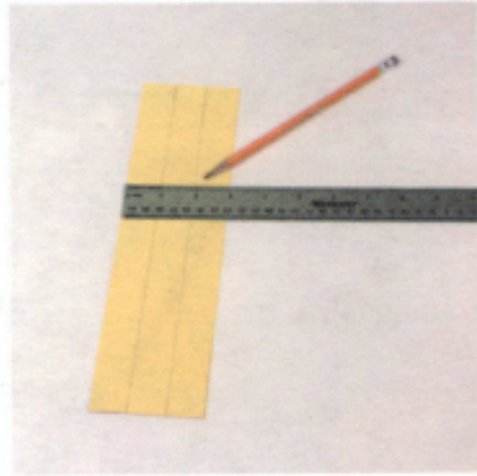
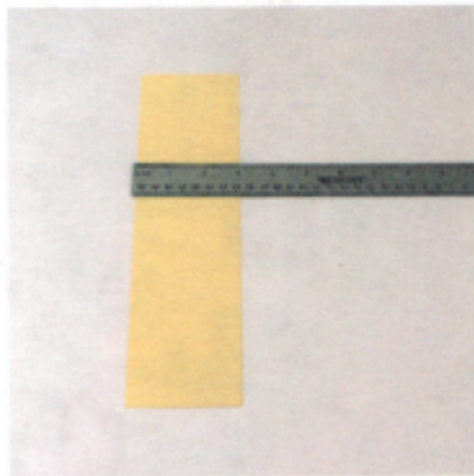
To build a loop or a hill:

1. Cut a 3-inch-wide strip of paper.
2. Draw two parallel lines that divide it into three 1-inch-wide strips.
3. Make marks every 1 inch along the long edges of the paper.
4. Cut 1 inch inward from these marks to form tabs.
5. Fold the tabs up 90 degrees.
6. Bend the track into the shape you want and tape the tabs together to hold it in place. This step is easier with two people, one to hold the track in place and one to do the taping.



To build a curve:

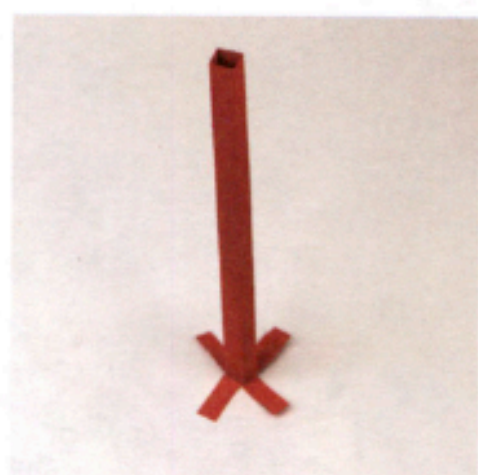
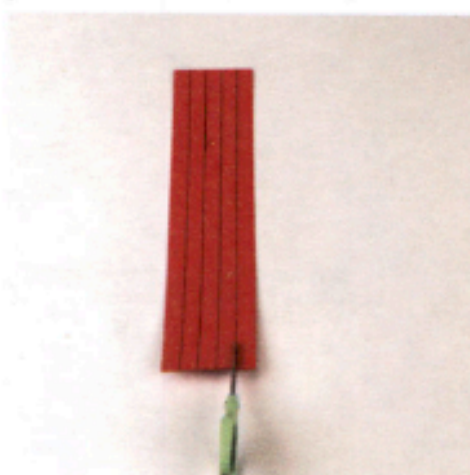
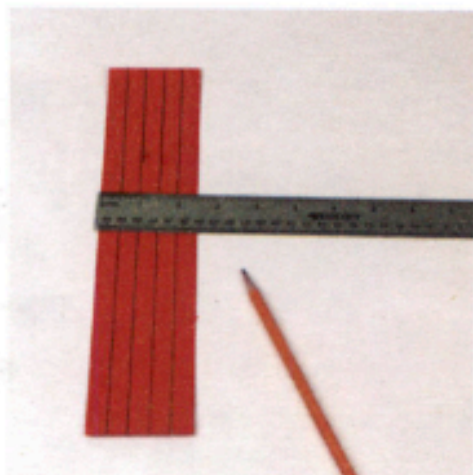
1. Cut a 3-inch-wide strip of paper.
2. Draw two parallel lines that divide it into three 1-inch-wide strips.
3. Make marks every 1 inch along one long edge of the paper.
4. Cut inward 2 inches from these marks.
5. Fold up the uncut side of the paper 90 degrees to form a wall.
6. Fold up the tabs on the other side to form the other wall.
7. Since the bottom portion of the track is cut into segments, you can bend it horizontally to form a curve. Tape the tabs together to hold the curve in place.

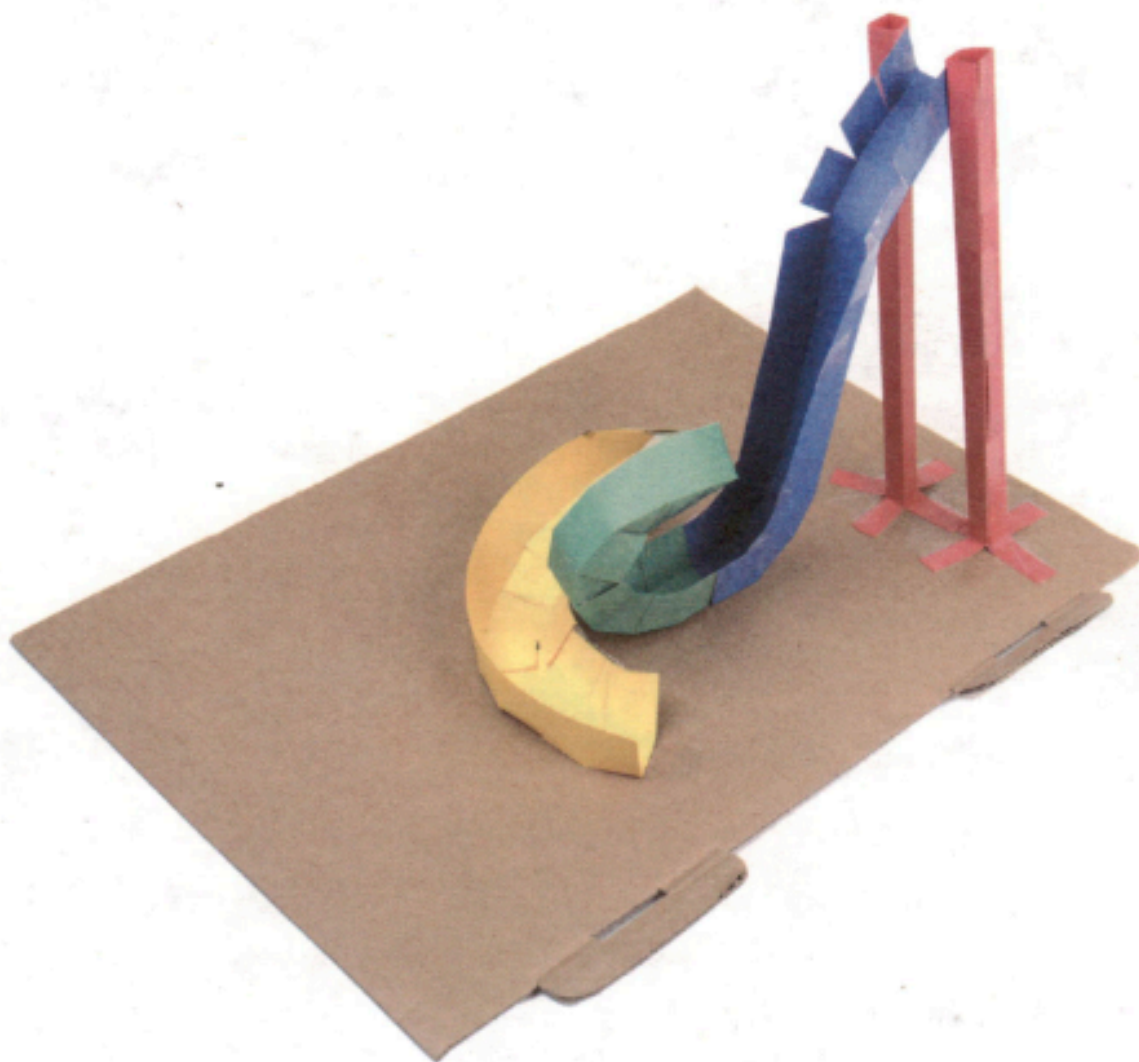


To build a support strut:

1. Cut a 2.5-inch-wide strip of paper.
2. Draw four parallel lines that divide it into five 0.5-inch-wide strips.
3. Cut 1 inch inward along these lines from one edge.
4. Fold along the lines to form a square shape (so two of the segments overlap) and use tape to hold in place.

Fold the tabs you cut at the end outward. This will allow you to tape the tabs flat to a piece of cardboard so your strut can stand upright.





Before putting all the pieces together for your marble roller coaster, make a simple drawing of what you want your roller coaster to look like. It is best to keep your first design simple. Look at your design and figure out how many of each of the pieces listed above you need to make to build your design.

Keep in mind that the marble will need to start high. Gravity makes the marble move through the track. If you make the track too long, the marble will not have enough momentum to complete the track.

REQUIREMENT 5

Using the engineering process, build your project.

THE ENGINEERING PROCESS

To understand how an engineer might approach a project, let's look at the engineering process. After an engineer becomes aware of a need, they gather information, and then make a design. The building phase begins after that.

Here is how you might use that process to construct a small item for your bedroom:

1. Determine your need.

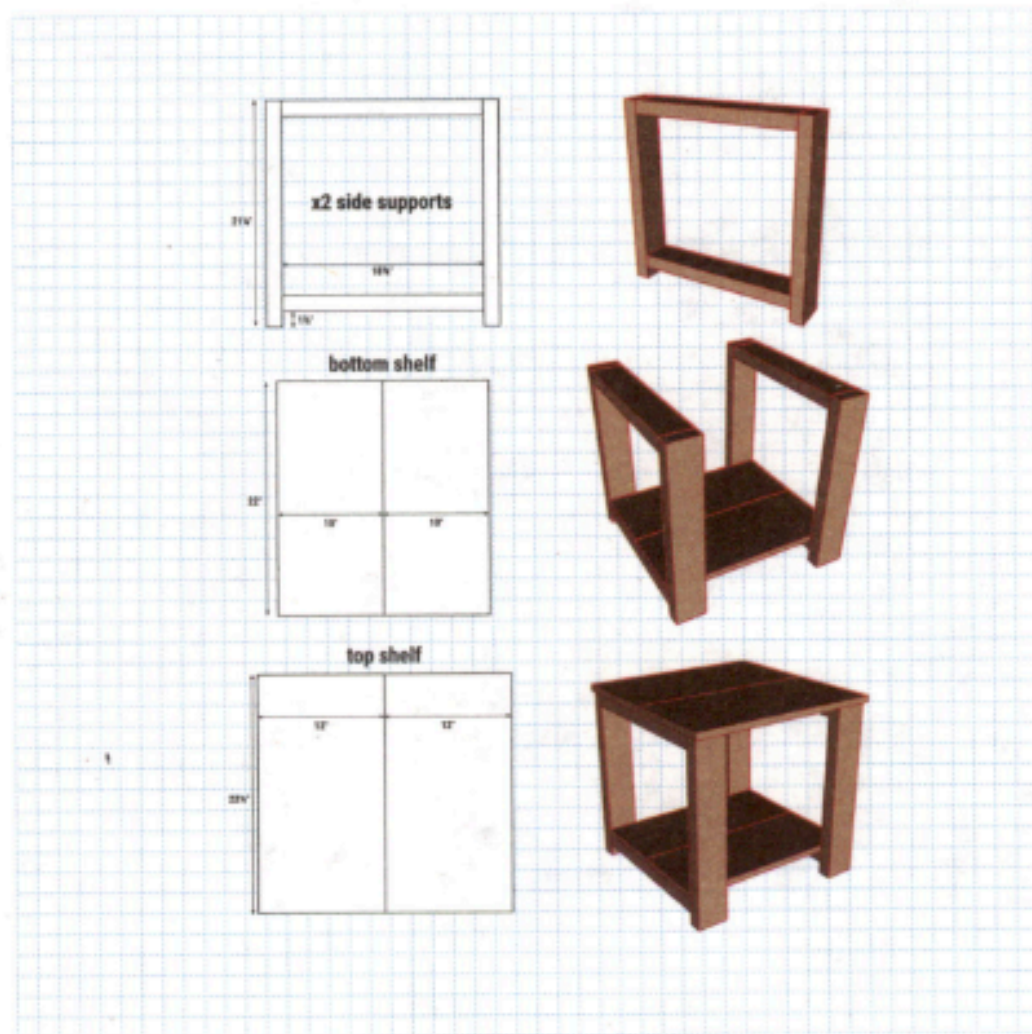
Let's say you don't have anything next to your bed to set your books and alarm clock on. You need a small table.

2. Gather information.

Of course, tables come in all sorts of shapes and styles. You could ask questions like these to refine your idea:

- ▶ What will I put on the table? How much do the items weigh?
You need to know how sturdy your table needs to be.
- ▶ What building materials should I use? Now that you know your weight requirements, you can pick materials that will be strong enough to handle the weight of the items.
- ▶ Will the materials be expensive if I have to purchase them? Can I recycle materials I already have? Engineers have to make sure their designs are cost-effective.

- What is the best design I can use? Should it have two, three, or four legs? Should it have a square, round, or rectangular top? How tall should it be? These questions will guide you to the right design based on your table's location and use.
- Will it help if I draw pictures of the design before I begin? These drawings can help start your blueprint!



3. Prepare instructions.

The information you gathered should help you better understand the planning process and your needs. Now you can create a plan for building your table. Because of the process you followed, you'll be able to build a better table than if you just

started nailing boards together without a plan. By drawing your blueprint on graph paper, you can easily keep the drawing to scale. For example, one grid on the paper could equal 1 inch on the finished product.

Be sure to make notes on your drawing about all dimensions and materials. Remember that another person should be able to create your project from the blueprint you have made. You might also want to make a small-scale model of your project. Heavy cardboard, toothpicks, craft sticks, and tape are some materials you could use.

4. Build your project.

Once you have prepared your design and your blueprint, you're ready to build your table. Here you'll discover if your design ideas work and if your blueprints have clear instructions and good information. It's a good idea to take notes and pictures as you go along so you remember what worked and what didn't.



5. Evaluate your project.

After you build your table, you should test it to make sure it meets your needs. Testing and evaluation are also important parts of the engineering process. On major projects, engineers build models and run computer simulations before starting actual construction. These steps can save time and money if the design needs to be changed.

You can also ask yourself questions like these:

- ▶ Did the project turn out as I expected?
- ▶ How much did it cost to build the project?
- ▶ What would I do differently next time?
- ▶ What three things did I learn when I designed and built my project?
- ▶ What am I most proud of about my project?

ESTIMATIONS

ELECTIVE ADVENTURE



SNAPSHOT OF ADVENTURE



There are times when we need to be exact, like when building a model or baking from a recipe. When we do not need to be exact, or we only need a general idea of something or its cost, we can estimate. There are some simple ways to estimate things like the time of day or even the height of an object.

REQUIREMENTS

Approved by

1. Estimate food measurements. _____
2. Estimate the time of day. _____
3. Estimate the height of a distant object. _____
4. Estimate the distance between two points. _____



- Elective Adventure
- Scan for this Adventure page

REQUIREMENT 1

Estimate food measurements.

You can use your hand to estimate food portions. These are estimates because everyone has different size hands, but they can still serve as a useful guide.

Palm = 3 ounces

The palm of your hand can be used to estimate a serving of protein. One palm is equivalent to a 3-ounce serving size. Examples of proteins include pork, poultry, beef, fish, and chicken.



Fist = 1 cup

A fistful is a great way of measuring carbohydrates like rice, cereals, salads, fruits, or popcorn.



Tip of the thumb = 1 tablespoon

The tip of a thumb, from the knuckle to the end, is equivalent to a serving of 1 tablespoon. This is helpful when measuring fat intake such as mayonnaise, cheese, salad dressings, creams, and peanut butter.



Thumbnail = 1 teaspoon

The nail of the thumb is about a 1-teaspoon serving of oils or fats. This can be used to measure salad dressings, olive oil, or butter.



Cupped hand = $\frac{1}{2}$ cup

One hand cupped is equivalent to a $\frac{1}{2}$ cup serving. You can use your cupped hand to measure food items such as pastas, potatoes, nuts, and even ice cream.



There are many other objects you can use to estimate a measurement aside from your hand or an actual measuring cup.



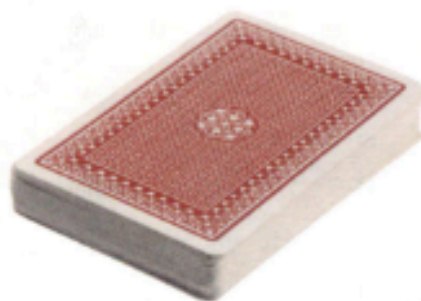
2 cup



1 cup



$\frac{1}{2}$ cup



3-ounce

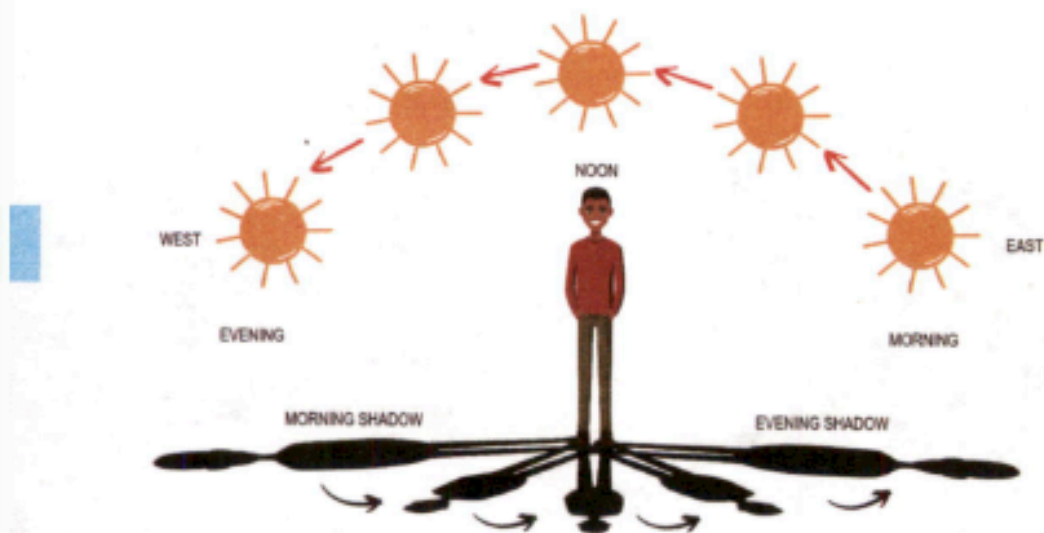


2 tablespoons

REQUIREMENT 2

Estimate the time of day.

As the Earth spins on its axis, the sun's rays reach the Earth at different angles, which causes shadows to move. By marking where objects' shadows land throughout the day, you can see how time passes.



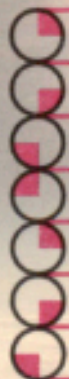
Early in the day the sun will be low in the sky as it rises in the east, so an object's shadow will be long and stretch to the west. As the day gets closer to midday, the object's shadow gets shorter until the sun hits its highest point, when there may not be much of a shadow at all. Then, throughout the afternoon the shadow of an object will stretch longer and longer in the opposite direction as the sun gets lower in the sky and sets in the west. Knowing when the sun rises and sets helps you estimate when the sun will be at its highest and shadows will be at their shortest.

There are 12 hours of sunlight at the equator, but the amount of sunlight in the United States changes based on the season. Since we are estimating, though, we can simply use 12 hours of sunlight

as our base. That would mean that the sun will be at its highest six hours after sunrise and six hours before sunset. If sunrise is at 6:30 a.m., the sun will be at its highest at 12:30 p.m. If the sun is a quarter of the way up, then it's about three hours after sunrise, or 9:30 a.m. If the sun is setting and is about a quarter of the way down, it's about three hours after its peak, or about 3:30 p.m.

When the sun is setting you can estimate how much daylight is left using your fingers. Stretch your hand out in front of you and place the sun at the top of your index finger. Every width of finger is going to be about 15 minutes of sunlight. So, if the sun is only two fingers away from the horizon, you have about 30 minutes before it gets dark.

15 minutes
15 minutes
15 minutes
15 minutes
15 minutes
15 minutes
15 minutes



REQUIREMENT 3

Estimate the height of a distant object.

Have you ever seen a really tall tree and wondered how tall it is? Here's a way to figure it out. This method requires flat ground to get a good estimation. It's based on the geometry of a right triangle — that the two sides of a right triangle are the same length.

1. Find a stick the length of your arm.
2. Hold your arm out straight with the stick pointing straight up (90-degree angle to your outstretched arm).
3. Walk backward until you see the tip of the stick line up with the top of the tree. Your feet are now at approximately the same distance from the tree as it is high.
4. Measure the distance from where you are standing to the base of the tree. That is how high the tree is.





REQUIREMENT 4

Estimate the distance between two points.

If you can't actually measure the distance between two points, you would want to be able to estimate it. For instance, what if you want to know how wide a narrow river is? Here are two ways you can do it.

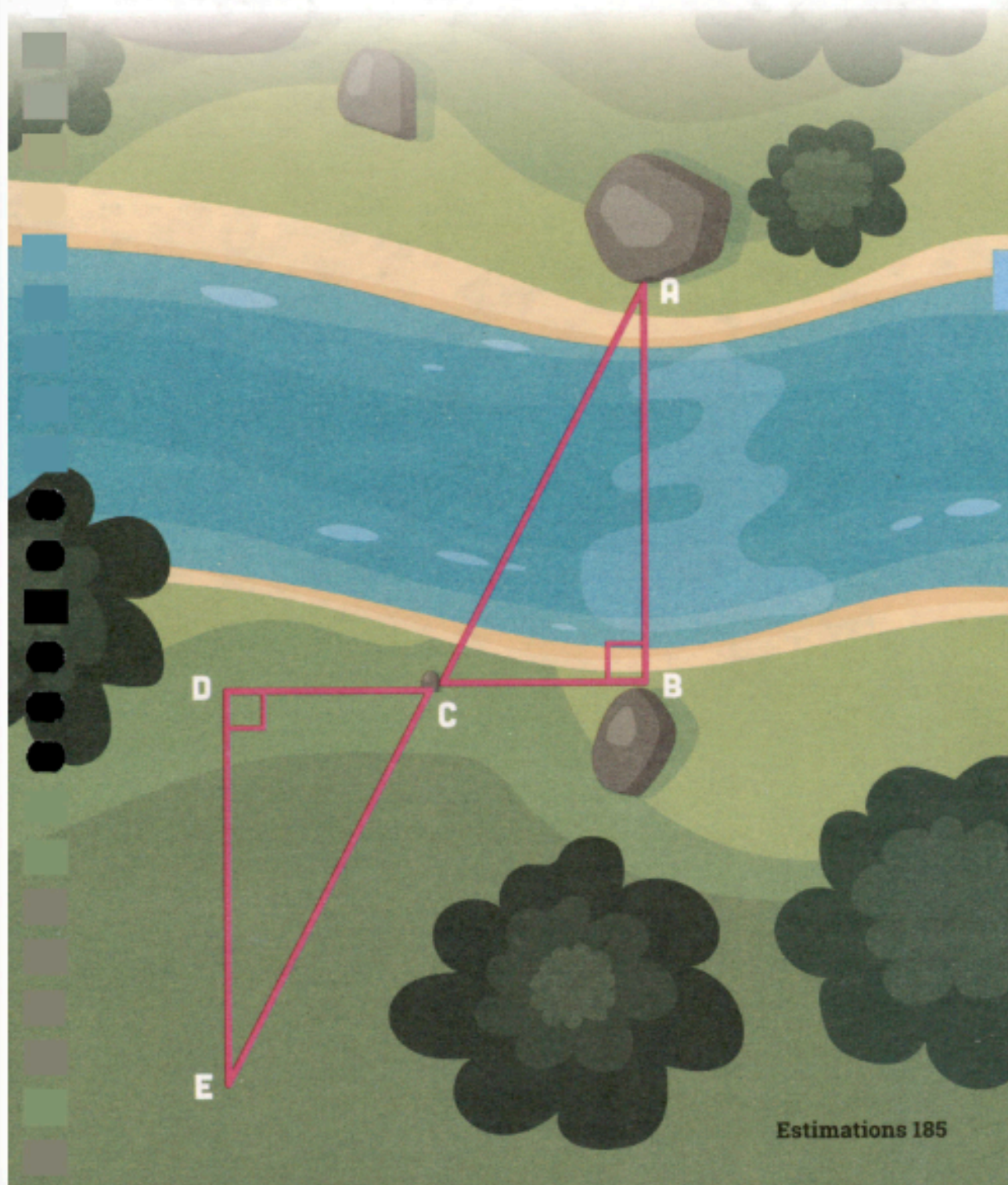
Napoleon Method

To measure the width of a narrow river, stand straight on your side of the river looking toward the other side. Tilt your head down until your chin rests on your chest and place your hand across your line of sight as if executing a military salute. Position the edge of your hand in such a way that it is as if is touching the opposite shore. Turn your body 90 degrees and note the distance where the edge of your hand is touching on this new direction. The distance between that spot and your position is an estimate of the width of that river.

Stride or Step Method

1. Select an object on the opposite bank of the river, such as a tree, and mark it as point A.
2. On your side of the river, place a stick or another object at the point directly in front of the object that's on the opposite bank of the river and mark it as point B.
3. Walk about 50 paces along the shore at a right angle to line AB. Place another object there, and mark that spot as point C, forming line BC.
4. Continue walking another 50 paces in the same direction to point D. The distance CD is equal to the distance BC.

5. From point D, walk away from the river at a right angle to line CD until you can see point C forming a straight line with point A. Stop and mark your spot as point E.
6. You have now made two identical right triangles (ABC and CDE). Measure the distance between points D and E to get the width of the stream (line AB).



FISHING

ELECTIVE ADVENTURE



SNAPSHOT OF ADVENTURE



You may have gone fishing before and know some basics. In this Adventure, you will learn how to plan a fishing experience using the BSA SAFE Checklist. This will help you be prepared for future adventures in Scouts BSA.

REQUIREMENTS

Approved by _____

1. Make a plan to go fishing. Determine where you will go and what type of fish you plan to catch. All of the following requirements are to be completed based on your choice. _____
2. Use the BSA SAFE Checklist to plan what you need for your fishing experience. _____
3. Describe the environment where the fish might be found. _____
4. Make a list of the equipment and materials you will need to fish. _____
5. Determine the best type of knot to tie your hook to your line and tie it. _____
6. On your own, choose the appropriate type of fishing rod and tackle you will be using. Have an adult review your gear. _____
7. Using what you have learned about fish and fishing equipment, spend at least one hour fishing following local guidelines and regulations. _____



- Elective Adventure
- Scan for this Adventure page

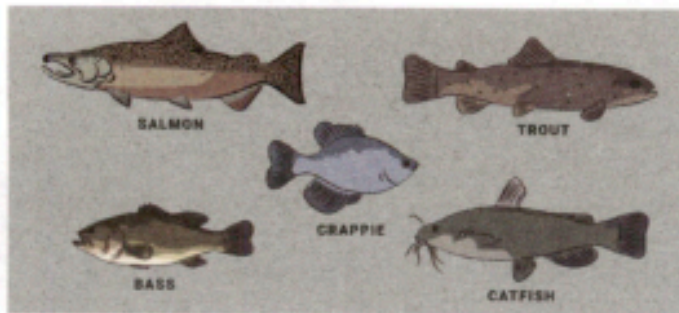
REQUIREMENT 1

Make a plan to go fishing. Determine where you will go and what type of fish you would like to catch. All of the following requirements are to be completed based on your choice.

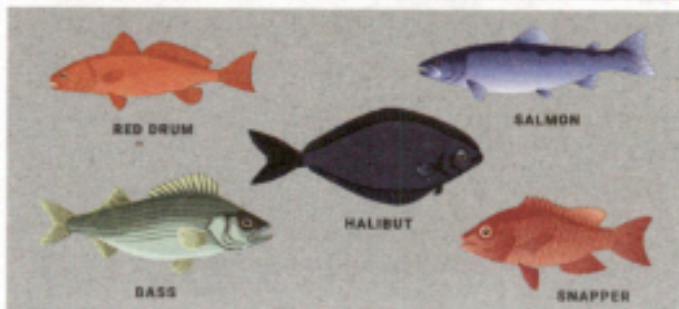
Fishing is popular because there are so many different places to fish and because most people live in an area that is not too far away from a fishing spot. Your fishing spot may be a human-made lake that is stocked with fish, a stream known for fly fishing, or an ocean pier.

Once you have decided where you will go fishing, spend time identifying the types of fish that live in that body of water. Here are things you should think of that will help you have a more successful fishing trip:

- ▶ What time of day are the fish most active and feeding?
- ▶ What do the fish naturally eat?
- ▶ At what temperature are the fish most active?
- ▶ Where are the likely places you might find fish?



Freshwater species



Saltwater species

REQUIREMENT 2

Use the BSA SAFE Checklist to plan what you need for your fishing experience.

With your patrol or family, visit the BSA SAFE Checklist website on Scouting.org. You can find the page by following the QR code here.



Here are the points of the BSA SAFE Checklist to consider for your fishing trip.

- ▶ **Supervision** — Youth are supervised by qualified and trustworthy adults who set the example for safety.
- ▶ **Assessment** — Activities are assessed for risks during planning. Leaders have reviewed applicable program guidance or standards and have verified the activity is not prohibited. Risk avoidance or mitigation is incorporated into the activity.
- ▶ **Fitness and Skill** — Participants' BSA Annual Health and Medical Records are reviewed, and leaders have confirmed that prerequisite fitness and skill levels exist for participants to take part safely.
- ▶ **Equipment and Environment** — Safe and appropriately sized equipment, courses, camps, campsites, trails, or playing fields are used properly. Leaders periodically check gear use and the environment for changing conditions that could affect safety.

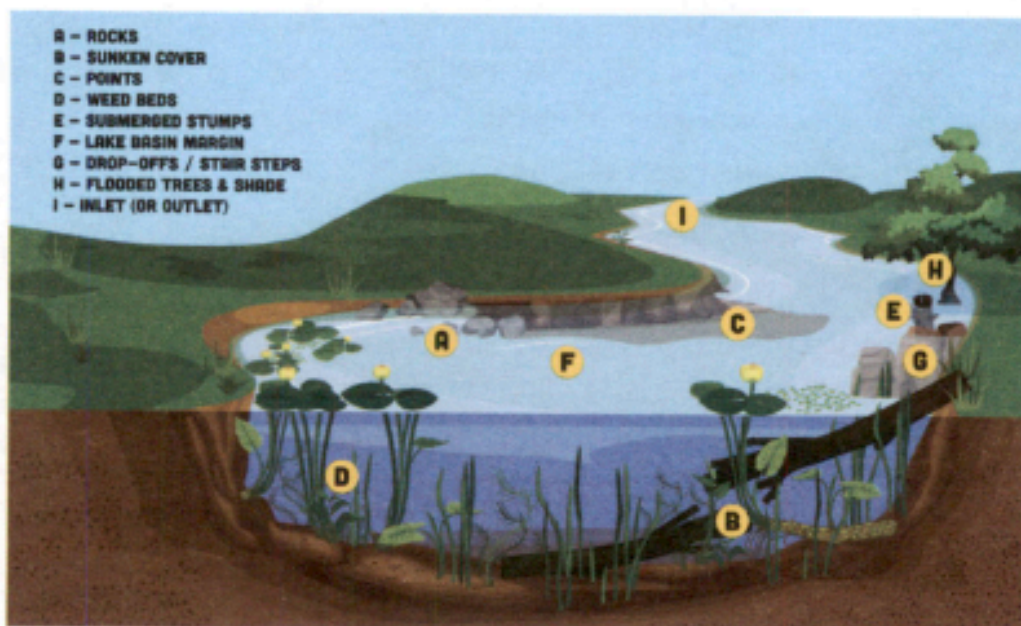
REQUIREMENT 3

Describe the environment where the fish might be found.

Different species of fish have different behaviors based on where they live, but all fish act on instinct. Instinct is the natural behavior an animal uses to survive. Think like the fish you plan to catch, and you'll increase your chances of success.

