



4TH GRADE

WEBELOS
SCOUT
HANDBOOK



WEBELOS



THIS BOOK BELONGS TO



BOY SCOUTS OF AMERICA



Q: Why did the Webelos Scout get so dizzy?

HA!



A: Too many Good Turns.

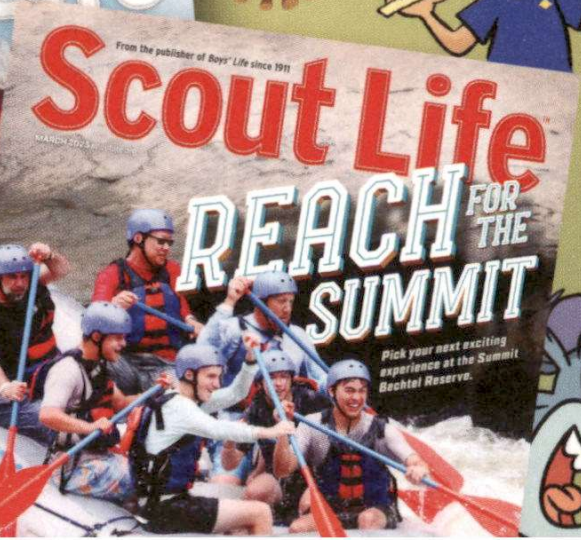


HA!
HA!

Impress your friends and family with the best jokes. Laugh at the funniest comics. Be inspired by the heroes of Scouts in Action. And learn how to get the most out of Scouting. All in

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WELCOME, CUB SCOUT!

Follow the trail to earn your Webelos badge of rank.

Bobcat is designed to be the first required Adventure.
Remaining Adventures can be earned in any order.



Fill in the diamond when you complete an Adventure.

WEBELOS

HANDBOOK



The Meaning of Webelos

The word Webelos (say WEE-buh-lows) has a special meaning within the BSA. Webelos is made up of the first letters of these words: **"WE'll BE LOyal Scouts."** Loyal means you'll keep the Scout Oath and try to live by the Scout Law.

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WELCOME TO THE WEBELOS ADVENTURE TRAIL

On the Webelos Adventure Trail, you'll explore the outdoors, make new friends, play games, and do things that only Cub Scouts do. As you're having fun, you'll complete a group of activities called **Adventures**. After completing each Adventure, you'll receive an Adventure pin that is worn on special ribbons called the Adventure Colors that attach to the right sleeve of your Cub Scout uniform shirt.

You may complete as many Adventures as you like, but to earn the Webelos badge of rank, you must complete all six required Adventures and at least two elective Adventures. When you complete fourth grade, you'll begin your Arrow of Light Adventure Trail.



CUB SCOUT PARENT GUIDE

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

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

GETTING STARTED AS A CUB SCOUT PARENT

1. **Find out who your contact person is for Cub Scouting.** The contact person may have a specific title like den leader or Cubmaster, or they just may be an active parent. This is the person whom you can contact to ask questions as you are getting started.
2. **Confirm the details of the den meetings,** pack meetings, and other activities. Add them to your personal and family calendars.
3. **Plug into the communication channel** that your pack and your den use. Each Cub Scout pack has a different way they communicate with parents; some have multiple ways. It may be as simple as a text message group, a communications app, or

a social media page. Make sure that the contact information you give to the Cub Scout pack is accurate.

- 4. Download the free Scouting app** from the Apple App Store® and Google Play™ store. The Scouting app gives parents an easy way to stay connected with their Cub Scout's progress and official records.
- 5. Read the remainder of this chapter**, Cub Scout Parent Guide, and the Essential Cub Scout Family Activities chapter.

WHAT IS CUB SCOUTING?

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

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

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

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

HOW CUB SCOUTING IS ORGANIZED

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

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



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

On the left sleeve of the Cub Scout uniform is a patch that identifies your local council. Some councils create geographic areas called **districts**. Districts are designed to provide service and support to local Scouting programs in the designated area. A district committee made up of volunteers does this work and is often supported by a staff member called a **district executive**.

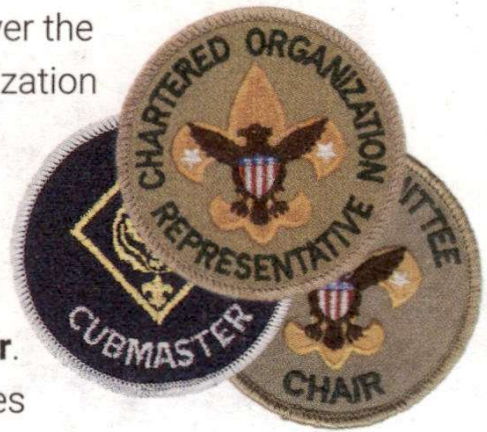


At the top of the pyramid – the largest part – are the local Scouting programs. Local councils partner with community organizations, called chartered organizations, to deliver Scouting

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

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

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



The **Cubmaster** is a volunteer, usually a parent, who coordinates the delivery of the program to the youth of all ages at the pack level, with the help of **assistant Cubmaster(s)** and other parents.

A Cub Scout pack is made up of small groups called **dens**. How dens are formed is up to the pack. Packs ultimately form dens in a way that best serves the families in the pack. Ideally, a den has about eight Cub Scouts who are all in the same grade and working on the same rank together. Dens can also be formed with different grades. A Cub Scout pack with three second graders (Wolves) and two third graders (Bears) may form a multi-rank den with those five Cub Scouts. Regardless of how dens are formed, Cub Scouts earn Adventures and the badge of rank only for their grade level.

The den is led by a volunteer **den leader** and assistant **den leader**, usually a parent. The den leader coordinates meetings and activities centered around Cub Scout **Adventures**. Adventures are made up of a group of activities. When the required activities for each Adventure are completed, the Cub Scout receives an Adventure pin that is worn on special ribbons called the Adventure Colors, as recognition for completing an Adventure.

Advancement refers to the progress your Cub Scout is making toward their badge of rank. Cub Scouts work only on the badge of rank associated with their grade level. For fourth grade, this is the **Webelos** badge of rank. Your Cub Scout earns their Webelos badge of rank by completing the six required Adventures and two elective Adventures. When they complete a badge of rank, they may not work on the next badge of rank until they have completed the grade level associated with that badge of rank. Cub Scouts may not work on a badge of rank for an earlier grade level.

ESSENTIAL CUB SCOUT FAMILY ACTIVITIES

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

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

ADVENTURE REQUIREMENTS TO DO AT HOME

Most Adventure requirements will be completed with your den or pack. The following requirements are designed to be done at home. Let your den leader know when you have completed them with your Cub Scout.

BOBCAT

Requirement 7 – At home, with your parent or legal guardian, do the activities in the booklet “How to Protect Your Children From Child Abuse: A Parent’s Guide.”

MY SAFETY

Requirement 1 – With permission from your parent or legal guardian, watch the *Protect Yourself Rules* video for the Webelos rank.

Requirement 2 – Identify items in your house that are hazardous and make sure they are stored properly. Identify where on the package it describes what to do if someone is accidentally exposed to the product.

MY FAMILY

Your den leader may ask that you complete all requirements for this Adventure at home. See the requirements on page 98.

WHAT ARE WEBELOS?

The Meaning of Webelos

The word Webelos (say WEE-buh-lows) has a special meaning. Webelos is made up of the first letters of these words: "WE'll BE LOyal Scouts." Loyal means you'll keep the Scout Oath and try to live by the Scout Law.



Webelos Tartan

A tartan is a pattern on a piece of cloth that has crisscrossed stripes in different colors. In America, tartan is also called plaid. In the country of Scotland, a tartan's unique colors and patterns can identify someone as part of a certain family. Scottish kilts are the most famous article of clothing made with tartan patterns.



Your Webelos neckerchief and hat are made with a tartan that has the colors blue, gold, red, and green. These colors represent the different programs of the BSA: blue and gold for Cub Scouting, red for Scouts BSA, and green for Venturing. The Webelos tartan is registered with The Scottish Register of Tartans and is a symbol that you're a Webelos Scout.

