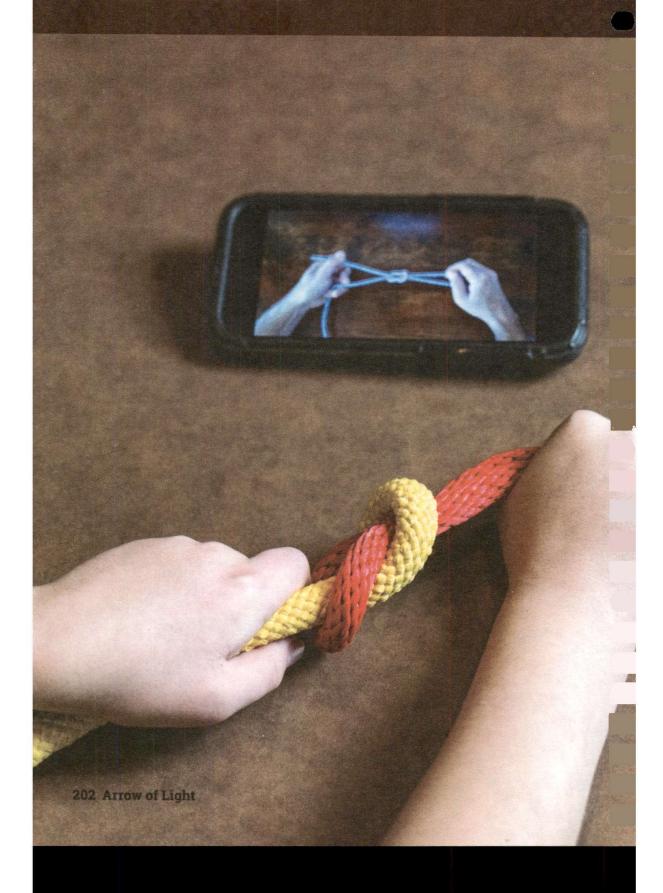
# HIGH TECH OUTDOORS

**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
<ol> <li>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.</li> <li>With an adult, find a knot-tying app. Select one knot to learn, and tie it using the app.</li> <li>Discuss how technology has improved camping gear.</li> <li>Think of a way technology can improve camping gear used on one of your outdoor activities.</li> </ol>	



- Elective Adventure
- Scan for this Adventure page

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.







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)

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



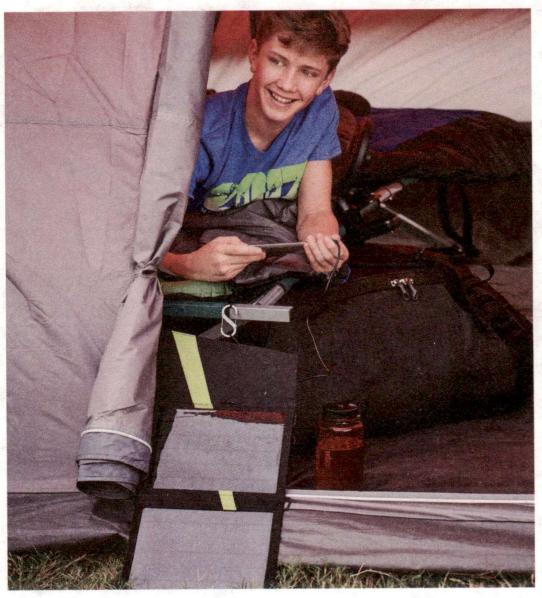
Think of a way technology can improve camping gear used on one of your outdoor activities.

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

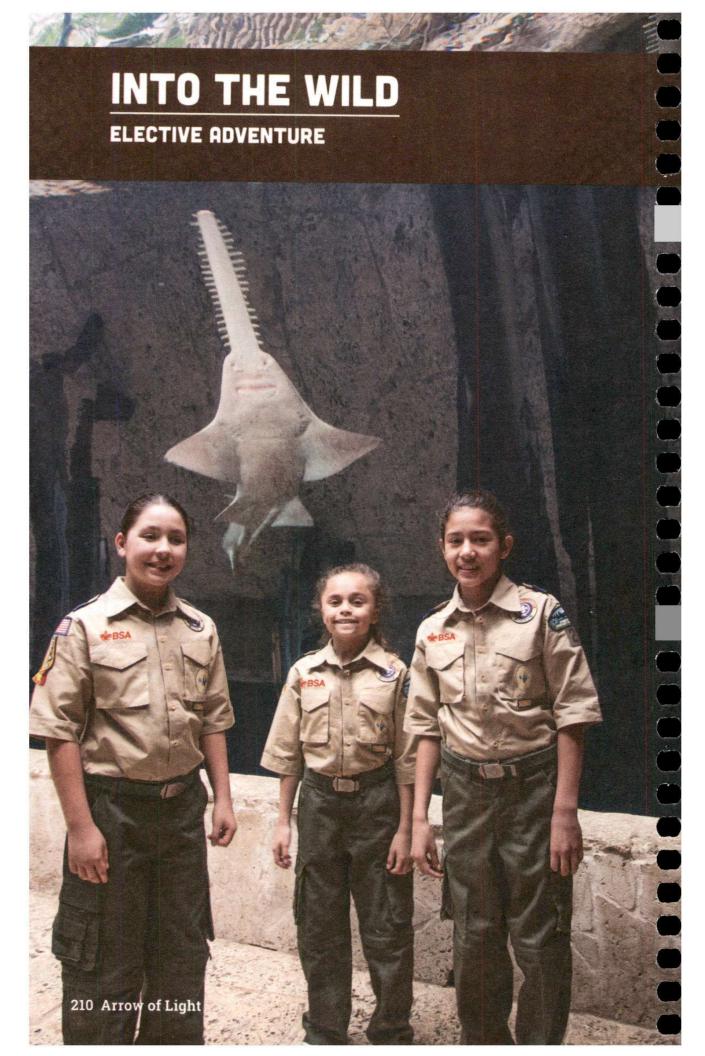
- ▶ Is there a piece of technology you use in other areas of your life that could be used for camping gear?
- ▶ Is there camping gear that you find uncomfortable or hard to use?
- ▶ If you could improve a piece of camping gear with technology that may not exist, what would that be?







**High Tech Outdoors 209** 



#### **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
<ol> <li>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.</li> <li>Create a model of your animal's         ecosystem.</li> <li>Investigate how your animal coexists with         other animals in the wild.</li> <li>Describe how humans interact with your         chosen animal's ecosystem.</li> <li>Discover how wildlife management         benefits your animal.</li> </ol>	



- Elective Adventure
- Scan for this Adventure page

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.



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:

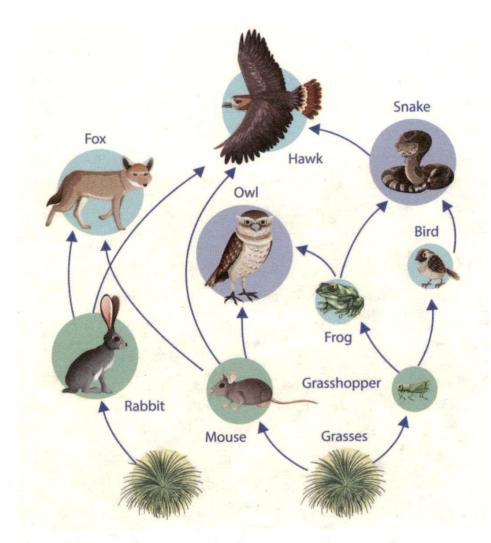
- ▶ **The sun** Without the sun, there would be no life on Earth. The energy of the sun flows through a cycle in the ecosystem. Plants are the first to use this energy.
- ▶ Producers All green plants trees, shrubs, grasses, flowers, etc. use the energy of the sun to grow. Plants also take up nutrients 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.