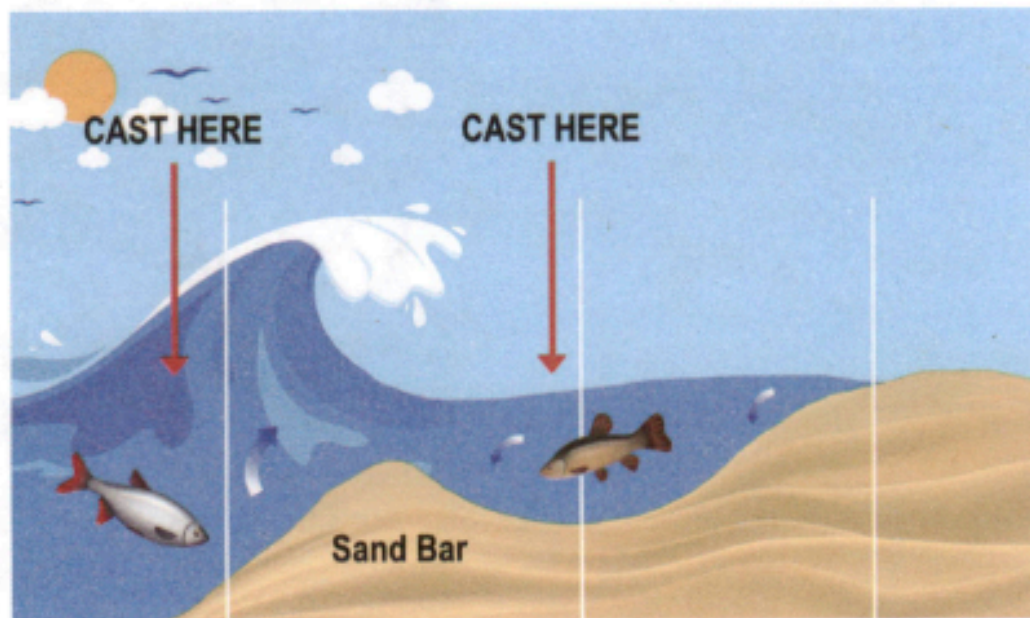
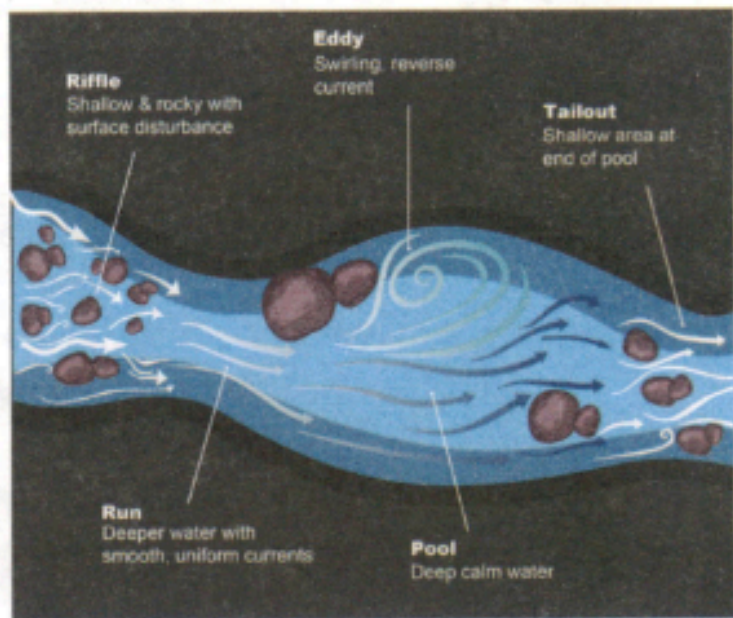
Most big fish eat little fish. To survive, little fish move fast, and they find places to hide where big fish cannot go. Little fish need food, too, so if you know what the little fish eat, chances are you'll find bigger fish nearby.

Some fish find food on the bottom of the body of water. Other fish find food floating on the top. Knowing where fish find their food will help you know where to fish. If you want to catch catfish, which sometimes find their food on the bottom of a lake or river, you'll want to have your bait or lure on the bottom. If you want to catch a big bass that eats little fish near the surface, you may want to have your bait or lure near the top of the water.



Where does the fish you wish to catch live?

- ▶ Do your fish eat smaller fish? Where do those smaller fish live? What do those smaller fish eat?
- ▶ Do your fish eat insects? If so, what kind and where do you find them?
- ▶ Do your fish like warmer or colder water? Water on top is warmer than deeper water.



To learn more about fish, you can find links to state fish and wildlife agencies on the internet (with permission) at fws.gov/offices.

REQUIREMENT 4

Make a list of equipment and materials you will need to fish.

It's fun to fish with a simple fishing pole, but most people who fish use a rod and reel instead. This equipment lets you cast your line farther out in the water. And when you hook a fish, it's easier to reel it in. Here's the equipment you will need.

ROD

The rod takes the place of the fishing pole. A rod has line guides (metal rings) along its length that the fishing line runs through. Most rods are made of fiberglass or carbon fiber. Some rods come apart so you can transport them easily. These are called take-down rods.

The weight of rods varies. To catch small fish, you could use an ultralight rod. To catch fish like trout, you could use a long, thin lightweight rod called a fly rod. For bigger fish, you would need a rod that is thicker around and stronger. If you were going surf fishing, you might use a rod that's 20 feet long!



REEL

The reel is attached to the rod near its handle. Inside the reel is a spool that your fishing line wraps around (and around and around and around). From the reel, the end of the line goes up the rod through the guides before you

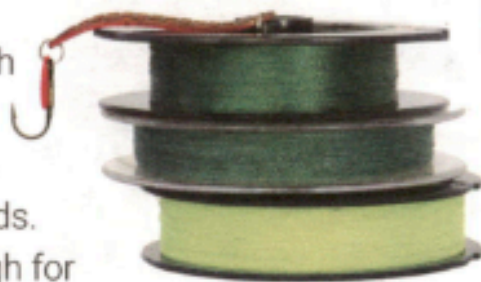
attach your hook or lure. To reel in the line, you turn the reel. When casting (tossing your line out on the water), you release a trigger on the reel which lets the fishing line go.

There are many types of reels. If you're new to fishing, you might want to pick a close-faced spincast reel that has a cover to protect the line inside. When casting with a spincast reel, you press and hold the button on top of the reel. During the cast, you release the button to let the line out and complete the cast. The timing can be tricky, but you'll soon figure it out.

Open-faced spincasting reels don't have a cover and take more skill to use. Without practice, you can end up with something called a "bird's nest": a big, knotted wad of fishing line that is no longer usable.

FISHING LINE

There are many types and colors of fishing line. Some line is meant to catch fish that weigh less than a pound. Some is meant to catch fish that weigh 10, 20, or even 50 or more pounds. Be sure to use line that is strong enough for the fish you want to catch. Otherwise, a fish can break the line and get away.



Fishing line may be clear or have a tint, like green or bronze. Like camouflage, the tinted fishing line blends into its surroundings and makes a good choice for fishing when looking to keep your line invisible to fish. A tinted fishing line may be more visible to you than clear fishing line in very clear water.

BAIT

You will also need to have the correct bait for the type of fish you're fishing for. If the fish don't like to eat the bait you're using, they won't bite. Do you remember





what you learned in requirement 1 about the fish in your area? You'll have better luck catching a fish if you use bait that the fish would naturally eat.

You will need to decide if you want to use live bait like minnows, worms, or grubs or use artificial bait. There are many types of artificial bait. Some

make noise in the water or spin around to attract fish. Some are designed to look like live bait.

There are special dough baits that you can form around the hook. These have scents that attract fish.



TACKLE BOX

A tackle box is a good place to store your bait and other fishing supplies (called tackle) while you're traveling and while you're fishing. It keeps your tackle clean and organized. You can buy a tackle box at a store or reuse something you find around your home. Be sure there is a way to secure the lid so it doesn't open at the wrong time.



Here are some things to carry in your tackle box:

- ▶ **Artificial bait** to catch fish.
- ▶ **Barbless hooks** to catch fish. These hooks cause less harm to a fish's mouth when you're practicing catch-and-release fishing. If you cannot find barbless hooks, you can use pliers to flatten the barbs on barbed hooks.
- ▶ **Bobbers** to attach to your fishing line. They are small floats that keep your hook at a certain depth and show when a fish bites.
- ▶ **Sinkers** to attach to your fishing line about 6 to 10 inches above the hook. They let you fish lower in the water because they are weighted and pull down on the hook. This keeps your bait down near the lake or river bottom where most fish swim. For most shore fishing, pinch one or two small split-shot sinkers onto your line. Use only enough weight to sink the bait.
- ▶ **Clippers** to cut off the fishing line after you tie it on a hook.
- ▶ **Dehookers** to remove hooks safely and quickly from a fish that swallows them.
- ▶ **Needle-nose pliers** to help you remove hooks from fish and pull knots tight.

Since you'll be outside, you'll also want to carry the Cub Scout Six Essentials when you go fishing. Other items to carry may include raingear if there is a chance of light rain and a life jacket if you're going fishing from a boat.

If you want to learn about fishing but aren't sure whether you'll like it, you may be able to borrow some equipment from a family member or friend. Once you decide you like it, you can purchase the proper equipment. You can also buy one or two items at a time and slowly build up a collection of fishing gear.

REQUIREMENT 5

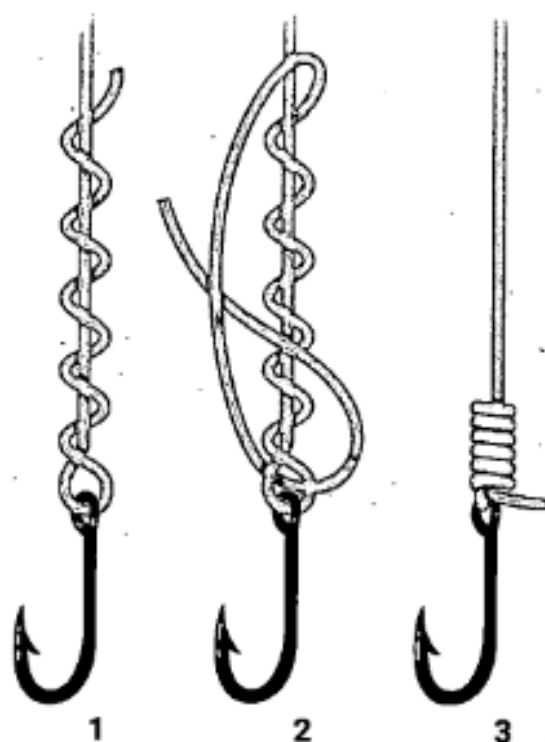
Determine the best type of knot to tie your hook to your line and tie it.

FISHING KNOTS

You must know the proper types of knots for tying hooks to your line. Because fishing line is stiff and slippery, you can't just use any knot. You need special knots that hold tight. Here are two good knots to learn:

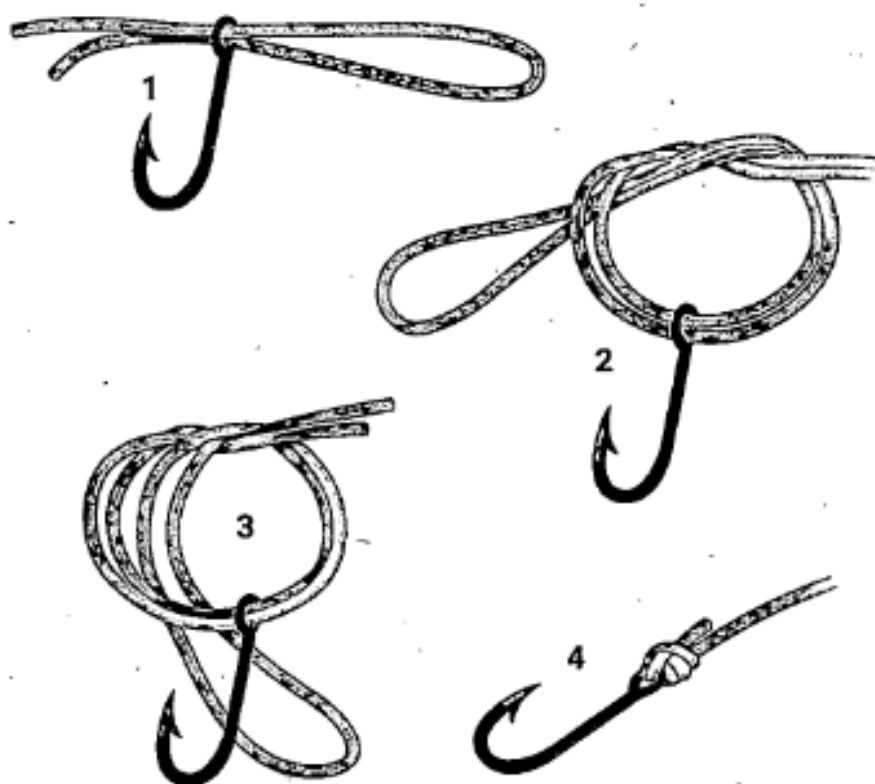
Improved clinch knot.

1. Run the end of the line through the eye of the hook, double the line back, and make six twists around the standing part (the long part of the line).
2. Run the end of the line through the small loop where the line joins the eye and then back through the large loop you just formed.
3. Partially close the knot and moisten it a little with water before securing it tightly against the hook eye. Cut off the short (tag) end of the line.



Palomar knot.

1. Double the line to make a 4- to 6-inch loop, then pass the end of the loop through the eye. (You may need to crimp the end of the loop so it will go through the eye.)
2. Tie a loose overhand knot in the doubled line.
3. Pass the hook through the loop and pull on the doubled line to tighten the knot, guiding the loop over the top of the eye.
4. Cut off the short (tag) end of the line.



REQUIREMENT 6

On your own, choose the appropriate type of fishing rod and tackle you will be using. Have an adult review your gear.

Things to check before going fishing:

- ▶ Is your fishing gear the proper size for the fish that you are targeting?
- ▶ Is your fishing gear clean and in good working order?
- ▶ Is your fishing gear properly assembled?
- ▶ Is your fishing line properly threaded and attached to your reel and hook or lure?
- ▶ Are your hooks clean?



REQUIREMENT 7

Using what you have learned about fish and fishing equipment, spend at least one hour fishing following local guidelines and regulations.

It is fun to practice casting and to pick out fishing gear, but the real fun happens when you actually go fishing. Nothing is as exciting as watching your bobber disappear under the water or feeling the pull on your line as you reel in a big fish! Decide with your patrol, parent, or legal guardian where and when you will go fishing. Spend a minimum of one hour trying to catch a fish. Remember all the things you have learned about fish and fishing equipment.

To practice casting, you'll need a rod with a reel attached. Instead of using a hook, tie a casting plug or bobber to your line so it will be heavy enough to cast. Place a target, and practice hitting the target with the casting plug or bobber. Do this until you can get closer to the target than you were at first. As your accuracy improves, move farther from the target. The time you spend practicing will help make fishing safe and fun.





There are rules to follow when fishing. These are important because they help protect the fish and their environment. It is important that you learn these rules, understand what they mean, and promise to obey them.

Your local area may have rules about where and when you can fish, how big a fish must be to keep, and how many fish you're allowed to keep. In some places you must put the fish you catch back in the water. This practice is called catch and release. It's a good way to make sure fish continue to live in the place you're fishing.

In addition to rules about fishing, your state will require you to have a fishing license. Adults must purchase a fishing license before they go fishing. Youth who are Cub Scout age often don't have to have a license. Be sure to find out about licensing requirements in your area.

Once you know your local fishing rules and regulations, here are the six things to know to keep yourself and others safe:

1. Fish with proper adult supervision.
2. Get permission to fish where you plan to fish.
3. Check the weather before you go. Do not fish in a thunderstorm or inclement weather.
4. Use the buddy system. You must be able to see your buddy.
5. Give plenty of room to others fishing nearby.
6. Never fish where people are swimming.

Be sure to discuss any other rules your family has so you'll be safe while fishing.

Fishing tips:

- ▶ When you're through fishing, properly dispose of your worms or bait fish. Do not release them into the water.
- ▶ If releasing your catch, always wet your hands prior to touching a fish so you don't damage the mucous membrane that protects it.
- ▶ To release fish easily, bend down all barbs on hooks.
- ▶ Treble hooks, 3 bends and points in one hook, are not recommended.



HIGH TECH OUTDOORS

ELECTIVE ADVENTURE



SNAPSHOT OF ADVENTURE



Long ago, tents were made from cotton canvas. They were heavy and were not waterproof. If you put them away wet, they could mold and rot. Today, tents are made using synthetic (human-made) materials that are waterproof, lightweight, breathable, and resistant to mold and rot. Not only has technology improved tents, but it's also given us digital devices that help us navigate, learn, and stay safe.

REQUIREMENTS

Approved by _____

1. With an adult, use a weather app or website to see the forecast for an outdoor activity and discuss any preparation needed to accommodate the weather. _____
2. With an adult, find a knot-tying app. Select one knot to learn, and tie it using the app. _____
3. Discuss how technology has improved camping gear. _____
4. Think of a way technology can improve camping gear used on one of your outdoor activities. _____



- Elective Adventure
- Scan for this Adventure page

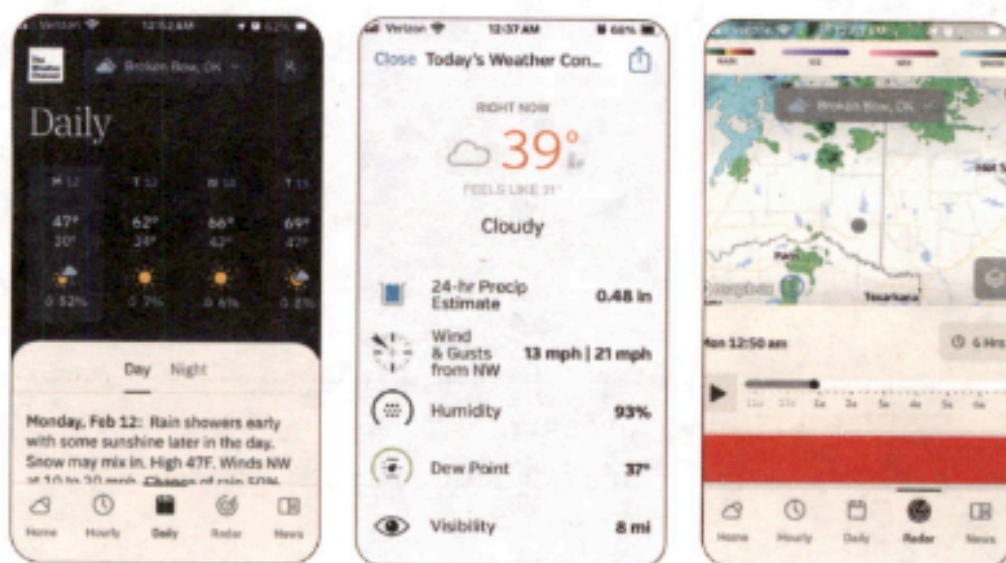
REQUIREMENT 1

With an adult, use a weather app or website to see the forecast for an outdoor activity and discuss any preparation needed to accommodate the weather.

Checking weather reports is part of planning a Scout outing. When you know what the weather will be like, you have a better idea of what clothing to carry with you and what to expect when you reach the trail. Studying weather also can be a terrific way to understand the bigger picture of nature.

Weather reports on mobile apps often include maps showing the movement of areas of low pressure and high pressure in the atmosphere. Regions experiencing high atmospheric pressure usually have stable weather. Low pressure systems pull in winds, and if those winds are carrying moisture, the moisture will condense into clouds and storms can occur.

If there is a prediction for severe weather for your outdoor adventure, it's best to cancel the adventure or reschedule it for a time when the severe weather has passed.



REQUIREMENT 2

With an adult, find a knot-tying app.
Select one knot to learn, and tie it using the app.

Some technology can teach us how to do things such as knot tying and what type of knot should be used in a certain situation. A knot-tying app can show the steps for tying a knot using visual effects and videos that might make it easier to learn than just reading about how to tie the knot.

When learning how to tie knots, it's often helpful to use two different colored ropes.



Animated
Knot 3D



Rope
Knots



Knots:
Knots Guide



Useful Knots
3D



Knots 3D



Animated
Knots
by Grog



Knot Guide
(Lite)

REQUIREMENT 3

Discuss how technology has improved camping gear.

In the snapshot of the Adventure, you learned how technology, in the development of synthetic materials, has made tents more durable. Synthetic materials have also improved the clothes we wear with fabrics that dry quickly, keep us warm, and even have SPF to block out harmful UV rays.

What other improvements to camping gear can you identify, and what technology was used to make those improvements possible?





1920s

Old canvas pup tent

1970s

A frame tent with
metal poles



1990s

Dome tent with
fiberglass poles

TODAY

Modern two-person
backpacking tent



REQUIREMENT 4

Think of a way technology can improve camping gear used on one of your outdoor activities.

When thinking of a way technology can improve camping gear, consider these questions:

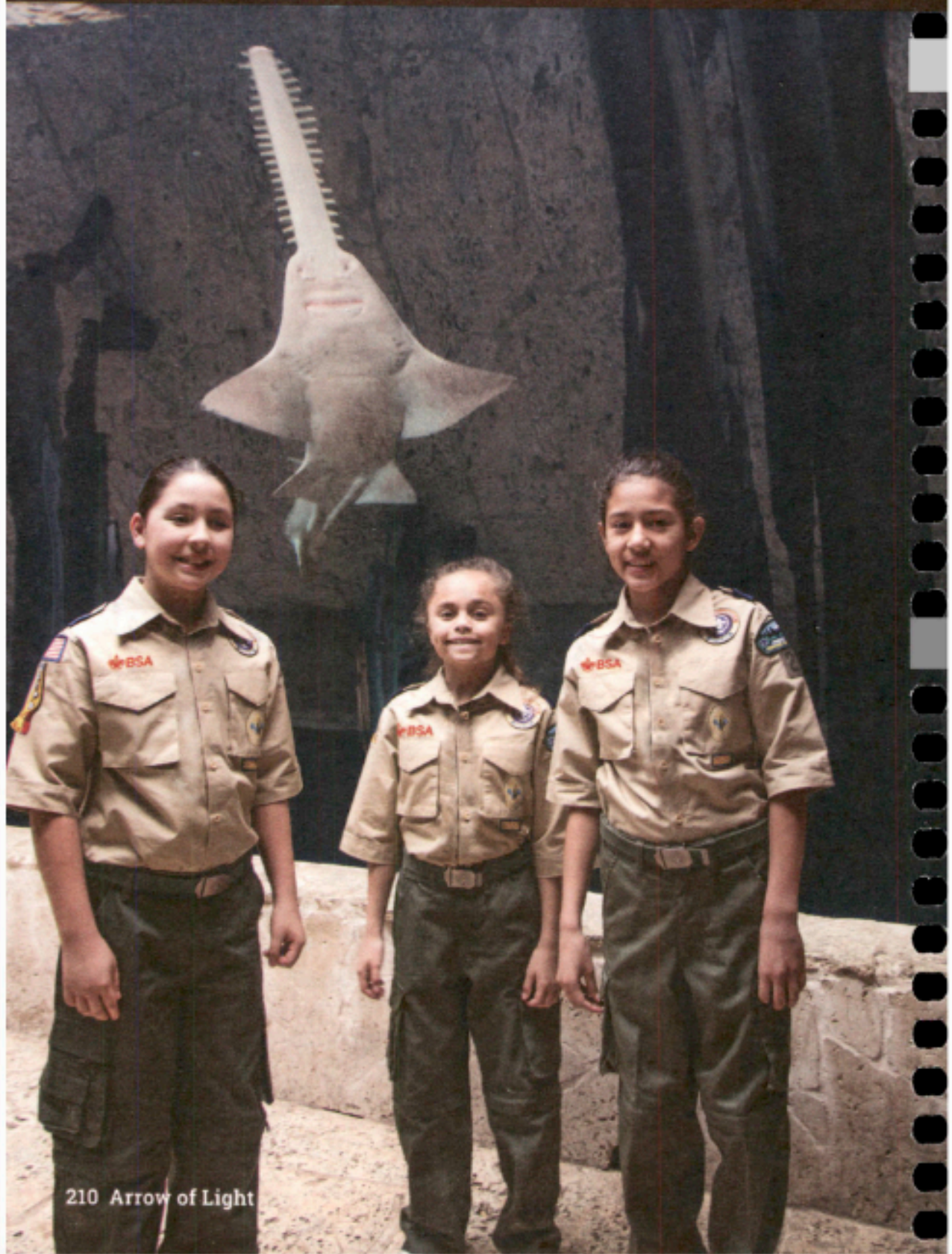
- ▶ Is there a piece of technology you use in other areas of your life that could be used for camping gear?
- ▶ Is there camping gear that you find uncomfortable or hard to use?
- ▶ If you could improve a piece of camping gear with technology that may not exist, what would that be?





INTO THE WILD

ELECTIVE ADVENTURE



210 Arrow of Light

SNAPSHOT OF ADVENTURE



When you go "into the wild," you will begin to learn about some of the mammals, birds, reptiles, amphibians, and insects that live with us day and night and how they contribute to the world in which we live.

REQUIREMENTS

Approved by _____

1. Visit a place with a variety of wild animals. Select one of the animals and observe its behavior. Use your selected animal to complete the remaining requirements. _____
2. Create a model of your animal's ecosystem. _____
3. Investigate how your animal coexists with other animals in the wild. _____
4. Describe how humans interact with your chosen animal's ecosystem. _____
5. Discover how wildlife management benefits your animal. _____



- Elective Adventure
- Scan for this Adventure page

REQUIREMENT 1

**Visit a place with a variety of wild animals.
Select one of the animals and observe its
behavior. Use your selected animal to complete
the remaining requirements.**

Here are some tips for observing wild creatures:

- ▶ Be as quiet as you can.
- ▶ Approach creatures from downwind, with the wind blowing toward you, not toward the creature.
- ▶ Move slowly and do not make sudden movements.
- ▶ Look in places where animals can find food or water.
- ▶ Make your observations in the early morning or early evening. Many wild creatures rest during the heat of the day.
- ▶ If possible, observe wildlife from a natural or human-made blind, a structure you can hide behind so the creatures cannot see you.



REQUIREMENT 2

Create a model of your animal's ecosystem.

An ecosystem is a community of plants and animals living in an environment that supplies what they need for life. In an ecosystem, plants and animals depend on their environment and on each other for survival. Energy and food flow through the community in a food chain. There are many types of ecosystems. For example, forests, deserts, and wetlands all contain different combinations of plants, animals, and environmental characteristics.

Elements of an Ecosystem

Here are the elements of an ecosystem:

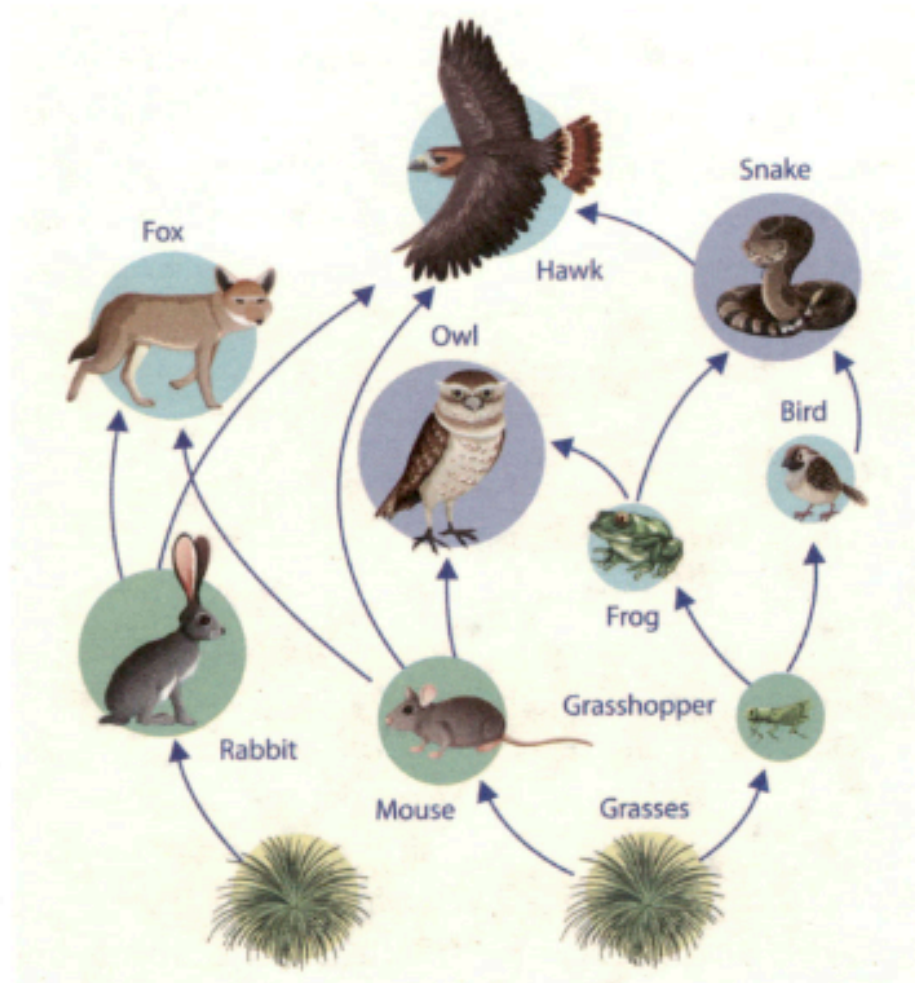
- ▶ **The sun** — Without the sun, there would be no life on Earth. The energy of the sun flows through a cycle in the ecosystem. Plants are the first to use this energy.
- ▶ **Producers** — All green plants — trees, shrubs, grasses, flowers, etc. — use the energy of the sun to grow. Plants also take up nutrients and minerals from the soil. The plants produce leaves, bark, fruits, nuts, and seeds that many animals eat.
- ▶ **Consumers** — Animals are consumers. They use the stored energy, nutrients, and minerals in their food to grow and to maintain their health.
- ▶ **Decomposers** — These are the fungi, lichens, bacteria, and insects that break down dead plants and animals. This process returns organic matter and minerals to the soil, making them available to trees and other plants — the producers. Nature is a good recycler.

You can divide consumers into two categories:

- ▶ **Primary consumers** — Plant-eating animals, also called herbivores, are called primary consumers because they are the first to benefit by eating the producers. Examples include rabbits, squirrels, deer, seed-eating birds, grasshoppers, and cattle on farms.
- ▶ **Secondary consumers:** Meat-eating animals, also called carnivores, are secondary consumers because they benefit from the energy and nutrients stored in their prey, the herbivores. For example, hawks and owls eat mice and rabbits, while mountain lions hunt deer and smaller animals.

Some consumers are called omnivores because they eat both plants and animals. For example, the gray fox hunts rabbits, mice, voles, birds, and insects, but it also eats blackberries, grapes, persimmons, and grass. Human beings are omnivores, too.





When you figure out the food chain in an ecosystem, you can see how animals, plants, and their habitat are connected. The ecosystem is in balance when all the necessary parts of its community are present. The ecosystem is out of balance when there is not enough habitat and food for animals to survive.

After some natural events, like a forest fire started by lightning, the original ecosystem may slowly recover. Nature eventually adjusts the balance. The needs and plans of humans often alter the balance of nature quickly and permanently. When people clear forest and brush and turn it into agricultural land, much of the animal life may disappear from the area, except for animals that can adapt to the farming environment. When a huge shopping center is built and surrounded by a paved parking lot, animals cannot adapt to that environment. Pollution of air or water can also damage or wipe out an ecosystem.

Losing one link in the food chain can upset the balance, too. Here's an example: Wolves hunt deer, and that helps keep the deer population under control. But since wolves also hunt livestock, many ranchers have tried to reduce their numbers. When the wolf population goes down, the deer population goes up because deer have fewer natural predators. When that happens, deer begin eating more vegetation than an area can produce. Eventually, overgrazing can cause soil erosion, making it harder for vegetation to grow.

As humans, we can all help maintain the balance of nature. Land developers often plant trees to replace those they cut down for their buildings. When hunters and fishermen buy licenses for their activities, part of the money goes to conservation efforts. Many people volunteer in parks and forests to pick up trash, plant trees, and remove invasive species that crowd out native species. You can help with those activities. You can also feed native species and conserve natural resources. When feeding native species, be sure to give them appropriate food (such as birdseed instead of table scraps). Check with a local nature center for guidelines.