As a Webelos Scout, you are one of the older Scouts in the pack. Everything in the Webelos program is more challenging than the activities younger Cub Scouts in the pack do. You'll earn Adventure pins instead of Adventure loops, which you'll wear on the Adventure Colors, a set of ribbons worn on the right sleeve of your uniform.

As a Webelos Scout, you are someone who younger Cub Scouts may look up to. It is important that you do your best to follow the Scout Oath and the Scout Law. When you're with younger Cub Scouts, you should set a good example with your behavior. You may ask adult leaders if they need help with the younger Cub Scouts.

YOUR CUB SCOUT PACK

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



YOUR CUB SCOUT WEBELOS DEN

Your den is the group in which you make new friends, play games, and earn Adventures as you work toward earning your Webelos badge of rank. Each den is a little different. Most of your Cub Scout fun will be with your den. The adult leader of the den is called the **den leader**.



YOUR CUB SCOUT ADULT LEADERS

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

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



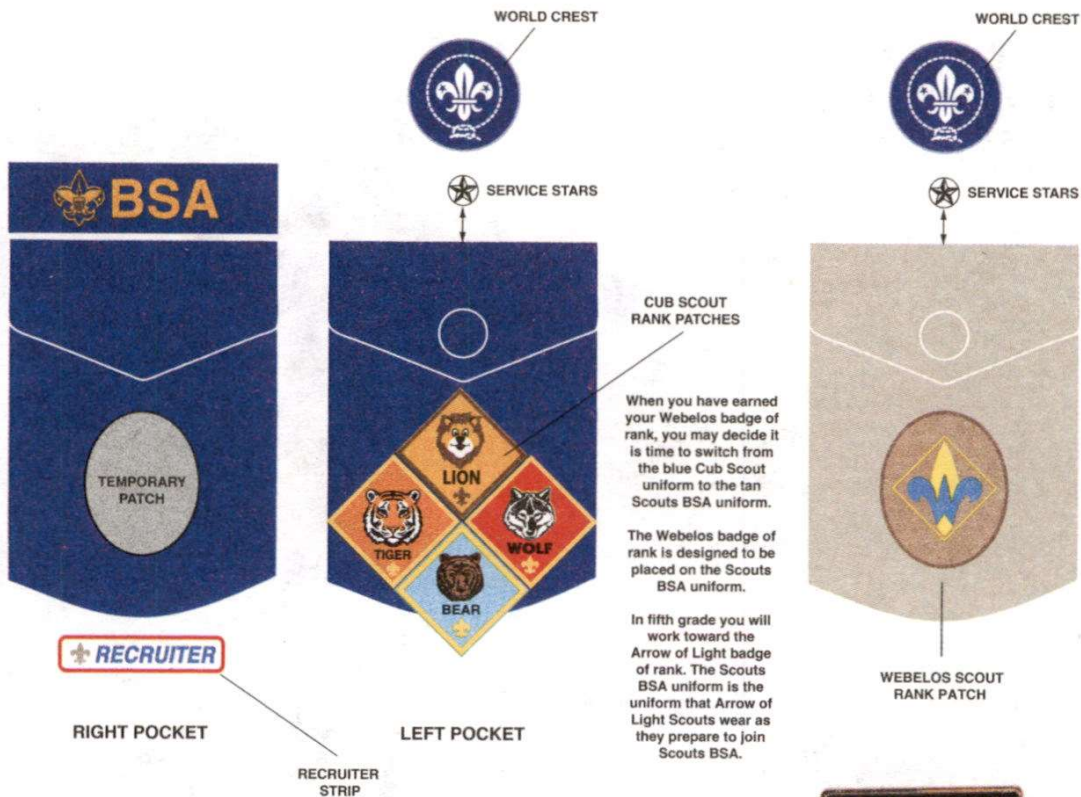
YOUR CUB SCOUT WEBELOS UNIFORM

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

The uniform includes the blue Cub Scout shirt, blue Cub Scout bottoms (shorts, pants, or skort), the Cub Scout belt, and Cub Scout socks. Each rank has a hat, neckerchief, and neckerchief slide with its own emblem and colors. The Webelos hat and neckerchief are plaid.

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





As a Webelos you also get to wear the Adventure Colors, a group of yellow, green, and red ribbons attached to a metal clasp. As you earn your Webelos Adventure pins, you'll attach them to the Adventure Colors. There is no order or specific color as to where you place the Adventure pins.





THE WEBELOS ADVENTURE TRAIL

The Cub Scout activities that you do with your den, pack, and family are called Adventures. Each Adventure has several things you do to earn that Adventure. These are called requirements. You'll have fun completing the requirements with the help of your den, pack, and family.

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

REQUIREMENTS

1. Get to know the members of your den.

Approved by

JGP

When you complete an Adventure, you are awarded a special Adventure pin that is worn on special ribbons called the Adventure Colors that attach to the right sleeve of your Cub Scout uniform shirt.

Most of the Adventures you do will be with your den in your den meetings. Your Cub Scout pack may plan some activities that will help you earn an Adventure. You can also complete Adventures at home with your family.

If you complete an Adventure or a requirement for an Adventure outside of your den meeting, let your den leader know so they can record it and make sure you are recognized for earning it.

To earn your Webelos badge of rank, you must complete the six required Adventures and at least two elective Adventures. You have 20 elective Adventures to choose from.

REQUIRED ADVENTURES

Must complete each of the 6 required Adventures



Bobcat
(Character & Leadership)



Webelos Walkabout
(Outdoors)



Stronger, Faster, Higher
(Personal Fitness)



My Community
(Citizenship)



My Safety
(Personal Safety Awareness)



My Family
(Family & Reverence)

ELECTIVE ADVENTURES

Must complete at least 2 elective Adventures



Aquanaut



Art Explosion



Aware and Care



Build It



Catch the Big One



Champions for Nature



Chef's Knife



Earth Rocks



Let's Camp



Math on the Trail



Modular Design



Paddle Onward



Pedal Away



Race Time



Summertime Fun



Tech on the Trail



Yo-yo



Archery*



BBs*



Slingshot*

* Range and target sports Adventures are special Adventures that can only be completed at approved events with qualified instructors.

THE BUDDY SYSTEM

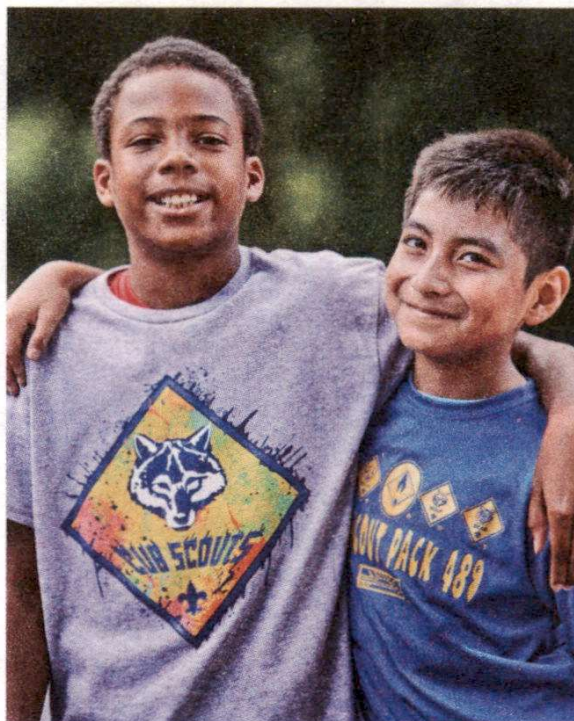
The buddy system is when two Cub Scouts work together, share, and keep each other safe. Your den leader decides how buddies are paired.

- ▶ Buddies are two Cub Scouts. If you have an odd number of Cub Scouts, you can have a buddy group of no more than three.
- ▶ Buddies are the same gender.
- ▶ Buddies can be no more than two years apart in age.

Having a buddy is especially important when you are:

- ▶ Doing an activity outdoors.
- ▶ Away from the group you are with. (For example, if you are at a den meeting and you must use the bathroom, you bring a buddy with you.)
- ▶ Doing an activity near or on the water.