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.

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.

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,

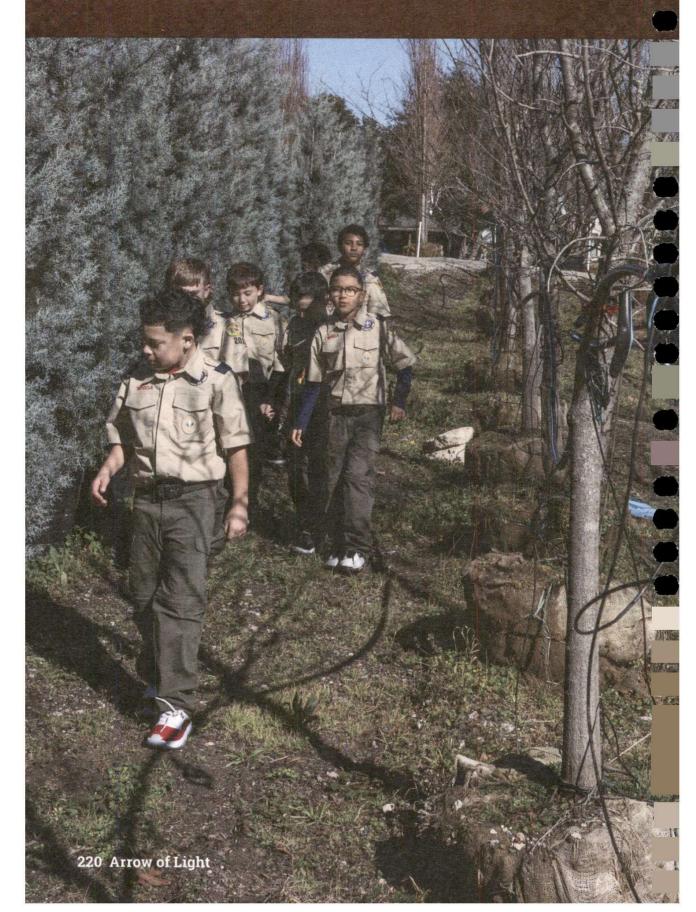


let's look at what happens to an ecosystem without enough predators. When there aren't enough predators, the number of animals hunted by those predators increases. Those animals start to use more of the ecosystem's natural resources, like vegetation. If their population continues to increase, there may 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.

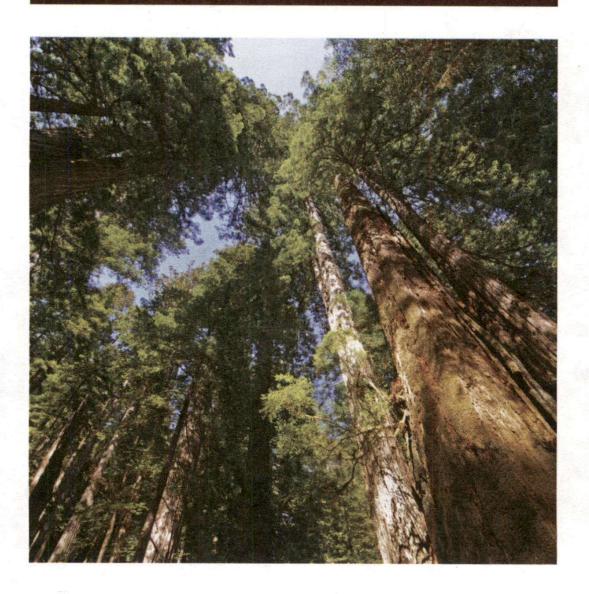
If you have ever stood beneath a towering redwood, enjoyed the colors of fall leaves, or watched pine trees swaying in the wind, you know that trees and plants are beautiful. But they are also important to life on Earth. As you go into the woods, you will learn what trees and plants do for us and for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

# REQUIREMENTS 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

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.

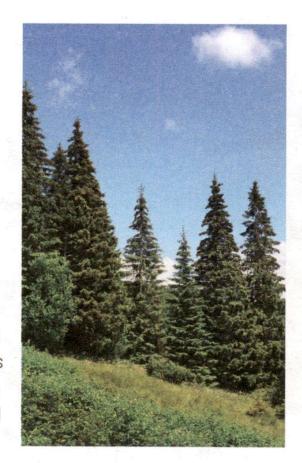
Determine if your tree is deciduous or evergreen.

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**

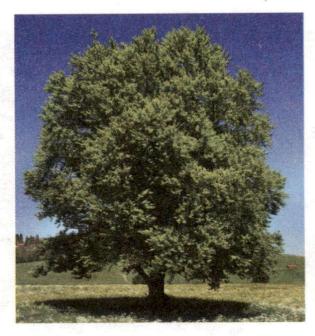
The seeds in coniferous trees grow in cones, which is where the word "coniferous" comes from. When a cone's scales open up, the seeds fall out, and new trees can take root. Coniferous trees tend to grow tall rather than wide; they have a triangular shape like a Christmas tree. Pines, cedars, firs, and 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.

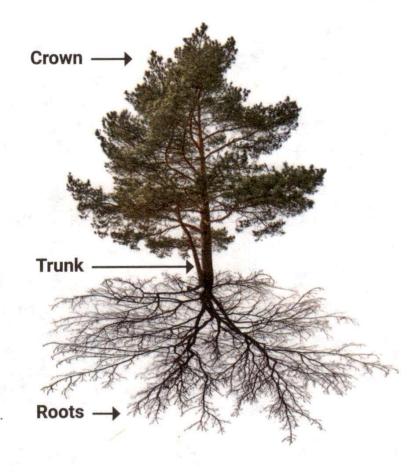
Palm trees are very flexible and more likely to bend instead of breaking. This special ability to bend is why the palm tree is on the state flag of South Carolina. In 1776, during the American Revolutionary War against the British, American patriots built a fort on Sullivan Island to defend Charleston 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.

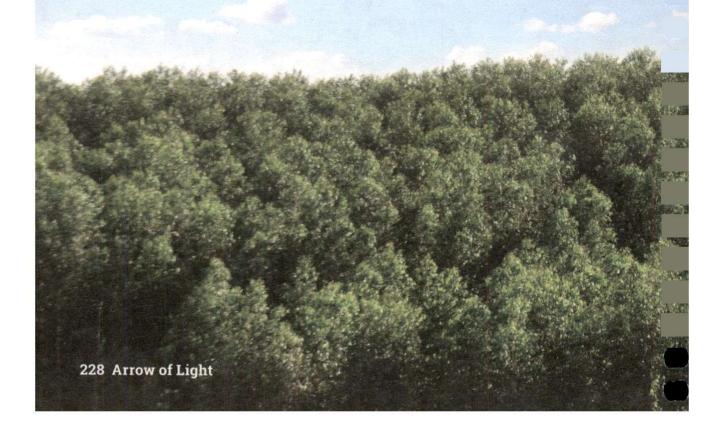
Determine if your tree is native or was introduced to your area.