Ecosystems don't occur just on dry land. Aquatic ecosystems and wetlands are very important, too. All living things need water, of course, and wetlands serve as natural water filters. Rivers and lakes provide habitat for wildlife and drinking water for human beings. Find out about the aquatic ecosystems and wetlands in your area and talk with your den leader or family about ways you can help protect them.

REQUIREMENT 3

Investigate how your animal coexists with other animals in the wild.

Your animal may be a predator, it may be the prey, it may be a scavenger, or it may be a combination.

- ▶ Predators are animals that hunt other animals.
- ▶ Prey are animals that are hunted by other animals.
- ▶ Scavengers are animals that eat the remains of animals that are already dead.

Most predators also are hunted by larger animals. A fox is a predator; it hunts and eats rodents like mice. A fox is also hunted by wolves, so a fox is prey to a wolf. A predator that is not naturally hunted by another animal is called an apex predator. A bear is an apex predator because it is not naturally prey for another animal.



When sources of food are low, some predators will become scavengers, eating the animals that have already been killed by another predator. Other animals like the vulture will eat animals that have been dead for a long time. The vulture has a very strong stomach and can digest rotten meat without getting sick. Scavengers help prevent the spread of diseases that can come from rotting animals.

REQUIREMENT 4

Describe how humans interact with your chosen animal's ecosystem.

Human interaction with animals can be both positive and negative. U.S. President Theodore Roosevelt was known as the conservation president and established several areas of the United States as national parks. National parks provide large areas for wildlife to go undisturbed by humans. There are areas of national parks that see millions of visitors, but these areas are usually just a very small portion of the park's total area. National parks provide us with opportunities to see the natural wonders of our country and hopefully learn how we can continue to protect and preserve them.



Humans also have a negative impact at times. Roadways in the Florida Everglades cut off natural migration and hunting patterns for native animals. The roadways also cause a hazard for animals, like the Florida panther, to cross. Some negative interactions can be changed, however. When new roadways were built in the Florida Everglades, engineers constructed several overpasses to create wildlife crossings. Wildlife crossings are large ground-level areas that panthers and other wildlife can safely use, giving them greater access to the hunting ground.

REQUIREMENT 5

Discover how wildlife management benefits your animal.

Managing wildlife involves knowing and tracking the population of an animal, understanding its ecosystem, and identifying ways to keep wildlife in balance. For example,

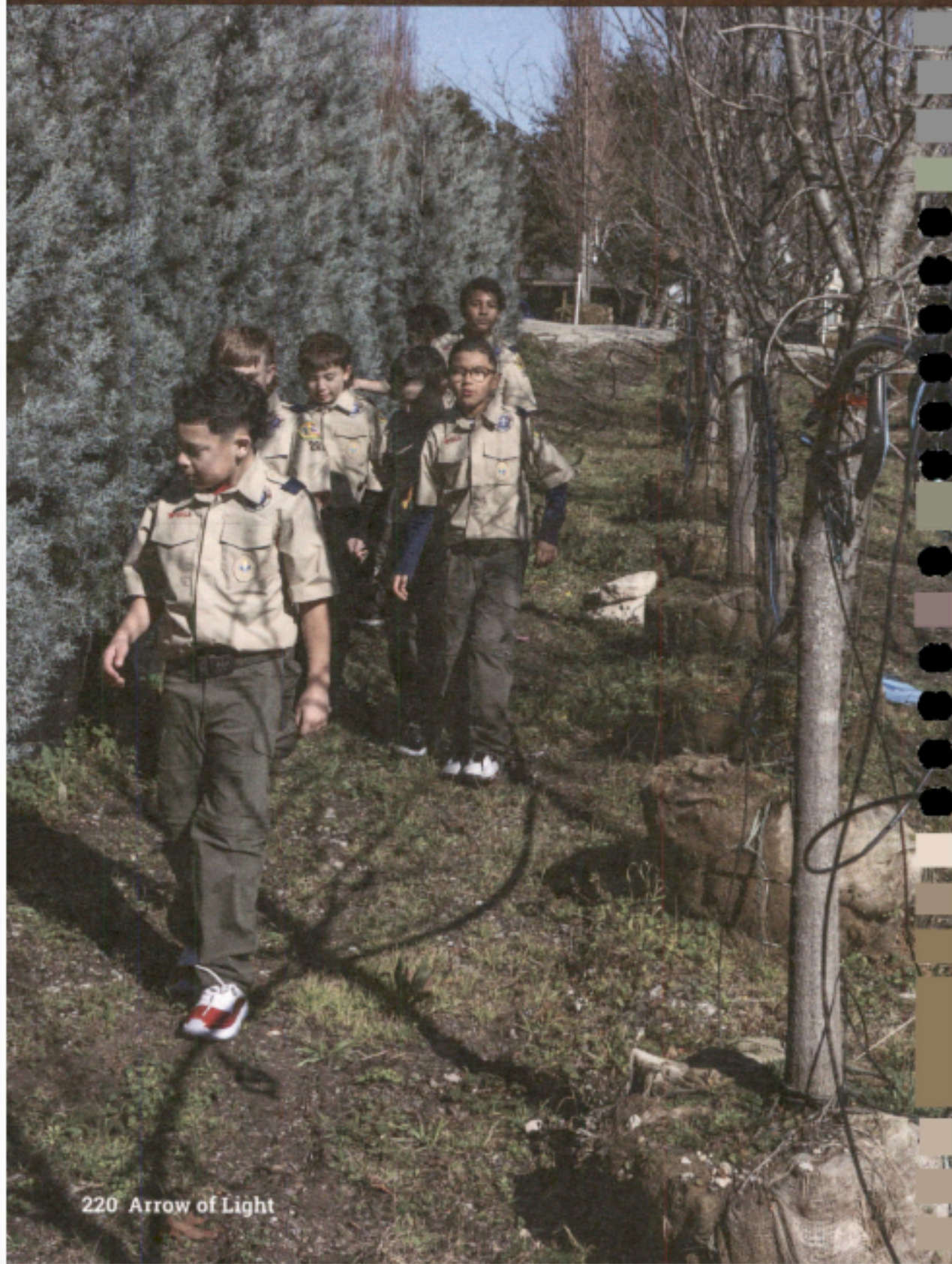


let's look at what happens to an ecosystem without enough predators. When there aren't enough predators, the number of animals hunted by those predators increases. Those animals start to use more of the ecosystem's natural resources, like vegetation. If their population continues to increase, there may not be enough natural resources in the ecosystem to sustain the animals; those natural resources may even die out completely. What do you think might happen to the animal population as a result?

Wildlife management works to ensure the balance of the ecosystem in several ways. One method protects certain species of animals and ecosystems by creating areas of protected lands and at times working to get the land to a more natural state. Another way uses hunting laws that restrict the time of year certain animals can be hunted and the amount a hunter can take. All of these pieces are important to keep wildlife in balance.

INTO THE WOODS

ELECTIVE ADVENTURE



SNAPSHOT OF ADVENTURE



Trees and plants play important roles in nature. In this Adventure, you will get to learn about the plants and trees in your community by exploring your area on a walk or visit to a local nature center, tree farm, or park.

If you have ever stood beneath a towering redwood, enjoyed the colors of fall leaves, or watched pine trees swaying in the wind, you know that trees and plants are beautiful. But they are also important to life on Earth. As you go into the woods, you will learn what trees and plants do for us and for animals, and why taking care of them is important to our planet's well-being.

REQUIREMENTS

Approved by _____

1. Visit an area with trees and plants and conduct a tree inventory. Select one tree and complete the remaining requirements based on that tree. _____
2. Determine if your tree is deciduous or evergreen. _____
3. Determine if your tree is native or was introduced to your area. _____
4. Find out how your tree deals with wildfire. _____
5. Learn how wildlife uses your tree. _____



- Elective Adventure
- Scan for this Adventure page

REQUIREMENT 1

Visit an area with trees and plants and conduct a tree inventory. Select one tree and complete the remaining requirements based on that tree.



A tree inventory is a record of the location and the types of trees in a defined geographic area. For a town or city, a tree inventory will typically include trees on streets and roads, parks, and other properties owned by the town. Conducting a tree inventory is the first step when developing a plan to manage the care of the trees.

There are three main types of tree inventories:

- ▶ A *sample* inventory is conducted on a random sample of street segments, blocks, road miles, or area to provide an estimate for the urban forest. Typically, the sample is 3-10% of the area.
- ▶ A *partial* inventory is conducted on a specific nonrandom area. It may be a geographic area, such as a city park. A survey collects a few attributes over a large area, even the entire municipality.
- ▶ A *complete* inventory includes all trees. Those on city streets, in local parks, on municipal properties. It may even include places where trees may be planted in the future.

For the area you're visiting, identify an area that is around 1,000 square feet. (A square that is 31 feet, 6 inches on each side is about 1,000 square feet.) If your location doesn't have many trees, increase the area of your inventory to make sure it includes at least two types of trees and at least four trees total.

Make a rough drawing of your area or use an existing map to identify where each tree is and what type of tree it is. From your tree inventory, pick one of those trees to complete the remaining requirements.

REQUIREMENT 2

Determine if your tree is deciduous or evergreen.

Unless you live in the desert, on the tundra, or at the top of a very tall mountain, there are trees around you — even in the middle of a city. But what kind of trees are they? If you look closely, you'll discover that different trees have distinctive characteristics. Some grow very tall, while others grow out as much as they grow up. Some keep their foliage all year round, while others lose their leaves in the fall (often after those leaves have turned brilliant shades of yellow, red, and orange).

Scientists divide most trees into two main groups: coniferous trees and deciduous trees.

Coniferous Trees

The seeds in coniferous trees grow in cones, which is where the word "coniferous" comes from. When a cone's scales open up, the seeds fall out, and new trees can take root. Coniferous trees tend to grow tall rather than wide; they have a triangular shape like a Christmas tree. Pines, cedars, firs, and spruces are examples of coniferous trees. Coniferous trees do lose their needles, but the majority don't lose them all at the same time.



Most coniferous trees are evergreen, meaning they don't lose their needles in the fall. Some coniferous trees, however, like the bald cypress and larch, do lose their leaves as winter approaches.

Deciduous Trees

Instead of having needles, deciduous trees have wide, flat leaves that are good at capturing sunlight. They are called deciduous because most of them lose their leaves each year. These trees spread out as they grow, and they are often bigger at the top than they are at the bottom.



Deciduous trees do not produce cones. Instead, their seeds are contained in nutshells or fruit. Oaks, maples, poplars, beeches, sycamores, and ashes are examples of deciduous trees. Maple trees have special seeds that "fly" to the ground like little helicopters. A few deciduous trees are actually evergreens. The live oak is an example.

What About Palm Trees?

There are several different types of palm trees. Some types of palms look more like a bush or shrub than a tree. The name "palm tree" makes it sound like everyone agrees that it's a tree. According to the botanical definition,



palms are woody herbs. The definition of a tree by the Society of American Foresters would include palm trees.

Palm trees are missing some of the characteristics of a tree. For example, as a tree grows, a growth ring is created each year. Counting growth rings is how we know the age of a tree. Palm trees don't have growth rings. Palm trees have circular vessels throughout. These are vascular tissues called xylem and phloem, and they allow the tree to thicken up its trunk until it reaches the maximum diameter.

Trees have bark, the outside layer on a tree. Bark minimizes water loss from the stems, deters insect and fungal attack, and can be a very effective protector against fire damage. The "bark" of the palm tree isn't bark at all; it's made of "sclerified" (hardened) cells left over from the bases of previously shed fronds.

Palm trees are very flexible and more likely to bend instead of breaking. This special ability to bend is why the palm tree is on the state flag of South Carolina. In 1776, during the American Revolutionary War against the British, American patriots built a fort on Sullivan Island to defend Charleston Harbor from British warships. The fort, now called Fort Moultrie, was constructed using local palm trees. The trees were so flexible that they absorbed most of the shock of the cannon balls fired from British ships. This was a factor in the British assault on the city of Charleston being unsuccessful.

How a Tree Grows

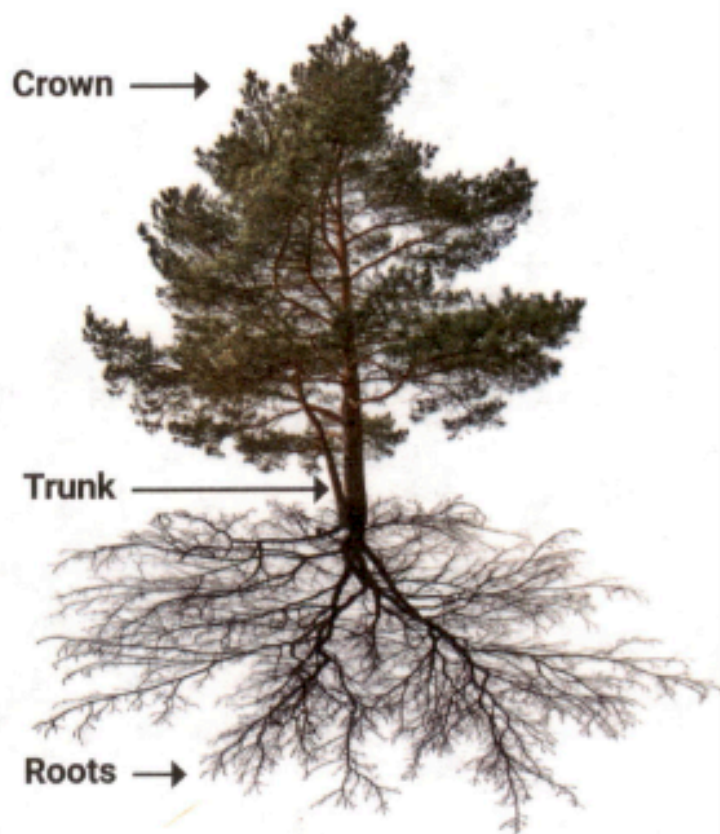
A tree grows in its roots, trunk, and crown (its top, where all the branches and leaves are). The tree needs food to grow, and its roots and leaves play a part in the process of making food.

How far do a tree's roots stretch? A tree's root ball is usually as wide as its branches.

Roots — Roots anchor the tree in the earth and help slow erosion by holding soil in place. They soak up the water, minerals, and nitrogen from the soil and send it up the trunk to the leaves to make food for the tree. A layer of growth cells at the root tips makes new roots each year. Even when a tree is cut down, the roots may sprout new growth to revive and bring the tree back to life.

Trunk — The trunk is a pathway for water and minerals (food) to move from the soil up through the trunk to the leaves. It grows outward and upward each year. As the trunk grows taller, the crown of the tree grows higher in search of more sunlight. In trees used for lumber, the trunk produces most of the useful wood.

Crown — The crown is the upper part of the tree, including the branches and leaves. The leaves take in sunlight and use it to make food for the tree in a process called photosynthesis.



REQUIREMENT 3

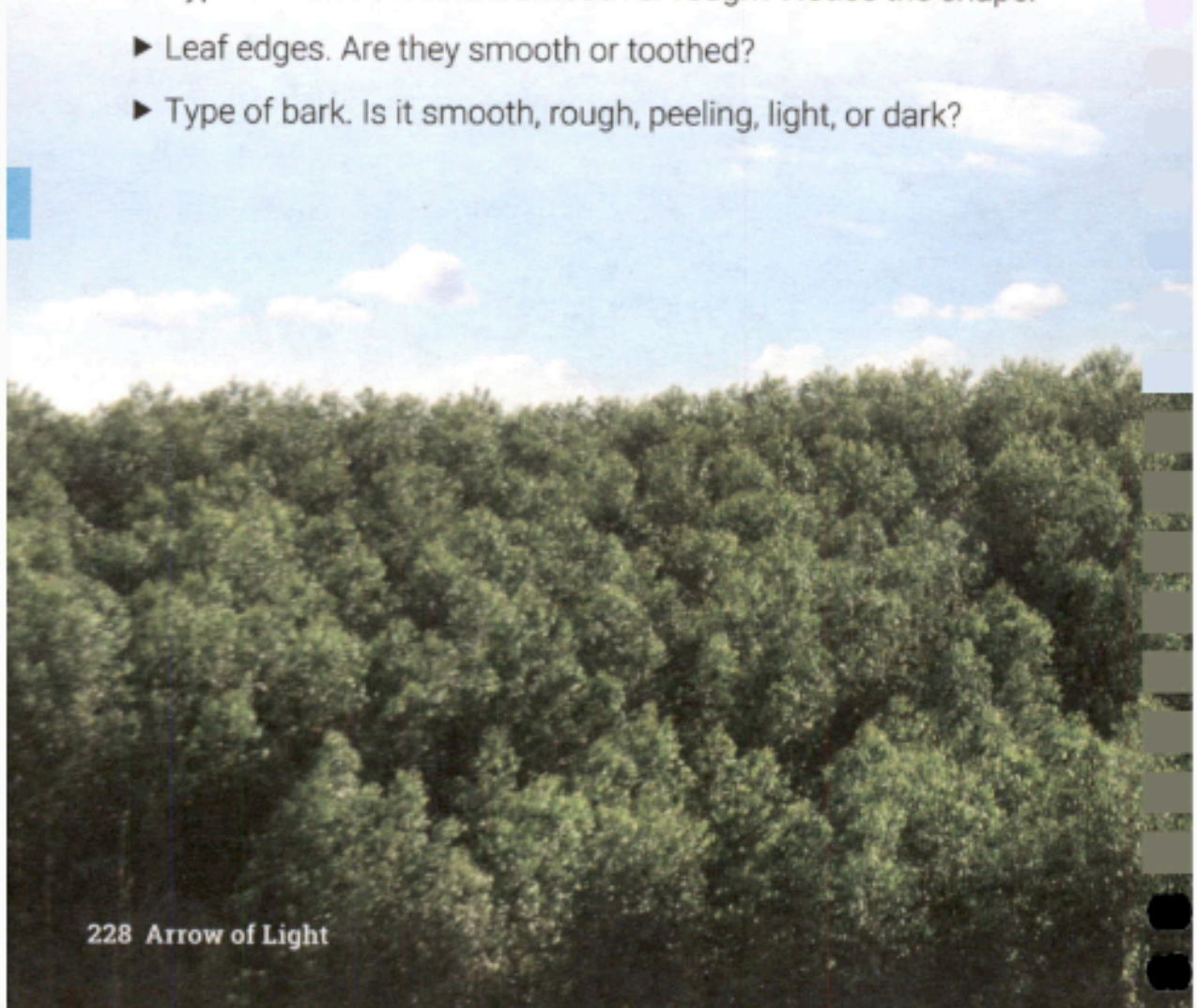
Determine if your tree is native or was introduced to your area.

Some trees are native to your part of the country and have been growing there for thousands of years. Others, especially those planted in parks and around buildings, may have been introduced from another area.

A field guide to trees can help you identify trees in your area. It will show you characteristics that make it easy to tell one kind of tree from another. When you're looking at trees, take time to look closely at everything. Use a magnifying glass to study tiny details.

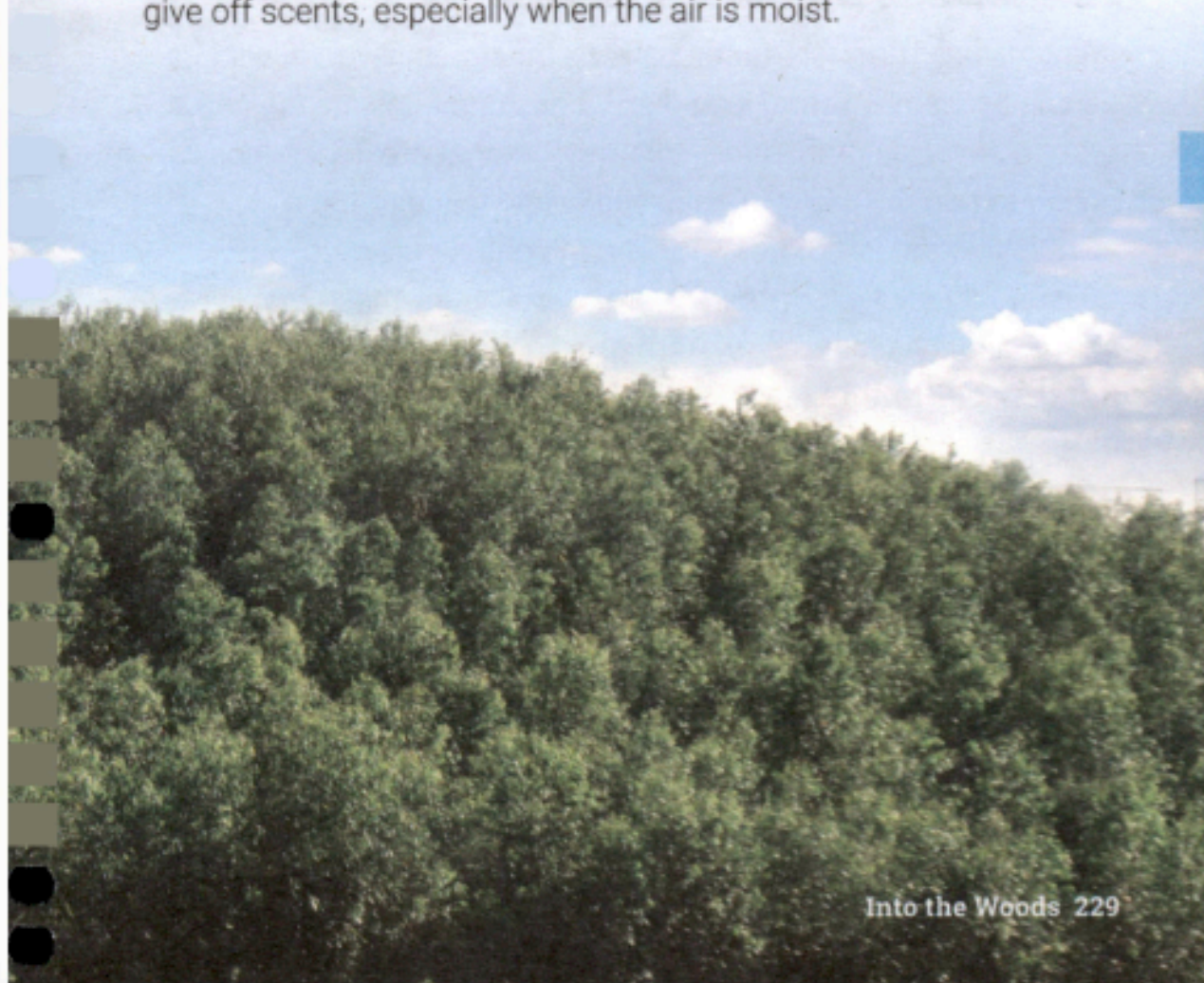
Check for:

- ▶ Type of leaf. Feel it. Is it smooth or rough? Notice the shape.
- ▶ Leaf edges. Are they smooth or toothed?
- ▶ Type of bark. Is it smooth, rough, peeling, light, or dark?



- ▶ Unusual features like thorns, flowers, or berries. Some trees have more than one leaf shape. The sassafras tree has three leaf shapes.
- ▶ With coniferous trees, notice the length, shape, and grouping of the needles. Spruce needles are sharp and short, with four sides, and they grow separately on the twigs. Pine needles grow in bundles.
- ▶ Count the number in a bundle for a clue to the kind of pine it is. Needles of a longleaf pine could be 18 inches long, but jack pine needles are only about 1 inch long.
- ▶ The size and type of cone or fruit will also provide clues to the identity of the tree. The acorns on most oak trees have small, fairly smooth caps, but bur oak acorns have fringed caps that nearly cover the whole acorn.

How do the trees smell? Some trees, like pines and eucalyptus, give off scents, especially when the air is moist.



REQUIREMENT 4

Find out how your tree deals with wildfire.



Wildfires are important to the balance of a forest. Natural wildfires can be caused by lightning strikes when conditions are dry and ground cover is combustible. Ecosystems that are dependent on fire to thin the forest canopy and cultivate the forest floor are slowly transformed without enough natural fire. Sunlight-dependent native plant species are overtaken by those that like shade, and the whole ecosystem becomes less diverse, denser from undergrowth, and littered with dead plant material.

Some trees that are in areas that are likely to have wildfires develop a thicker bark. The bark can resist some fires. Some trees will also naturally drop their lower branches, which prevents a fire from catching lower branches and climbing up the tree to the crown (top of the tree). When this happens, it's called a crown fire. Fire can also help trees and forests grow by activating seeds.

REQUIREMENT 5

Learn how wildlife uses your tree.

An ecosystem is a community of plants and animals living in an environment that supplies what they need for life. Within an ecosystem, trees and plants produce leaves, bark, fruits, nuts, and seeds that many animals eat or use. They also produce oxygen, which animals need to breathe.

In fact, plants and trees produce most of the oxygen on Earth. Through a process called photosynthesis, plants turn sunlight, water, and carbon dioxide into energy. A byproduct of photosynthesis is oxygen.

You know where sunlight and water come from, but where does carbon dioxide come from? It comes from animals and humans every time we breathe out! That is why scientists talk about the oxygen cycle that connects plants and animals.

By trapping carbon dioxide, plants and trees keep it out of the atmosphere. That is important because too much carbon dioxide in the atmosphere contributes to climate change.

Plants and trees do some other important things. They stabilize the soil, which prevents erosion, and they provide shade and shelter for animals and humans. They can be harvested to create furniture, building materials, clothing, paper, food, and many other things we use every day.





If you look closely, you'll see how trees support other forms of life. Look for woodpecker holes, insects hiding under the bark, mistletoe rooted in the branches, fungi growing on the bark, and the nests of birds and squirrels. Larger animals use trees, too. Bears mark their territory by clawing and biting tree trunks.

Beavers eat tree bark and cut down trees to build dams and homes for themselves. Mountain lions sharpen their claws on trees. Moose, elk, and deer use tree trunks or flexible saplings to rub the velvet off their antlers. They also eat tree bark, leaves, and stems.



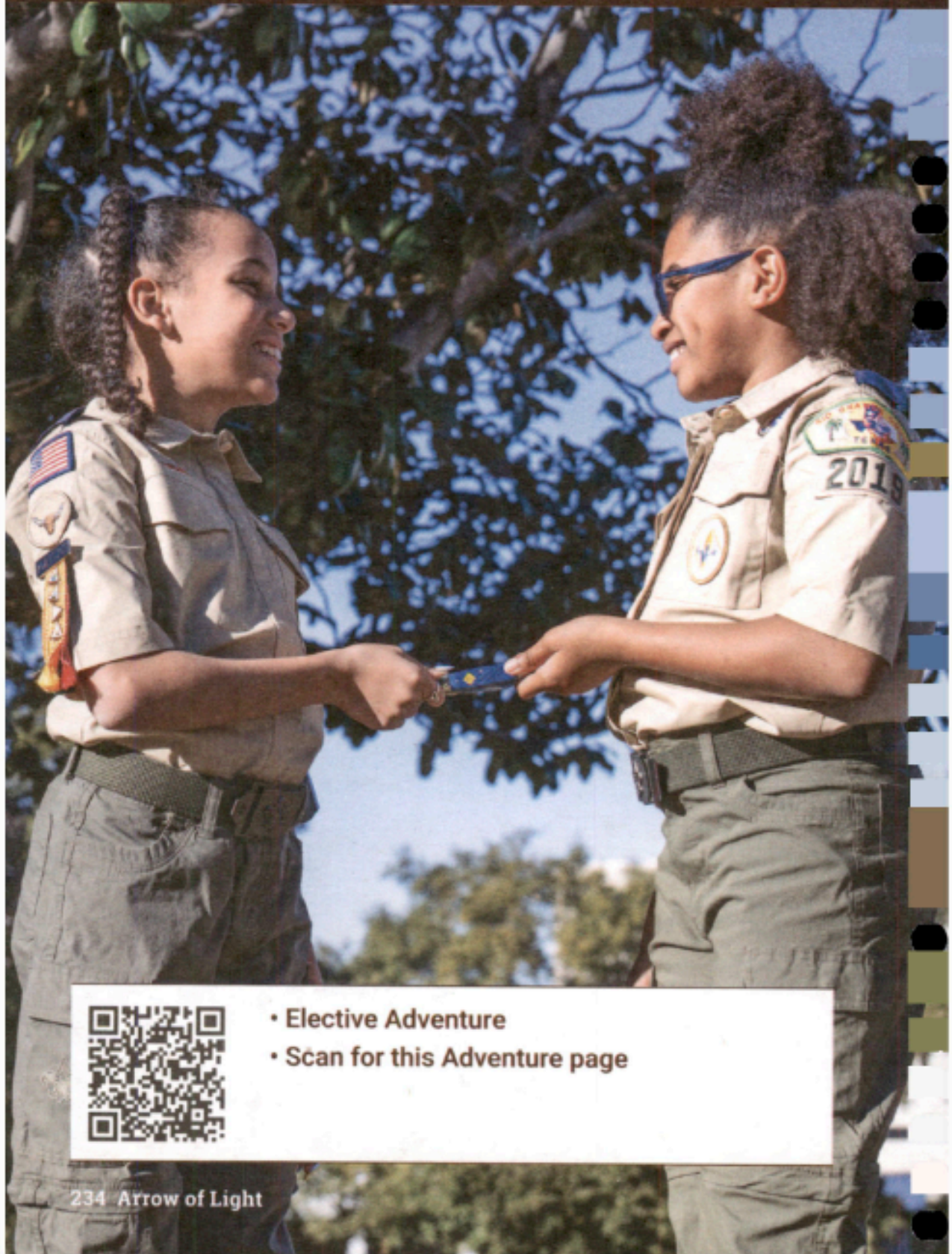
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KNIFE SAFETY

ELECTIVE ADVENTURE



- Elective Adventure
- Scan for this Adventure page

SNAPSHOT OF ADVENTURE



A knife is a tool. A pocketknife or multipurpose tool is one of the Scout Basic Essentials. On campouts, you will be preparing your own food. It's more than likely you'll use a kitchen knife. In this Adventure, you will learn the safety rules about using a knife and some basic instructions on how to use a pocketknife and kitchen knife.

This Adventure allows you as an Arrow of Light Scout to use a knife, with adult permission, during Cub Scout activities. Your pocket certificate for this Adventure may serve as proof you have earned this Adventure. If you earned the Whittling Adventure as a Bear and/or the Chef's Knife Adventure as a Webelos, you must earn the Knife Safety Adventure as an Arrow of Light Scout to earn the privilege of using a knife during a Cub Scout activity.

When joining a Scouts BSA troop, you will be asked to share what you need to know about pocketknife safety for your first rank, Scout. You will also need to earn the Totin' Chip certification to earn the privilege of using a knife during a Scouts BSA activity. The Totin' Chip also covers the proper use of a saw and ax.

REQUIREMENTS

Approved by _____

1. Read, understand, and promise to follow the Cub Scout Knife Safety Rules. _____
2. Demonstrate the knife safety circle. _____
3. Demonstrate that you know how to care for and use a knife safely. _____
4. Demonstrate the proper use of a pocketknife to make a useful object on a campout. _____
5. Choose the correct cooking knife, and demonstrate how to properly slice, chop, and mince. _____

POCKETKNIVES

Pocketknives come in all shapes and sizes. Some can be used for many different tasks. Others are designed for special purposes like fishing. Three common designs used in Scouting are the jackknife, the penknife, and the multipurpose knife. Let's look at each type.

JACKKNIFE

A jackknife is a good tool when camping and fishing. It is hinged at only one end and may have one or two blades. Sometimes one blade has a very sharp point, while another blade has a more rounded point. Some jackknives (and other knives) have locking blades. That means you have to push a release before you can close the blade. Locking blades prevent you from accidentally closing the blade on your fingers.



PENKNIFE

A penknife is small and lightweight, so it is easy to carry in your pocket. It is hinged at both ends and usually has one or two blades at each end. Penknives were originally designed to cut or sharpen quills used for writing. Thomas Jefferson wrote the Declaration of Independence with a quill pen.





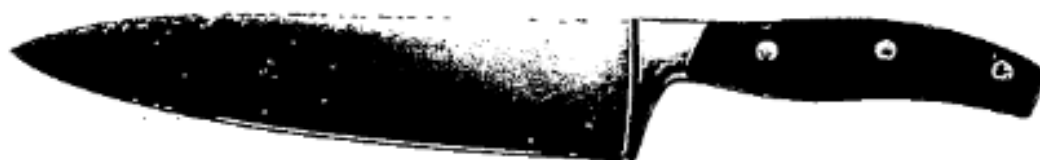
MULTIPURPOSE KNIFE

Multipurpose knives can be used to do many things. In addition to one or two blades, a multipurpose knife might include a can opener, scissors, leather punch, tweezers, and screwdrivers. These knives can be fun to have, but all those extra pieces can get in your way when you're just trying to carve or cut some string. Also, the more tools your knife includes, the heavier it will be. Pick a multipurpose knife that has only the tools you really need.