When you have a buddy, you are not to let your buddy out of your sight. You are to be with your buddy at all times. As buddies you are friends. Remember the points of the Scout Law to be friendly, courteous, and kind to each other. You keep each other safe by following any rules or instructions for the activity. If your buddy gets hurt or needs an adult, you are there to help.



THE CUB SCOUT SIX ESSENTIALS

Cub Scouts love being outdoors. When you go outdoors for an Adventure, there are six things you should bring with you. These are called the Cub Scout Six Essentials. If something is essential, it's extremely important.

1. FILLED WATER BOTTLE

You always carry water with you when you are going outside. Your body loses water all the time, and you have to replace it. When it is hot outside, your body loses water by sweating, and when it is cold outside, your body loses water with every breath you take; when you can see your breath when it is cold outside, that is water your body has lost.

When your body has lost too much water, your body will tell you in different ways. The first is that you will feel thirsty. If you don't drink water, you may get a headache. If you continue to not listen to your body, you may end up getting a stomachache.

When outside, it is best to get in the habit of drinking water before you start, continuously drinking small amounts throughout your activity, and drinking when you are finished. Do not drink a lot of water at a time. It is best to drink small amounts a lot of times than to drink a large amount all at once.



How do you know if you're drinking enough water? One way is by checking your urine (pee). Your urine should be clear and light. If it's yellow, your body could use more water. If it's dark yellow, your body needs more water.



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

Water bladders are carried in backpacks. These are useful as they make drinking water easy and include a place to carry your other Cub Scout essentials.

It is best to keep only water in your water bottle or water bladder and make sure to wash it after each use.

2. FIRST-AID KIT

There are different kinds of first-aid kits. The one you carry should be small and simple. Your first-aid kit should include things you know how to use and may need, based on the activity. Always check your first-aid kit before going out to make sure it has what you need.



Your first-aid kit should have the following items:

- ▶ Personal medical items (for example, if you are allergic to bee stings, you may need to carry an EpiPen)
- ▶ Pads (to clean cuts before applying an adhesive bandage)
- ▶ First-aid cream (applied to a cut before putting on an adhesive bandage)
- ▶ Adhesive bandages (only a few in two or three different sizes; include latex free)

As you learn more about first aid, you will begin to carry more items in your kit.

3. WHISTLE

A whistle is for emergencies if you get separated from your group. If you lose sight of your group, use your whistle to let people know where to find you. Blow three loud, short blasts, counting to three in your head during each blast. Using a whistle in combination with the STOP method – Stay calm, Think, Observe, and Plan – will help people find you. You will learn more about STOP later in this handbook.



4. FLASHLIGHT

A flashlight is part of the Six Essentials because like a first-aid kit and whistle, it is better to have it and not need it than to need it and not have it.

There are a lot of options for a flashlight. When looking at different flashlights, remember that you have to carry it. There are some you carry in your hands, some that you wear on your head, and even some that you wear around your neck.



The next thing to consider about your flashlight is how it is powered. What type of batteries does it use? Do the batteries come with the flashlight? Is it easy to replace the batteries?

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

5. SUN PROTECTION

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



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

A hat can provide good sun protection if it covers not only your head, but also your ears and neck. If your hat doesn't cover your ears or neck, make sure to apply sunscreen to those areas.

When using sunscreen, always follow the directions on the container. Know if your sunscreen is waterproof or sweatproof. If it isn't, you'll need to reapply if you get wet or sweat a lot. Most sunscreen will wear off after a while, and you'll need to apply more if you're outside for a longer period of time.

6. TRAIL FOOD

When you are outside and active, your body will need energy. Pack a snack that is easy to carry, is easy to eat when you are moving, and will stay fresh. Here are some ideas for trail food. Be aware of food allergies.

GORP – Good Old Raisins and Peanuts was the first trail mix and was simply raisins and peanuts.

Raisins provided sugar and peanuts provided protein, two important nutrients for energy. Trail mix is now much more than just raisins and peanuts. Dried fruits, chocolate candies, and other nuts are just some items you can find in trail mix.

Dried meats like beef jerky and turkey jerky are another source of high-protein foods that make a good snack when outdoors. You can even find vegetarian jerky made from plant-based proteins.

Granola can be simply rolled oats, nuts, and honey baked together. Like trail mix, granola can be made from different ingredients. You can find a variety of granola bars at your grocery store.

When deciding on trail food, **remember what the temperature** will be like. If it is going to be warm outside, anything that has chocolate will melt, making it difficult to eat. If it is going to be 35 degrees or colder outside, you can consider packing cheese as your trail food.

When planning what to bring for trail food, make sure to **check with your den leader to see if anyone has a food allergy**, so you can plan to avoid those foods.



WHAT TO DO IF YOU GET LOST — STOP

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

STAY CALM. THINK. OBSERVE. PLAN.

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

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

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

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

THE OUTDOOR CODE

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

As an American, I will do my best to:

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

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

- **Be careful with fire.**

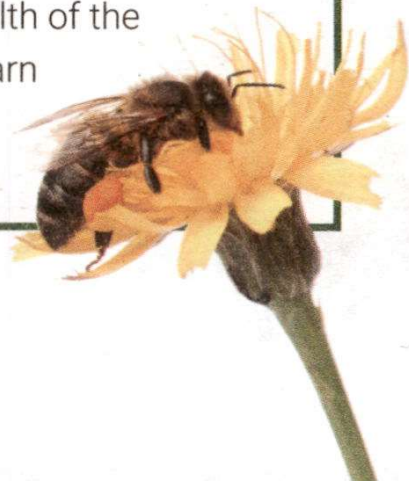
A Cub Scout may enjoy a campfire only with adult leaders. A Cub Scout knows not to play with matches and lighters.

- **Be considerate in the outdoors.**

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

- **Be conservation-minded.**

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



LEAVE NO TRACE PRINCIPLES FOR KIDS

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



1. KNOW BEFORE YOU GO

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

2. CHOOSE THE RIGHT PATH

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

3. TRASH YOUR TRASH

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

4. LEAVE WHAT YOU FIND

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

5. BE CAREFUL WITH FIRE

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

6. RESPECT WILDLIFE

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

7. BE KIND TO OTHERS

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

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



* 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.

BOBCAT

CHARACTER & LEADERSHIP



SNAPSHOT OF ADVENTURE



The Bobcat Adventure is the first required Adventure on your trail and will get you and your den off to a great start. Once you have completed the Bobcat Adventure, you can work on the other Adventures in any order.

REQUIREMENTS

Approved by _____

1. Get to know the members of your den. _____
2. Recite the Scout Oath and the Scout Law with your den and den leader. Describe the three points of the Scout Oath. _____
3. Learn about the Scout Law. _____
4. With your den create a den code of conduct. _____
5. Learn about the denner position and responsibilities. _____
6. Demonstrate the Cub Scout sign, Cub Scout salute, and Cub Scout handshake. Show how each is used. _____
7. At home with your parent or legal guardian, do the activities in the booklet "How to Protect Your Children From Child Abuse: A Parent's Guide." _____



- Required Adventure
- Scan for this Adventure page

REQUIREMENT 1

Get to know the members of your den.

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

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

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

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

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

Share with them some of the things you like to do in Cub Scouts.

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

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



REQUIREMENT 2

Recite the Scout Oath and the Scout Law with your den and den leader. Describe the three parts of the Scout Oath.



One of the most important parts of earning the Bobcat Adventure is understanding that all Scouts believe in and work to live by the Scout Oath and the Scout Law. We learn those words and believe in them as a way to live our lives and be good members of our families, our communities, and the Cub Scout pack.

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.**

In the Scout Oath, we make a promise to do our duty to three things.

Our first duty is to God and our country. You do your duty to God by following the teachings of your family and religious leaders. You do your duty to your country by being a good citizen and obeying the law.

Our second duty is to help other people at all times. Many people need help. A friendly smile and a helping hand make life easier for others. By helping other people, you're doing a Good Turn and making our world a better place.