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:

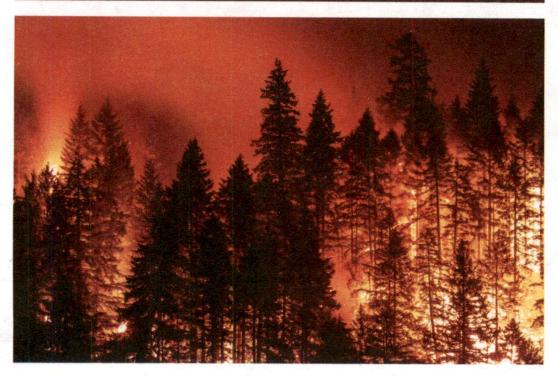
- ▶ Type of leaf. Feel it. Is it smooth or rough? Notice the shape.
- ► Leaf edges. Are they smooth or toothed?
- ► Type of bark. Is it smooth, rough, peeling, light, or dark?



- ▶ 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.

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.

Learn how wildlife uses your tree.

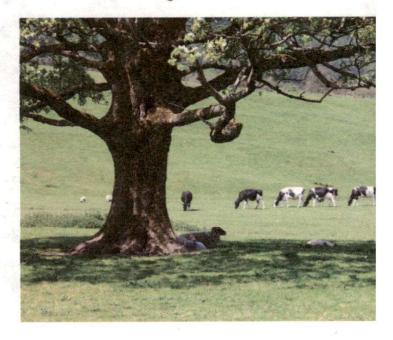
An ecosystem is a community of plants and animals living in an environment that supplies what they need for life. Within an ecosystem, trees and plants produce leaves, bark, fruits, nuts, and seeds that many animals eat or use. They also produce oxygen, which animals need to breathe.

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.





#### 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.

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the Cub So 2. Demonstra 3. Demonstra for and use 4. Demonstra pocketknif	erstand, and promise to follocout Knife Safety Rules. The the knife safety circle. The that you know how to cate that you know how to cate a knife safely. The the proper use of a fee to make a useful object or	re
	e correct cooking knife, and ate how to properly slice, cho	op, 

#### **POCKETKNIFES**

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.



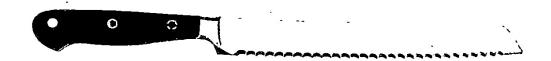
### Chef's Knife (8 inches or 10 inches)

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.

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

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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.

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

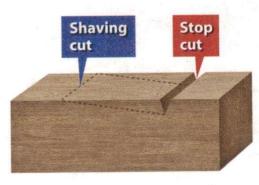
### **POCKETKNIFE CARE**

### 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 backand-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**

eina

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.

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.



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 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.



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** 

248 Arrow of Light



### **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.	
	<ol> <li>Pick a paddle craft you'll use to complete all requirements: canoe, kayak, or stand-up paddleboard.</li> </ol>	
	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.	
X	8. Learn two paddle strokes: power stroke and sweep.	
	9. Have 30 minutes or more of canoe, kayak, or stand-up paddleboard paddle time.	

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-I"), 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.

**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

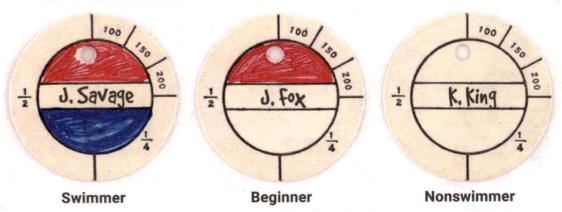
during the activity. Below is the definition of qualified supervision for Safety Afloat. After reading it, discuss with your patrol or an adult what the responsibilities are of the adult who is serving as the qualified supervision.

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 Guardapproved life jackets are worn by everyone engaged in boating activities.
- 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.
- Planning Check for weather and contingencies as needed prior to your activity.
- Equipment All craft must be suitable for the activity, be seaworthy, and be capable of floating if capsized.
- Discipline Remember that rules are only effective when they are followed.

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.

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.



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.



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.



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.





Have 30 minutes or more of canoe, kayak, or stand-up paddleboard time.

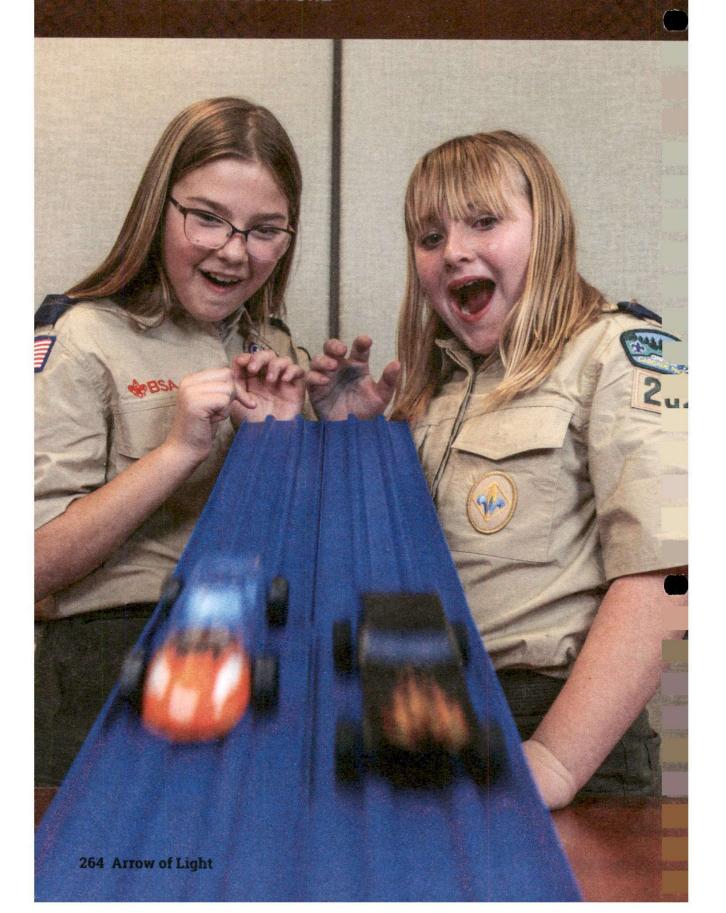


Follow Safety Afloat. Make sure that you are on flat water and check the weather. A flat-water lake or river can become difficult to paddle in if it is windy. You want good paddling conditions when you're learning.

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.

DECUIDEMENTS	
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

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.

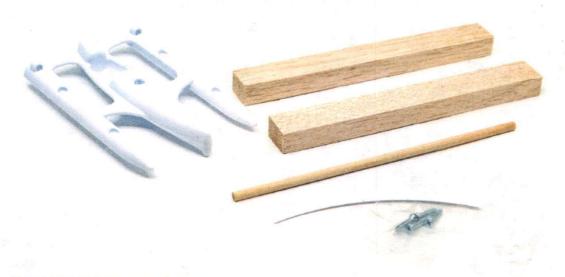
**5. Assemble your car.** Using the nails that came in your kit, attach the wheels that came



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.

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.

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.



Before the race, discuss with your patrol how you will demonstrate good sportsmanship during the race.