KITCHEN KNIVES

There are a lot of different types of kitchen knives. Some are designed for very specific jobs, and others are designed for multiple jobs. Here are the four most common kitchen knives.



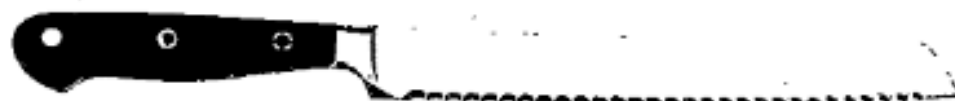
Chef's Knife (8 inches or 10 inches)

A chef's knife is the most common knife. It can be used to slice, chop, and mince meat, fruit, vegetables, or any kind of food.



Paring Knife (3 inches)

A paring knife is small by design and is used for small detail cutting, like peeling an apple. Since it has a thin blade, it's usually used for fruits and vegetables.



Long Serrated Bread Knife

A knife that is serrated is one that has a blade with ridges. These ridges work like a saw and prevent the bread from getting squished when cutting.



Slicing/Carving Knife (10 inches)

A carving knife is designed to slice and cut through meat.

REQUIREMENT 1

**Read, understand, and promise to follow the
Cub Scout Knife Safety Rules.**

There are four Cub Scout Knife Safety Rules that focus on knife safety. Your parent, den leader, and other adults may have additional rules you must follow.

CUB SCOUT KNIFE SAFETY RULES

Stop — Make sure no one else is within arm's reach by making a knife safety circle.

Away — Always cut away from your finger or other body parts.

Sharp — A sharp, clean knife is a safe knife.

Store — Store knives closed, in a sheath or knife block.

Source: American Knife and Tool Institute

OTHER RULES THAT I MUST FOLLOW

REQUIREMENT 2

Demonstrate the knife safety circle.



Make a safety circle. Before you pick up your knife to use it, stretch your arm out and turn in a circle. If you cannot touch anyone or anything else, it's safe to use your knife. While using your knife, be sure to watch in case someone walks toward you and gets too close.

REQUIREMENT 3

Demonstrate that you know how to care for and use a knife safely.

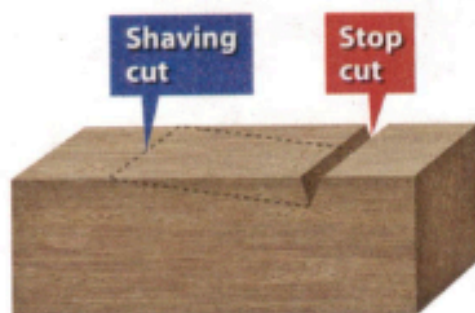
POCKETKNIFE CARE

KEEPING YOUR KNIFE SHARP

When a knife is dull, you have to use more force to cut things. If you slip, with this extra force you are more likely to injure yourself. This is why sharp



knives are safer to use than dull ones. A good way to sharpen your knife is to use a sharpening stone. Lay the blade on the stone at a slight angle. Push the blade forward as if you were going to shave a thin sliver from the stone. Do not push down hard. Next, turn the blade over and shave the stone toward you. This is the only time you should move your knife toward yourself. Keep your fingers below the surface of the stone to protect them. Continue this back-and-forth action until the edge is sharp along its entire length.



MAKING STOP CUTS

Here is a secret to use when you're whittling. Before you make a shaving cut, make a stop cut. At the place you want the shaving to stop, cut straight down with your knife. Press down and rock

the blade back and forth until the cut is as deep as you want the shaving to go. This stop cut will prevent you from shaving off too much wood.

KITCHEN KNIFE CARE

KEEPING YOUR KITCHEN KNIFE SHARP

It is recommended that you have kitchen knives professionally sharpened. Remember that you don't sharpen serrated blades.

STORING KITCHEN KNIVES

Kitchen knives should be stored out of the reach of children and with the blades covered. A knife block is a good choice to keep knives safe.



USING KITCHEN KNIVES

Always use a cutting board when using a kitchen knife. Make sure that the cutting board is flat and stable. Place a kitchen towel flat under a cutting board to give it greater stability. Always follow the Cub Scout Knife Safety Rules.



WASHING KITCHEN KNIVES

Always wash your knife when you're done using it and be careful when washing it by hand. Make sure your kitchen knife is dishwasher safe before placing it in a dishwasher. If the kitchen knife has a wooden handle, chances are it is not dishwasher safe.



FIRST AID FOR KNIFE CUTS

Accidents can happen even when you're being careful. It's important that you know what to do if you or one of your fellow Scouts gets cut while using a pocketknife. Small cuts in the skin can allow bacteria to enter the body and cause infection. Wash minor cuts with soap and water. Apply first-aid ointment and cover with a dry, sterile dressing, an adhesive bandage, or a liquid bandage to help prevent infection and protect the wound. Clean and re-bandage wounds each day. If the cut is more serious, get help from an adult immediately. Taking proper care of a wound will help prevent other health issues like an infection.

REQUIREMENT 4

Demonstrate the proper use of a pocketknife to make a useful object on a campout.



Starting a campfire is a lot easier when you have the right materials. A knife can help create some helpful objects to get your fire started.

Tinder

Tinder is anything that burns as soon as you light it. It can include small twigs, dry leaves, pine needles, tree bark, or wood shavings. You can use your pocketknife to simply whittle a stick to create wood shavings to use as tinder.

Fuzz Stick

Kindling is small sticks, no bigger than a pencil, which will burn easily but not as fast as tinder. If you cannot find sticks that are as thin as a pencil, you can make a fuzz stick from a larger stick. This

also works if it just rained and most of the wood you find is wet. Usually only the outside of the stick may be wet, and the inside is still dry.

First, strip off the bark and hold the piece of wood against something to stabilize it (not your leg — you do not want to end up needing your first-aid kit).

Angle your knife along the wood and slide the blade to create thin, spiral-shaped shavings. Do not cut too deep; you are not trying to make notches. Leave the shavings attached to the wood. The thinner the shavings, the easier they will catch fire. One trick is to split your stick, giving you a wooden edge over which to run your knife — the smaller surface area should make it easier to make shavings.

When you have made quite a few shavings, prop your fuzz stick against your kindling and light the shavings on fire. The flames should easily spread up the stick and to the kindling.



REQUIREMENT 5

Choose the correct kitchen knife, and demonstrate how to properly slice, dice, and mince.

Before you start using a kitchen knife, learn these basics.

GRIP

Use the hand that you are most comfortable with. You can grip the knife on the handle (called the handshake grip) or you can use the pinch grip. The pinch grip is when you pinch the blade of the knife just above the bolster with your thumb and forefinger, then wrap the other fingers around the handle.



THE CLAW

When holding the object you are cutting, use the claw technique to keep the object stable and your fingers out of the way. To make a claw, shape your free hand into a claw by tucking four fingers behind your middle finger. Tightly grip the food with your claw hand, using all five fingers to hold it steady, with the



thumb and pinky finger stabilizing the sides. Make sure the fingertips are always farther back from the knife edge than the knuckles.



SLICE

Move the knife in a rocking, tip-to-heel motion to cleanly slice a food all the way through. Slide the fingers



of your claw hand back and move the knife (not the food) after each cut. Experienced chefs use the knuckle of their middle finger as a width guide for slices.

DICE

Cutting food into uniform cubes is a three-step process. First cut food into even slices. Stack

two or three slices on the cutting board, then cut them lengthwise into thick sticks. Holding the sticks together with your claw hand, cut the sticks crosswise into dice. When working with large quantities of food, make room on the cutting board by transferring the dice to a bowl.



MINCE

Aromatic herbs, ginger, and garlic need to be minced into fine bits that will permeate a finished dish. Place the knife next to the



item to be chopped and set your free hand flat on the tip of the knife. Hold the tip down as you move the knife heel up and down in a chopping motion, rocking back and forth over the food until it is finely minced.

PADDLE CRAFT

ELECTIVE ADVENTURE



- Elective Adventure
- Scan for this Adventure page

SNAPSHOT OF ADVENTURE



Using a paddle craft is one of the oldest forms of transportation. The Pesse Canoe is the oldest known boat. It was constructed sometime between 8040 B.C.E. and 7510 B.C.E., making it about 10,000 years old. And it still floats! This proves that if you take care of your equipment, it can last a long time.

In this Adventure, you will choose between a canoe, kayak, and stand-up paddleboard to complete the requirements.

REQUIREMENTS

Approved by

1. Before attempting requirements 5, 6, 7, 8, and 9 for this Adventure, you must pass the BSA swimmer test. _____
2. Pick a paddle craft you'll use to complete all requirements: canoe, kayak, or stand-up paddleboard. _____
3. Review Safety Afloat. _____
4. Demonstrate how to identify and properly wear a life jacket that is the correct size. _____
5. Jump feet first into water over your head while wearing a life jacket. Then swim 25 feet wearing the life jacket. _____
6. Discuss how to enter and exit a canoe, kayak, or stand-up paddleboard safely. _____
7. Discuss what to do if your canoe or kayak tips over or you fall off your stand-up paddleboard. _____
8. Learn two paddle strokes: power stroke and sweep. _____
9. Have 30 minutes or more of canoe, kayak, or stand-up paddleboard paddle time. _____

REQUIREMENT 1

Before attempting requirements 5, 6, 7, 8, and 9 for this Adventure, you must pass the BSA swimmer test.

Before entering the water and paddling along, you must pass the BSA swimmer test.

To learn more about the BSA swimmer test, follow this QR code.



REQUIREMENT 2

Pick a paddle craft you'll use to complete all requirements: canoe, kayak, or stand-up paddleboard.

CANOE

A canoe is a narrow and usually lightweight boat that is pointed on both ends (the bow and stern) and is open. Canoes can be made out of wood, fiberglass, or aluminum. The most common type of canoe is aluminum since it's durable and easy to care for.

Like all boats, the front of a canoe is called the bow. It is identified by the distance the seat is positioned from the front of the boat, allowing for leg room. The back of the canoe is called the stern. The seat is positioned closer to the back of the boat since your legs will be toward the middle of the canoe.



The sides of the canoe are called the gunwales (pronounced "gun-l"), the middle of the canoe is called the centerline, and the braces across the top of the canoe are called the thwarts.

Canoes are designed for flat water like a lake or calm river.

KAYAK

A kayak is also a narrow and lightweight boat that is pointed on both ends. A kayak may be open (commonly called a "sit on top"), or it may be closed with a cockpit. Kayaks can be made from wood, fiberglass, or plastic. The most common kayak is plastic since it's durable and easy to care for, but they tend to be heavier.

Kayaks may be designed for a single paddler or for two paddlers (tandem). Kayaks come in many different shapes and sizes based on how they are to be used. Fishing kayaks tend to be open, are wide, and have attachments for fishing poles and equipment. Ocean kayaks are closed with a cockpit and may come with a "skirt" that the paddler wears to keep water out of the cockpit.



STAND-UP PADDLEBOARD (SUP)

A paddleboard is like a giant surfboard. It is commonly made of foam with a fiberglass coating. Some paddleboards are inflatable. You stand up on a paddleboard and while standing use a long paddle to move about the water. It requires balance and strength.

REQUIREMENT 3

Review Safety Afloat.

Paddle crafts are all different types of boats. When boating during a Scouting activity, we follow the nine parts of Safety Afloat.



The first part of Safety Afloat is that for any boating activity in Cub Scouting, there must be an adult who has completed the Safety Afloat training and makes sure it's used

during the activity. Below is the definition of qualified supervision for Safety Afloat. After reading it, discuss with your patrol or an adult what the responsibilities are of the adult who is serving as the qualified supervision.

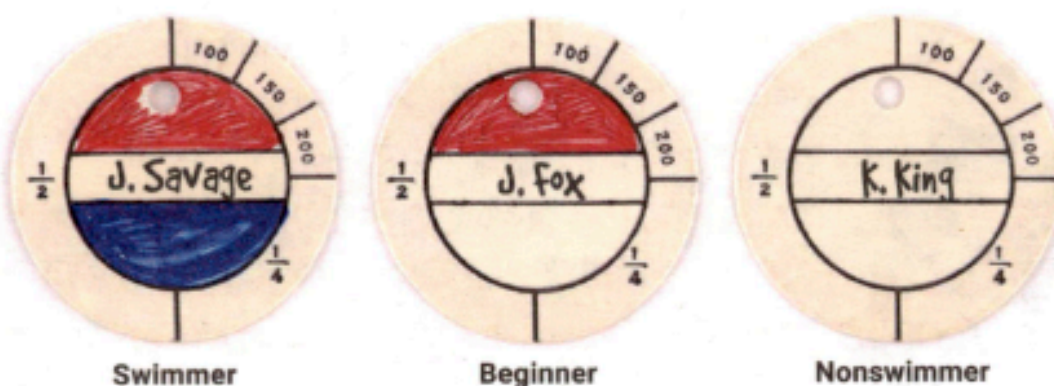
It is best if the adult who will be the qualified supervisor for your paddle craft adventure leads the conversation and gives details on Safety Afloat.

- 1. Qualified Supervision** — All activity afloat (on the water) must be supervised by a mature and conscientious adult aged 21 or older who understands and knowingly accepts responsibility for the well-being and safety of those in their care and who is trained in and committed to compliance with the nine points of BSA Safety Afloat. That supervisor must be skilled in the safe operation of the craft for the specific activity, knowledgeable in accident prevention, and prepared for emergency situations. If the adult with Safety Afloat training lacks the necessary boat operating and safety skills, then they may serve as the supervisor only if assisted by other adults, camp staff personnel, or professional tour guides who have the appropriate skills. Additional leadership is provided in ratios of one trained

adult, staff member, or guide per 5 Cub Scouts. At least one leader must be trained in first aid including CPR. Any swimming done in conjunction with the activity afloat must be supervised in accordance with BSA Safe Swim Defense standards.

2. Personal Health Review — Completing the BSA Annual Health and Medical Record is required. Are there any restrictions on the part of the participant?

3. Swimming Ability — Complete an annual swim test. Do you know what that is?



4. Life Jackets — Properly fitted United States Coast Guard-approved life jackets are worn by everyone engaged in boating activities.

5. Buddy System — Make sure each member is accounted for, especially when in the water.

6. Skill Proficiency — Everyone in an activity afloat must have sufficient knowledge and skill to participate safely.

7. Planning — Check for weather and contingencies as needed prior to your activity.

8. Equipment — All craft must be suitable for the activity, be seaworthy, and be capable of floating if capsized.

9. Discipline — Remember that rules are only effective when they are followed.

REQUIREMENT 4

Demonstrate how to choose and properly wear a life jacket that is the correct size.

No matter what kind of boating you do, you must wear a properly fitted life jacket. The only life jacket you should use is one that has been approved by the United States Coast Guard.

Here is the performance list of Coast Guard-approved life jackets.



- ▶ Level 50 Buoyancy Aid — Not recommended for weak or nonswimmers. No self-turning ability.
- ▶ Level 70 Buoyancy Aid — Equivalent to the Type III life jackets. They are the most common life jackets worn by recreational boaters. No self-turning ability.
- ▶ Level 100 Life Jacket — High flotation life jacket. Some self-turning ability.
- ▶ Level 150 Life Jacket — High flotation life jacket. Offshore waters, self-turning ability.

You can see if the life jacket has been approved by the Coast Guard by locating the approval information printed on the inside of life jacket. The approval information must be clearly legible. If not, the life jacket has reached the end of its useful life and may not be worn.

It is required that everyone, Cub Scouts and adults, wear a level 70 life jacket or above during paddle craft activities.

To make sure your life jacket fits, do this:

- ▶ Check the label to see if it's designed for your size and weight.
- ▶ Put the jacket on, buckle it, and tighten the straps.
- ▶ Hold your arms over your head. Have a friend pull up on the tops of the arm openings. If the jacket rides up over your chin or face, it's too loose.

REQUIREMENT 5

Jump feet first into water over your head while wearing a life jacket. Then swim 25 feet wearing the life jacket.



Swimming with a life jacket is a good way to gain confidence. If your paddle craft were to tip over or you were to fall off your stand-up paddleboard, you would know how to be able to get back on your paddle craft. Paddle craft are designed to float even if they fill with water, so it is best to stay with your paddle craft if you tip over or fall off.



REQUIREMENT 6

Demonstrate how to enter and exit a canoe, kayak, or stand-up paddleboard safely.

CANOE

Start with putting the canoe in the water with the stern (back of the boat) in first. Make sure the canoe is fully in the water to avoid "bridging," in which part of the boat is still on land and the other part in the water. Bridging makes the canoe unstable and dangerous.

Whenever you enter, exit, or move about a canoe, always keep three points of contact by keeping both hands on the gunwales (sides of the canoe) and moving one foot at a time. Stay low by hunching your back and bending your knees; this will make it easier to keep your balance.

Standing outside the canoe in the water, the bow (front) paddler steadies the bow with their knees while holding on to the bow deck plate. Next, with their paddle already in the canoe, the stern (back) paddler steps into the boat on the center line, facing the bow (front), then backs up to the stern and sits or kneels into their position, keeping three points of contact.



Once in position the stern paddler places their paddle in the water with the blade parallel to the canoe, up to the throat and holds the paddle shaft against the side of the canoe, locking their thumb of the shaft hand over the gunwale. This will reduce the side-to-side motion of the canoe as the bow (front) paddler gets in. The bow paddler places their paddle in the canoe and enters the canoe in the same way the stern (back) paddler did going to the center of the canoe. The stern (back) paddler is in their position and the bow (front) paddler is in the center of the boat. The bow of the boat will float free of the shoreline. The stern (back) paddler back paddles away from the shoreline, and the bow (front) paddler moves forward to their paddling position.

KAYAK

When you kayak you are to always have a buddy, even if you are using a one-person kayak. Buddies with their own kayaks stay close together when they paddle. Having a buddy is not only for safety, but it also makes it easier to enter and exit a kayak.

Start with the kayak on a shallow shoreline. As with a canoe, you will need to wear appropriate shoes for the water.

To keep your kayak stable, bring it parallel to the shore. Use your paddle for balance by placing one end on the shore bank and the other end



just behind the cockpit rim of the kayak. Try to keep three points of contact with the boat such as both hands and a foot, or both feet and your seat. Never try to stand in a kayak. Instead, slide your legs in and out of the cockpit. Move slowly and keep your body low.

Getting out of a kayak is like getting in. As you approach the shallow shoreline, paddle the kayak so that it is parallel with the shore. Use your paddle to stabilize the kayak like you did when you got in. Lift yourself out of the cockpit and sit on the back of the kayak just behind the cockpit. Take your leg out of the cockpit and place it on the shore. Keeping three points of contact, take your second leg out to exit the kayak.

STAND-UP PADDLEBOARD

Start with the stand-up paddleboard on a shallow shoreline. Grab each side of the paddleboard with your hands. Staying low, get on the board using your knees. Place the paddle in front of you parallel to your knees. Stay centered on the stand-up paddleboard. Holding on to the paddle shaft with both hands, slowly stand up keeping hands on the paddle. Stay centered on the paddleboard with your feet square to your shoulders and start to paddle.

To get off a stand-up paddleboard, approach the shallow shoreline slowly. As you approach, lower yourself so you are on your knees, like you were when you started. If the shoreline is soft wait for the stand-up paddleboard to hit the shoreline, then grab each side of the paddleboard with your hands and carefully step off.



REQUIREMENT 7

Discuss what to do if your canoe or kayak tips over or you fall off your stand-up paddleboard.

It's always a good idea to get wet before you get into a paddle craft. Wanting to stay dry when using a paddle craft only adds to the fear of tipping over or falling off. If your canoe or kayak tips over or you fall off your stand-up paddleboard, the first thing to do is remain calm.

The No. 1 rule is to stay with your paddle craft. If you can get back in your paddle craft safely, you'll be surprised to find out that most canoes and kayaks can be paddled even when they are full of water. Paddle your way back to safety. Your buddy boat is there to help.



REQUIREMENT 8

Learn two paddle strokes: power stroke and sweep.

CANOE PADDLE

Canoe paddles come in different sizes. The proper size of a paddle is more about comfort and feel than an exact measurement. To see if a paddle is the right size for you, crouch down on land like you would sit or kneel in a canoe. Put the grip of the paddle on the ground with the tip pointing up. The throat of the paddle should be between your shoulder and nose.



KAYAK PADDLE

A kayak paddle has two blades. It is designed so there is constant power moving the kayak through the water. Kayak paddles are measured in centimeters. The most important thing about selecting a kayak paddle is the comfort of the paddle in your hands. To size your kayak paddle, hold the paddle above your head horizontally (side to side) and centered. With your elbows bent at 90-degree angles, your hands should be 6 to 8 inches from the throat on either end of the paddle.





STAND-UP PADDLEBOARD PADDLE

The paddle for a stand-up paddleboard is long and should be about 8 to 10 inches taller than you are.

PADDLE STROKES

When canoeing, both people in the canoe paddle, usually on opposite sides and stroking at the same time. The person in the back steers and gives directions. The person in the front adds power and helps the canoe go straight.

To stroke a paddle properly, hold it firmly with both hands — one hand on the top of the handle and the other hand just above the throat, the area where the paddle starts to get wide. Bend forward a little, and let your upper body rotate as you paddle.

A kayak paddle has two blades that are curved, like a spoon. The curve of the blade is designed to catch the water. If your kayak paddles have an angled tip to them, the short part of the tip points down and the longer end of the tip points up. Grip the kayak paddle with your hands so they are the same distance from the center of the paddle.

To paddle, pick one side of the paddle to start with and place it forward in the water and pull back. Then place the other side of the paddle in the water and pull back. Rotate your body as you paddle so your arms are not doing all the work.

A stand-up paddleboard paddle is long. You hold it like a canoe paddle with one hand on the top of the handle and the other hand on the shaft. The lower your hand is on the shaft of the paddle the more power you'll get from each stroke. Hold the paddle so that it's comfortable.

Power Stroke

Paddle strokes have three parts. The parts below describe how to move a paddle craft forward using a power stroke.

- **Catch.** Lower the paddle blade edgewise into the water in front of you, not too deep.

- **Power.** Pull backward.

- **Recover.** Position the paddle forward ready to begin another stroke.

Backstroke. To do the backstroke, push on the paddle instead of pulling.

Sweep

Use sweeps to turn a canoe. Reach out with the paddle and move it in a quarter circle, either forward or backward. Or use draw and pry strokes, pulling or pushing the paddle straight toward or away from the canoe.

Now it's your chance to demonstrate these steps. You can practice before you get into a boat by standing in knee-high water and paddling like you would if you were in or on your paddle craft. Using a real paddle, demonstrate the correct form for paddling.



REQUIREMENT 9

Have 30 minutes or more of canoe, kayak, or stand-up paddleboard time.



Follow Safety Afloat. Make sure that you are on flat water and check the weather. A flat-water lake or river can become difficult to paddle in if it is windy. You want good paddling conditions when you're learning.

Canoes, kayaks, and stand-up paddleboards are all different. You may find that you like one better than the other or that you like all of them.

RACE TIME

ELECTIVE ADVENTURE



SNAPSHOT OF ADVENTURE



In this Adventure you will design and build your own Pinewood Derby car or Raingutter Regatta boat. As an Arrow of Light Scout, you will mentor younger Cub Scouts on design, building, and good sportsmanship.

REQUIREMENTS

Approved by

1. With adult supervision, build either a Pinewood Derby® car or a Raingutter Regatta™ boat.
2. Learn the rules of the race for the vehicle chosen in requirement 1.
3. Mentor a younger den to prepare for the race.
4. Before the race, discuss with your patrol how you will demonstrate good sportsmanship during the race.
5. Participate in a Pinewood Derby or a Raingutter Regatta.



- Elective Adventure
- Scan for this Adventure page

REQUIREMENT 1

With an adult, build either a Pinewood Derby car or Raingutter Regatta boat.



Building a Pinewood Derby car or Raingutter Regatta boat is a fun way to spend time with your patrol or family. Here are some basic instructions on how to make these fun vehicles. You may find more advanced tips and tricks with your patrol or family online.



PINEWOOD DERBY CAR

A Pinewood Derby car is made out of wood and runs on a downward track. The car uses the force of gravity to run down the track. Read all the basic instructions first before starting to make your car.

Materials and Tools

- ▶ Pinewood Derby car kit
- ▶ Saw
- ▶ Hammer
- ▶ Sandpaper (200 grit)
- ▶ Paint
- ▶ Paint brushes

Instructions

1. Draw a design for your car.

Take the block of wood in your Pinewood Derby car kit and place it on its side. Draw an outline of the wood on paper. Now draw the profile (side view) of your car.



2. Cut out your car from the block of wood.

You can use a handsaw or you can have an adult use a power tool to cut it out.



3. Sand your car. Sanding will remove any sharp corners and will allow paint or any other decoration you add to your car stick better.

4. Paint and decorate your car.

Pinewood Derby cars are made of soft wood and when you paint them, it may take a couple of layers or coats of paint. Paint the car once and then, when the paint is dry, use sandpaper to lightly sand it. Clean off any dust from sanding and paint it again. You can repeat this over and over until you get the look you want.



5. Assemble your car. Using the nails that came in your kit, attach the wheels that came

in the kit to the car in the pre-cut areas on the bottom of the car.



6. Check the weight. Do this step last as everything else you do will either add or subtract weight from your car. You want your car to be exactly 5 ounces. If it weighs less, you can simply glue pennies to the car to get it just right.

Here is a tip. Make sure your axles are square, at a 90-degree angle. This will keep your car straight when going down the track. If your axles are not square, your car may turn and rub up against the track, causing it to slow down. You can test your car by simply pushing it across the floor to see if it goes straight.



RAINGUTTER REGATTA BOAT

The Raingutter Regatta kit comes with everything you need to make your boat. The Raingutter Regatta boat is raced in either a homemade track by capping the ends of two 10-foot-long rain gutters or an inflatable track your pack may buy. Two Cub Scouts race their boats by blowing into the sails.

Materials and Tools

- ▶ Raingutter Regatta kit
- ▶ Phillips head screwdriver
- ▶ Sandpaper (200 grit)
- ▶ Paint
- ▶ Paint brushes
- ▶ Glue

Instructions

1. Sand the wooden hulls. It is easier to sand the wooden hulls before you assemble your boat.



2. Attach the plastic cabin to the two wooden hulls.

3. Paint and decorate your boat. If you're painting, it's best to use a primer first; this will help the paint stick to the plastic parts of the boat. You can decorate the sail too.

4. Assemble the sail and mast. Use a small bit of glue in the hole where the mast will go, then place the mast into the hole. Allow the glue to dry before you attach the sail.



Here is a tip. You can add wax to the bottom of your boat, called the hull, to make it extra smooth. The smoother the hull, the faster your boat can go.

REQUIREMENT 2

Learn the rules of the race for the vehicle chosen in requirement 1.

Rules are important so that everyone knows how to play. The rules to the Pinewood Derby or Raingutter Regatta should be kept short and simple so everyone can know and understand them. Rules for the Pinewood Derby and Raingutter Regatta are included in each kit. You can also find the rules online by following one of the below QR codes.



Pinewood Derby



Raingutter Regatta

Your pack may have additional rules. You should ask for these rules before you start building. Most of the rules about Pinewood Derby and Raingutter Regatta are about what you can and cannot do when building your car or boat.

Next is knowing how your race will be conducted. You may have a race with just the members of your patrol first and the winner of each den or patrol competing for the pack championship. Your pack may run races based on the fastest time. Understanding how your pack will conduct the race will help you understand what is going on during the race and how many times you might be racing.

REQUIREMENT 3

Mentor a younger den to prepare for the race.

Ask your den leader to identify a younger den that your patrol can mentor. There are several ways you can mentor a younger den. Here are some examples. You can pick one or several.

- ▶ Help a younger Cub Scout design their car or boat.
- ▶ Provide tips on how to build a car or boat that goes fast.
- ▶ Provide tips on how to decorate their car or boat.
- ▶ Explain the rules of your pack's Pinewood Derby or Raingutter Regatta.



REQUIREMENT 4

Before the race, discuss with your patrol how you will demonstrate good sportsmanship during the race.



Having a good time building your car or boat is what really matters. Just like any race, there is going to be someone with the fastest car or boat. Remember that the race is done to add excitement and fun. If you worked hard on your car or boat and can say that you did your best, then you have lived up to the Cub Scout motto — Do Your Best.

Think about the Scout Oath and the Scout Law. With your patrol or family, point out the parts of the Scout Oath and the Scout Law that will be helpful for everyone to follow during the race.

REQUIREMENT 5

Participate in a Pinewood Derby or a Raingutter Regatta.

It's race day! Time to take everything you have learned in this Adventure and have a great time with your patrol or pack.



SUMMERTIME FUN

ELECTIVE ADVENTURE



SNAPSHOT OF ADVENTURE



Summertime is a great time to get together with your patrol or pack. The requirement for this Adventure is simple. Participate in three Cub Scout activities during the summer months. This can be at council-organized camps like day camp or resident camp, or it can be a patrol or pack get-together for a summertime picnic.

To earn this Adventure as an Arrow of Light Scout, you participate in summer activities during the summer after you have completed fourth grade. If you're just now learning about this Adventure, don't worry, this coming summer you'll be in Scouts BSA. You may attend Scouts BSA resident camp where you'll get to spend a week camping, earning merit badges, making new friends, and learning new skills.

REQUIREMENTS

Approved by _____

1. Anytime during May through August participate in a total of three Cub Scout activities.



- Elective Adventure
- Scan for this Adventure page

REQUIREMENT 1

Anytime during May through August participate in a total of three Cub Scout activities.

The summer is filled with fun Cub Scout activities. Below are just some things you, your patrol, or your pack may choose to do.



Cub Scout Day Camp

Cub Scout day camps are held by local councils. Adults who serve as leaders for this camp are trained to put together fun activities. Day camp may be three to five days long. Each

day you arrive for a day filled with adventures and come home to share with your family what you did.

Cub Scout Resident Camp

Cub Scout resident camps are held by local councils. Adults who serve as leaders for these camps are nationally trained and certified in all areas of camp. A resident camp takes place over several days and nights as you stay at camp the whole time sleeping in a tent or other shelter.





A Pack-Organized Event

Pack events during the summer may include a fun day at a park, a trek on a local trail, or a back-to-the-pack event right before school starts. It may even be an overnight campout.

A Patrol-Organized Event

It can be fun to have your patrol get together, with proper adult supervision, for a trip to the bowling alley or a state park, or even for a backyard picnic.



SWIMMING

ELECTIVE ADVENTURE



- Elective Adventure
- Scan for this Adventure page

SNAPSHOT OF ADVENTURE



As you get ready to join Scouts BSA, there are new aquatic activities that you will get the chance to do. Small-boat sailing, SCUBA, and overnight canoe treks are just some of the great adventures. To earn many of the aquatic-based merit badges in Scouts BSA, you will need to pass the BSA swimmer test.

In this Adventure you do not have to pass the BSA swimmer test; you just need to attempt it. If you do not pass the swimmer test for this Adventure, you can practice before you go to Scouts BSA summer camp or sign up for a session on how to swim at the camp you attend. As a swimmer you will have more merit badges you can earn at summer camp.

This elective Adventure may be earned by completing the requirements below OR passing the BSA swimmer test OR taking swimming lessons.

REQUIREMENTS

Approved by _____

1. Review Safe Swim Defense.
2. Explain the meaning of "order of rescue" and demonstrate the reach and throw rescue techniques from land.
3. Attempt the BSA swimmer test.
4. Have 30 minutes or more of free swim time during which you practice the buddy system and stay within your ability group. The qualified adult supervision should conduct at least three buddy checks per half hour of swimming.

REQUIREMENT 1

Review Safe Swim Defense.

While swimming is a lot of fun, it does require you to follow safety rules and to be alert for danger. In Scouting, we have two sets of rules we follow to be safe in and on the water: Safe Swim Defense and Safety Afloat. The adults who lead aquatic activities must be trained in these rules. Discuss Safe Swim Defense with your leader or a parent or legal guardian, and explain how you will follow safety guidelines.