Our third duty is to ourselves: to keep ourselves physically strong, mentally awake, and morally straight. This part of the Scout Oath is about taking care of yourself. You stay physically strong when you eat the right foods, get plenty of exercise, and get enough rest. You stay mentally awake when you work hard in school, learn all you can, and ask questions. You stay morally straight when you do the right thing and live your life with honesty.

REQUIREMENT 3

Learn about the Scout Law.



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

The Meaning of the Scout Law

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

A Scout is TRUSTWORTHY.

Tell the truth and keep your promises so people can depend on you.

A Scout is LOYAL.

Be true to your family, friends, Scout leaders, school, and country.

A Scout is HELPFUL.

Volunteer to help others without expecting a reward.

A Scout is FRIENDLY.

Be a friend to everyone, even people who are very different from you.



A Scout is COURTEOUS.

Be polite to everyone and always use good manners.

A Scout is KIND.

Treat others as you want to be treated. Never harm or kill any living thing without good reason.

A Scout is OBEDIENT.

Follow the rules of your family, school, and pack. Obey the laws of your community and country.

A Scout is CHEERFUL.

Look for the bright side of life. Cheerfully do tasks that come your way. Try to help others be happy.

A Scout is THRIFTY.

Work to pay your own way. Don't be wasteful. Use time, property, and natural resources wisely.

A Scout is BRAVE.

Face difficult situations even when you feel afraid. Do what is right despite what others might be doing or saying.

A Scout is CLEAN.

Keep your body and mind fit. Help keep your home and community clean.

A Scout is REVERENT.

Be reverent toward God. Be faithful in your religious duties. Respect the beliefs of others.

REQUIREMENT 4

With your den create a den code of conduct.



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

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

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

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

REQUIREMENT 5

Learn about the denner position and responsibilities.



A denner is a Cub Scout who helps the den leader during a den meeting. The den leader decides how the denner will be chosen and how long the Cub Scout will serve as the denner. Each Cub Scout should have a chance to serve as the denner for at least one meeting.

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

- ▶ Arrive early to help set up the meeting.
- ▶ Welcome everyone when they arrive at the den meeting.
- ▶ Lead the den in reciting the Scout Oath and the Scout Law.

- ▶ Carry the United States flag during the opening.
- ▶ Pick a game for the den to play.
- ▶ Help hand out supplies for an activity.
- ▶ Stay after the meeting to help clean up.

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

When you're the denner, you may wear the denner cord — a yellow cord that is worn over your left shoulder. When you're no longer the denner, you'll pass the denner cord on to the next denner.

The denner is not the leader of the den and is never to be put in charge of other Cub Scouts.

REQUIREMENT 6

Demonstrate the Cub Scout sign, Cub Scout salute, and Cub Scout handshake. Show how each is used.



The Cub Scout Sign

Make the sign with your right hand. Hold your arm straight up. The two raised fingers stand for the Scout Oath and the Scout Law. The fingers look like the sharp ears of the wolf ready to listen to Akela! Remember that Akela means "good leader" to a Cub Scout. Your den leader is Akela. Your mother or father or legal guardian is also Akela. At school, your teacher is Akela.

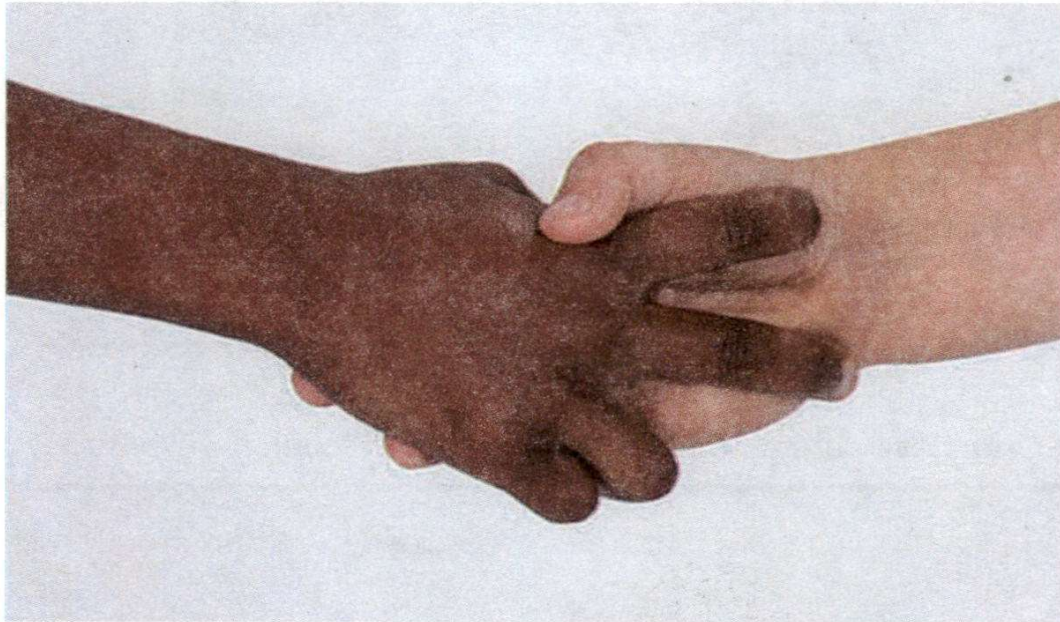
The Cub Scout Salute

Salute with your right hand. Hold your first two fingers close together. Touch your fingertips to your cap. If you're not wearing a cap, touch your right eyebrow. We use the Cub Scout salute to show respect to our country. Always use the Cub Scout salute



when you're in your Cub Scout uniform, both indoors and outdoors. If you're not in uniform, show respect to the flag by placing your right hand over your heart.

- ▶ We use the Cub Scout salute when the United States flag is being raised or lowered.
- ▶ We use the Cub Scout salute when the United States flag is passing by, like in a parade.
- ▶ We use the Cub Scout salute when we are saying the Pledge of Allegiance.



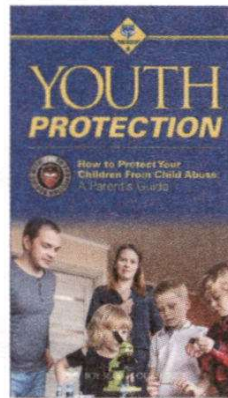
The Cub Scout Handshake

When you shake hands with another Cub Scout, do this: Hold out your right hand just as you always do to shake hands. But then put your first two fingers along the inside of the other Scout's wrist. This means that you help each other to remember and obey the Scout Oath and the Scout Law.

REQUIREMENT 7

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

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



CONGRATULATIONS!

You have completed your first required Webelos Adventure!

You may now earn any of the other Webelos Adventures in any order.



WEBELOS WALKABOUT

OUTDOORS



- Required Adventure
- Scan for this Adventure page

SNAPSHOT OF ADVENTURE



Some places you can only get to if you walk. Walking is great exercise and a fun activity to do with your den or family. In the Webelos Walkabout Adventure, you'll learn how to prepare for a 2-mile walk, what you should bring along, and what you should do if there is an emergency. And when you're ready, take your walk!

REQUIREMENTS

Approved by _____

1. Prepare for a 2-mile walk outside. Gather your Cub Scout Six Essentials and weather-appropriate clothing and shoes. _____
2. Plan a 2-mile route for your walk. _____
3. Check the weather forecast for the time of your planned 2-mile walk. _____
4. Review the four points of the BSA SAFE Checklist and how you will apply them on your 2-mile walk. _____
5. Demonstrate first aid for each of the following events that could occur on your 2-mile walk:
 - ▶ Blister
 - ▶ Sprained ankle
 - ▶ Sunburn
 - ▶ Dehydration and heat-related illness _____
6. With your den, pack, or family, go on your 2-mile walk while practicing the Leave No Trace Principles for Kids and the Outdoor Code. _____
7. After your 2-mile walk, discuss with your den what went well and what you would do differently next time. _____

REQUIREMENT 1

Prepare for a 2-mile walk outside.
Gather your Cub Scout Six Essentials and
weather-appropriate clothing and shoes.