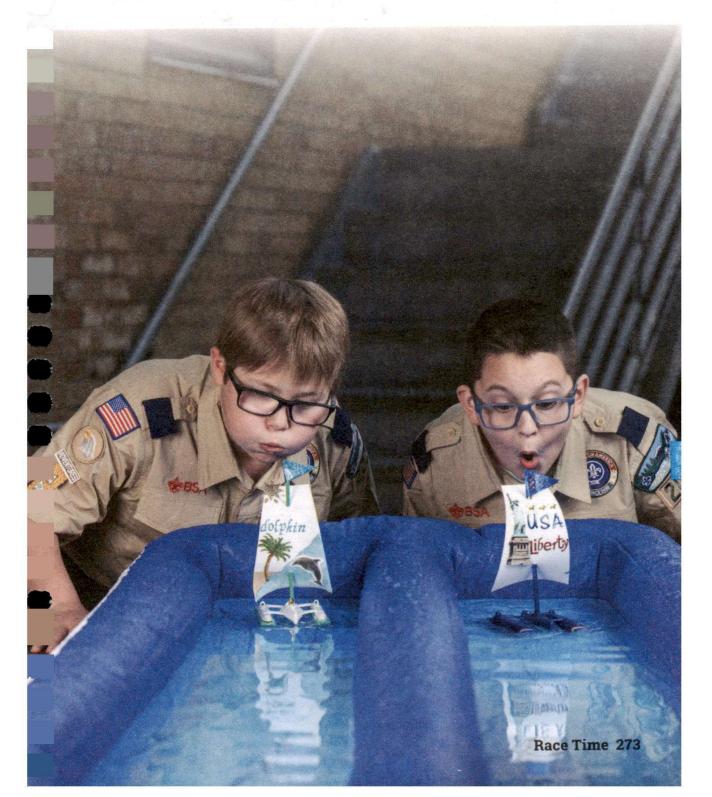


Having a good time building your car or boat is what really matters. Just like any race, there is going to be someone with the fastest car or boat. Remember that the race is done to add excitement and fun. If you worked hard on your car or boat and can say that you did your best, then you have lived 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.

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.





## 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.

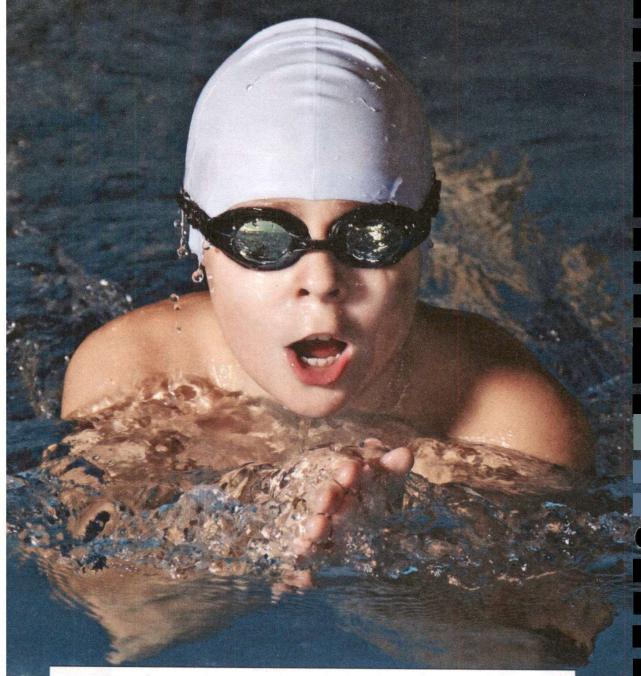
#### **A Patrol-Organized Event**

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
<ol> <li>Review Safe Swim Defense.</li> <li>Explain the meaning of "order of rescue" and demonstrate the reach and throw rescue techniques from land.</li> <li>Attempt the BSA swimmer test.</li> <li>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.</li> </ol>	

## **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.





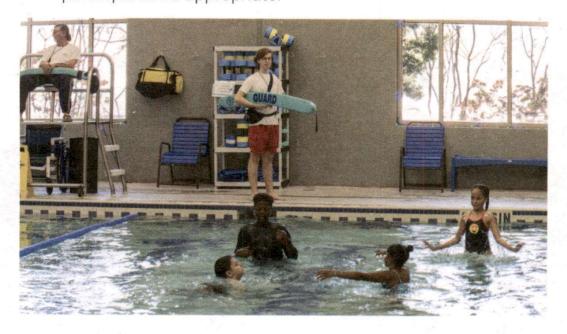
#### 3. Safe Area

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

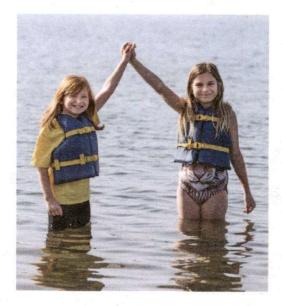
Rules are effective only when followed. All participants should know, understand, and respect the rules and procedures for safe swimming provided by Safe Swim Defense guidelines. Applicable rules should be discussed prior to the outing and reviewed for all participants at the water's edge just before 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





## **TABLE OF CONTENTS**

Adventure Ahead!	
Character & Leadership	322
Citizenship	
First Aid	332
Outdoor Ethics	334
Hiking	344
Camping	358
Cooking	368

This handbook contains the information you need to start working on your Scout rank once you join a Scouts BSA troop.

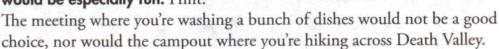
- While an Arrow of Light Cub Scout, you can work only on the requirements for the Arrow of Light badge of rank and Adventures (pages 44–293).
- 2. Arrow of Light badge of rank requirements and Adventures must be approved by the den leader. You may do a requirement at home, but your den leader approves the completion of the requirement(s).
- 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:



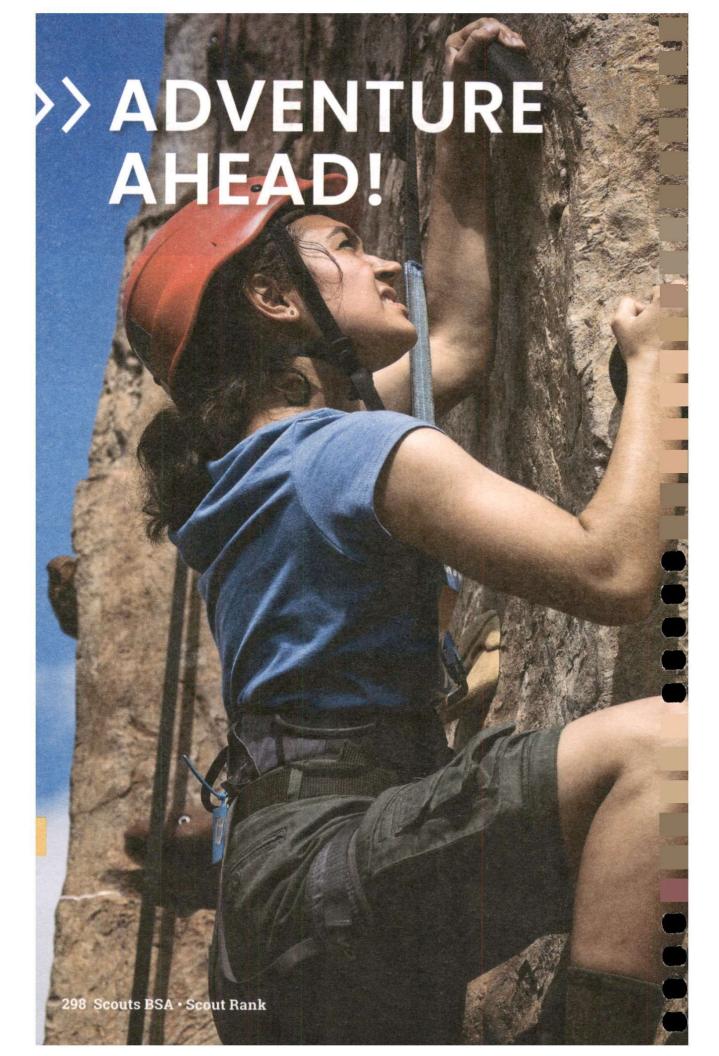
- Make the ask. Extend the invitation, and give the friend and the friend's parents all the information they need. See if the friend can ride with you and your parents.
- Let your senior patrol leader and Scoutmaster know that you're bringing a friend. If they know ahead of time, they can roll out the 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.