Safe Swim Defense covers these eight points:

1. Qualified Supervision


All swimming activity must be supervised by a mature and conscientious adult age 21 or older who understands and knowingly accepts responsibility for



the well-being and safety of those in their care, and who is trained in and committed to compliance with the eight points of BSA Safe Swim Defense. It is strongly recommended that all units have at least one adult or older youth member currently trained in BSA aquatics supervision, swimming, and water rescue, or BSA lifeguard to assist in planning and conducting all swimming activities.

2. Personal Health Review

Completing the BSA Annual Health and Medical Record is required of all participants as evidence of fitness for swimming activities. Forms for minors must be signed by a parent or legal guardian. Participants should be asked to relate any recent incidents of illness or injury just prior to the activity. Supervision and protection should be adjusted to anticipate any potential risks associated with individual health conditions. For significant health conditions, the adult supervisor should require an examination by a physician and consult with the parent, legal guardian, or caregiver for appropriate precautions.

The image shows a BSA Annual Health and Medical Record form. It is a multi-page document with sections labeled A, B1, and B2. Section A contains a consent form with checkboxes for various medical conditions and a signature line. Sections B1 and B2 contain tables for recording medical history and current medications.

3. Safe Area

All swimming areas must be carefully inspected and prepared for safety prior to each activity. Water depth, quality, temperature, movement, and clarity are important considerations. Hazards must be eliminated or isolated by conspicuous markings and discussed with participants.

4. Response Personnel (Lifeguards)

Every swimming activity must be closely and continuously monitored by a trained rescue team on the alert for and ready to respond during emergencies. Professionally trained lifeguards satisfy this need when provided by a regulated facility or tour operator. When lifeguards are not provided by

others, the adult supervisor must assign at least two rescue personnel, with additional numbers to maintain a ratio of one rescuer to every 10 Cub Scouts. The supervisor must provide instruction and rescue equipment and assign areas of responsibility as outlined in "Aquatics Supervision." The qualified supervisor, the designated response personnel, and the lookout work together as a safety team. An emergency action plan should be formulated and shared with participants as appropriate.



5. Lookout

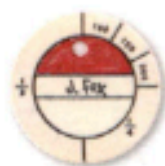
The lookout continuously monitors the conduct of the swim, identifies any departures from Safe Swim Defense guidelines, alerts rescue personnel as needed, and monitors the weather and environment. The lookout should have a clear view of the entire area but be close enough for easy verbal communication. The lookout must have a sound understanding of Safe Swim Defense but is not required to perform rescues. The adult supervisor may serve simultaneously as the lookout but must assign the task to someone else if engaged in activities that preclude focused observation.

6. Ability Groups

All youth and adult participants are designated as swimmers, beginners, or nonswimmers, based on swimming ability confirmed by standardized BSA swim classification tests.



Swimmer



Beginner



Nonswimmer

Each group is assigned a specific swimming area with depths consistent with those abilities. The classification tests must be renewed annually, preferably at the beginning of the season, even if the youth has earned the Swimming Adventure.

7. Buddy System

Every participant is paired with one other. Buddies stay together, monitor each other, and alert the safety team if either needs assistance or is missing. Buddies check into and out of the area together. Buddies are normally in the same ability group and remain in their assigned area. If they are not in the same ability group, then they swim in the area assigned to the buddy with the lesser ability.

8. Discipline

Rules are effective only when followed. All participants should know, understand, and respect the rules and procedures for safe swimming provided by Safe Swim Defense guidelines. Applicable rules should be discussed prior to the outing and reviewed for all participants at the water's edge just before the swimming activity begins. People are more likely to follow directions when they know the reasons for rules and procedures. Consistent, impartially applied rules supported by skill and good judgment provide steppingstones to a safe, enjoyable outing.

THE BUDDY SYSTEM

One of the most important ways you can ensure a safe swim is to follow the buddy system. As you read in the Safe Swim Defense section, you and another Scout will be paired and should always stay together. Keep an eye on your buddy and call for help if needed. Always check into and out of the swimming area together.

A buddy check reminds participants of their obligation to monitor their buddies and indicates how closely the buddies are keeping track of each other. Roughly every 10 minutes, or as needed to keep the buddies together, the lookout, or other person designated by the supervisor, gives an audible signal, such as a single whistle blast, and a call for "Buddies."

As quickly as possible, get to your buddy and raise each other's hand. Buddies are expected to raise each other's hand before completion of a slow, audible count to 10. See if you can be the first buddy pair to do this! Buddies who take longer to find each other should be reminded of their responsibility for the other's safety.



Once everyone has a buddy, a count is made by area and compared with the total number known to be in the water. After the count is confirmed, a signal is given to resume swimming.

The buddy system is also a good idea when you're hiking, cooking, or doing any other activity!

REQUIREMENT 2

Explain the meaning of "order of rescue" and demonstrate the reach and throw rescue technique from land.

If a swimmer or boater gets in trouble, trained rescuers know how to perform a rescue. To be as effective as possible and to protect themselves from getting into trouble, too, rescuers follow what's called the order of rescue, doing the following actions in order:

- ▶ Reach for the victim with whatever is available — a hand or foot, a tree branch, a canoe paddle, or a towel. Pools and waterfront areas usually have reach poles at least 10 feet long.
- ▶ Throw or toss a line, buoy, or floating object (like a kickboard or even a drink cooler) to the victim to provide support. If the object is tied to a rope, the rescuer can pull the victim to safety. A trained rescuer can easily toss a ring buoy 25 feet or more.

As an Arrow of Light Scout, you're not expected to do the rescue work of a trained adult. You can, however, perform a reach or throw rescue from shore or from a dock — even if you do not know how to swim. If someone falls in the water and no one else is around, you could save the person's life!

If you see someone in danger, first call for help from an adult. If no adult is present, you can try a reach or throw rescue. For this requirement, practice reach and throw rescues. You could do this in a pool or lake, but you could also do it on shore.

Following are some tips to make your rescues more effective.

Reach Rescues

- ▶ Lie down on the shore, dock, or pier so you are more stable and are closer to the victim's level.
- ▶ Be sure to anchor yourself so you do not get pulled into the water. You could hold onto a ladder or post or have a friend stand behind you and hold onto you.
- ▶ If you are using a reach pole, sweep it under the victim's arm from the side rather than poking at the victim straight on. Stand with one leg in front of the other, keep the knees flexible (do not lock knees) and lean back slightly for balance — do not lean forward or your center of gravity may send you into the water when the person you are rescuing starts pulling on the pole or rope.



Throw Rescues

- ▶ Do not throw a ring buoy or float directly at the victim; you do not want to bonk the victim on the head!
- ▶ If the object you are throwing is attached to a rope, throw it past the victim so the line falls across their shoulder. You can then reel it in so it's easy to grasp.



In any water rescue, never put yourself in danger or at risk.

REQUIREMENT 3

Attempt the BSA swimmer test.

If you are a swimmer, you'll have more fun in the water and be safer, too. You'll also be able to participate in more boating activities like canoeing, kayaking, motorboating, and whitewater rafting when you join a Scouts BSA troop.

To be classified as a swimmer, you must pass this test:

- ▶ Jump feet first into water that is over your head in depth.
- ▶ Level off and swim 100 yards in one swim (without stops and including at least one sharp turn). The first 75 yards must be done in a strong manner using one or more of the following strokes: sidestroke, breaststroke, trudgen, or crawl; the last 25 yards must be done using an easy resting backstroke.
- ▶ After completing the swim, rest by floating.

There are many different swimming strokes you can use. Some help you go very fast but also require a lot of energy. Others are so easy and relaxing that you could use them to swim a whole mile. Below are four strokes you should know:



Front Crawl

- ▶ Float face down in the water with your arms and legs stretched out.
 - ▶ Move your legs up and down. Press down on the water with the top of your foot. This is called a flutter kick.
 - ▶ While still kicking, pull downward with your left arm. Breathe out through your nose and mouth while your face is in the water.
 - ▶ As your left-arm stroke ends, begin a stroke with your right arm. Raise your face by turning your head to the right so you can breathe in through your mouth.
 - ▶ Reach ahead again with your right arm. At the end of the right-arm stroke, begin a new one with the left arm. Turn your face under water again to breathe out.
- ▶ Keep repeating the arm and leg motions, making them as smooth and even as possible.



Sidestroke

- ▶ Lie on your side with one ear in the water. Stretch your bottom arm out ahead of you.
- ▶ Your top arm is at your side, along your leg.
- ▶ Start with your feet together, and then bend your knees, pulling your heels toward your hips.
- ▶ Cup your reaching hand a little. Sweep it down in front of your chest.
- ▶ Move your feet apart by moving your top leg forward and your bottom leg backward.



► Notice the hand and arm movement. As your lower hand sweeps water toward your feet, your upper hand moves toward your chest. They nearly meet.



► When your legs are as far apart as possible, snap them together quickly the way you close a pair of scissors.



► Your upper hand sweeps water toward your feet. Your lower hand reaches out ahead of you, returning to its starting position.



► Stop your feet as they come together. Repeat the arm and leg movements.



Breaststroke

- Float face down in the water with your arms and legs stretched out.
- Spread your arms out so they are diagonal from your body.
- Your elbows should be straight, and your palms should be facing slightly out.
- Pull your elbows toward your sides and then bring your hands together in front of your chest as if you are trying to scoop the water toward you. Quickly push your hands back to where they started. (Your hands should trace the shape of an upside-down heart.)
- As you start the arm stroke, bend your knees so your heels are close to your hips and your ankles are spread out. Make a quick circular motion outward and backward until your legs are fully extended.
- Just before you push your hands forward and your legs backward, lift your head and upper chest out of the water and take a breath.
- Glide for a second or two; then repeat the arm and leg movements.



Elementary Backstroke

- ▶ Start by floating on your back, arms at your sides.
- ▶ Bring your cupped hands up over your chest to your shoulders. At the same time, drop your heels downward. They should be beneath your knees.
- ▶ Turn your toes outward and swing your feet outward in a circular motion without stopping. At the same time, reach your arms straight out.
- ▶ Then sweep them down to your sides as your legs come together in a straight-out position, with toes pointed. The arm pull and leg kick happen at the same time.
- ▶ You should end up the same way you were at the start, and then glide before the next stroke.



REQUIREMENT 4

Have 30 minutes or more of free swim time during which you practice the buddy system and stay within your ability group. The qualified adult supervision should conduct at least three buddy checks per half hour of swimming.



Whether you live in the city or the country, there is probably a place nearby where you can go swimming. There may even be an indoor pool that is open year-round. For this requirement, visit a pool or swimming area with your patrol, pack, or family. Follow Safe Swim Defense to keep you and your patrol, pack, or family safe.

SCOUTS BSA

HANDBOOK



BOY SCOUTS OF AMERICA®

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This handbook contains the information you need to start working on your Scout rank once you join a Scouts BSA troop.

1. While an Arrow of Light Cub Scout, you can work only on the requirements for the Arrow of Light badge of rank and Adventures (pages 44–293).
2. Arrow of Light badge of rank requirements and Adventures must be approved by the den leader. You may do a requirement at home, but your den leader approves the completion of the requirement(s).
3. After you join Scouts BSA, you may begin work on the requirements for the Scout badge of rank. You may not begin working on the Scout badge of rank while an Arrow of Light Scout.

TELL A FRIEND ABOUT SCOUTING

A Scout is helpful and friendly. And a great way to demonstrate that is by helping a friend join Scouting!

To become a First Class Scout, you must invite a friend to a meeting, campout, or other activity. But you'll probably want to invite someone long before you reach First Class. Here's how to get started:

- **Think of a friend you think would be a great Scout.** Maybe one who's already into the outdoors or isn't involved in a lot of other activities. Maybe someone who laughs at your jokes.



- **Pick a meeting or activity that would be especially fun.** Hint: The meeting where you're washing a bunch of dishes would not be a good choice, nor would the campout where you're hiking across Death Valley.
- **Make the ask.** Extend the invitation, and give the friend and the friend's parents all the information they need. See if the friend can ride with you and your parents.
- **Let your senior patrol leader and Scoutmaster know that you're bringing a friend.** If they know ahead of time, they can roll out the red carpet for your friend.

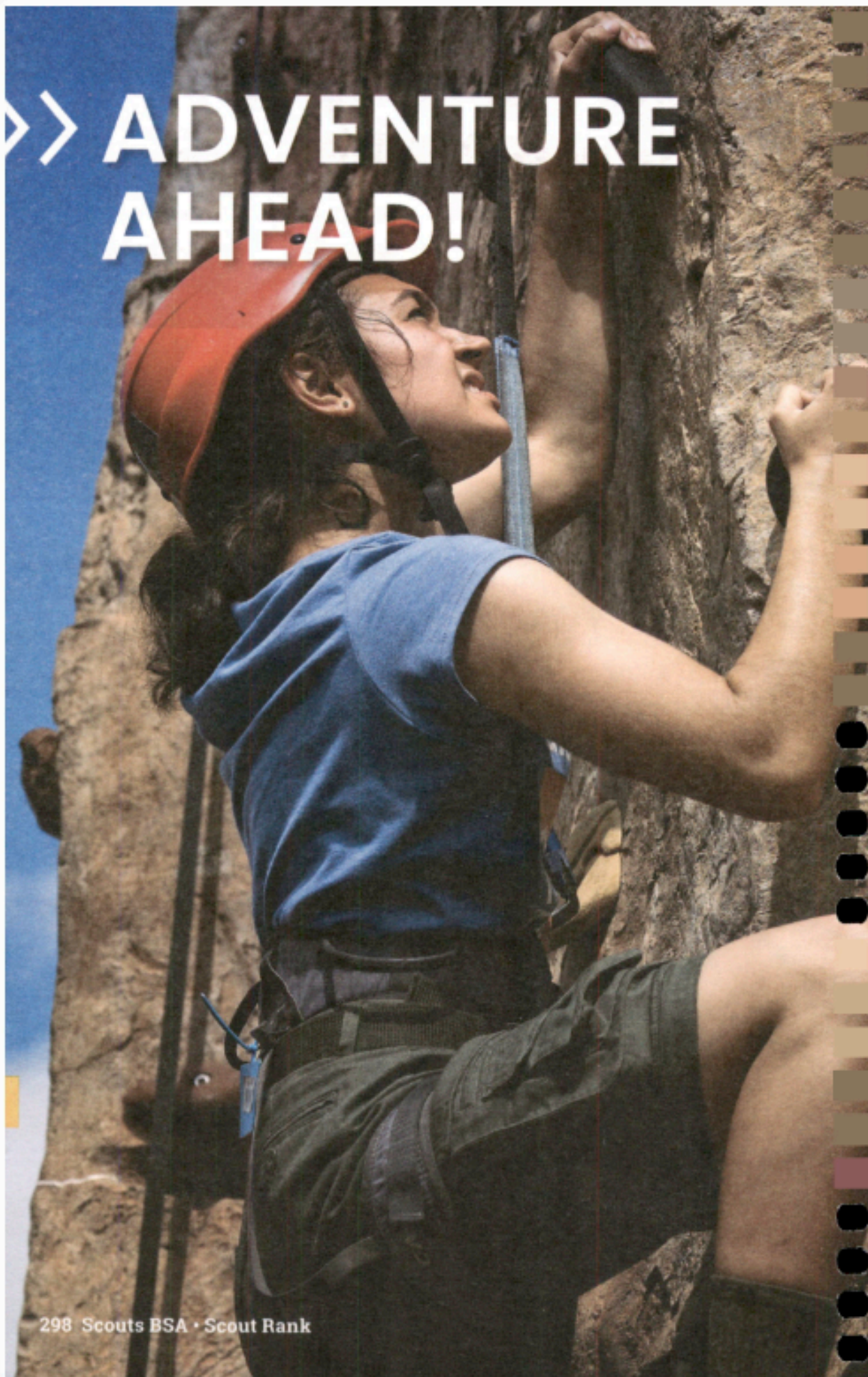
If the event is an outing, the friend will need to complete an Annual Health and Medical Record, but won't need to turn in an application—yet. Many troops waive the cost of campouts for prospective members, making it as easy as possible for them to check out Scouting.

Youth Membership Requirements

To become a Scout, a youth must:

- Be at least 10 years old, currently in the fifth grade and register on or after March 1; OR have earned the Arrow of Light Award and be at least 10 years old, OR be age 11.
- Have not reached age 18.
- Complete and submit the Boy Scouts of America youth application.
- Submit the completed application and fees to the Scoutmaster.

>> ADVENTURE AHEAD!



Imagine standing at a trailhead with a small group of friends. It's early morning, and the air is filled with the scent of pine and honeysuckle. In a nearby tree, a squirrel is chittering away. An eagle circles high overhead, soaring gracefully on unseen air currents. At the trailhead, a weathered trail sign reads simply, "Adventure Ahead!"

That's it. No description, no distance, just the promise of some untold adventure. You can't tell just where the trail leads, but that doesn't really matter, because you know the journey is the reward.

And so, without a word, you and your friends smile, pick up your backpacks, and take your first steps into adventure, into excitement, and into the future.



Imagine what you will discover on your next Scouting adventure.

WELCOME TO SCOUTING

By becoming a Scout, you are following in the footsteps of millions of youth over the past century who laced up their hiking boots and set off on great adventures in the outdoors. They served their families, their communities, and the nation. They learned skills and built friendships that guided them throughout their lives. They lived the values of Scouting and built lives of success and honor.

Soon after joining a troop, you will find yourself hiking in open country and camping under the stars. You will learn first aid, become stronger physically and mentally, and practice leading yourself and others. As you get more Scouting experience under your belt, the places you explore will become familiar as you discover plants, wildlife, and all else nature offers. You'll also learn how to enjoy the outdoors while leaving no trace that you were ever there.



But that's not all you'll learn. The skills you develop in Scouting will help you back home, too. You may become a better student or athlete or family member because you are a Scout. Through the merit badge program, you may discover a hobby or even a career that you can pursue throughout the rest of your life. One day you might save a life—or save the planet—because of something you learned in Scouting.

Throughout your life, you will face challenges as great as any you meet while camping and hiking. The Scout Oath and Scout Law provide guidelines for doing the right thing. As a Scout, you will be surrounded by friends and leaders who share your values and will be there for you in good times and in bad.

How do we know? Because that trailhead has been there since way back in 1910, when the Boy Scouts of America was founded.

THE MERITS OF SCOUTING



Scouting's merit badge program will lead you to experiences you might not get anywhere else, such as soldering the intricate pieces of your own robot as this Scout is doing to earn the Robotics merit badge.



Robotics



Scouting has changed a great deal since 1910. Camping gear is lighter and easier to use. Troop members undertake adventures their grandfathers could not have even imagined. Where the Scouts of the last century relied heavily on maps and compasses, Scouts today also use GPS receivers to find their way. While early Scouts could earn merit badges in Beekeeping,

Blacksmithing, and Pigeon Raising, Scouts today can work on Animation, Digital Technology, Nuclear Science, and plenty of other merit badges well-suited for the 21st century.

Not everything has changed, though. Scouts still go camping every chance they get. They still prepare themselves to do their best in emergencies and to care for their communities and the environment with Good Turns and other service projects. As steady as the Big Dipper and the North Star, the Scout Oath and Scout Law have shown the way for millions of youth during their time as Scouts and throughout the rest of their lives. And there's still the lure of the adventure beyond the next turn in the trail.

Scouting continues to be an adventure that is filled with opportunities to learn, to have fun, and to become the best person you can be. The pages ahead will lead you deep into Scouting. The more you learn, the more exciting and challenging your adventures will become.

Adventure, learning, challenge, and responsibility—the promise of Scouting is all this and more. If you are ready for the adventure to begin, then let's get started.



Honeybee



Modern camping gear used by today's Scouts is much lighter and more suited for outdoor activities than gear used by early Scouts.

ADVANCEMENT: SCOUTING BASICS

The basics of Scouting will follow you throughout your journey along the trail from the Scout rank to Scouting's highest rank: Eagle Scout. It all starts here, with demonstrating that you know and understand some of Scouting's basic premises.



SCOUT Repeat from memory the Scout Oath, Scout Law, Scout motto, and Scout slogan, and explain what they mean. Explain what Scout spirit is and tell how you have shown Scout spirit. Give the Scout sign, salute, and handshake, and explain when they should be used. Describe the elements and significance of the First Class badge. Explain the patrol method and describe the types of patrols that are used in your troop. Be familiar with your patrol name, emblem, flag, and yell, and explain how these items create patrol spirit. Describe the four steps in Scout advancement and how the seven ranks of Scouting are earned. Understand what merit badges are and how they are earned. Participate in a Scoutmaster conference while working on the Scout rank.



TENDERFOOT, SECOND CLASS, FIRST CLASS Demonstrate Scout spirit by living the Scout Oath and Scout Law, and tell how you have lived four different points of the Scout Law, as well as your duty to God, in your everyday life. Participate in a Scoutmaster conference while working on the next Scouting rank, and successfully complete a board of review.



STAR In addition to continuing the activities described for Tenderfoot, Second Class, and First Class above, be active in your troop for four months as a First Class Scout. Earn six merit badges, including any four from the required list for Eagle. Participate in six hours of community service, and serve actively in your troop for four months in a position of responsibility.



LIFE In addition to continuing the activities described for Tenderfoot, Second Class, and First Class above, be active in your troop for six months as a Star Scout. Earn five additional merit badges, including any three additional ones from the required list for Eagle. Participate in six hours of community service, including three hours of conservation, and serve actively in your troop for six months in a position of responsibility.



EAGLE In addition to continuing the activities described for Tenderfoot, Second Class, and First Class above, be active in your troop for six months as a Life Scout. Explain how your understanding of the Scout Oath and Scout Law will guide your life in the future. Earn a total of 21 merit badges (10 more than required for the Life rank), including 14 required for Eagle. Serve actively in your troop for six months in a position of responsibility. Participate in a Scoutmaster conference while working on the Eagle rank, and successfully complete an Eagle Scout board of review.

SCOUT BASICS

Scouts learn an amazing number of things about camping, nature, first aid, and more. Some of the most important things are on the next few pages. The Scout Oath, Scout Law, Scout motto, and Scout slogan will guide your steps long after you hang up your hiking boots.

THE SCOUT OATH, SCOUT LAW, SCOUT MOTTO, AND SCOUT SLOGAN

Every Scout for more than a hundred years has pledged to live by the Scout Oath, Scout Law, Scout motto, and Scout slogan.

Scout Oath

Before you can agree to live by the Scout Oath, you must know what it means.

THE SCOUT OATH

On my honor I will do my best
To do my duty to God and my country
and to obey the Scout Law;
To help other people at all times;
To keep myself physically strong,
mentally awake, and morally straight.

On my honor . . . Honor is the core of who you are—your honesty, your integrity, your reputation, the ways you treat others, and how you act when no one is looking. By giving your word at the outset of the Scout Oath, you are promising to be guided by its ideals.

I will do my best . . . Do all you can to live by the Scout Oath, even when you are faced with difficult challenges. Measure your achievements against your own high standards, and don't be influenced by peer pressure or what other people do.

To do my duty . . . Duty is what others expect of you, but more importantly, it is what you expect of yourself.

to God . . . Your family and religious leaders teach you about God and the ways you can serve. You can do your duty to God by following the wisdom of those teachings and by defending the rights of others to practice their own beliefs.

and my country . . . Help the United States continue to be a strong and fair nation by learning about our system of government and your responsibilities as a citizen. When you do all you can for your family and community, you are serving your country. Making the most of your opportunities will help shape our nation's future.

and to obey the Scout Law; . . . In your thoughts, words, and deeds, the 12 points of the Scout Law will lead you toward doing the right thing throughout your life. When you obey the Scout Law, other people will respect you for the way you live, and you will respect yourself.

To help other people at all times; . . . Your cheerful smile and helping hand will ease the burden of many who need assistance. By helping out whenever you can, you are making the world better. "At all times" is a reminder to help even when it is difficult and even if you haven't been asked.

To keep myself physically strong, . . . Taking care of your body prepares you for a lifetime of great adventures. You can build your body's strength and endurance by eating nutritious foods, getting enough sleep, and being active. You should also avoid tobacco, alcohol, illegal drugs, and anything else that might harm your health.

mentally awake, . . . Develop your mind both in and outside of the classroom. Be curious about everything around you, and never stop learning. Work hard to make the most of your abilities. With an inquiring attitude and the willingness to ask questions, you can learn much about the world around you and your role in it.

and morally straight. Your relationships with others should be honest and open. Respect and defend the rights of all people. Be clean in your speech and actions and faithful in your religious duties. Values you practice as a Scout will help you shape a life of virtue and self-reliance.



Scout Law

The Scout Law will show you how to live as a young person and as an adult.

THE SCOUT LAW

A Scout is trustworthy, loyal, helpful, friendly, courteous, kind, obedient, cheerful, thrifty, brave, clean, and reverent.

A Scout is trustworthy. A Scout tells the truth. A Scout is honest and keeps promises. People can depend on a Scout.

Trustworthiness will help you make and maintain good friendships. As you demonstrate that you are trustworthy, you are showing your character—the person you are on the inside. If your judgment fails and you make a mistake, your good character will be what helps you quickly admit it and make good on any damage. Adults and your peers alike will know that they can rely on you to do your best in every situation. Living in this way also means that you can trust yourself.



A Scout is loyal. A Scout is loyal to those to whom loyalty is due.

Loyalty can be shown everywhere: at home, in your troop and patrol, among your classmates at school. You can also express loyalty to the United States when you respect the flag and the government. Give real meaning to your loyalty by helping to improve your community, state, and nation.

A Scout is helpful. A Scout cares about other people. A Scout helps others without expecting payment or reward. A Scout fulfills duties to the family by helping at home.

Scouts want the best for everyone and act to make that happen. While a Scout might work for pay, a Scout does not expect to receive money for being helpful. A Good Turn that is done in the hope of getting a tip or a favor is not a Good Turn at all.

A Scout is friendly. A Scout is a friend to all other Scouts. A Scout offers friendship to people of all races, religions, and nations, and a Scout respects them even if their beliefs and customs are different.

If you are willing to be a good friend, you will find friendship reflected back to you. Friends also are able to celebrate their differences, realizing that real friends can respect the ideas, interests, and talents that make each person special.

A Scout is courteous. A Scout is polite to people of all ages and positions. A Scout understands that using good manners makes it easier for people to get along.

Being courteous shows that you are aware of the feelings of others. The habits of courtesy that you practice as a Scout will stay with you throughout your life.

A Scout is kind. Scouts treat others as they want others to treat them. A Scout knows there is strength in being gentle. A Scout does not harm or kill any living thing without good reason.



Kindness is not limited to how we feel about people. Be kind to pets and wildlife, too.

Kindness is a sign of true strength. To be kind, you must look beyond yourself and try to understand the needs of others. Take time to listen to people and imagine being in their place. Extending kindness to those around you and having compassion for all people is a powerful agent of change to a more peaceful world.

A Scout is obedient. A Scout follows the rules of the family, school, and troop. Scouts obey the laws of their communities and countries. If a Scout thinks these rules and laws are unfair, then change is sought in an orderly way.

Many times, rules are put in place to keep you safe, to help you learn, or simply to create order. Being obedient when an authority such as your parents, teachers, or government imposes rules is your way of helping them achieve success. Trust your beliefs and obey your conscience, though, if you are told to do something that you know is wrong.

A Scout is cheerful. A Scout looks for the bright side of life. A Scout cheerfully does assigned tasks, and tries to make others happy, too.

You know that you cannot always have your way, but a cheerful attitude can make the time seem to pass more quickly and can even turn a task you dislike into a lot of fun. You have a choice whether to enjoy life's experiences and challenges. It is always easier and much more enjoyable to decide from the start to be cheerful whenever you can.



Cheerfulness is infectious; the smile on your face can lift the spirits of those around you.

A Scout is thrifty. Scouts work to pay their own way and to help others. Scouts save for the future. A Scout protects and conserves natural resources, and is careful in the use of time, money, and property.

Paying your own way with money you have earned gives you independence and pride. Even if you have only a few dollars, you have enough to save a bit

for the future and even to share a bit with others—although what you share doesn't have to be in cash. Volunteering your time and talent can be just as valuable as donating money.

A Scout is brave. A Scout faces danger even when afraid. A Scout does the right thing even when doing the wrong thing or doing nothing would be easier.

Bravery doesn't have to mean saving someone's life at risk to your own. While that is definitely brave, you are also being brave when you speak up to stop someone from being bullied or when you do what is right in spite of what others say. You are brave when you speak the truth and when you admit a mistake and apologize for it. And you show true courage when you defend the rights of others.



Facing your fears helps you grow so you are prepared for the next experience.

Scout Spirit

You show Scout spirit by making the Scout Oath, Scout Law, Scout motto, and Scout slogan part of your life. How well you live the Scout Oath and Scout Law can be judged by you and by others. You know when you are being kind and when you are helpful and a good friend. You know when you are trustworthy and reverent. You know how you act when no one is around to see what you do.

Do your best to live each day by the Scout Oath and Scout Law. You might look back on some of your decisions and wish you had acted differently, but you can learn from those moments and promise yourself to do better in the future.

As you use the Scout Oath and Scout Law for guidance, don't be surprised when others recognize those values in you and respect you for it. When a non-Scout tells you that you are behaving like a Scout, that's a good sign that you have Scout spirit. Set high standards for yourself and strive to reach them. Ask nothing less of yourself, and no one can ask anything more of you.

The Scout Oath and Scout Law are not meant just to be recited at troop meetings, and they are not to be obeyed just while you are wearing a Scout uniform. The spirit of Scouting is always important—at home, at school, and in your community.



A Scout is clean. Scouts keep their bodies and minds fit. A Scout chooses friends who also live by high standards. Scouts avoid profanity and pornography. A Scout helps keep the home and community clean.

A Scout knows there is no kindness or honor in tasteless behavior, such as using profanity or ethnic slurs, or in making fun of someone who has a disability. A Scout avoids that kind of behavior in words and deeds. Scouts keep their character clean by carefully monitoring what is viewed on television and the internet or read in books and magazines.

A Scout is reverent. A Scout is reverent toward God. A Scout is faithful in fulfilling religious duties. A Scout respects the beliefs of others.

Wonders all around us remind us of our faith in God, and we show our reverence by living our lives according to the ideals of our beliefs. You will encounter people expressing their reverence in many ways. It is your duty to respect and defend their rights to their religious beliefs even when they differ from your own.

Scout Motto

Be Prepared. That's the Scout motto.

THE SCOUT MOTTO

Be Prepared.

"Be prepared for what?" someone once asked Robert Baden-Powell, the founder of worldwide Scouting.

"Why, for any old thing," he replied.

The skills you learn in Scouting will help you live up to the Scout motto. Because you know first aid, you will be prepared if someone gets hurt. Because you will have practiced lifesaving skills, you might be able to save a nonswimmer struggling in deep water. Whenever leadership is needed, you will understand what to do.

Baden-Powell wasn't thinking only of being ready for emergencies. His idea was that Scouts should prepare themselves to become productive citizens and strong leaders and to bring joy to other people. He wanted each Scout to be ready in mind and body and to meet with a strong heart whatever challenges lie ahead.



*Lord Baden-Powell,
founder of the worldwide
Scouting movement*

You'll face plenty of decisions in your life. How will you spend your time? Who will your friends be? What will you do after high school? Remembering the Scout motto can help you make those decisions a little more easily.

The Scout Slogan

The Scout slogan is **Do a Good Turn Daily**. That means doing something to help others each day without expecting anything in return. It means doing your part to care for your community and the environment, too. A Good Turn is more than simple good manners. It is a special act of kindness.

THE SCOUT SLOGAN

Do a Good Turn Daily.

From recycling to helping conserve America's natural resources, opportunities for Good Turns are everywhere. Some Good Turns are big—providing service after floods or other disasters, rescuing someone from a dangerous situation, recycling community trash, or completing conservation projects with your patrol. Good Turns also can be small, thoughtful acts—helping a disabled person safely cross a busy street, going to the store for an elderly neighbor, cutting back weeds blocking a street sign, or doing something special for a sibling.



Keeping a Good Turn coin like this one in your left pocket can help you remember the Scout slogan. As the back of the coin reads, you can transfer the coin to your right pocket when you've completed your daily Good Turn.



The Value of a Good Turn

A Good Turn brought Scouting to America. In 1909, on the streets of London, American businessman William D. Boyce lost his way. A boy walked up and asked if he could help. Mr. Boyce explained where he wanted to go, and the boy led him there. The grateful American wanted to give the boy some money, but the boy said, "No, thank you, sir. I am a Scout. I won't take anything for helping."