To create your walk plan, work with your den and den leader and determine the following:

Walk location: _____

Walk distance: _____

Gathering place: _____

Gathering time: _____

Walk start time: _____

Walk finish time: _____

Is there a place of interest where you want to stop?: _____

Are there bathrooms on the route?: _____

If you're planning to use an existing trail, try to get a copy of the trail map. Study it ahead of time to learn more about the trail. If you're making up your own route, work with your den leader to create a map.

PACK YOUR CUB SCOUT SIX ESSENTIALS



Filled water bottle



First-aid kit



Whistle



Flashlight
(check the batteries)



Sun protection



Trail food

Are there other things you may need? Here are some items you may want to consider:

- ▶ Insect repellent
- ▶ Rain gear
- ▶ Map of the trail
- ▶ Compass or GPS
- ▶ Camera

When you go walking, you want to take care of your feet. High-top shoes or boots are best because they keep out rocks and sand and help protect your ankles. Your shoes should fit tightly around your heel but with room to wiggle your toes. If your shoes don't fit well, you can get blisters, and that's no fun. When you get new boots or shoes, always break them in by wearing them part of every day for a week or more before you go on a long walk or hike.

Socks are as important as shoes. They soak up moisture and cushion your feet. Hiking socks made of polypropylene or a wool/nylon blend work better than cotton socks.

REQUIREMENT 2

Plan a 2-mile route for your walk.



How fast can you walk? Most dens can expect to average about 1 to 2 miles per hour, including stops. This means your route will take 1 to 2 hours. If the place you're walking is flat and paved, it will be faster compared to a walk on a hiking trail that has a lot of hills.

How do you know that your route is 2 miles? If the route you take is an established trail with a map, you can look for the key and find the scale of the map. The scale will tell you how long the trail is in real life.

You could also look at your route on an online map with the help of your den leader or adult. There is usually a scale in the lower right corner to help you figure out the distance of your route. Remember that when you zoom in and out of the route, the scale will change.

REQUIREMENT 3

Check the weather forecast for the time of your planned 2-mile walk.

65°



Storms

H: 68° L: 42°

Before you leave for your walk, check the weather forecast. If the weather is going to be severe, change your plans and schedule the walk for another time. The National Weather Service issues a “storm watch” when conditions are right for severe weather and a “storm warning” when severe weather is occurring.

On your walk, it may rain, or it may be hot or cold. This is normal. Sometimes, however, the weather can change quickly and become dangerous. It’s important to be prepared for bad situations.

Floods

Flash flooding can occur when there is very heavy rain over several hours or steady rain over several days. Because flash floods can strike with little warning, you should never walk on low ground near streams or other bodies of water when rain is expected. Heavy rain miles away can turn into flash floods downstream. If flooding occurs, move to higher ground immediately. Stay out of streams, ditches, and other flooded areas. Adults should never try to drive through flood waters, no matter how shallow they may seem. Just a few inches of water can carry off a car!



Severe Thunderstorms, Lightning, and Tornadoes

Thunderstorms can be loud and scary. Sometimes they produce dangerous lightning and tornadoes. Lightning can strike 10 miles from a thunderstorm.



You should take shelter in a building or vehicle as soon as you hear thunder – even if the sun is shining overhead. Make sure you're not the highest object in the area. Avoid water, open areas, isolated trees, picnic shelters, and metal objects. If you're caught in the open, spread out 100 feet apart from everyone else and crouch down like you do when you play leapfrog.

Tornadoes are funnel clouds that can form in spring and summer thunderstorms. The best place to be if a tornado hits is indoors, either in a basement or closet or against an interior wall. If you're caught outside, get in a ditch, and lie as flat as possible.



REQUIREMENT 4

Review the four points of the BSA Safe Checklist and how you will apply them on your 2-mile walk.

SAFE is an acronym for the things we do in Scouting to keep everyone safe. Review these four points with your den leader and den and discuss how you will follow each of the four points.

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

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

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

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



REQUIREMENT 5

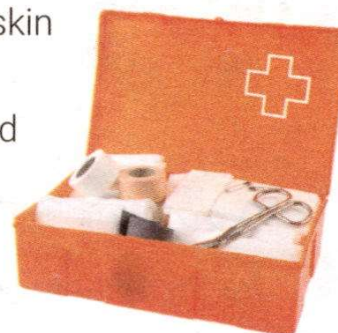
Demonstrate first aid for each of the following events that could occur on your 2-mile walk: blister, sprained ankle, sunburn, dehydration and heat-related illness.



Blisters on the Hand and Foot

Blisters are pockets of fluid that form as the skin's way of protecting itself from friction. Blisters on the feet are common injuries among hikers. You can avoid getting blisters by wearing shoes or boots that

fit well, changing your socks if they become sweaty or wet, and paying attention to how your feet feel. A hot spot is a warning that a blister might be forming. As soon as you notice it, cover the hot spot with moleskin. If a blister forms, you can protect it with a doughnut bandage. To make one, cut moleskin in the shape of a doughnut, and fit it around the blister. Shape several more doughnuts and stack them on top of the first. Cover with an adhesive bandage.



Sprained Ankle

The **RICE method (rest, ice, compression, and elevation)** is the appropriate treatment for most minor soft-tissue injuries.

Rest – Stop using the injured area.

Ice – Apply cold therapy for 15 to 20 minutes every four hours. Never apply ice directly to the skin; instead, place a thin cloth between the ice and the skin to prevent skin damage.

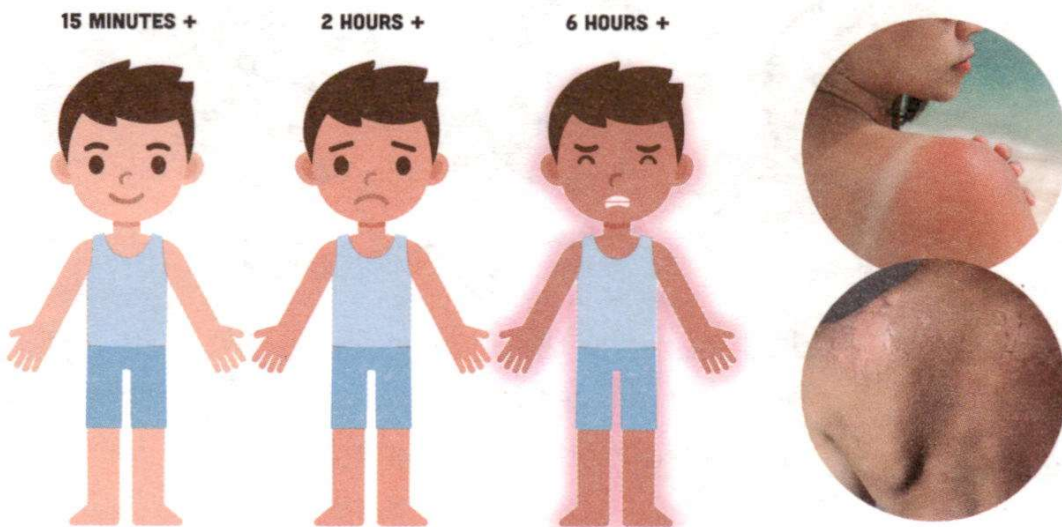


Compression — An elastic bandage can help prevent swelling and provide support. Remember: Do not wrap it so tightly that it cuts off circulation. Be sure to check for circulation, sensation, and motion after applying the wrap and periodically thereafter. Signs to check for include decreased sensations, throbbing pain that is different from the injury, tingling, bluish or mottled skin, or a decreased pulse. If any of these signs are present, the wrap should be released and reapplied.

Elevation — Raise the injured extremity above the level of the heart when possible. This will help reduce swelling.

Sunburn

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



sunburned, but no one is immune. You can prevent sunburn by using plenty of broad-spectrum sunscreen with a sun protection factor (SPF) of at least 30. Put it on 20 minutes before you go outside and every two hours while you're outside. Reapply if you are sweating a lot. A broad brimmed hat, long-sleeved shirt, and long pants will give you even more protection. You should wear sunscreen even on cloudy days. The ultraviolet radiation from the sun that causes a sunburn can pass through clouds. It can also bounce off water and snow and cause damage to your skin.