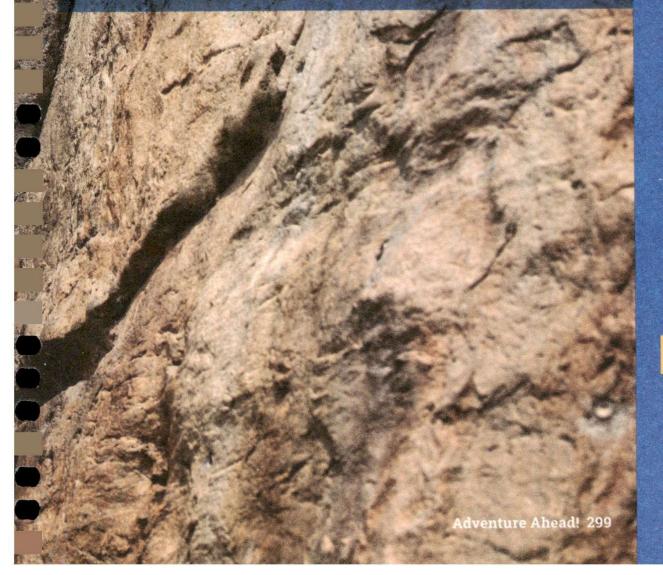
Imagine standing at a trailhead with a small group of friends. It's early morning, and the air is filled with the scent of pine and honeysuckle. In a nearby tree, a squirrel is chittering away. An eagle circles high overhead, soaring gracefully on unseen air currents. At the trailhead, a weathered trail 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.



Imagine what you will discover on your next Scouting adventure.

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.



## **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.

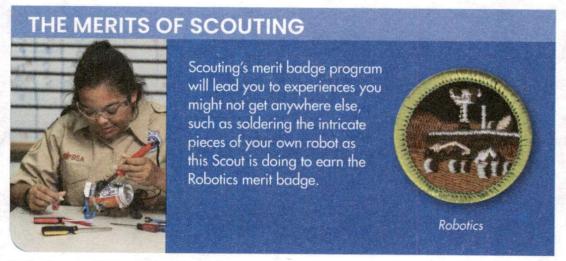
Soon after joining a troop, you will find yourself hiking in open country and camping under the stars. You will learn first aid, become stronger physically and mentally, and practice leading yourself and others. As you get more Scouting experience under your belt, the places you explore will become familiar 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.





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.



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**

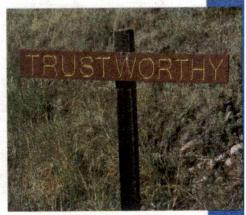
The Scout Law will show you how to live as a young person and as an adult.

#### 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.



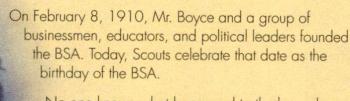
#### The Value of a Good Turn

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."



You can learn more about the history of Scouting and your place in it by earning the Scouting Heritage merit badge.

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.



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.

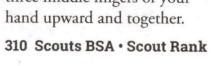
## THE SCOUT SIGN, SALUTE, AND HANDSHAKE

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.



When a youth or adult leader raises the Scout sign, all Scouts should respond by coming to silent attention and making the sign, too.



#### **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.



#### 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.



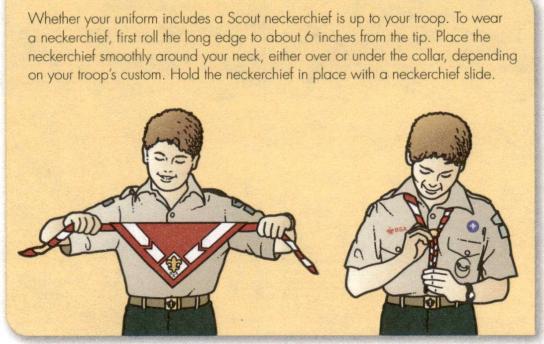
312 Scouts BSA · Scout Rank

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 broadbrimmed 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."

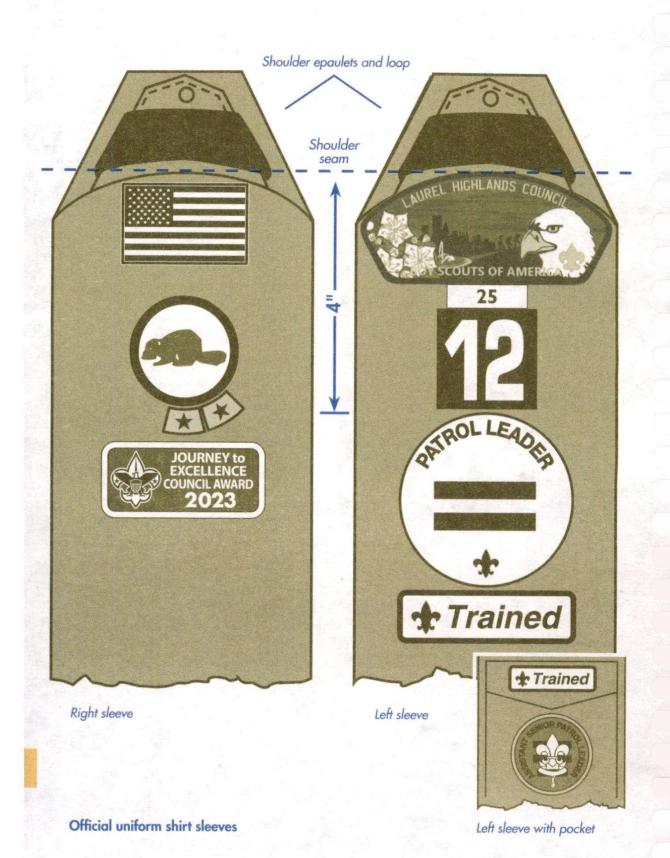


Scout wearing the merit badge sash

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.



Adventure Ahead! 313





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.

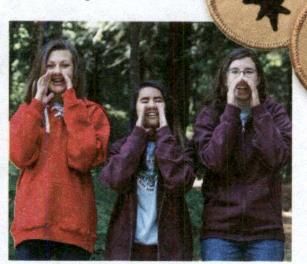
#### YOUR PATROL'S NAME, EMBLEM, FLAG, AND YELL

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.

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 emblems

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 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.





Receiving your Eagle Scout medal at a special court of honor ceremony can be one of the most memorable moments of your life.

Adventure Ahead! 319

Eagle

#### **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.



Inventing



Fly-Fishing

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.

Welding

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.



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.

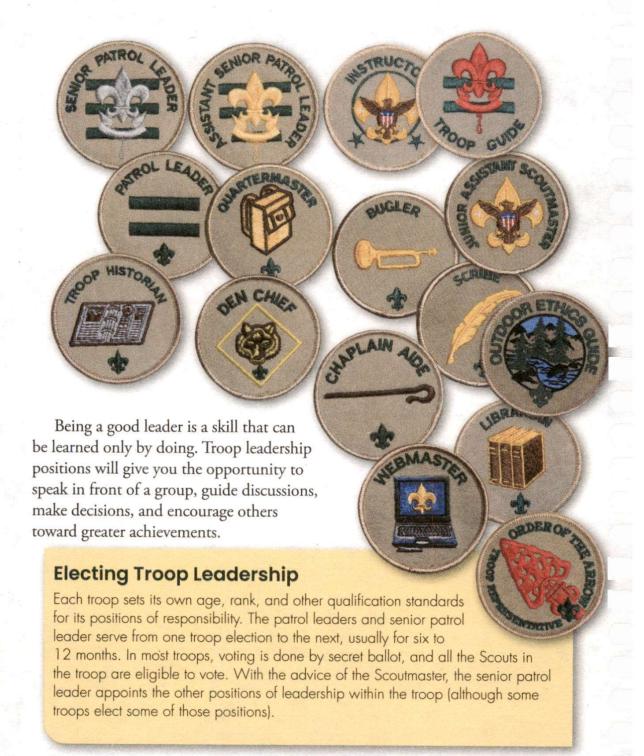
Like millions of Scouts over the last century, you will learn leadership not by sitting in a class or reading a book but by actually being a leader! Along the way, you will have both successes and failures, and you will learn from each experience. You will also learn from the examples (good and bad) 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.