Mr. Boyce was so impressed by the boy's actions that he learned more about the new Scouting movement in Great Britain and about its founder, Lord Baden-Powell. Mr. Boyce realized that many boys in the United States would want to be Scouts, too.

On February 8, 1910, Mr. Boyce and a group of businessmen, educators, and political leaders founded the BSA. Today, Scouts celebrate that date as the birthday of the BSA.

No one knows what happened to the boy who guided Mr. Boyce through the London streets, but he will never be forgotten. As with many acts of kindness, what was done proved to be far more important than who did it. In helping bring Scouting to America, the Unknown Scout's simple Good Turn has been multiplied millions of times over as Scouts through the decades have followed his example.



You can learn more about the history of Scouting and your place in it by earning the Scouting Heritage merit badge.

THE SCOUT SIGN, SALUTE, AND HANDSHAKE

Scouts greet one another and show they are members of the BSA with the Scout sign, salute, and handshake.

Scout Sign

Give the Scout sign each time you say the Scout Oath and Scout Law. To make the Scout sign, raise your right arm to shoulder height with your elbow bent at a right angle. Cover the nail of the little finger of your right hand with your thumb and hold the three middle fingers of your hand upward and together.



Your thumb and little finger touch to represent the bond uniting Scouts throughout the world.



The three fingers stand for the three parts of the Scout Oath:

- Duty to God and country
- Duty to others
- Duty to self

Scout Salute

Form the Scout sign with your right hand, then finish the salute by bringing that hand up, palm down, until your forefinger touches the brim of your hat or the tip of your right eyebrow.

The Scout salute is a form of greeting that also shows respect. Use it to salute the flag of the United States of America. You may also salute other Scouts and Scout leaders.

Scout Handshake

Extend your left hand to another Scout and firmly grasp their left hand. Made with the hand nearest your heart, the Scout handshake signifies friendship.

Because only Scouts and Scouters know the Scout handshake, use the regular right-handed handshake when greeting people outside of Scouting.

THE FIRST CLASS SCOUT BADGE

The imagery on the BSA's rank badges features icons that are well-recognized by Americans everywhere, and each one has meaning. The background design is shaped like the north point on an old mariner's compass; it is known as a trefoil (a flower with three leaves) or a fleur-de-lis (the French name for an iris flower). It is the basic shape of the badges worn by Scouts in other countries, too.

The design on the First Class Scout badge signifies a Scout's ability to point the right way in life just as a compass does in the wilderness. The three points of the fleur-de-lis, like the three raised fingers of the Scout sign, represent the three parts of the Scout Oath—duty to God and country, duty to others, and duty to self.



When a youth or adult leader raises the Scout sign, all Scouts should respond by coming to silent attention and making the sign, too.





The First Class Scout Badge

The eagle with a shield, an emblem of the United States of America, represents freedom and a Scout's readiness to defend that freedom.

The two stars symbolize Scouting's ideals of truth and knowledge. As guides in the night sky for finding the way, stars also suggest a Scout's outdoor adventures.

The scroll displays the Scout motto. Its ends are turned up like a smile because a Scout smiles as each daily Good Turn is done.

The knot below the scroll is a reminder to do a daily Good Turn.

YOUR SCOUT UNIFORM

The Scout uniform is a symbol of the BSA. It tells others that you are a Scout and represents Scouting's history of service to the nation and the world. By wearing uniforms, Scouts show that they are equals and that they share values and beliefs. Your uniform is also a sign that you are a person who can be trusted and that you will lend a hand whenever help is needed. When you are dressed as a Scout, you will want to act as a Scout.



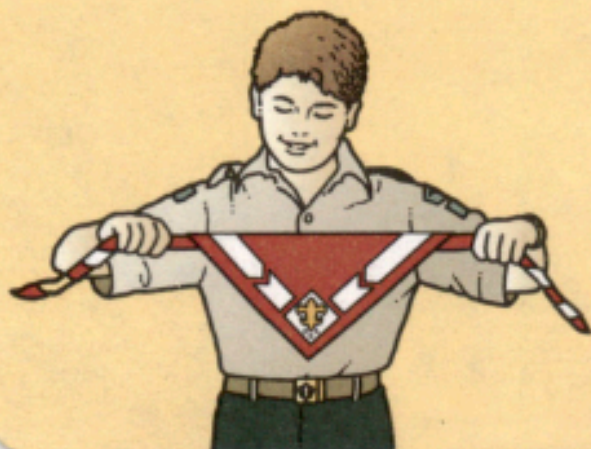
The BSA's official Scout uniform (sometimes called the "field uniform") includes a Scout shirt, Scout pants or Scout shorts, Scout belt, Scout socks, and shoes or hiking boots. Your troop may also elect to wear a cap or broad-brimmed hat and a neckerchief. Your uniform may be brand new, or it might have been worn by others for many troop activities. Proudly wear your uniform to troop meetings, special ceremonies, and other troop functions where dressing up is appropriate. When you're headed outdoors to do something active, you can pull on a T-shirt with Scout pants or shorts, or wear other clothing that is appropriate for the events of the day. This is sometimes called an "activity uniform."

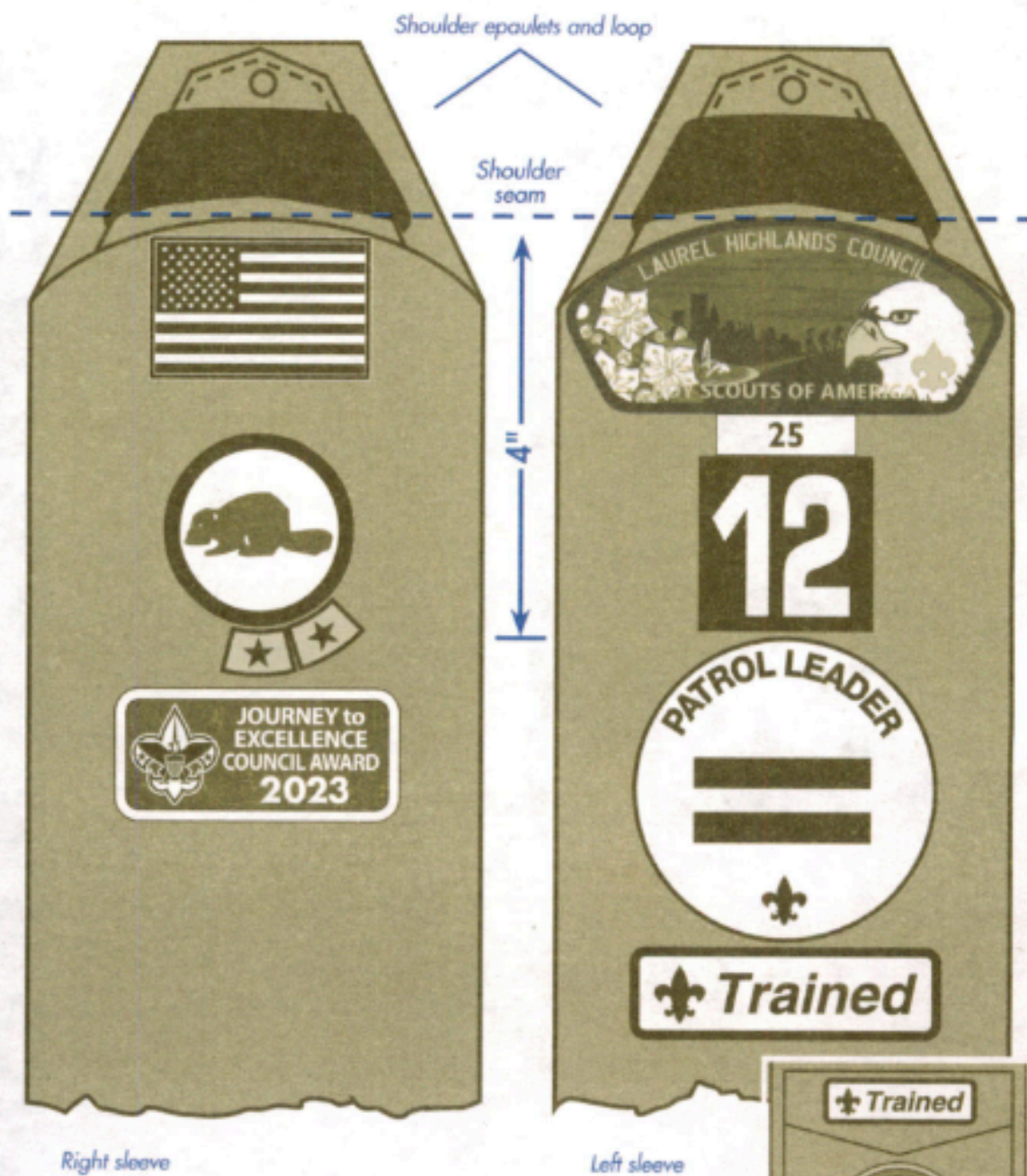


Scout wearing the merit badge sash

Your uniform is the perfect place to show off your patrol patch, your badge of office if you're a youth leader, your rank, and patches from some of your adventures. For formal occasions such as courts of honor, you'll wear a merit badge sash that displays all the merit badges you've earned. Formal occasions are also the time to wear medals like the Eagle Scout medal or the religious emblem of your faith.

Whether your uniform includes a Scout neckerchief is up to your troop. To wear a neckerchief, first roll the long edge to about 6 inches from the tip. Place the neckerchief smoothly around your neck, either over or under the collar, depending on your troop's custom. Hold the neckerchief in place with a neckerchief slide.





Official uniform shirt sleeves

Left sleeve with pocket



Right pocket

Left pocket

Official uniform front pockets

Duty to God

The BSA believes that you can't grow into the best kind of citizen without recognizing your duty to God. However, Scouting is nonsectarian, which means it doesn't tell members what to believe or how to worship.

One of the great things about Scouting is that it lets you meet with and learn from people of different religious backgrounds. At summer camp or a national Scout jamboree, you may encounter Scouts from all sorts of faith groups and even get the chance to participate in worship services with them. The first thing you may notice is how differently they do things, but look for similarities, too, like reverence toward God and a commitment to serving people in need.



As a Scout, you'll have the chance to tell about your duty to God. If you aren't sure what that means, talk with your parents and religious leaders.

YOUR TROOP

When you join a troop, you will find that a troop is an organization of youth enjoying the challenges and adventures of Scouting. Your Scoutmaster and other adult leaders will help Scouts become good leaders, then will step back and allow the troop's youth leaders to take charge of planning and carrying out activities. Once you're ready to become a leader in your troop, you'll learn much of what you need to know through the BSA's youth training programs such as Introduction to Leadership Skills for Troops, National Youth Leadership Training, and National Advanced Youth Leadership Experience.



YOUR PATROL

Your Scout troop is made up of patrols, with each patrol's members sharing responsibility for the patrol's success. You will learn together, make plans, and turn your ideas into action. Together, your patrol will achieve much more than each of you would on your own.

A patrol of eight Scouts is the right size for many outdoor adventures. A few tents will shelter everyone on camping trips, and a couple of backpacking stoves are enough for cooking patrol meals.

Placing Scouts in small groups—Scouting's patrol method—is so important that most troop meetings include time for each patrol to meet by itself. Other patrol meetings might take place at a special patrol site or in the home of one of the patrol members.

Everyone in your patrol will have skills and knowledge to share. You can teach one another what you know and learn new skills together. As friends, you can look out for one another. Hikes and campouts give your patrol a chance to put its knowledge into practice and to enjoy friendship, fun, and adventure together.



Patrol members can create a muster point around the patrol camp box.

KINDS OF PATROLS

A Scout troop can have three kinds of patrols:

New-Scout Patrols. The new-Scout patrol is made up of youth who have just become Scouts. An experienced Scout, called a **troop guide**, helps show the way. An assistant Scoutmaster assigned to the patrol gives it added support.



Members of a new-Scout patrol choose their patrol leader and plan what they want to do. They take part in troop meetings and activities. As they learn hiking and camping skills, they also will start completing requirements for the Scout, Tenderfoot, Second Class, and First Class ranks.

Regular Patrols. Scouts who hold the rank of First Class or higher can be members of regular patrols. Older Scouts who have not yet reached the First Class rank also may join a troop's regular patrols and continue to work on the First Class requirements.

Older-Scout Patrols. Many troops have an older-Scout patrol for seasoned Scouts who are eager to set out on rugged, high-adventure activities. Being part of such a patrol gives older Scouts the opportunity to stay active in their troops. They also may use their knowledge to enrich the Scouting experience for themselves and for other troop members.

YOUR PATROL'S NAME, EMBLEM, FLAG, AND YELL

Your patrol will choose a name that says something about its members. Nature lovers might become the Flying Eagles, the Crafty Foxes, or the Pine Tree Patrol. Some patrols name themselves after people; you could become the Daniel Boone Patrol, the Frontiersmen, or the Vikings. Other patrols come up with fun names like the Superstars, the Brainiacs, or even the Space Aliens. The choice is yours.

Each patrol can make a flag to carry at troop meetings and on campouts. A patrol also has an emblem that members wear on the right sleeves of their uniform shirts; the design on the patch reflects the patrol name.



A unique patrol yell can give your patrol some character.

give the patrol yell whenever they do well in a troop competition or reach an important goal, and even when they're ready to chow down on a camp meal.



Patrol emblems

Patrols have yells, too. If your patrol is named for an animal, you can use that animal's sound—the howl of a wolf, for example, or the hoot of an owl. Or your patrol might decide on some other shout that identifies it. Members can

Patrol Leaders' Council

Your patrol will elect a leader to help the patrol reach its goals. The senior patrol leader, the chief youth leader of the troop, gives guidance, too. The patrol leaders will meet with the senior patrol leader and assistants at a patrol leaders' council to plan the troop's programs and activities. Your patrol leader will represent the wishes of your patrol as decisions are being made.

SCOUT ADVANCEMENT

The biggest reward of participating in Scouting comes from the fun you have and the skills you learn. But you can also receive more concrete recognition of your accomplishments, including rank awards and merit badges. The Awards and Advancement chapter of this handbook will help guide you through them.

RANKS

In Scouting, there are seven ranks:

The **Scout** rank covers the basic information you need to know to be a good Scout. You should earn it soon after joining a troop.

The ranks of **Tenderfoot**, **Second Class**, and **First Class** cover skills in camping, hiking, cooking, first aid, nature, fitness, aquatics, citizenship, and leadership. Once you become a First Class Scout, which will probably take a year to 18 months, you will be a well-rounded Scout. You can work on requirements from all three ranks at the same time, but you must complete the ranks in order.

The ranks of **Star**, **Life**, and **Eagle** (Scouting's highest rank) focus on active participation, community service, leadership, and merit badges. Each of these ranks will take several months (or even a year or more) to complete, but that's OK, because you can keep working on Scout advancement until you reach your 18th birthday.



Scout



Tenderfoot



Second Class



First Class



Star



Life



Eagle



Receiving your Eagle Scout medal at a special court of honor ceremony can be one of the most memorable moments of your life.

MERIT BADGES

Merit badges are awarded to Scouts who have put special emphasis on learning specific topics. There are about 135 merit badges you can choose from, and they cover everything from camping and first aid to robotics and game design.



Art



Inventing



Welding



Fly-Fishing



Chess



Emergency Preparedness



To become an Eagle Scout, you must earn at least 21 merit badges, including 14 from a list of Eagle-required merit badges. (You can spot these badges because they have a silver border instead of a green border.) If you earn more than 21 merit badges—and complete some other requirements—you can earn Eagle Palms, which are pins that go on the Eagle Scout medal or patch.

A NOTE ABOUT SAFE SCOUTING

Scouting's top priority is keeping you safe. When you go camping, your leaders follow the guidelines in the *Guide to Safe Scouting*, a book that explains how to make sure that even the most adventurous activities are conducted safely. They make sure there are always two adults on hand and that the people leading activities have the right training.

Two simple tools Scouts can use to help stay safe are creating safety checklists and using the Safety PAUSE program. Like a packing checklist to remind you what to bring on a campout, you can use a safety checklist to help remind you what you need for a safe campout or event, like training, fire extinguishers, emergency plans, or the location of the nearest hospital. Use the checklist to talk about safety with your patrol and adult leaders.

After your planning is complete, put the Safety PAUSE program to work as a last-minute safety check. Just before setting off on an adventure, start your PAUSE:

- **Pause** before you start.
- **Assess** possible hazards.
- **Understand** how to proceed safely.
- **Share** your plan with others.
- **Execute** the activity safely.

And safety is just as important back home. Inside the front cover of this *Scouts BSA Handbook* is a pamphlet that is part of the BSA's commitment to ensuring your safety. The exercises inside the pamphlet were developed to make sure that you and your parent have an open line of communication when it comes to keeping you safe at all times, in and outside of Scouting.

In the Personal Safety Awareness chapter, you will learn more ways to keep yourself and your friends safe.

Buddy System

During outdoor activities, including aquatics, Scouting uses the buddy system to help ensure everyone's safety. You and a buddy can watch out for each other during a campout by checking in now and then to be sure everything is all right. In the backcountry, you'll want to stay in groups of at least four. That way, if someone gets hurt, two people can go for help while one stays behind.



YOU'RE ON YOUR WAY!

Going to meetings and camping with your troop and patrol will help you imagine all the things that you can do as a Scout. You'll also discover that your troop's leaders and other Scouts will be there to guide you along the way. So grab your pack and hit the trail!

ADVANCEMENT: LEADERSHIP

Leadership and character go hand in hand, and Scouting is known for building young people into adults who have solid foundations of both. Along your trail to Eagle, you will encounter situations that will test your character as well as your leadership skills. Some of the requirements for advancement directly address that, but your life experiences will be great tests for you as well.



SCOUT Describe how the Scouts in your troop provide leadership.



TENDERFOOT Describe the steps in Scouting's Teaching EDGE method, and use that method to teach another person how to tie a square knot.



FIRST CLASS Tell someone who is eligible to join Scouts, or an inactive Scout, about your Scouting activities. Invite your prospect to an outing, activity, service project, or meeting. Give information on how to join, or encourage an inactive member to become active in Scouting again. Share your efforts with your leader.



STAR, LIFE Be an active member of your troop. Participate in community service through one or more projects approved by your Scoutmaster. Actively serve your troop in a position of responsibility.



EAGLE Be an active member of your troop, and actively serve your troop in a position of responsibility. While a Life Scout, plan, develop, and give leadership to a community service project to benefit an organization other than Scouting. Also, earn the Family Life, Personal Management, and Communication merit badges, as they are a few of the 21 badges required to earn the Eagle Scout rank.

Family Life



Personal Management



Communication



LEADERSHIP

You may think of a leader as someone who stands in front of a group and gives orders. There's a place for that kind of leadership, but Scouting focuses more on servant leadership, which simply means choosing to lead, giving more than you receive, and making a difference. Servant leaders know what it takes to make their group—and each of its members—successful, and they do what it takes to achieve that success.

Like millions of Scouts over the last century, you will learn leadership not by sitting in a class or reading a book but by actually being a leader! Along the way, you will have both successes and failures, and you will learn from each experience. You will also learn from the examples (good and bad) that you see in other leaders and from the coaching of the adult leaders in your troop.

LEADERSHIP IN YOUR PATROL AND TROOP

Some of your fellow Scouts wear leadership patches on the sleeves of their uniform shirts. Your patrol leader wears one with two green bars. The senior patrol leader's patch has three bars. There are patches identifying all the positions of responsibility in the troop. Adult leaders—Scouters—also have special patches. The leadership positions and the specific responsibilities of each are described in the Awards and Advancement chapter of this handbook.



Troop badges of office are worn on the left uniform sleeve.



Being a good leader is a skill that can be learned only by doing. Troop leadership positions will give you the opportunity to speak in front of a group, guide discussions, make decisions, and encourage others toward greater achievements.

Electing Troop Leadership

Each troop sets its own age, rank, and other qualification standards for its positions of responsibility. The patrol leaders and senior patrol leader serve from one troop election to the next, usually for six to 12 months. In most troops, voting is done by secret ballot, and all the Scouts in the troop are eligible to vote. With the advice of the Scoutmaster, the senior patrol leader appoints the other positions of leadership within the troop (although some troops elect some of those positions).

You can step forward to become a leader of your patrol. You can even take on some of the leadership responsibilities for your whole troop. You will find it challenging and fun, and it will provide you with a great learning experience. Along the way, you will discover the satisfaction of seeing how your leadership efforts allow your patrol and troop to succeed.

But leadership is not just about earning a patch. What really matters is how Scouts and Scouters show leadership by sharing knowledge and offering guidance and encouragement to others.

Scouting's Adult Leaders

All around you in your troop are adult leaders. They include your Scoutmaster and assistant Scoutmasters, of course, but also members of the troop committee and parents who volunteer to help with certain activities. A good way to learn leadership skills is to watch these adults at work. How do they get Scouts to follow their lead? What do they do that you would like to copy?



As you become a leader in the troop, you will work side by side with the troop's adult leaders. Be sure to ask for guidance as you learn and practice new leadership skills.

CHARACTER

A wise person once said that character is what you do when nobody is looking. If you find money in the street, do you pocket it or turn it in? If you're home alone after school, do you visit questionable websites or finish your homework? If classmates are picking on an unpopular kid, do you join in or take a stand for what is right?

Character also relates to how you make decisions, especially when the right path to follow is not clear. Common sense, ethics, wisdom, and good judgment help you make good choices and allow you to do your best with what you know. The skills you have can prepare you for what lies ahead. Self-leadership will help you develop a vision of what is right and the steps for getting there. The Scout Oath and Scout Law will provide guidance along the way.

GOOD JUDGMENT IN CHOOSING FRIENDS

Your friends are among the most important people in your life. You enjoy being with them and going places together. They understand you. You depend on one another for support through good times and bad.



Good friends can be with you for many years to come.

Choose friends whose values you share and admire. Be open to those who are not just like everyone else you know. Differences in race, culture, and language may keep some people at a distance, but those differences can also

be doorways for you to expand your understanding of other people and of the world. Disabilities might seem to be barriers to friendship, too, but look beyond what seems to separate you. You might be surprised to discover how much you have in common with others and how much you can share with one another.

PEER PRESSURE

At some point while you are growing up, you will probably discover that friends or acquaintances are doing something you know is wrong. They might be using tobacco, alcohol, or illegal drugs or engaging in sexual activity. They might be cheating on tests, stealing, or being unkind to others. They may want you to join them, even though you believe what they are doing is not right. When you refuse, they might say that they'll stop being friends with you.

Real friends will not ask you to do anything that could put you at risk. If those who say they are your friends are smoking, drinking, using drugs, watching pornography, using profanity, or doing anything else that is unwise, you don't have to go along with them. You might need to look for new friends who are interested in healthier activities. Real friends are those who make sure that you wear a life jacket on a float trip, that you come in out of the thunderstorm, and that you associate with people you can trust. Don't worry; they are out there. Be true to your values, and you will find others who share them.

BULLYING AND HAZING

People of character treat others well, including those who are younger, smaller, or less able than themselves. Lead by setting a good example. Respect others and help them succeed. If you know someone is being hazed or bullied (either in the real world or online), stand up for what is right by defending that person. Don't be a silent bystander; be prepared to stand up and support those who are bullied.



Sometimes it might seem easy to respond to someone's poor behavior with angry words or physical force, but there are always better ways to handle difficult situations. When dealing with peer pressure, bullying, hazing, and other challenges, use the Scout Oath and Scout Law as reliable guides for making good decisions. If you need help, seek support and assistance from your Scout leader, parent, or other trusted adult.



ADVANCEMENT: CITIZENSHIP

Being a citizen starts at home, with participation in family activities and good stewardship of your personal and family resources. It extends into your local community, where you are expected to give back where you can, and into your nation, where you should exercise your rights as an American citizen to help the country run smoothly. Good citizenship even applies on the world stage, where your role as an American fits into the great melting pot of world politics and humanitarianism. Along your trail to Eagle, you will explore all those things and more.



SCOUT Repeat from memory the Pledge of Allegiance, and in your own words, explain its meaning.



TENDERFOOT Demonstrate how to display, raise, lower, and fold the U.S. flag. Participate in a service project that benefits others, and tell how that relates to the Scout slogan and Scout motto.



SECOND CLASS Participate in a flag ceremony, and explain what respect is due the flag of the United States. Decide on an amount of money you would like to earn, then develop a plan to do so that includes what you ultimately will do with the money. Compare costs for an item you want at three or more locations to determine the best place to purchase it. Participate in a service project that benefits others, and tell how that relates to the Scout Oath.



FIRST CLASS Discuss with a community leader the constitutional rights and obligations of a U.S. citizen. Investigate an environmental issue that affects your community, and share what you learn with your patrol or troop, including what can be done to address the concern. On an outing, note the trash you produce, then decide how you can reduce, reuse, or repurpose on the next trip. Participate in a service project that benefits others, and tell how that relates to the Scout Law.



EAGLE The Citizenship in the Community, Citizenship in the Nation, Citizenship in Society, and Citizenship in the World merit badges are all required for the Eagle Scout rank, as are the Personal Management and Family Life merit badges, which cover a different kind of citizenship. As the final step on your journey to Eagle, you will create, coordinate, and carry out a service project of your own.

*Citizenship in
the Community*



*Citizenship in
the Nation*



*Citizenship in
Society*



*Citizenship in
the World*



When you repeat the Scout Oath, you pledge on your honor to do your duty to your country. Likewise, when you repeat the Scout Law, you are called to be loyal, helpful, obedient, and brave. All these traits are characteristics of a good citizen.

So what exactly *is* a good citizen? And can you be one at your age?



Showing respect to the American flag is a sign of true citizenship.

As a Scout, you're too young to vote, serve in the military, or run for elected office. You probably don't earn enough money to owe much in taxes, so you aren't able to pay for the government services you receive, such as public education, access to parks, and police protection. At your age, many of the rights and responsibilities of adult citizens are out of your reach.

Yet you can learn to be a good citizen now, and you can become an even better citizen when you grow up. Scouting is a laboratory of citizenship. Scouts demonstrate good citizenship through community service projects and practice democracy within their troops by electing leaders and working as a team.

THE AMERICAN FLAG

The flag of the United States is much more than just a red, white, and blue cloth. As the symbol of America, it stands for the past, present, and future of our country. It represents our people, our land, and our many ways of life.

Honoring the flag offers all of us a time to think about what it means to be Americans and to pledge ourselves to making our country the best it can be. Perhaps you recite the Pledge of Allegiance each day at your school. Before sporting events and at other public gatherings, you might stand, remove your cap, and put your hand over your heart for the singing of "The Star-Spangled Banner," the national anthem. Your Scout troop might open its meetings with a flag ceremony. At Scout camp, you can join with others to raise the flag each morning and to retire it in the evening.

The American flag commands a certain amount of respect. While you are wearing your Scout uniform, greet the flag with a Scout salute. In fact, you should face the flag and salute whenever you see the flag being hoisted or lowered, when you pass it or it passes you, and during the playing of the national anthem. Give the Scout salute as you recite the Pledge of Allegiance, too. Greet the flag when you are not in uniform by removing your hat, if you are wearing one, and placing your right hand over your heart.

The Star-Spangled Banner

During the War of 1812, a British fleet attacked Fort McHenry near Baltimore, Maryland. A young man named Francis Scott Key watched as the bombardment lasted through the night. He did not know if the American fortress could withstand the assault.

When the smoke cleared the next morning, Key saw the United States flag—the star-spangled banner—still flying over the fort. He wrote down the feelings he'd had during the night and about his trust in America's future in a poem he called "Defence of Fort McHenry." Soon the words

were being sung throughout the country. Francis Scott Key had written the lyrics to the song that has become known as "The Star-Spangled Banner."



O say can you see, by the dawn's early light,
What so proudly we hail'd at the twilight's last gleaming,
Whose broad stripes and bright stars through the perilous fight
O'er the ramparts we watch'd were so gallantly streaming?
And the rockets' red glare, the bombs bursting in air,
Gave proof through the night that our flag was still there,
O say does that star-spangled banner yet wave
O'er the land of the free and the home of the brave?



The Pledge of Allegiance

Feeling that patriotism was declining and that "the time was ripe for a reawakening of simple Americanism," Baptist minister Francis Bellamy composed the Pledge of Allegiance in 1892. The pledge first appeared that September in the children's magazine *The Youth's Companion* in celebration of the 400th anniversary of Christopher Columbus' arrival in the New World.

In 1942, the U.S. Congress formally adopted the pledge, and it now opens countless school days, legislative sessions, and, of course, Scout meetings across the country. The wording of the pledge has been changed four times, most recently in 1954, when the words "under God" were added.

I pledge allegiance to the Flag of the United States of America, and to the Republic for which it stands, one Nation under God, indivisible, with liberty and justice for all.

Service and the Scout Oath and Scout Law

When you participate in service projects, you live out your promise to help other people at all times (part of the Scout Oath) and to be helpful (part of the Scout Law). Can you think of how service projects might relate to other parts of the Scout Oath and Scout Law, like duty to God and country?



DEHYDRATION

Water is necessary for nearly every bodily function, including producing heat and staying cool. Moisture can be lost through breathing, sweating, digestion, and urination. A person giving off more water than they are taking in will become dehydrated. When this happens, the body might have a difficult time regulating core temperature.

Hypothermia, heat exhaustion, and heatstroke can all be worsened by dehydration. Signals of dehydration might include:

- Increased to severe thirst
- Dark urine or decreased urine production
- Tiredness or weakness
- Dry skin and lips, decreased sweating
- Nausea, fainting, loss of appetite
- Headache, body aches, muscle cramps
- Confusion, dizziness

Protect yourself from dehydration by drinking plenty of fluids before you feel thirsty; waiting until you are thirsty to drink is waiting too long. Avoid caffeine because it can cause greater dehydration. Take in enough fluids so that your urine stays colorless. This is easy to remember to do on hot days, but it is just as important in cold weather when you might not feel like drinking.

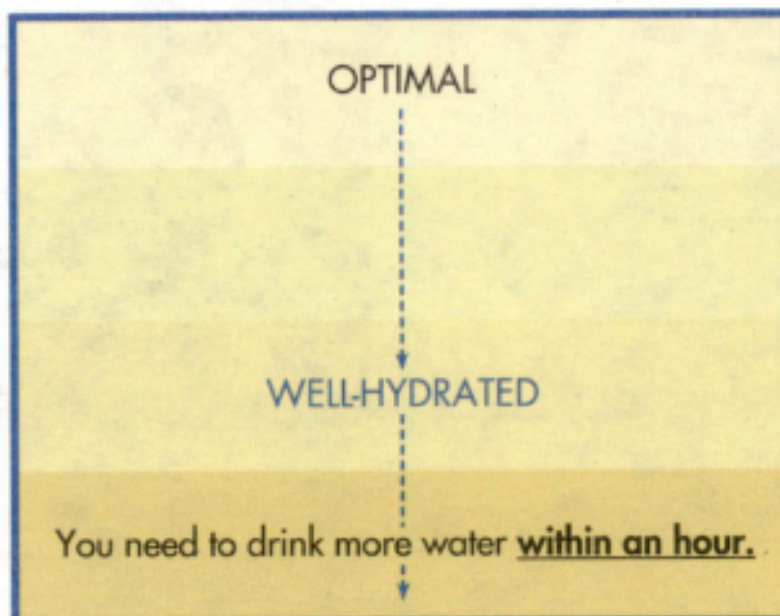
If someone shows signs of becoming dehydrated, encourage them to drink fluids and rest. When the weather is hot, get the person to a shaded place or into an air-conditioned vehicle or building. In cold weather, be sure they are wearing enough dry clothing. Help the person reach the shelter of a tent and sleeping bag or a warm building. Keep checking their condition, and be ready to provide further first-aid treatment.