Dehydration

When you walk for a long time, you risk losing more water than you're taking in. When you sweat or breathe out more fluid than you take in, that's dehydration.

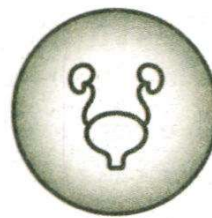
Signs of dehydration include:



Increased
thirst



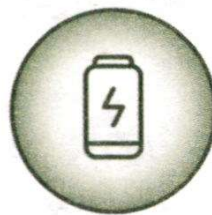
Headaches or
muscle cramps



Dark urine and/or
decreased urine production



Dry skin
and lips



Tiredness or
weakness



Confusion or
dizziness

Treating dehydration is easy: Drink water. The best thing to do is prevent it. Being dehydrated is not an accident. Drink water before you go on your walk and then drink small amounts as you walk.

REQUIREMENT 6

With your den, pack, or family, go on your 2-mile walk while practicing Leave No Trace Principles For Kids and the Outdoor Code.



There's nothing like a walk outdoors to remind Scouts of the importance of caring for the Earth. Scouts of all ages can make a big difference when they act responsibly in the outdoors. After all, there are millions of us out there! Just think about the good that happens when that many people promise to do their best to protect nature and keep our country beautiful. That's what the Outdoor Code and Leave No Trace Principles for Kids do — they remind us that even the little choices matter when it comes to nature.

As a Webelos Scout, you'll give extra attention to being conservation-minded, which means protecting natural resources. Two of the Leave No Trace Principles for Kids will help you do that: Know Before You Go and Choose the Right Path. When you plan ahead, you'll be familiar with the area and prepared for your outing. When you stay on existing trails, you'll protect the land around them. To be sure you'll have those words guiding you in this Adventure (and in the many, even greater adventures to come), take some time to memorize the Outdoor Code and Leave No Trace Principles for Kids.

You can find both the Outdoor Code and Leave No Trace Principles for Kids in the front of your handbook. When you've learned both, recite them for your den leader and discuss how you'll apply them on your walk.



REQUIREMENT 7

After your 2-mile walk, discuss with your den what went well and what you would do differently next time.



After your 2-mile walk, take some time before everyone leaves to talk about it. A good way to start the conversation is to use the Start, Stop, Continue method. This is something you could do for all your activities.

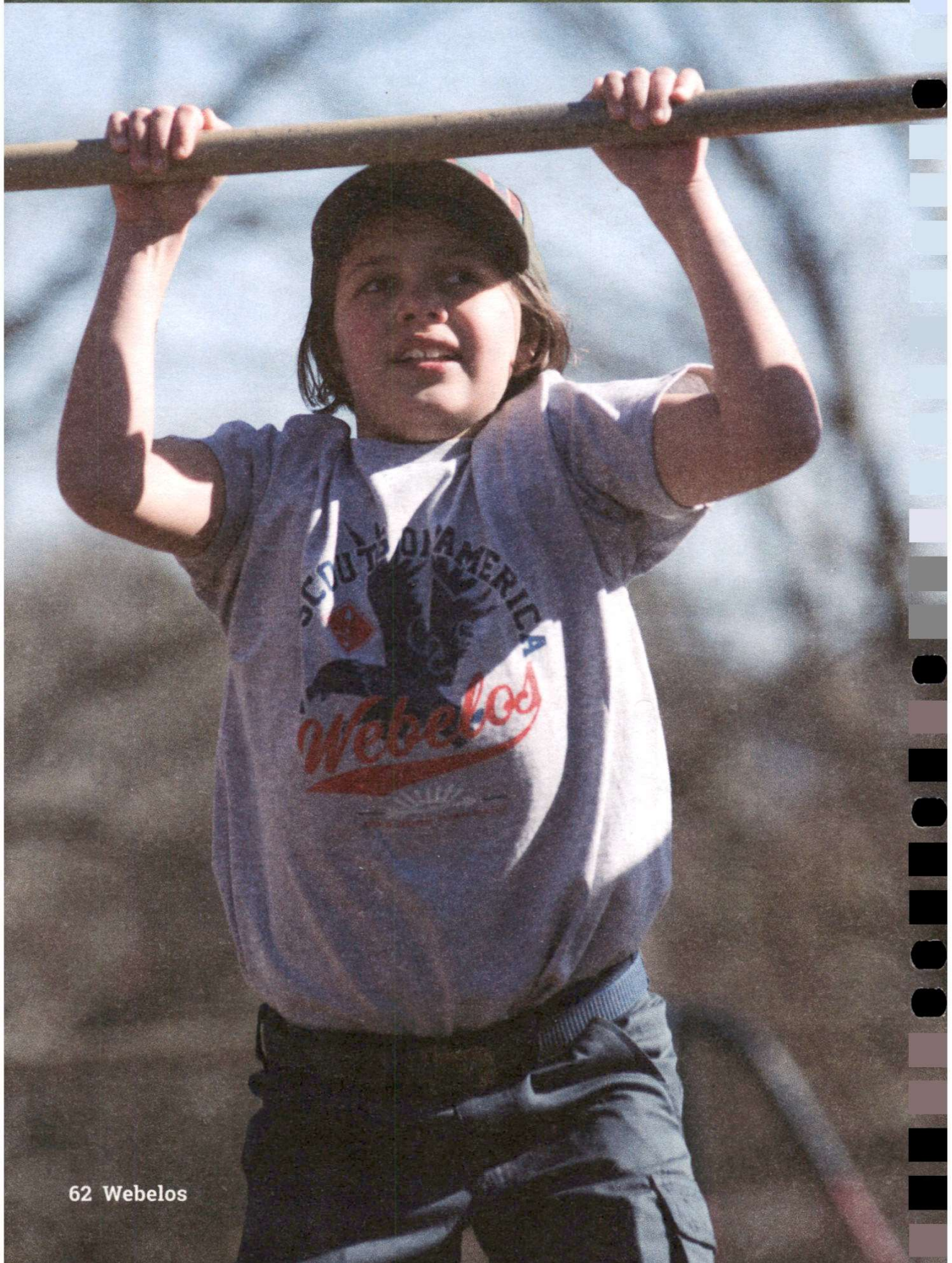
Start — Ask everyone if they were to do the walk again, what would they do differently or what would they start doing that they didn't do this time.

Stop — Ask everyone if there is something that they or the den did that they don't want to do again or what would they like to stop doing.

Continue — Ask everyone what they liked about the walk. If they did it again, what would they want to do the same way?

STRONGER, FASTER, HIGHER

PERSONAL FITNESS



SNAPSHOT OF ADVENTURE



The Stronger, Faster, Higher Adventure will help you understand how important it is to eat well, exercise, and get enough rest. Personal fitness is a balance of these three things. What you eat is the fuel your body turns into energy to keep it working and healthy. Exercise not only works your body, but it's also good for your mind. Your body needs rest, and so does your mind.

REQUIREMENTS

Approved by

1. With your den or family, plan, cook, and eat a balanced meal. _____
2. Be active for 30 minutes with your den or at least one other person in a way that includes both stretching and moving. _____
3. Be active for 15 minutes doing personal exercises that boost your heart rate, use your muscles, and work on flexibility. _____
4. Do a relaxing activity for 10 minutes. _____
5. Review your BSA Annual Health and Medical Record with your parent or legal guardian. Discuss your ability to participate in den and pack activities. _____



- Required Adventure
- Scan for this Adventure page

REQUIREMENT 1

With your den or family, plan, cook, and eat a balanced meal.



Great meals don't just happen; somebody has to plan them. Work with your family or other members of your den to plan a delicious and nutritious breakfast, lunch, or dinner.

Balanced Meals

A balanced meal is a way to give your body a variety of proteins, vitamins, minerals, and other nutrients it needs to grow and be active. It's always best to get the nutrition your body needs from foods.