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.

Choose friends whose values you share and admire. Be open to those



Good friends can be with you for many years to come.

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.



Character & Leadership 327

# **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.



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.



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 Nation

Citizenship in Society

Citizenship in the World









hen 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

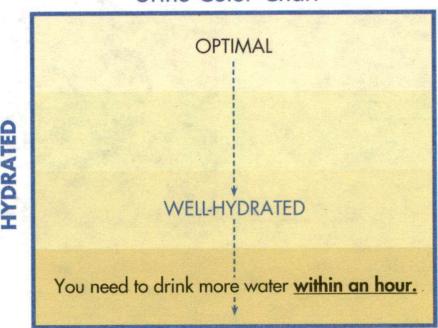
Protect yourself from dehydration by drinking plenty of fluids before you feel thirsty; waiting until you are thirsty to drink is waiting too long. Avoid caffeine because it can cause greater dehydration. Take in enough fluids so that your urine stays colorless. This is easy to remember to do on hot 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\*



# DEHYDRATED: You need to drink more water now. SEEK MEDICAL AID: May indicate blood in urine or kidney disease

# **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.



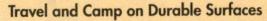
# **LEAVE NO TRACE**

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.



- 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**

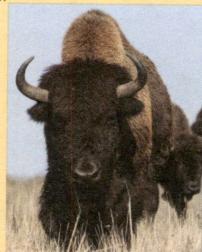
- Campfires can cause lasting impacts to the backcountry. Use a lightweight stove for cooking and enjoy a candle lantern for light.
- Where fires are permitted, use established fire rings, fire pans, or mound fires.
- Keep fires small. Use only sticks from the ground that can be broken by hand.
- Burn 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.

#### MINIMIZE CAMPFIRE IMPACTS

Many Scouts use stoves rather than campfires on all their camping trips. Without a wood fire at the center of



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.

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.



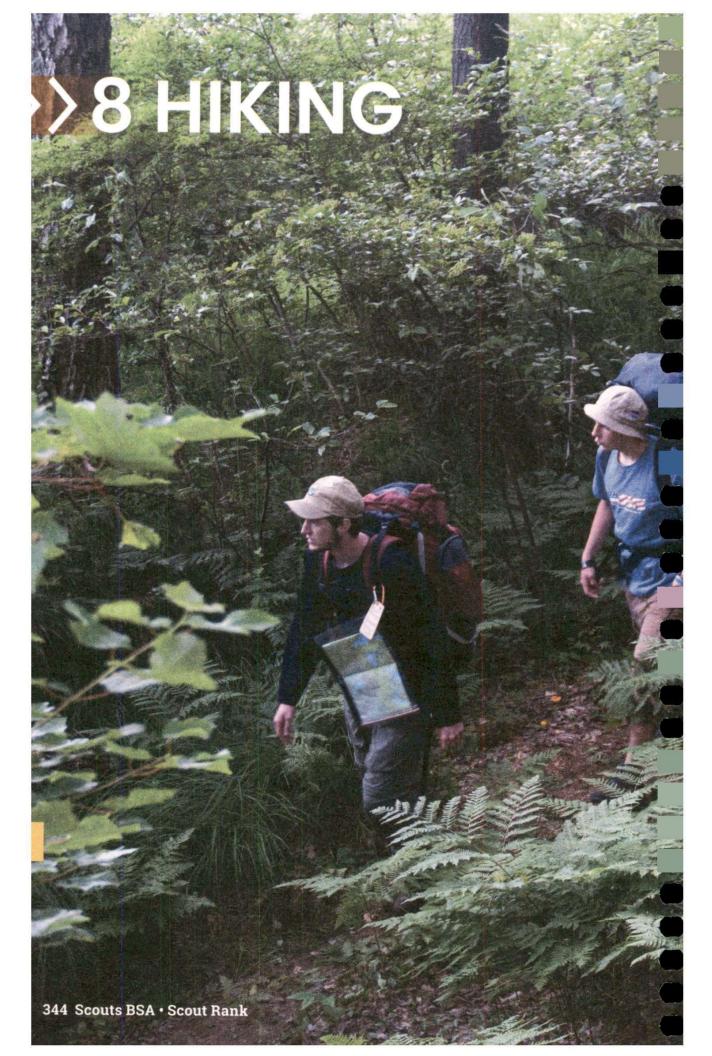
Virginia opossum

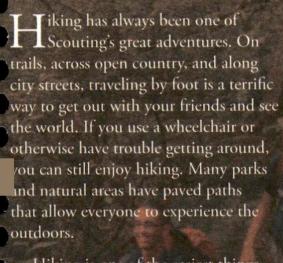
#### BE CONSIDERATE OF OTHER VISITORS



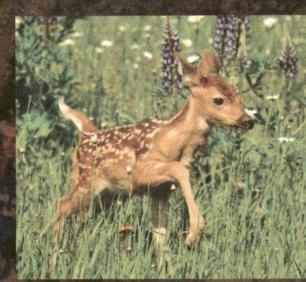
Scouts are not the only people who enjoy outdoor adventures. Be considerate of everyone you meet along the way. If you can, select campsites away from those of other campers. Trees, bushes, and the shape of the terrain can screen your camp from trails and neighboring campsites. Tents with muted colors 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.



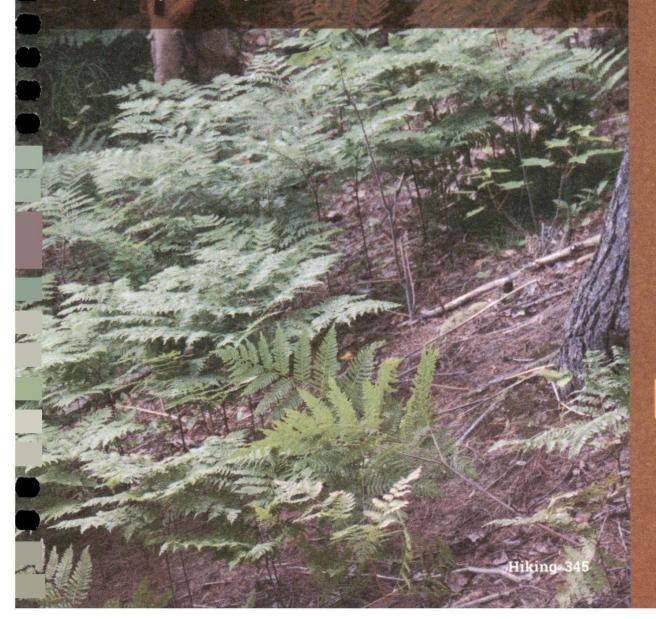


Hiking is one of the easiest things you can do in Scouting, but you still need to be prepared. You might



White-tailed deer fawn

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.



### **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.



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.