THE HEAT INDEX

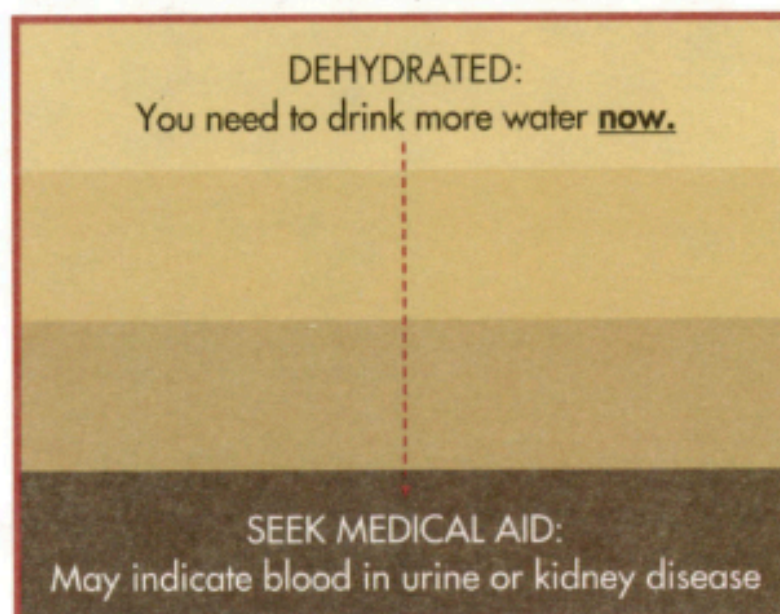
The heat index—a combination of temperature and relative humidity—is a good indicator of how hot it really feels outside. As the heat index rises, you should drink more water and do fewer physically demanding activities. You should also monitor the color of your urine, which is a good way to check how well-hydrated you are.

Urine Color Chart *

HYDRATED



DEHYDRATED



*This color chart is not for clinical use.

ADVANCEMENT: OUTDOOR ETHICS

Taking care of the land is not just a responsibility for Scouts; it is a responsibility for everyone. Understanding how practicing outdoor ethics can have a positive effect on our planet is a big factor in doing your part as a Scout and as an inhabitant of Earth. As you travel the trail to Eagle, you will delve deep into the principles of outdoor ethics that the BSA has recognized, including the following.



SCOUT Repeat from memory and describe in your own words the Outdoor Code.



TENDERFOOT Tell how you practiced the Outdoor Code on a campout or outing.



SECOND CLASS Explain the principles of Leave No Trace and tell how you practiced them at a different campout.



FIRST CLASS Explain the principles of Tread Lightly! and tell how you practiced them at a third campout or outing.



EAGLE Earning either the Environmental Science or the Sustainability merit badge is a requirement to achieve the Eagle Scout rank. Both will teach you how to respect the land and help save it for future users.



THE OUTDOOR CODE

To define outdoor ethics a little better, the BSA created the Outdoor Code. That was back in 1948, when Americans were beginning to venture farther and farther into the wilderness—not to find new places to settle but to enjoy their natural environment.



Outdoor Code

As an American, I will do my best to—

Be clean in my outdoor manners.

Be careful with fire.

Be considerate in the outdoors.

Be conservation-minded.

DECODING THE OUTDOOR CODE

The Outdoor Code is something you should memorize, just as you have memorized the Scout Oath. More importantly, you should commit to memory its principles so you can play a role in preserving America's great outdoor heritage.

As an American, I will do my best. *I have a duty as an American and a Scout to care for the environment to the best of my ability.* As more and more people use outdoor areas, Scouts should set a good example of how to care for the land.

Be clean in my outdoor manners. *I will treat the outdoors as a heritage. I will take care of it for myself and others. I will keep my trash out of lakes, streams, fields, woods, and roadways.* Make a habit of packing out any garbage you create or come across during your travels in the outdoors, and protect waterways by camping at least 200 feet (75 steps) away from the shore. Each of these small steps can add up to really reduce our impact on the environment.

Be careful with fire. *I will prevent wildfire. I will build my fires only when and where they are permitted and appropriate. When I have finished using a fire, I will make sure it is cold out. I will leave a clean fire ring or remove all evidence of my fire.* Be sure that you understand how to use campfires and camp stoves well before setting out on a trip. Follow all safety precautions to the letter.

Be considerate in the outdoors. *I will treat the land and other land users with respect. I will follow the principles of outdoor ethics for all outdoor activities.* Being considerate in the outdoors includes such things as keeping your voice down on the trail, avoiding brightly colored clothing, staying on established trails, and crossing private land only with permission.



Be conservation-minded. *I will learn about and practice good conservation of soil, waters, forests, minerals, grasslands, wildlife, and energy. I will urge others to do the same.* Keep conservation in mind all the time, and you will make decisions that are good for the environment. Sharing information is one of the best ways to learn, so discuss with your fellow Scouts how conservation guides your decisions.

BSA OUTDOOR ETHICS

In the early 1990s, the U.S. Forest Service formalized its no-trace policy as the principles of Leave No Trace. Today, the Leave No Trace Center for Outdoor Ethics helps educate the public through extensive conservation and outreach programs. Scouting is proud to be a partner in this ongoing effort.

More recently, Scouting has also embraced the principles of Tread Lightly!, which were developed by the U.S. Forest Service to guide a wider array of outdoor activities. Today, BSA Outdoor Ethics encompasses Leave No Trace, Tread Lightly!, and the Outdoor Code, which is just as important today as it was back in 1948.

Sustainability and the Summit

The Summit Bechtel Reserve in West Virginia is a good example of how campers and the environment can coexist. The 10,600-acre camp was built on reclaimed mine land, and 10% of the land has been set aside as a nature preserve to trap carbon and protect the headwaters of the nearby New River.



Shower houses at the Summit are built of locally harvested lumber.

Two years before the Summit opened in 2013, 1,400 Order of the Arrow members came together to remove invasive species and build the Arrowhead Trail at the adjacent New River Gorge National River. Through the OA Summit Experience, Arrowmen continue to do similar trail work each summer.

Summit 
BECHTEL RESERVE

LEAVE NO TRACE

Scouting's adventures cover a wide range of activities, from spending weekends at public campgrounds and BSA council camps to backpacking many miles through forests, deserts, and mountains.

Think about Leave No Trace wherever you hike, camp, or do any other outdoor activity, and do your best to follow its principles. Make them a guide for how you conduct yourself in the outdoors.

The Principles of Leave No Trace

Plan Ahead and Prepare

- Know the regulations and special concerns for the area you will visit.
- Prepare for extreme weather, hazards, and emergencies.
- Schedule your trip to avoid times of high use.
- Visit in small groups when possible. Consider splitting larger groups into smaller groups.
- Repackage food to minimize waste.
- Use a map and compass to eliminate the use of marking paint, rock cairns, or flagging.

Travel and Camp on Durable Surfaces

- Durable surfaces include established trails and campsites, rock, gravel, dry grasses, and snow.
- Protect riparian areas by camping at least 200 feet from lakes and streams.
- Good campsites are found, not made. Altering a site is not necessary.
- In popular areas:
 - Concentrate use on existing trails and campsites.
 - Walk single-file in the middle of the trail, even when wet or muddy.
 - Keep campsites small. Focus activity in areas where vegetation is absent.
- In pristine areas:
 - Disperse use to prevent the creation of campsites and trails.
 - Avoid places where impacts are just beginning.

Dispose of Waste Properly

- Pack it in, pack it out. Inspect your campsite and rest areas for trash or spilled foods. Pack out all trash, leftover food, and litter.
- Deposit solid human waste in catholes dug 6 to 8 inches deep, at least 200 feet from water, camp, and trails. Cover and disguise the cathole when finished.
- Pack out toilet paper and hygiene products.
- To wash yourself or your dishes, carry water 200 feet away from streams or lakes and use small amounts of biodegradable soap. Scatter strained dishwater.



Leave What You Find

- Preserve the past: Examine, but do not touch, cultural or historic structures and artifacts.
- Leave rocks, plants, and other natural objects as you find them.
 - Avoid introducing or transporting non-native species.
- Do not build structures or furniture, or dig trenches.



Minimize Campfire Impacts

- Campfires can cause lasting impacts to the backcountry. Use a lightweight stove for cooking and enjoy a candle lantern for light.
- Where fires are permitted, use established fire rings, fire pans, or mound fires.
- Keep fires small. Use only sticks from the ground that can be broken by hand.
- Burn all wood and coals to ash, put out campfires completely, then scatter cool ashes.

Respect Wildlife

- Observe wildlife from a distance. Do not follow or approach them.
- Never feed animals. Feeding wildlife damages their health, alters natural behaviors, and exposes them to predators and other dangers.
- Protect wildlife and your food by storing rations and trash securely.
- Control pets at all times, or leave them at home.
- Avoid wildlife during sensitive times: mating, nesting, raising young, or winter.

Be Considerate of Other Visitors

- Respect other visitors and protect the quality of their experience.
- Be courteous. Yield to other users on the trail.
- Step to the downhill side of the trail when encountering pack stock.
- Take breaks and camp away from trails and other visitors.
- Let nature's sounds prevail. Avoid loud voices and noises.



American bison

The member-driven Leave No Trace Center for Outdoor Ethics teaches people how to enjoy the outdoors responsibly. This copyrighted information has been reprinted with permission from the Leave No Trace Center for Outdoor Ethics: www.LNT.org.

PLAN AHEAD AND PREPARE

Leave No Trace begins before you ever leave home. By planning ahead, you can minimize your impact on the environment while still having a great time.

Be sure you understand the principles of Leave No Trace, including specific practices that apply to your destination. (What works in a public campground doesn't necessarily work in a subalpine wilderness area.) Find out from land managers if there are limits on group size and if permission is required to enter a backcountry area. Land managers also might suggest ways you can lessen your impact, such as staying in certain places or avoiding certain times of the year.

Consider what gear and supplies you will need to take to help reduce your impact. You might need a trowel to dig catholes, a plastic bag for packing out trash, a lightweight stove for cooking, and a fine screen to strain food particles from dishwater.

TRAVEL AND CAMP ON DURABLE SURFACES

Durable surfaces are areas that will not be damaged by your footsteps, bicycles, or tents. A trail is a good example of a durable surface. The soil of most trails has become so compacted that little can grow there. By staying on existing trails, you protect the surrounding landscape and the plants and animals that live there.

What if the trail ahead is muddy? Wade right in! When you use the edge of a trail or go around a muddy or rutted stretch, you widen the trail unnecessarily. And never take shortcuts, especially on hillsides. These almost always lead to damage from erosion.



Always use established campsites when they are available. If there are no designated camping areas, make your camp on sand, gravel, rock, compacted soil, dry grasses, or snow. All of these are durable surfaces.

In more remote areas, it may be more appropriate to practice dispersed camping, if allowed. Select a durable surface (rock, soil, drier grass) that shows no signs of prior camping, vary your traffic pattern around the site, cook only with stoves (no campfires), and stay only one night in the same location.

Pitch your tents well away from streams and lakes, which will allow animals to reach the water and will lessen your impact on shorelines. Pick a campsite that is big enough for your group, or split up and camp in separate sites. Keep your tents and cooking area near the center of your site to protect surrounding soil and vegetation. Be careful as you walk around your campsite so that you don't trample plant communities, pack down the soil, and form unwanted pathways.



Use good judgment if you are thinking about playing Capture the Flag or other wide games that are popular with many troops. Dry fields with tough vegetation could be perfect, while a damp meadow might be too fragile.

Keep Soap Away From Open Water

Any soap, even the biodegradable kind, can leave residue that might harm fish, plants, and other organisms in streams and lakes. Choose soap that is designed to be kind to the environment, then dispose of soapy water at least 200 feet (75 steps) away from bodies of water.



Disposing of Dishwater. Strain food bits out of your dishwater and put them in your trash. Carry dishwater and rinse water away from your camp and at least 200 feet (75 steps) from any streams or lakes. Give the water a good fling to spread it over a wide area or pour it into a rocky area or under organic litter. Grease and very oily water should be packed out. For long-term camping, follow the rules of the local land manager.

BIODEGRADABILITY

Something is biodegradable if it can be broken down by microorganisms within a reasonable amount of time. Here's how long some substances take to biodegrade.

- Paper towel, 2 to 4 weeks
- Orange or banana peel, 2 to 5 weeks
- Apple core, 2 months
- Cardboard box, 2 months
- Wool sock, 1 to 5 years
- Wax-coated paper milk carton, 3 months
- Plastic bag, 10 to 20 years
- Tin can, 50 years
- Aluminum can, 80 to 200 years
- Soft plastic water bottle, 450 years
- Fishing line, 600 years

LEAVE WHAT YOU FIND

Among the joys of being outdoors is finding evidence of the natural world and of our past. Resist the temptation to collect antlers, petrified wood, unusual rocks, alpine flowers, and other natural souvenirs. Removing almost anything can change an environment in ways that might have a negative effect on wildlife and plant communities.

Leave a place in as good a condition as you found it by removing everything that you bring into an area. Don't leave structures or furniture at a campsite, and don't dig trenches. "Pack it in, pack it out" is good advice when it comes to food wrappers, cans, paper, and whatever else you have carried to camp or along a trail.



Rather than carry home natural souvenirs, take photos or make sketches or pencil rubbings. If you find something significant, mark the location on your map and report the find to local land management.

MINIMIZE CAMPFIRE IMPACTS

Many Scouts use stoves rather than campfires on all their camping trips. Without a wood fire at the center of their camp, they often find that they are more aware of their surroundings and of the night sky. Stoves are clean, quick to heat water and cook food, and easy to light in any weather. Best of all, they leave no marks on the land.



Campfires have their place, too. A fire can warm you, dry your clothes, and provide a focal point for gathering with friends. Bright flames can lift your spirits on a rainy morning. At night, glowing embers can stir your imagination.

A good Scout knows how to build a fire, especially in an emergency, but knows there are often reasons not to light one.

- Campfires can char the ground, blacken rocks, and sterilize soil. Vegetation might have a hard time growing where a fire has been.
- Fires consume branches, bark, and other organic material that would have provided shelter and food for animals and plants.
- Campfires must be closely watched and carefully extinguished to prevent them from spreading to surrounding grasses, brush, and trees.

Find out ahead of time if the area where you plan to camp permits the use of fires. If you build one, use an existing fire ring or raised platform and use only dead or downed wood that you can break by hand. Burn only wood (no trash). If possible, allow the fire to burn completely to ash so no charred wood or coals are left. After the ashes are completely cool, scatter them over a wide area.



RESPECT WILDLIFE

Travel quietly and give animals enough space that you don't disturb them. Avoid nesting sites, feeding areas, and other places critical to wildlife. Chasing or picking up wild animals causes them stress and can affect their ability to survive.

Plan your trips so that you can protect your food from wildlife. This is especially important when you are sharing the woods with bears. Bears that find food in campsites might come back for more, and that can be dangerous for both the animals and the campers. Keep your camp clean and hang your food and other smellables from trees or store it in bear-proof containers.



Virginia opossum

BE CONSIDERATE OF OTHER VISITORS



Scouts are not the only people who enjoy outdoor adventures. Be considerate of everyone you meet along the way. If you can, select campsites away from those of other campers. Trees, bushes, and the shape of the terrain can screen your camp from trails and neighboring campsites. Tents with muted colors that blend into the background will reduce the visual impact of your camp.

Leave portable music players at home and hold down noise in your troop and patrol. Keeping noise to a minimum will make it easier to appreciate the outdoors, and you will be less likely to disturb wildlife and other backcountry users.

> 8 HIKING



Hiking has always been one of Scouting's great adventures. On trails, across open country, and along city streets, traveling by foot is a terrific way to get out with your friends and see the world. If you use a wheelchair or otherwise have trouble getting around, you can still enjoy hiking. Many parks and natural areas have paved paths that allow everyone to experience the outdoors.

Hiking is one of the easiest things you can do in Scouting, but you still need to be prepared. You might encounter rain or snow. Your route might be rocky and steep, and someone could get hurt. There will be times when you are weary, but overcoming hardships can be part of hiking, too.



White-tailed deer fawn



ADVANCEMENT: HIKING

Setting off on a hike sounds like great fun—and it is! But being prepared for certain situations along the way will go a long way to making your hike even more enjoyable and beneficial. This chapter will show you how to make your path along the trail to Eagle a smooth one.



TENDERFOOT Explain the importance of using the buddy system on outings and in your neighborhood, and practice the system while out with your troop or patrol. Describe what to do if you become lost on a hike. Explain the rules of safe hiking, both on the highway and cross-country, during the day and at night.



SECOND CLASS Describe some hazards or injuries you might encounter during a hike and what you might do to prevent them.



EAGLE The Hiking merit badge is one of 21 required for the Eagle Scout rank.



Hiking

THE SCOUT BASIC ESSENTIALS

The Scout Basic Essentials can make every outdoor adventure better. In an emergency, they can help you get out of a jam.

Pocketknife. A pocketknife or multitool could be the most useful tool you can own. Keep yours clean, sharp, and secure. And don't pick one so heavy that it pulls your pants down.

Rain Gear. A poncho or a rain parka can protect you from light showers and heavy storms. It can also block the wind and help keep you warm.



Trail Food. A small bag of granola, some raisins and nuts, or a couple of energy bars can give you a boost when you get hungry on the trail. High-energy foods are especially important if you are out longer than you had expected.

Flashlight. An LED flashlight will cast a strong beam with just one or two AA batteries. LED headlamps are a good option, too, because they leave your hands free. Carry spare batteries, and reverse the batteries in your flashlight during the day to prevent the light from accidentally turning on in your pack and draining the power.



Extra Clothing. Layers of clothing allow you to adjust what you wear to match the weather. During an afternoon hike, a jacket might provide all the extra warmth you need. On camping trips, bring along additional clothing to deal with changes in temperature.

First-Aid Kit. Your patrol leader or a troop leader will bring a group first-aid kit on most Scout trips, but you should also carry a few personal supplies to treat blisters, small cuts, and other minor injuries.

Sun Protection. Guard your skin by applying a good sunscreen (SPF 30 or greater) and wearing a broad-brimmed hat, sunglasses, and lip balm that contains sunscreen ingredients. Apply sunscreen 15 minutes before you hit the trail and every two hours after that—more often if you sweat a lot.

Map and Compass. A map and a compass can show you the way in unfamiliar areas. Learn the basics and then enjoy practicing with a compass and a map when you are in the field.

Matches and Fire Starters. With strike-anywhere matches or a butane lighter, you can light a stove or kindle a fire in any weather. Protect matches and other fire starters from moisture by storing them in a self-sealing plastic bag or canister.



Water Bottle. Always take along at least a 1-quart bottle filled with water. On long hikes, on hot days, in arid regions, and at high elevations, carry two bottles or more.

Depending on your destination, the length of your trip, and the season, other essential items may include insect repellent, a whistle, and other items, such as water treatment tablets. Remember the Scout motto, and be prepared.

FOOD FOR A HIKE

The most important meal for hiking might be the breakfast you eat before you hit the trail. In camp and at home, a hearty breakfast helps start the day right. If you'll be out much of the day, carry a lunch in your pack. Make a couple of sandwiches and take along some fruit, nuts, and raisins. You might also carry some crackers, peanut butter and jelly, jerky, or cheese.



SAFE DRINKING WATER

Drink at least 2 quarts of fluid each day. That's about 8 cups. When you're drinking enough water, your urine will remain clear and copious (meaning there's a lot of it). Fill your water bottle with fresh tap water before you set out on a hike, and drink from it often—not just when you feel thirsty. In hot weather, you may need to carry several containers of water.

Water you bring from home or take from faucets and drinking fountains in campgrounds and Scout camps is almost always safe to use. Water from streams, lakes, and springs may contain bacteria, viruses, and parasites too small for you to see. Treat any water that does not come from a tested source, no matter how clean it looks.

HOW TO TREAT DRINKING WATER



Three ways to make water safer for drinking are boiling, filtering, and treating it with tablets.

Boiling. Bringing water to a rolling boil for a full minute will kill most organisms. If the water looks especially dirty, try filtering it through a bandanna before boiling.

Filtering. Water treatment filters made for hikers and campers are effective and easy to use. Some pump water through pores small enough to strain out bacteria and parasites. Others contain chemicals or carbon that help make the water safer to drink. Follow the instructions that come with the filter you plan to use, and be sure to clean it frequently so it doesn't become clogged.

Treating. Water treatment tablets are sold in small bottles and in packets. To treat water, follow the instructions on the packaging. Most treatment tablets call for you to drop one or two tablets into a quart of water and then wait 30 minutes before drinking it. If you're treating water in your water bottle, loosen the lid and slosh a little water into the threads at the top; that will treat the water that's trapped there. Water treatment tablets can lose their strength over time, so check the expiration date on the package. Use only fresh tablets.

CLOTHING FOR OUTDOOR ADVENTURES

The clothing you wear when you're hiking protects your skin from brambles along the trail, the sun's rays, and other hazards. It also helps you regulate your body's temperature. When you dress in layers, you can adjust your clothing to match changing weather conditions.

Most of the clothing you use for hiking is the same as what you'll wear when you go camping. If you are carrying all your gear in a backpack, make good clothing choices so you will have everything you need but won't be carrying unnecessary clothing that weighs down your pack.



A stocking hat is a great heat regulator. If your feet are cold, put on your hat. If you're starting to sweat, stuff your hat in a jacket pocket.

CHOOSING APPROPRIATE FABRICS

Outdoor clothing may be made of wool, cotton, or synthetics. Each type of fabric has its advantages.

Wool. Wool can keep you warm even when it is damp with rain. Some people find that wool feels scratchy against their skin. Wearing long underwear or a T-shirt beneath wool garments can help lower the itch factor.



Cotton

Cotton. Cotton is fine for warm, dry weather. Once wet, though, cotton will not keep you warm. This can make it dangerous to wear on trips when conditions turn chilly, rainy, or snowy.

Synthetics. Many synthetic fabrics offer the comfort of cotton and the warmth of wool.

Clothing made of human-made fibers such as polypropylene or polar fleece can insulate you even if it gets wet. Long underwear, sweaters, vests, parkas, gloves, hats, and activity shirts are often made of synthetic fabrics.



Wool



Synthetic fleece

WARM-WEATHER CLOTHING CHECKLIST FOR OUTDOOR ADVENTURES

- ☐ Long-sleeved shirt
- ☐ T-shirt
- ☐ Hiking shorts
- ☐ Long pants (or convertible pants with zip-off legs)
- ☐ Sweater or warm jacket*
- ☐ Hiking boots or sturdy shoes
- ☐ Extra socks
- ☐ Hat with a brim for shade
- ☐ Bandanna
- ☐ Rain gear
- ☐ Extra underwear (for longer trips)



**These items should be made of wool or a warm synthetic fabric. Avoid cotton clothing when the weather might be cool, cold, or wet.*

COLD-WEATHER CLOTHING CHECKLIST FOR OUTDOOR ADVENTURES

- ☐ Long-sleeved shirt
- ☐ Warm shirt*
- ☐ Long pants*
- ☐ Sweater*
- ☐ Long underwear*
- ☐ Hiking boots or sturdy shoes
- ☐ Extra socks
- ☐ Insulated parka or coat with hood
- ☐ Warm hat*
- ☐ Gloves*
- ☐ Rain gear
- ☐ Extra underwear (for longer trips)



*These items should be made of wool or a warm synthetic fabric. Avoid cotton clothing when the weather might be cool, cold, or wet.

RAIN GEAR

Staying dry in the outdoors is an important part of staying comfortable and having a good time. Wearing or carrying rain gear such as a poncho or rain parka, rain pants, gaiters, and a hat can also add to your safety, because dry clothing will keep you much warmer than shirts, pants, and jackets that have become wet.



Poncho. A poncho is a waterproof cape that can protect you from summer rains. Because a poncho is loose-fitting and can flap in the wind, it may not be the best choice for severe weather or for winter travel. On the plus side, many ponchos are big enough to also cover your backpack.

Rain Parka. A rain parka is a long jacket that repels rain, sleet, and snow. It should have a hood that you can pull over your head.



Gaiters

Rain Pants. Rain pants extend the protection of a poncho or parka down to your ankles.

Gaiters. Gaiters can shield your feet and lower legs from rain. During winter hikes, they'll help keep snow out of your boots.

Hat. A broad-brimmed hat protects your face and neck from sun and from storms. If you wear eyeglasses, the brim of a hat can keep them clear when it's raining.

FABRICS THAT BREATHE

Rain gear may be made of breathable fabric or nonbreathable fabric. There are pros and cons to both.

Breathable. Breathable fabrics repel rain and also let body moisture escape—the ideal combination for rain gear. The drawback is that these garments can be expensive.

Nonbreathable. Many ponchos, parkas, rain pants, and gaiters are made of coated nylon and plastic. This nonbreathable gear is waterproof and often inexpensive. The disadvantage of nonbreathable rain gear is that moisture given off by your body may be trapped inside, causing you to feel damp and chilled.

FOOTGEAR

If your feet feel good, chances are you'll have a great time hiking. Taking care of your feet begins with choosing your footwear. Almost any shoes are fine for short walks over easy ground. For longer hikes in good weather, lightweight boots usually work well.

Leather shoes and boots were once the only choices for hiking. These types of footwear are still popular today and can give your feet and ankles plenty of protection and support. They will also keep snow and rain from soaking your socks. They are a good choice if you will be hiking and backpacking on rugged trails. Choose carefully when selecting leather boots, though. Stiff boots for mountaineering or serious winter travel can be quite heavy and are better suited for more experienced hikers.

The footwear you choose must fit well. When you shop for new boots or hiking shoes, try them on while wearing the same socks you will use on the trail. Your heels should not slip much when you walk, and your toes should have a little wiggle room. Before using your new hiking shoes or boots on a hike, wear them around home for a few days—longer for leather—until they adjust to the shape of your feet.



Many styles of modern outdoor footwear are made of nylon mesh and other manufactured materials.

CARING FOR HIKING BOOTS

Hiking boots will last a long time if you take care of them. When you get home from a trip, remove mud or soil from your boots with a stiff brush or by hosing them off. Allow them to dry at room temperature. (High heat can melt nylon and harm leather, so don't put your boots too close to a fire.) Treat leather with a boot dressing meant for outdoor footwear. Oils and waxes in the dressing will keep leather flexible and help the boots repel water.

Camp Shoes

Many campers and backpackers carry a pair of lightweight shoes in their packs so that they can shed their boots at the end of the day. Choose closed-toe shoes that will help protect you from injury. A pair of running shoes might be just right. Water shoes can work well, too, if they are also comfortable for walking about on dry land. If they have good tread, your extra shoes will come in handy when you need to wade across a stream. Take off your hiking boots and socks and change into your extra shoes to cross the water.



Water shoes

SOCKS

Hiking socks made of various kinds of wool, including antimicrobial merino wool, or a wool-nylon blend will help cushion your feet as you walk. Try wearing a pair of thin, synthetic-blend socks underneath your hiking socks. The inner socks will slide against the heavier outer socks and wick moisture from the skin. This will reduce friction and your chances of getting blisters. Carry spare socks on your hikes. If your feet get tired or sweaty, change into fresh socks and hang the damp ones on your pack to dry.

HIKING STICKS AND TREKKING POLES

Use a hiking stick to push back branches and to poke behind rocks. When you wade a stream, a hiking stick will give you extra stability.

Trekking poles are a lot like ski poles. They can improve your balance and lessen the strain on your knees. Adjustable trekking poles can be made shorter or longer to match your height. Those with rubber tips might have less impact on the edges of trails. Trekking poles also tend to be lighter than hiking sticks.



MAKING A TRIP PLAN

Writing a trip plan encourages you to think through your preparations for a hike, or any other outdoor activity. Give copies of your plan to your Scoutmaster, parents, and other responsible adults. Your plan will fill them in on what you hope to do and when you expect to return.

Organizing your ideas well enough to put them down on paper is good writing practice, too. Keeping a journal of the adventure while it is happening then writing a record of the trip when you get home is another excellent idea.

Develop a trip plan by writing answers to the five W's—where, when, who, why, and what.

WHERE are we going, and how will we get there? Decide on your destination and the route you will use to reach it and to return. For backcountry trips, include a copy of a map with your route highlighted or marked in pencil.

WHEN will we go and return? If you are not back close to the time you listed on your trip plan, Scout leaders and your family can take steps to locate you and, if necessary, provide assistance.

WHO is going with us? List the names of your hiking partners and adult leaders. If you need a ride to or from a trail, write down who will be driving.

WHY are we going? To fish in a lake? Climb a peak? Photograph wildlife? Explore an island? Write a sentence or two about the purpose of your journey.

WHAT are we taking? Start with the Scout Basic Essentials, then add any special gear you'll need based on the activity you're planning or the weather you expect.

Add one more item to the list:

HOW will we respect the environment by following the principles of outdoor ethics?

HIKING TRIP PLAN

Name of this trip: _____

WHERE

WHERE are we going, and how will we get there?

WHEN

WHEN will we leave and return?

WHO

WHO is going with us?

Adult leaders: _____

Patrol members: _____

WHY

WHY are we going? (Write a sentence or two about the purpose of the hiking trip.)

WHAT

WHAT do we need to take with us? _____

HOW

HOW will we respect the environment by following the principles of outdoor ethics?

WHAT TO DO WHEN LOST

One day you might accidentally wander off a trail and be unsure how to find it again. Perhaps you will take a wrong turn and not know which way to go. If you think you are lost, stop where you are and follow the four steps that spell STOP.

Stay calm.

Think.

Observe.

Plan.

Stay calm. Sit down and have some water and something to eat. If you are cold, put on a jacket or sweater. Breathe slowly and relax.

Think. Try to remember how you got where you are. If you have a map, open it and see what you can learn from the symbols and contour lines.

Observe. Look for your footprints in soft ground or snow. Notice any landmarks that can be clues to your location. Listen for sounds of other Scouts.

Plan. If you are convinced that you know which way to go to get back on track, move carefully. Use a compass to set a bearing in the direction of your destination. Then clearly mark the way you are going with broken branches, piles of stones, or whatever else is handy in case you need to find your way back to the spot where you've been sitting. However, if you don't have a clear idea where you are, stay where you are. People will start looking for you as soon as someone realizes you are missing.



Be careful with fire even in emergencies. Take the time to build the fire correctly so that it does not spread. Never leave a fire unattended.

Help searchers find you with any signal repeated three times. For instance, you might give three shouts or three blasts on a whistle. A smoky fire in the daytime and a bright fire at night might also attract attention. Toss grass or green leaves on the flames to create additional smoke. Spread your rain gear, sleeping bag, and bright-colored equipment in the open to catch the eye of a rescue pilot, or flash a mirror in the direction of aircraft.

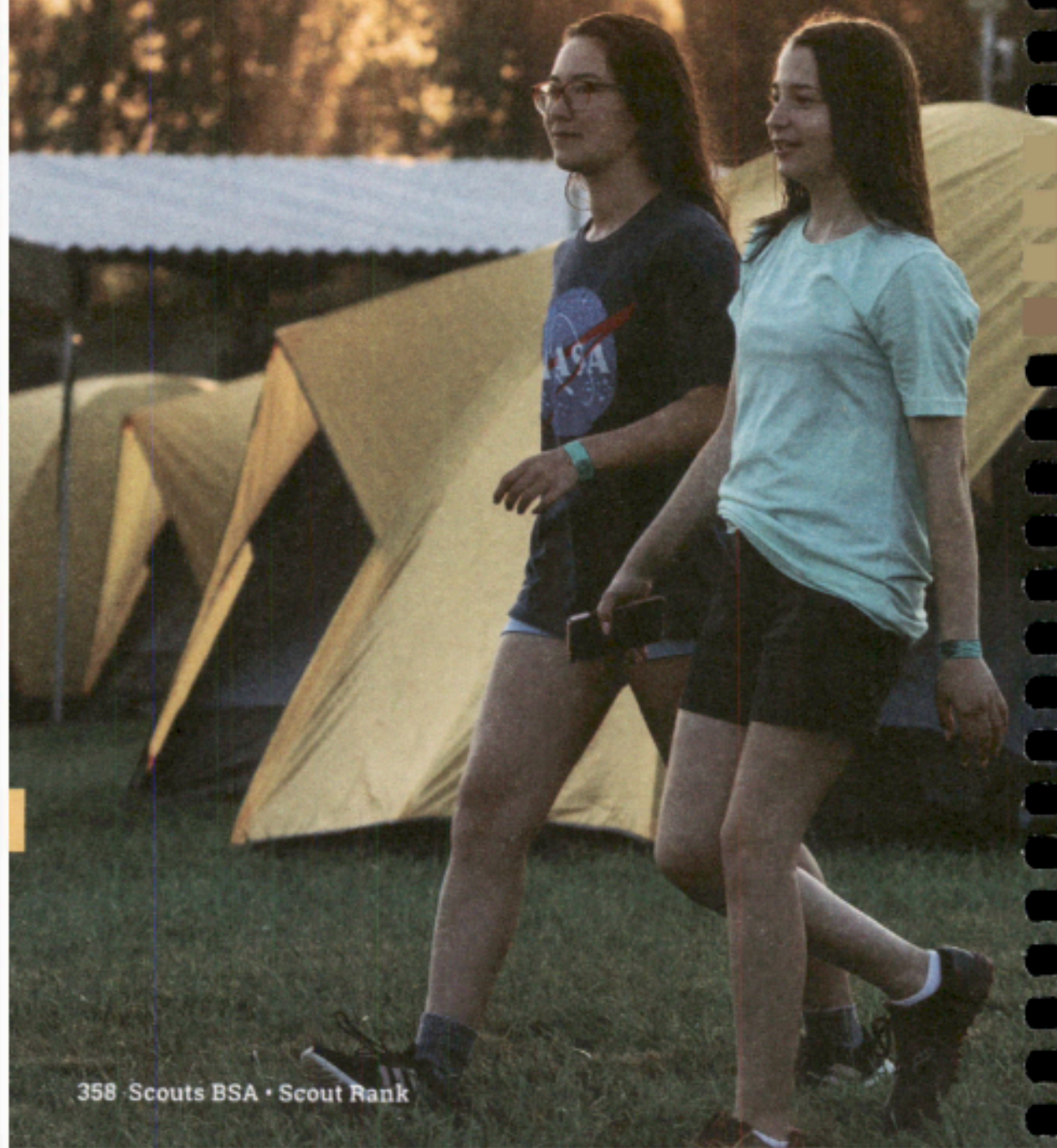


Pitch a tent if you have one, or find shelter against a rock or under a tree. Hang a T-shirt or something else on a branch above you to get the attention of searchers even if you have fallen asleep.