A balanced meal will have two or more foods from different food groups. It's also helpful to know what types of nutrients the foods you're planning to eat have and look to balance that, too.

The United States Department of Agriculture sorts food into five different groups: fruits, vegetables, grains, protein, and dairy.

When you plan your meal, try to include foods from as many of the different food groups as possible.

Shopping for Ingredients

Make a shopping list and decide how much money you can spend. Then head to the grocery store and start shopping. Work to stay within your budget by checking prices as you go. If you need to adjust, that's OK. Here are some things to consider when you go shopping:

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

Food Safety

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

- ▶ Clean hands and surfaces frequently. Wash your hands with warm water and soap for at least 20 seconds before and after you handle food and after you use the bathroom. Wash your cutting boards, dishes, utensils, and countertops with hot, soapy water after you prepare each food item and before you go on to the next food.
- ▶ Don't cross-contaminate. That's a fancy way to say you should keep raw meat, poultry, seafood, and eggs separate from each other and from other foods in your shopping cart,

grocery bags, refrigerator, and ice chest. Also, never place cooked food on a plate that has held raw meat, poultry, seafood, or eggs.

- ▶ Cook to proper temperatures. Use a food thermometer, which measures the temperature inside cooked meat, poultry, and egg dishes, to make sure the food is fully cooked. Stick the thermometer into the middle of the food, and don't let it touch the pan. Most cookbooks include the correct temperatures for different kinds of food.
- ▶ Chill/refrigerate promptly. Never let food sit out for more than two hours before putting it in the refrigerator, freezer, or ice chest. Never thaw frozen food at room temperature. Instead, thaw it in the refrigerator, in cold water, or in a microwave oven using the defrost setting. Food thawed in cold water or in the microwave should be cooked immediately.
- ▶ Maintain proper temperatures. Keep cold foods in an ice chest or refrigerator until you're ready to use them. If you're going to use an insulated container to keep food warm, fill it with hot water, wait a few minutes, then empty it and fill it with hot food.

REQUIREMENT 2

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

One way to complete this requirement is to play a team sport with your den or family. Here are some team sports that can be played with as few as four players, 10 players, or more.

Soccer

Here are some basic rules for soccer. Soccer is usually played on a field that is 110 yards by 70 yards. Change the size of the field based on the number of players you have. A full soccer team has 11 players. Make it a shorter field if you have four players. Set up the corners of the field using cones or other objects, and set up the goals, one on each end. A typical goal is 24 feet wide, but you can adjust the width, especially if you don't have enough players to have a dedicated goalie for each team.

The game begins at the center of the field. The team that kicks off passes the ball to a teammate, typically using their feet. Only the goalie can use their hands to stop or pass the ball. As long as the ball stays in the field, the game is in play. In the basic soccer rules, the point of the game is to get the ball in the opposing team's goal. The team with the most goals after the specified time is the winner.



Ultimate Frisbee™

Ultimate Frisbee is kind of like soccer, but in this game, you must use your hands. It is played on a field that is 70 yards by 40 yards. Just like soccer, you can change the size of the field based on the numbers of players you have. A full team has six players. Set up the corners of the field using cones or other objects.



At the two ends of the field, set up an end-zone area, like a football field has, where crossing the line earns the team a point, but going beyond another line is out of bounds.

The game begins with each team on opposite sides of the field. The starting team throws the Frisbee toward the other team, like a kickoff. The other team can either catch it or allow it to land on the ground.

To move the Frisbee down the field, one player holds the Frisbee and cannot move their feet. They may have one pivot foot; that means they can move one foot but not the other. They throw the Frisbee to a player on their team and that player must catch it. If they don't, the other team picks it up where it landed. The objective is to move the Frisbee down the field and score a point by throwing it into the end zone and having a teammate catch it. The team with the most points at the end wins.

REQUIREMENT 3

Be active for 15 minutes doing personal exercises that boost your heart rate, use your muscles, and work on flexibility.

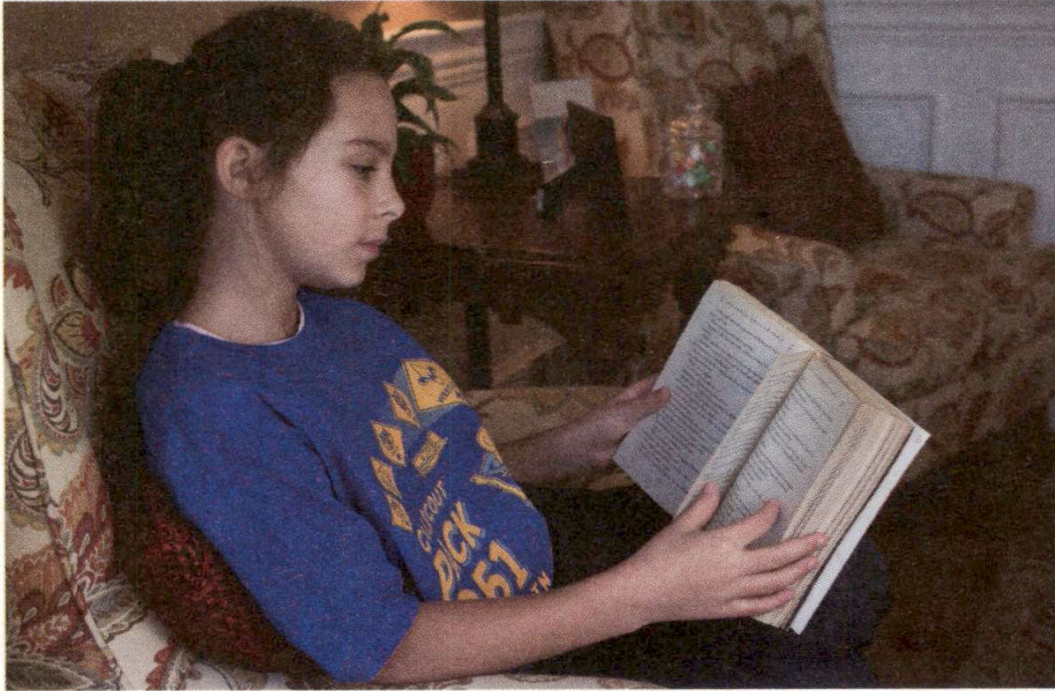


Personal exercises are things you can do on your own. Trying different types of exercises will help you find the ones you like the best. You should enjoy your personal exercises. You may like to walk, jog, or run. You may find that yoga is for you. Personal exercises can also be things you do to practice for a team sport like going to a batting cage or hitting a tennis ball against a practice wall.



REQUIREMENT 4

Do a relaxing activity for 10 minutes.



Being active is important. Just as you aim to eat a balanced meal, you also want to balance your activity with rest. Finding time to do something that relaxes you helps your body and mind. As with personal exercise, you want to find something that you enjoy. To do that, you should try different things.

The activity shouldn't get you excited or angry or frustrated. If you find it does these things, you should try something else.

Here are some ideas:

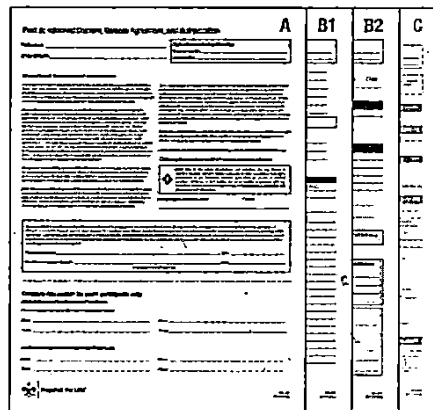
- ▶ Draw or color.
- ▶ Read a book or write a short story.
- ▶ Play music or practice an instrument.



REQUIREMENT 5

**Review your BSA Annual Health And Medical Record with your parent or legal guardian.
Discuss your ability to participate in den and pack activities.**

Everyone who participates in a Cub Scout activity is required to have a BSA Annual Health and Medical Record on file with the pack. You and your parent(s) or legal guardian can learn more about the BSA Annual Health and Medical Record by scanning the QR code.