# 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 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.



Cotton

**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\*

4.4171

- ☐ 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 footgear are still popular today and can give your feet and ankles plenty of protection and

Many styles of modern outdoor footwear are made of nylon mesh and other manufactured materials.

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.

#### 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.

Hiking 355

**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?

ame of	f this trip:
VHERE	WHERE are we going, and how will we get there?
WHEN	WHEN will we leave and return?
WH0	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	<b>HOW</b> 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.** 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.

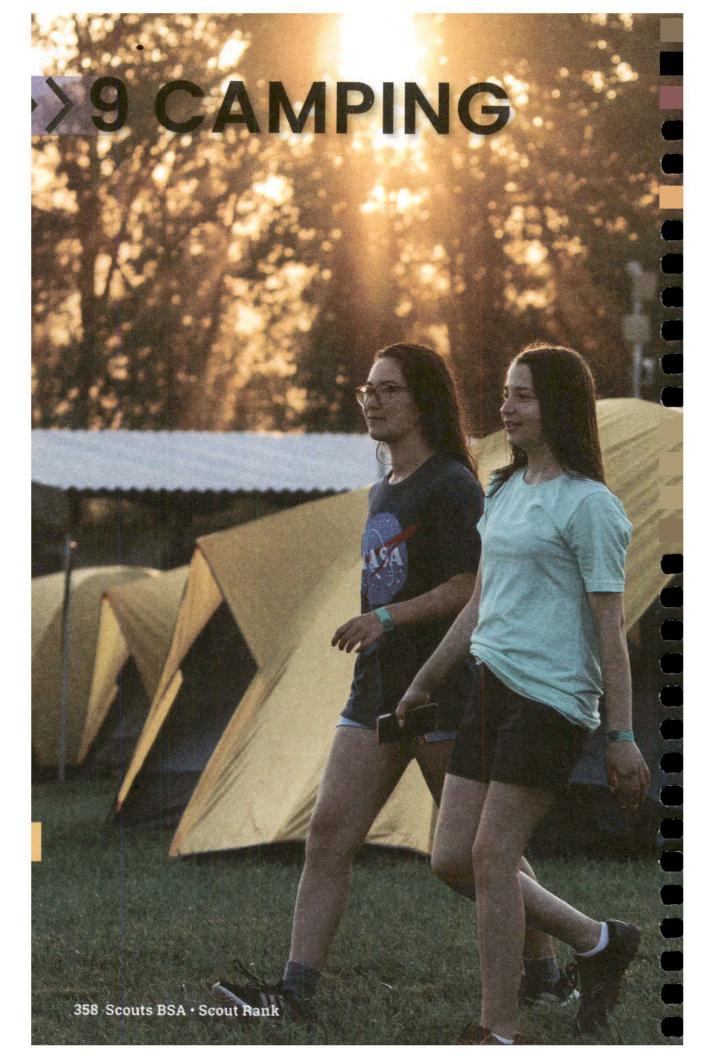
Be careful with fire even in emergencies. Take the time to build the fire correctly so that it does not spread. Never leave a fire unattended.

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.



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.



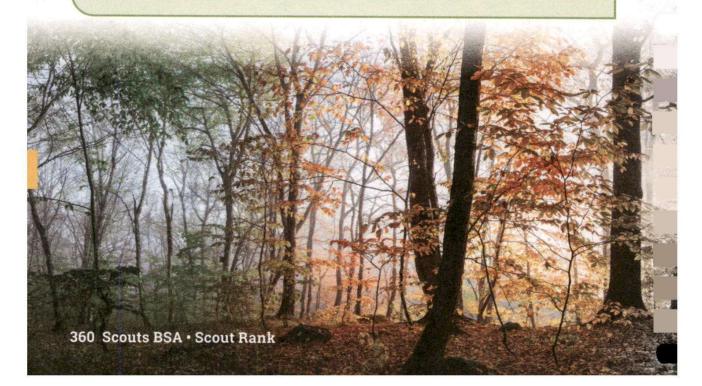
**FIRST CLASS** Participate in at least six overnight camping trips with your troop or patrol, and for five of them, spend the night in a tent that you pitched or other structure that you helped erect.



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.

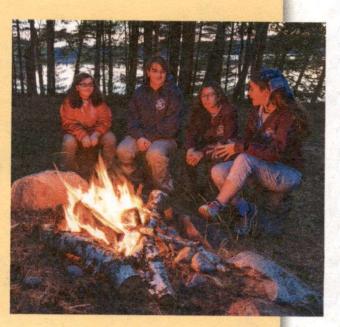
#### **Scout Vespers**

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 ■ Matches and fire starters ☐ Water bottle ☐ Pocketknife ☐ Sun protection ☐ Flashlight ☐ First-aid kit ☐ Map and compass ☐ Trail food ☐ Extra clothing Rain gear Clothing appropriate for the season and the weather Backpack with rain cover Sleeping gear Water ☐ Ground cloth ☐ Sleeping pad ☐ Sleeping bag bottle **Eating kit** ☐ Plate ☐ Eating utensils ☐ Bowl ☐ Cup Cleanup kit ☐ Dental floss ☐ Soap ☐ Toothbrush ☐ Comb ☐ Toothpaste ☐ Small camp towel Optional personal items Personal medications ☐ Watch Eating kit ☐ Fishing pole and gear ☐ Camera Pencil or pen ☐ Insect repellent ☐ Small notebook ☐ Swimsuit $\square$ Bible, testament, or prayer book, according to your faith ☐ Other gear for specific activities

e equipment you'll share with other rries about the same amount of we	r Scouts can be divided up so eight.	each of you
Patrol first-aid kit		
Tents, ground cloths, and stak	es	
Dining fly and stakes		Bi-co
50-foot nylon cord		
Cook kit containing		31100000
☐ Stove(s) and fuel		The state of the s
☐ Matches and/or butane lighted bags or containers)	ers (in resealable plastic	
☐ Pots and pans (matched to me ☐ Spatula, large spoon, and/or		Biodegradable ds) soap
Cleanup kit containing		
☐ Biodegradable soap	☐ Sanitizing rinse agent	
☐ Scouring pads (no-soap type)	☐ Trash can liners	
☐ Toilet paper	☐ Food strainer	STATE OF THE PARTY
Repair kit containing	So	couring pad
☐ Thread ☐ Needles	☐ Safety pins	
Group extras you may want to	o take	
☐ Hot-pot tongs		19
Plastic, collapsible water contr		
Water-treatment filter or tablets	ron	out air kit
Cutting board or two 4-by-4-fo food preparation surfaces	pot plastic sheets for	
☐ Spade		
Grill		×
☐ Patrol flag		
☐ Small American flag	Spade	
☐ Two 50-foot ropes and bear b	pags	
Other gear for specific activitie	es	

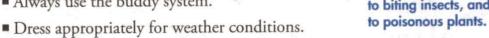
# SAFE CAMPING

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.



- 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.)

## Pack It In, Pack It Out

Whatever you take to camp must be carried home. Don't leave anything behindlitter, 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



Animal-proof storage box

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.



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.