Use your Scout Basic Essentials and whatever else you have with you to stay warm and dry. In addition to serving as a signal to rescuers, a campfire can offer warmth and lift your spirits. Collect enough wood before dark to last through the night.

Lastly, try not to worry. You can survive for several days without water and for several weeks without food. Stay where you are. You will be found.

>> 9 CAMPING



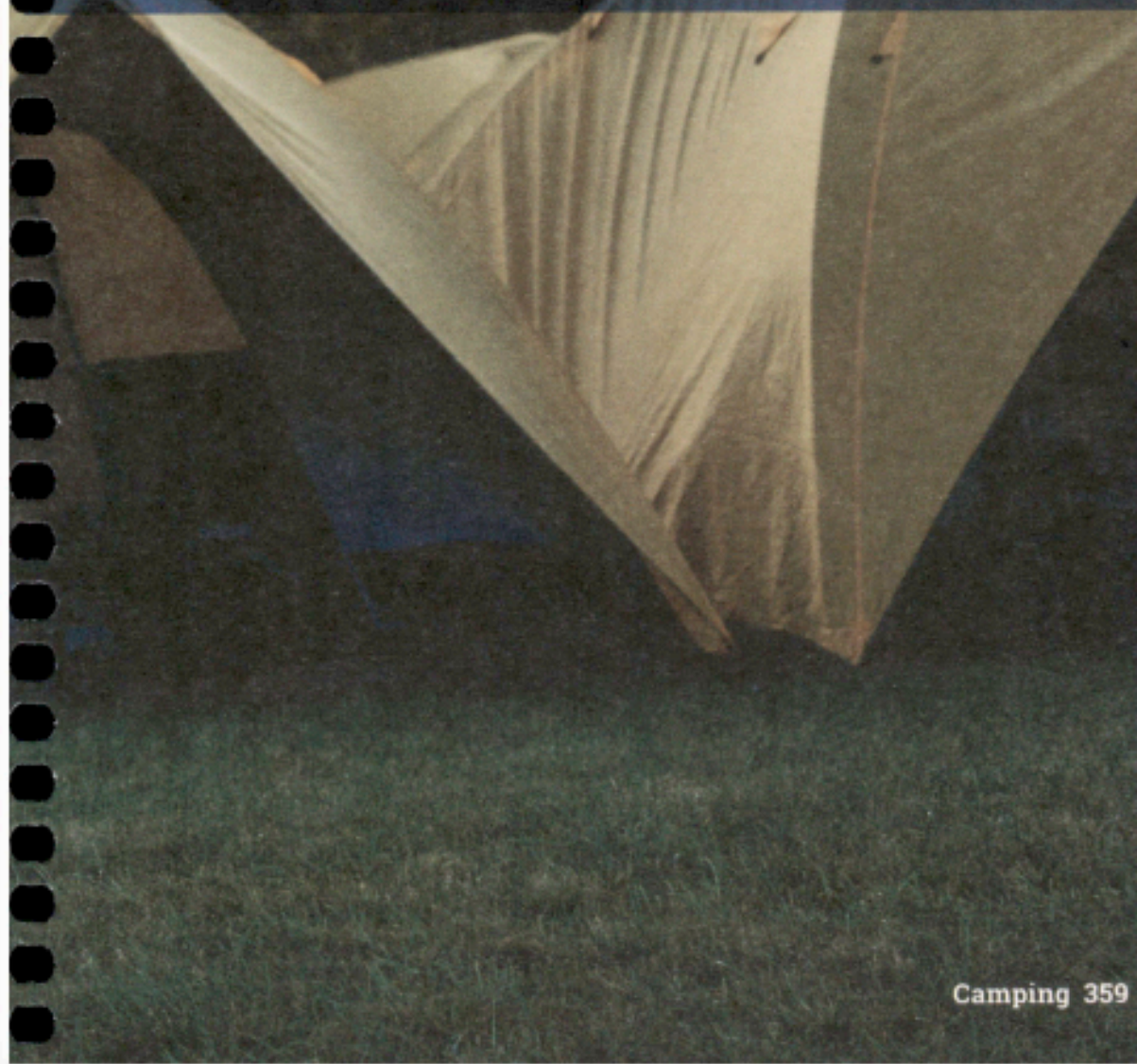
Your patrol pitches its tents under the trees of a quiet forest or on a hillside overlooking a lake or a rushing mountain stream. It could be a hot summer day or a frosty winter afternoon with drifts of snow all around. The laughter of good friends floats through camp as you work together to set up a dining fly and light camp stoves to cook an evening meal.



Camping trips are great opportunities to experience wildlife.

You talk excitedly about what you plan to do for the next few days as you make the outdoors your home. Maybe fishing is your top priority. Perhaps you will build snow shelters or follow the tracks of wildlife. If you climb to the top of a mountain or set off across the lake in your canoes, you are sure to practice using maps and compasses.

Adventure, fun, discovery, and teamwork—that's Scout camping.



ADVANCEMENT: CAMPING

Each time you go camping, you will be building your ability to live well in the outdoors. By mastering the skills of planning and by learning what gear to carry, you will go farther, stay out longer, and find more ways to make "outing" a big part of "Scouting." And you'll be fulfilling some of the requirements to achieve your next Scout rank.



TENDERFOOT Present yourself to your leader ready for an overnight camping trip. Show the gear you will use and how to pack and carry it. Spend a night on a patrol or troop campout in a tent you helped pitch.



SECOND CLASS Participate in at least three overnight campouts with your troop or patrol, and on at least two of those trips, spend the night in a shelter that you helped erect, such as a tent or a snow cave. Explain to your leader the factors to be considered when choosing a campsite.



FIRST CLASS Participate in at least six overnight camping trips with your troop or patrol, and for five of them, spend the night in a tent that you pitched or other structure that you helped erect.



EAGLE The Camping merit badge is one of 21 required for the Eagle Scout rank.



Camping



PATROL AND TROOP CAMPOUTS

Most of your campouts will be with your patrol or with your whole troop, as well as at least two adult leaders. Your patrol leaders' council might plan an outing where you focus on specific skills or work together on an outdoor merit badge. Your campsite could be a home base for day hikes or fishing expeditions.

Camp Activities

Camp can be your home base for all sorts of adventures. A campout can get you close to an area where you can enjoy an exciting activity—swimming, for example, or kayaking, photography, or environmental studies.

As you plan a trip, think about the opportunities for adventure within easy reach of your campsite. Other possibilities include:

- Take a day hike to a lake, the top of a mountain, a scenic vista, or another point of interest.
- On winter trips, try cross-country skiing or snowshoeing. Build an igloo or a snow cave. Look in the snow for the footprints of wildlife, and follow them to discover the habits of different animals.
- Bike along trails open to cyclists.
- Go swimming, canoeing, rafting, or fishing. (Be sure to follow Safe Swim Defense and Safety Afloat guidelines.)
- With proper supervision, take part with your group in organized climbing and rappelling activities. Learn the correct skills and safety procedures from qualified instructors.



CAMPOREES AND SCOUTING SHOWS

At camporees, your patrol can compete against patrols from other troops in tests of Scout camping skills. At Scouting shows, you can demonstrate your expertise to other troops and visitors from the community.

A Scout Is Reverent

Evenings in camp are a great time to reflect on what happened during the day and to think about what went well and what didn't. Evenings are also a great time for simple chapel services that allow Scouts to reflect and show reverence toward God, according to their beliefs.

Scout Vespers

Tune: "O Christmas Tree"

Softly falls the light of day,
While our campfire fades away.
Silently each Scout should ask:
"Have I done my daily task?
Have I kept my honor bright?
Can I guiltless sleep tonight?
Have I done and have I dared
Everything to be prepared?"

Taps

Day is done, gone the sun,
From the lake, from the hills,
from the sky;
All is well, safely rest, God is nigh.



SUMMER CAMP

For many troops, a week at a BSA summer camp is a highlight of the Scouting year. Many summer camps offer activities for all ages. New Scouts can work on the basic skills that lead to the Tenderfoot, Second Class, and First Class ranks. Experienced Scouts can earn merit badges. Older Scouts can participate in ropes courses, backpacking trips, and other high-adventure activities.

Remember, two-deep adult leadership is required on all troop and patrol outings.

PERSONAL CAMPING GEAR CHECKLIST

Use this checklist every time you go on a Scout outdoor trip. Use a pencil to check off each item as you pack it.

☐ The Scout Basic Essentials

- | | | |
|---|---------------------------------------|--|
| <input type="checkbox"/> Pocketknife | <input type="checkbox"/> Water bottle | <input type="checkbox"/> Matches and fire starters |
| <input type="checkbox"/> First-aid kit | <input type="checkbox"/> Flashlight | <input type="checkbox"/> Sun protection |
| <input type="checkbox"/> Extra clothing | <input type="checkbox"/> Trail food | <input type="checkbox"/> Map and compass |
| <input type="checkbox"/> Rain gear | | |



Water bottle

☐ Clothing appropriate for the season and the weather

☐ Backpack with rain cover

☐ Sleeping gear

- | | | |
|---------------------------------------|---------------------------------------|---------------------------------------|
| <input type="checkbox"/> Sleeping bag | <input type="checkbox"/> Sleeping pad | <input type="checkbox"/> Ground cloth |
|---------------------------------------|---------------------------------------|---------------------------------------|

☐ Eating kit

- | | |
|--|--------------------------------|
| <input type="checkbox"/> Eating utensils | <input type="checkbox"/> Plate |
| <input type="checkbox"/> Bowl | <input type="checkbox"/> Cup |

☐ Cleanup kit

- | | |
|-------------------------------------|---|
| <input type="checkbox"/> Soap | <input type="checkbox"/> Dental floss |
| <input type="checkbox"/> Toothbrush | <input type="checkbox"/> Comb |
| <input type="checkbox"/> Toothpaste | <input type="checkbox"/> Small camp towel |

☐ Optional personal items

- ☐ Personal medications
- ☐ Watch
- ☐ Fishing pole and gear
- ☐ Camera
- ☐ Pencil or pen
- ☐ Insect repellent
- ☐ Small notebook
- ☐ Swimsuit
- ☐ Bible, testament, or prayer book, according to your faith
- ☐ Other gear for specific activities



Eating kit

GROUP CAMPING GEAR CHECKLIST

The equipment you'll share with other Scouts can be divided up so each of you carries about the same amount of weight.

- ☐ Patrol first-aid kit
- ☐ Tents, ground cloths, and stakes
- ☐ Dining fly and stakes
- ☐ 50-foot nylon cord
- ☐ Cook kit containing
 - ☐ Stove(s) and fuel
 - ☐ Matches and/or butane lighters (in resealable plastic bags or containers)
 - ☐ Pots and pans (matched to menu and dishwashing needs)
 - ☐ Spatula, large spoon, and/or ladle (matched to menu needs)



Biodegradable soap

- ☐ Cleanup kit containing

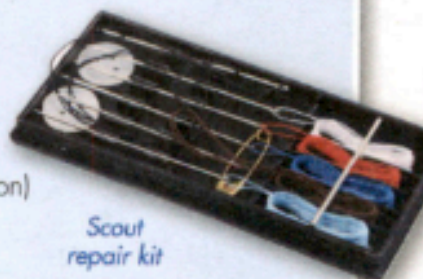
<input type="checkbox"/> Biodegradable soap	<input type="checkbox"/> Sanitizing rinse agent
<input type="checkbox"/> Scouring pads (no-soap type)	<input type="checkbox"/> Trash can liners
<input type="checkbox"/> Toilet paper	<input type="checkbox"/> Food strainer



Scouring pad

- ☐ Repair kit containing

<input type="checkbox"/> Thread	<input type="checkbox"/> Needles	<input type="checkbox"/> Safety pins
---------------------------------	----------------------------------	--------------------------------------



Scout repair kit

- ☐ Group extras you may want to take
 - ☐ Hot-pot tongs
 - ☐ Plastic, collapsible water container (1 or 2½ gallon)
 - ☐ Water-treatment filter or tablets
 - ☐ Cutting board or two 4-by-4-foot plastic sheets for food preparation surfaces
 - ☐ Spade
 - ☐ Grill
 - ☐ Patrol flag
 - ☐ Small American flag
 - ☐ Two 50-foot ropes and bear bags



Spade

- ☐ Other gear for specific activities

SAFE CAMPING

Over time, you will learn countless techniques for safe and enjoyable camping. Here are a few that you should learn right away.

STAYING SAFE

Staying safe in camp is easy if you are prepared and use common sense. Here are some tips:

- Stay in good physical shape so you are ready for the demands of camping.
- Don't bother wildlife, and stay well clear of beehives and hornet nests.
- Stay away from hazardous areas such as cliffs.
- Choose a safe campsite.
- Always use the buddy system.
- Dress appropriately for weather conditions.
- Pay attention to the weather and act promptly in case of hazardous weather.
- Don't run in camp, and be extra careful when walking around in the dark.
- Stay away from the cooking area when you're not cooking. (See the Cooking chapter for more information.)
- Be careful with knives, saws, and axes. (See the Tools chapter in the *Scouts BSA Handbook* for more information.)



Protect yourself from exposure to the sun, to biting insects, and to poisonous plants.

Pack It In, Pack It Out

Whatever you take to camp must be carried home. Don't leave anything behind—litter, cans, leftover food, or camp projects. Do not throw trash into lakes and streams or bury it in the woods. Making sure that a campsite is in better shape than you found it will help you reach the goal of camping that follows the principles of outdoor ethics.

KEEPING CLEAN

Staying healthy is a key to successful camping trips. The most important way to prevent sickness while you are outdoors is to use a hand cleanser or wash your hands with soap and water before and after handling food and after trips to an outhouse, cathole, or latrine.

On overnight campouts, you'll also want to brush your teeth before bed and in the morning. Take a shower or a bath when you get home. During longer adventures, you and those around you will be happier if you can bathe once in a while. Doing it the right way will prevent any harm to the environment. Fill two cook pots or buckets with water and carry them to a private spot at least 200 feet (75 steps) from any stream, lake, or spring. Use one container of water for washing yourself and use water from the other for rinsing away the soap. Scatter the remaining water when you are done.

A little soap goes a long way outdoors. The less soap you use, the less rinsing you will have to do. A small plastic bottle of biodegradable soap is ideal. Store the bottle in a plastic bag in case it leaks.

USING BIODEGRADABLE SOAP

A substance is considered biodegradable if bacteria and other microorganisms in the soil can break it down into natural components. Note the words "in the soil." Just because a soap is biodegradable doesn't mean you can use it in or near the water; the 200-foot distance still applies. Biodegradable soap can contain unnecessary ingredients such as scents, so it's best to choose a soap designed specifically for camping.

PROTECTING CAMP FOOD

Proper storage of food at campsites will prevent mice, squirrels, raccoons, and other small creatures from getting into your meal ingredients and spoiling them. It's also essential that you store food out of the reach of larger animals. For example, if bears discover that they can get into your food supplies, they could be tempted to visit your campsite later in search of more. This can be dangerous for you and future campers—and for the bears, which might have to be moved or even destroyed to protect humans.



Animal-proof storage box



Golden-mantled ground squirrels (called "minibears" at the BSA's Philmont Scout Ranch) are small mammals with a big nuisance factor. Minibears have been known to chew through anything and everything to get to camp food, so be sure to store your food well!

As your troop plans a trip, find out from those who manage the areas where you will camp how you should store your food. Your storage method can be as simple as locking your food in your vehicle during campouts near roads or using animal-proof storage boxes located close to campsites. For travels in areas where there may be bears, be prepared so that if bears do come by, they will find nothing of interest in your campsite and will move on.

Smellables

Smellables include all meal ingredients and leftover food, garbage, soap, shampoo, deodorant, lotions, toothbrushes and toothpaste, sunscreen, lip balm, insect repellent, first-aid kits, water bottles that have contained anything but water, and anything else with an odor that might attract animals.

To help protect your food and other smellables, follow these tips.



- Bring nylon cord and stuff sacks for hanging food from tree branches.
- Pitch tents away from the camp cooking area (200 feet or more is ideal) and leave nothing in tents except clean sleeping clothes, sleeping bags and pads, flashlights, and perhaps a book or two.
- Clean up crumbs and bits of spilled food, and put it all in with the trash. Wash and rinse cook pots, plates, and utensils after every meal.
- At night and whenever you will be gone from your camp, protect food and other smellables by hanging them in bear bags or stowing them in bear boxes away from tents.

BEARS AND SMELLABLES

A black bear can smell seven times better than a bloodhound, even picking up the trail of another bear just by sniffing its tracks. The smell receptors in its nose are 100 times bigger than in a human, and it uses the Jacobson's organ in the roof of its mouth to detect minute quantities of pheromones. That's why things like lip balm and food-splattered shirts should be considered smellables even when you can't smell a thing.

> 10 COOKING



Bacon and eggs sizzling at dawn over a backpacking stove. Fresh fruit, nuts, and a granola bar for a midday snack. Dutch oven stew and cobbler cooking over charcoal at the end of a busy day of rafting. Food in the outdoors powers you through days packed with action. It helps you stay warm at night. It cheers you up when you get tired or the sky turns stormy.



Almost nothing is finer than bacon sizzling at dawn over a bed of hot coals.

On a day hike, you can carry your lunch, some energy food, and plenty of fluids. For longer adventures, prepare meals by cooking over a camp stove or open fire. You'll eat well and have fun as you work with your fellow Scouts to fix meals that are delicious, healthy, and filling.



ADVANCEMENT: COOKING

If you and your patrol are going to camp out, you're going to have to eat! That's one of the main reasons why cooking—outdoors and at home—is emphasized in Scouting. Many of the requirements along the trail to Eagle have cooking at their core. As you devour this chapter, you will get a taste of the skills needed to fulfill the following rank requirements.



TENDERFOOT Assist in preparing a meal at a campout. Tell why patrol members should share in meal preparation and cleanup. Demonstrate safe cleaning of items used to prepare, serve, and eat a camp meal. Explain why your patrol members should enjoy meals together as a group.



SECOND CLASS Explain appropriate times for using a camp stove or a campfire to cook or for other purposes. Plan and cook a nutritious breakfast or lunch for your patrol. Explain the importance of good nutrition. Demonstrate proper transport, storage, and preparation of foods.



FIRST CLASS Plan a full day of nutritious menus for a patrol campout. Budget for the meals you planned and show how much food will be needed to feed all those who will be eating. Secure the ingredients and show which utensils you will need to prepare the meals. Show the proper way to handle and store perishable food products and how to dispose of camp garbage and other rubbish. Serve as cook on one campout, supervising use of the stove or cooking fire, preparing the meals, and overseeing cleanup.



EAGLE Cooking is one of the 21 required merit badges you will earn along your trail to the Eagle Scout rank.



Cooking

PLANNING CAMP MEALS

With good planning, you can take enough food on a trip so that everyone in your patrol eats well and there are few leftovers to pack out. You'll also know which pots, pans, and utensils to carry, and whether you'll be cooking over a camp stove or a campfire.

Begin making meal plans by answering the following questions:

How many Scouts are going on the trip, and how long will we be away from home? Decide on the number of meals you will need and who will be eating together. A patrol is often just the right size for organizing the food and cooking gear for a hike or camping trip. Scouting cookbooks usually base recipes on eight servings. If the number of servings in a recipe doesn't match the number of people eating, scale the recipe up or down as needed. (For example, if the recipe serves four and you'll have eight people along, double the amount of each ingredient.)



Are there any special food needs? Discuss special food needs with patrol members. You may have members who are vegetarians or vegans, who don't eat certain foods for religious or health reasons, or who have food intolerances or allergies. Scouts with severe allergies may need to bring their own food. The BSA's specific guidelines for helping keep participants with food allergies safe during meals can be found at the Scouting Safely section of Scouting.org.

What do we have planned? For days full of activities, choose recipes that won't take long to prepare and that will give you plenty of fuel. If you will have time to make cooking a focal point of a campout, take ingredients to put together meals that are special. You could even arrange a cook-off between patrols where teams of Scout chefs compete to create a feast using the same set of random ingredients.

How will we reach camp? Backpackers can keep their loads lighter by planning simple menus of nonperishable ingredients. (These are usually dehydrated, making them very light.) When you will be traveling to your campsite by car, you can bring along griddles, fresh and canned foods, and even charcoal briquettes for a tasty Dutch oven meal.

What weather do we expect? Winter menus should contain more fats and carbohydrates. Your body burns these substances to help you keep warm. Include mixes for soups and hot drinks to warm you up. Summer meals can be lighter. Whatever the season, menus should include plenty of fluids.

What is our budget? Sirloin steak will cost more than ground beef. Out-of-season fruits and vegetables may cost more than they do in season (and probably won't taste as good). Prepared foods typically cost more than those you create from scratch. Plan a menu that fits your budget and shop carefully to keep costs down.

Food Allergies and Intolerances

Food allergies happen when the body's immune system thinks a harmless food protein is a threat and attacks it. Food intolerances don't involve the immune system, but they can still cause serious symptoms. The most common sources of food intolerances are lactose, which is found in dairy products, and gluten, which is found in most breads.

If someone in your patrol has food allergies or intolerances, talk with the Scout and their family about necessary steps for safety. The best thing to do, of course, is to avoid using food items that cause the problems. Usually, you can find an alternative food in the same food group, like pineapples instead of apples or chicken instead of shellfish.

Be sure to check ingredient labels carefully, because problem foods can be hidden in unlikely places.

For example, gluten can show up in soup, salad dressing, soy sauce, and sausage (as well as in many foods that don't start with an S). Look for words like wheat, barley, rye, graham flour, malt, brewer's yeast, durum, semolina, and spelt.

Beyond avoiding problem foods, it's important to avoid cross-contamination. If you're making peanut butter and jelly sandwiches, don't dip a knife that's been in the peanut butter jar into the jelly jar.



Ninety percent of food allergies in the United States are to eight foods: peanuts, tree nuts, milk, eggs, wheat, soy, fish, and shellfish.

FOOD FOR THE OUTDOORS

Depending on the sort of trip you're planning, you can take along all sorts of food. In fact, just about anything in the grocery store could find a spot on your menu. Here are some meal ingredients you can choose for the outdoors.

Fresh. Fresh foods have the most flavor and nutrition of any menu items. However, they can also be heavy, easily damaged, and prone to spoiling. Some, such as fresh meats, must be kept cool until you are ready to cook them. Carrots, apples, and certain cheeses will last longer, though most fresh foods are best used on short trips or while car camping rather than during longer backcountry adventures.





Nonperishable. Pasta, beans, oatmeal, rice, flour, grains, and other foods that won't spoil are ideal for short-term and long-term camping. Stored in plastic bags, they can be stowed in a backpack or duffel bags on canoes and rafts.

Dried/Dehydrated. Much of the weight of many foods is water. Dehydrated food has most of the water removed from it, so it is very lightweight and just right for backpackers. Camping stores sell complete camp meals that require only the addition of boiling water, but you can also find many dehydrated items at grocery stores, such as dried milk, cocoa mix, potato flakes, and soup mixes.



Dried soup mix

Making Healthy Choices

What you eat plays an important role in how healthy you are. Plan balanced meals that are heavy on fruits and vegetables and light on high-fat proteins such as hot dogs, sausage, and bacon. Also, avoid empty calories that come from the added sugar in drink mixes and many processed foods like sugar-sweetened cereal.



Canned. Many foods can be purchased in cans. Canned food is heavy to carry, and the empty containers must be packed out for recycling or proper disposal. That's not a problem when you are driving to a campsite. Sometimes an ingredient such as a can of peaches for a special dessert might be worth the effort it takes to carry it to your trail camp. Just don't forget a can opener!

Convenience. Every supermarket has dozens of convenience foods that are ready to eat or quick to prepare.

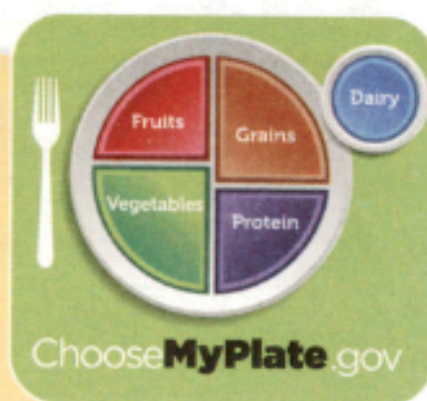
Those you might want to try are pasta sauce mixes, biscuit and pancake mixes, jerky, and energy bars.



The MyPlate diagram shows the relative amounts of each type of food you should eat each day. At home and in camp, try to eat a balanced diet made up of the right amounts of these food groups:

- Fruits ■ Vegetables ■ Grains
- Protein ■ Dairy

Limit the oils (fats) and sugars in your diet.



EATING KIT

A set of utensils and a lightweight unbreakable plate and bowl are all you will need for eating most outdoor meals. An insulated plastic mug will keep drinks and soup warm.

If you reach camp and discover you've forgotten to bring eating utensils, try whittling a spoon from a piece of wood, or remove the bark from a couple of slender, footlong sticks and use them as chopsticks. In a pinch, you can make a bowl out of aluminum foil or eat out of a can or even a clean flying disc.

FOOD-BORNE ILLNESSES

If you aren't careful in the kitchen (at camp or at home), you can end up with some serious food-borne illnesses, such as botulism, hepatitis A, listeriosis, and salmonella poisoning. The most common causes are bacteria (including *Campylobacter jejuni*, *Clostridium botulinum*, *Escherichia coli*, *Listeria monocytogenes*, *salmonella*, and *Staphylococcus aureus*), viruses (including hepatitis A and norovirus), and several protozoans in the genus *Cryptosporidium*.

In the *Cooking* merit badge pamphlet, you can learn more about these tiny organisms that can cause big problems. To prevent the spread of food-borne illnesses, always do the following:

- Wash your hands after using the bathroom and before and after handling food.
- Keep work surfaces and knives clean.
- Thoroughly cook all meat, poultry, seafood, and eggs.
- Carefully wash fruits and vegetables, including those you are going to peel.
- Consume water only from trusted sources.
- Consume only pasteurized milk, juice, and cider.
- Never use damaged cans of food or cans that show signs of bulging, leakage, punctures, holes, or rusting.
- Keep raw and cooked meat, poultry, seafood, and eggs at or below 40°F.

Special Thank You

On behalf of the BSA, a special thank you to the more than 25,000 volunteers and parents who provided feedback and guidance in developing the updates for the Cub Scout program that are reflected in this handbook.

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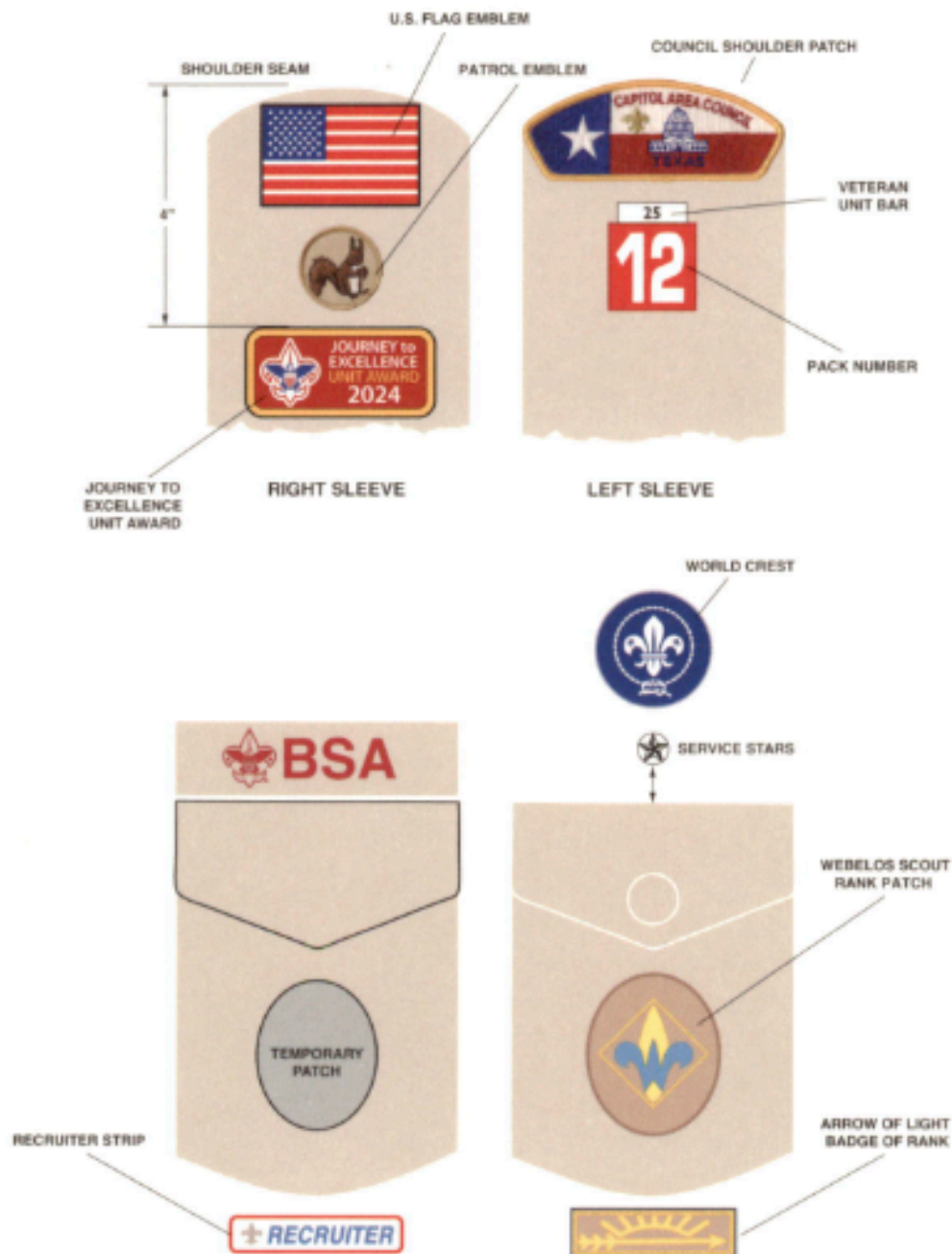
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OFFICIAL PLACEMENT OF INSIGNIA



BOBCAT
(CHARACTER & LEADERSHIP)

OUTDOOR ADVENTURER
(OUTDOORS)

PERSONAL FITNESS
(PERSONAL FITNESS)

CITIZENSHIP
(CITIZENSHIP)

FIRST AID
(PERSONAL SAFETY AWARENESS)

DUTY TO GOD
(FAMILY & REVERENCE)

CHAMPIONS FOR NATURE

CYCLING

ENGINEER

ESTIMATIONS

FISHING

HIGH TECH CAMPING

INTO THE WILD

INTO THE WOODS

KNIFE SAFETY

PADDLE CRAFT

RACE TIME

SUMMERTIME FUN

SWIMMING

SCOUTS BSA SCOUT RANK

SCOUT OATH

On my honor I will do my best
To do my duty to God and my country
and to obey the Scout Law;
To help other people at all times;
To keep myself physically strong,
mentally awake, and morally straight.

SCOUT LAW

Trustworthy
Loyal
Helpful
Friendly
Courteous
Kind
Obedient
Cheerful
Thrifty
Brave
Clean
Reverent



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