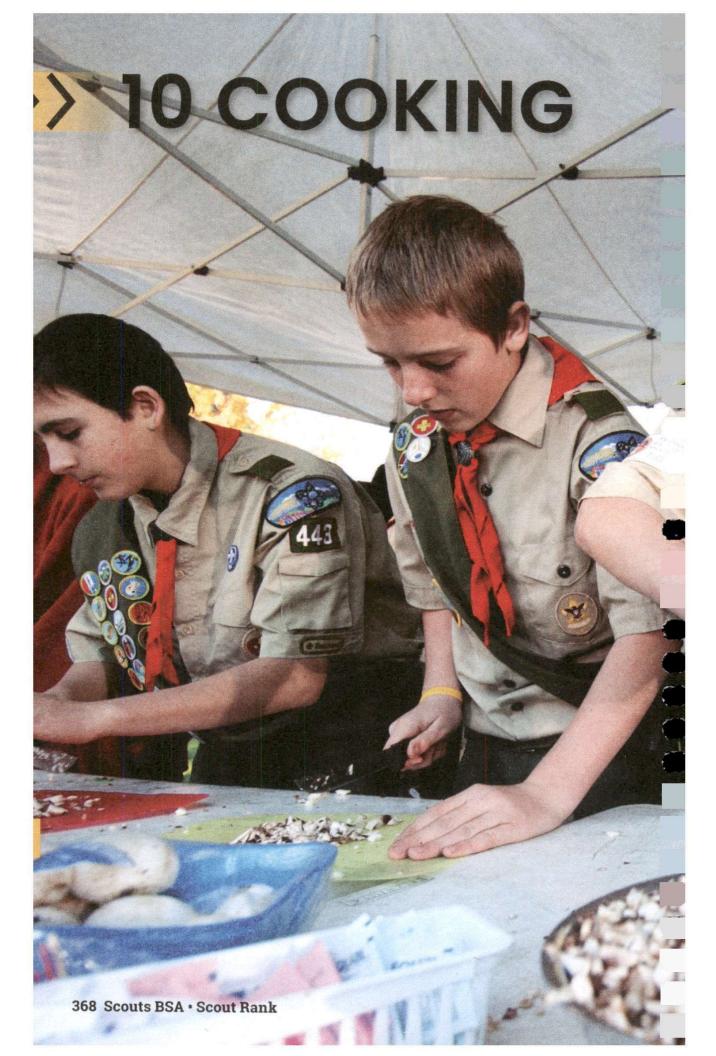
To help protect your food and other smellables, follow these tips.



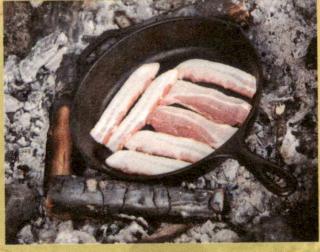
- Bring nylon cord and stuff sacks for hanging food from tree branches.
- Pitch tents away from the camp cooking area (200 feet or more is ideal) and leave nothing in tents except clean sleeping clothes, sleeping bags and pads, flashlights, and perhaps a book or two.
- Clean up crumbs and bits of spilled 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 foodsplattered shirts should be considered smellables even when you can't smell a thing.



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.



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.





# 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. Outof-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.



Ninety percent of food allergies in the United States are to eight foods: peanuts, tree nuts, milk, eggs, wheat, soy, fish, and shellfish.

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.

# **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**

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#### **BSA Volunteer Committees**

Program Development Committee: Pat Noack – chair, Jennifer Hancock – chair 2019-2022, and members of the Program Development Committee.

Outdoor Programs Committee: Dan Segersin – chair, and Andrea Watson – national director of Outdoor Programs, and the members of the Outdoor Programs Committee.

Camping and Trekking Committee: Russ and Rose Hunsaker – co-chairs and members of the committee.

Range and Target Sports Committee: Mark Abramson — chair and members of the committee.

Aquatics Committee: Terrence Budd – chair and members of the committee.

Conservation: Mike Huneke – chair and members of the committee.

Outdoor Ethics: Scott Anderson – chair and members of the committee.

Wheels and Board Sports: Warren Wenner – chair and members of the committee.

Fishing: Ben Jelsema – past chair and members of the committee.

Disability Awareness Committee: Brent Worley – chair and members of the committee.

Safe Scouting Committee: David Berry – chair, Richard Bourlon – national director of Health and Safety, Bev Singel, R.N. – Health Consultant, Dr. Tim Brox, and members of the committee.

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#### **Bobcat**

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Page 049-050:

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Page 057-059:

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Citizenship

Page 100:

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Page 156-157:

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(18)

Page 173:

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(3)

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#### Into the Wild

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#### Into the Woods

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Page 224-225:

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Page 232:

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#### **Knife Safety**

Page 234:

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Page 236-237:

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Page 240-241:

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Page 244-245:

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Photograph: Brian Payne

Page 260:

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Page 261:

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Page 262:

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Page 263:

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#### **Race Time**

Page 264:

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Page 266-269:

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(9)

Page 271:

Photograph: Michael Roytek

Page 272:

Photograph: Jesse Scoffield

Page 273:

Photograph: Michael Roytek

#### Summertime Fun

Page 274:

Photograph: Jesse Scoffield

Page 276:

Photograph: Michael Roytek (2)

Page 277:

Photograph: Jesse Scoffield;

Ryan Mitchell

#### Swimming

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Page 280:

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Page 282-292:

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(29)

Page 293:

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#### SCOUTS BSA SCOUT RANK

#### **Welcome to Scouts BSA!**

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#### **Adventure Ahead!**

Page 298:

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Page 299:

Photograph: Brian Payne

Page 300:

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Page 301: Photograph: Shutterstock (2);

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Page 302 ~

Photograph: Brian Payne

Page 304:

Photograph: Roger Morgan

Page 305:

Photograph: Brian Payne

Page 306:

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Page 307:

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Page 310:

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Page 311:

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Photograph: Michael Roytek (2)

Page 313:

Illustration: John McDearmon (2); Photograph: BSA File Photo

Page 315:

Photograph: BSA File Photo

Page 316:

Photograph: Michael Roytek (2)

Page 317:

Photograph: Brian Payne

Page 318:

Photograph: Randy Piland;

Michael Roytek

Page 319:

Photograph: BSA File Photo

Page 321:

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#### **Character & Leadership**

Page 323:

Photograph: Randy Piland

Page 325:

Photograph: Tara-Tamer; Randy

Piland

Page 326:

Photograph: Roger Morgan

Page 327:

Photograph: Michael Roytek

#### Citizenship

Page 328

Photograph: Daniel Giles

Page 329:

Photograph: Michael Roytek

Page 330:

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Page 331:

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First Aid

Page 333:

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**Outdoor Ethics** 

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Page 341:

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Page 342:

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Page 343:

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Brian Payne

Hiking

Page 344-245:

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Page 346:

Photograph: Randy Piland; BSA

File Photo

Page 347:

Photograph: Brian Payne;

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Page 348:

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Page 354:

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Page 356-357:

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Page 362:

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Page 363-364:

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File Photo (4)

Page 365:

Photograph: Brian Payne

Page 366:

Photograph: Brian Payne;

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Page 367:

Photograph: Randy Piland

Cooking

Page 368-369:

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Page 370:

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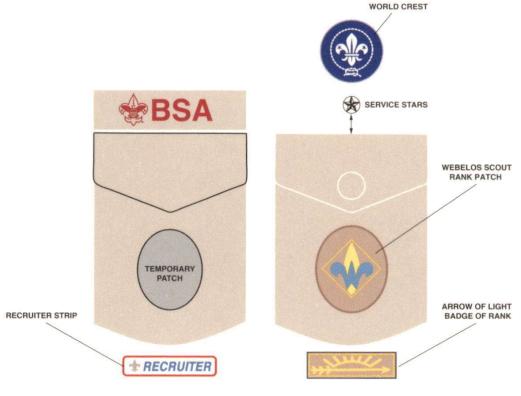
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# OFFICIAL PLACEMENT OF INSIGNIA





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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