A thumbnail image of the BSA Annual Health and Medical Record form. The form is divided into four main sections: A, B1, B2, and C. Section A is the largest and contains various text boxes and checkboxes for personal information and medical history. Sections B1, B2, and C are narrower vertical columns on the right side of the form, likely for emergency contacts and other specific details. The form is titled 'Part A: BSA Annual Health and Medical Record'.

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

The form has general information like how tall you are. It also shows who to contact if there is an emergency and your parent or legal guardian is not with you. It also includes your health history.

Discuss with your parent or legal guardian if there is something about your health that could prevent you from participating in an activity or that an adult leader should know. Some Cub Scouts may be allergic to bee stings and carry an EpiPen. This is something that an adult leader in Cub Scouts needs to know. Other things could include food allergies or physical conditions. Knowing this type of information will help your adult leaders keep you safe.

MY COMMUNITY

CITIZENSHIP



SNAPSHOT OF ADVENTURE



This Adventure is all about being a good citizen. You'll learn about the different types of voting and how our national government maintains the balance of power. You'll meet with a local politician and discuss how they were elected and their role in government.

REQUIREMENTS

Approved by

1. Learn about majority and plurality types of voting. _____
2. Speak with someone who is elected to their position. Discover the type of voting that was used to elect them and why. _____
3. Choose a federal law and create a timeline of the history of the law. Include the involvement of the three branches of government. _____
4. Participate in a service project. _____



- Required Adventure
- Scan for this Adventure page

REQUIREMENT 1

Learn about majority and plurality types of voting.

With your den or family, take a vote on what you'd rather have for dinner: pizza or tacos? If you don't like either pizza or tacos, don't worry — this is just a pretend vote. Everyone needs to pick one.



As a result of this vote, three things could have happened.

1. Pizza got the most votes.
2. Tacos got the most votes.
3. There was a tie: Pizza and tacos got the same number of votes. This could happen if there are an even number of people voting.

How do you feel when the thing you voted for gets chosen?

How do you feel when the thing you voted for doesn't get chosen?

When there is a tie, how do you decide what to have?

Majority Vote

In a majority voting system, the winner is the option that receives more than half of the votes. In our example of pizza and tacos, there are only two items to choose from. Chances are good that one of them will be chosen by more than half the people voting.

Plurality Vote

Sometimes, there are more than two choices to pick from. Let's look at our last example, but with a small change. This time there are four choices for dinner: pizza, tacos, hamburgers, or chicken

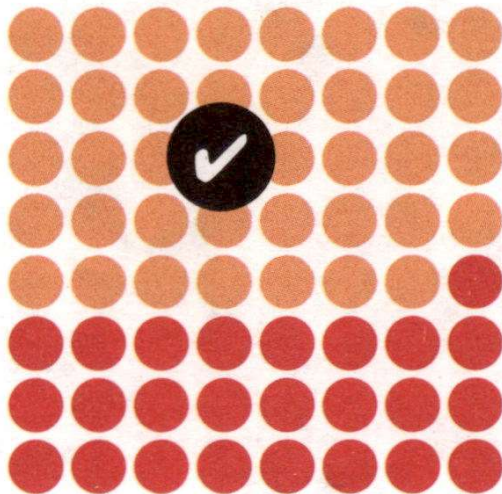
nuggets. We know there are a lot of different types of these foods, but don't get too focused on what type — this is just for pretend. Have everyone vote.

Now the rules for what wins may be different. Will the winner need to have more than half the people voting for it, or will the winner be the one that gets the most votes? Since there are four choices, there is a chance that none of the choices will have more than half the people vote for it.

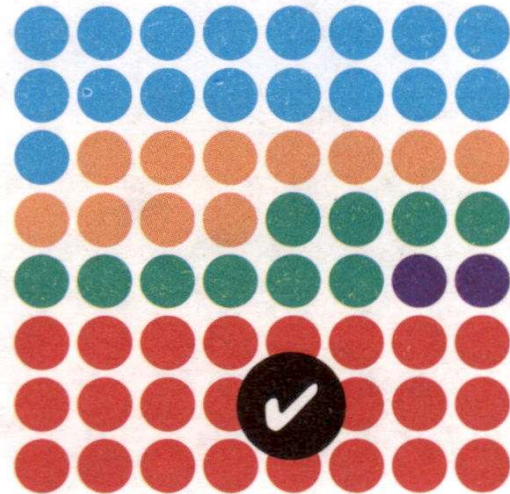
Consider an example of an outcome with 12 people voting. Here are the results of the vote: Tacos — 4, Pizza — 3, Hamburgers — 3, and Chicken nuggets — 2.

When something only needs to have the most votes and not a majority of them, it is called a plurality. Pluralities are often used when there are more than two options to pick from. In our example above, tacos got more votes than any other option. If you want to get a majority you may limit the choices to just two

MAJORITY



PLURALITY



CANDIDATES



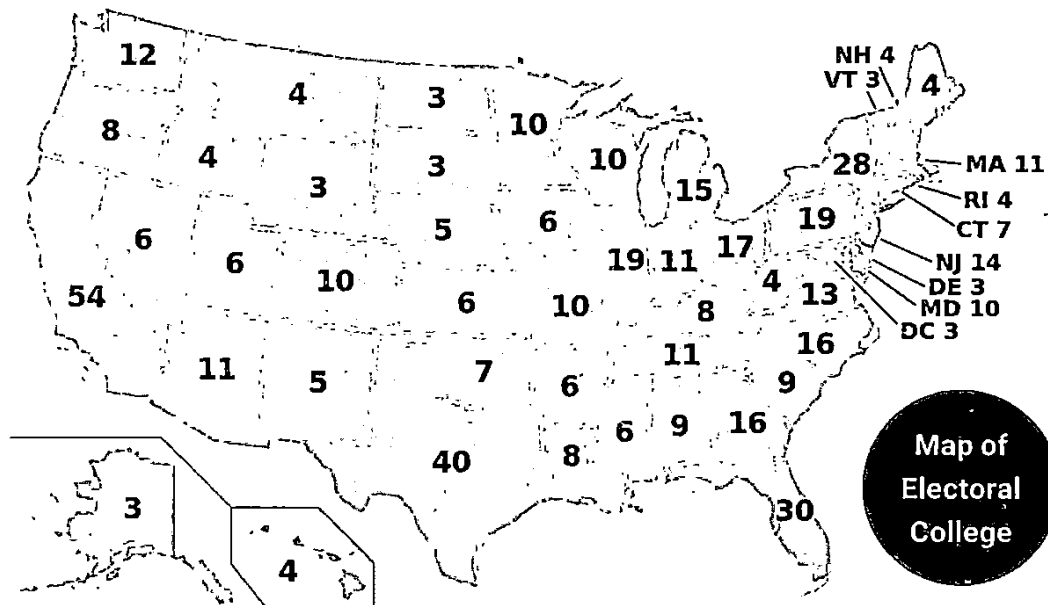
options or you can keep voting until you get a majority. Because getting a majority of people to agree on one thing can be difficult, plurality voting can make it easier to arrive at a decision.

When we elect people to local government positions, some communities require candidates to receive a majority vote in order to win the election, while others require a plurality because there may be more than two candidates. Running an election requires a lot of resources and a plurality vote is less likely than a majority vote to end in a tie and require another election.

Electoral College

The president of the United States is elected by the Electoral College. Each state is given a number of votes that is based on their population. Each state has the right to decide how its votes get used.

In a presidential election, individual citizens cast a vote that goes to their state. The state then takes the votes of its citizens and uses its Electoral College votes toward the election of the president. This process was developed to protect states that have smaller populations. It uses a combination of majority and plurality voting.



REQUIREMENT 2

Speak with someone who was elected to their position. Discover the type of voting that was used to elect them and why.



Each community chooses, or elects, adults to do specific jobs. Wherever you live, there are adults that are chosen, or elected, by the community to do a specific job. They may be responsible for making local laws and/or enforcing them. Your den leader may invite someone to your den meeting, or you may (with your family) meet with someone who was elected to their position.

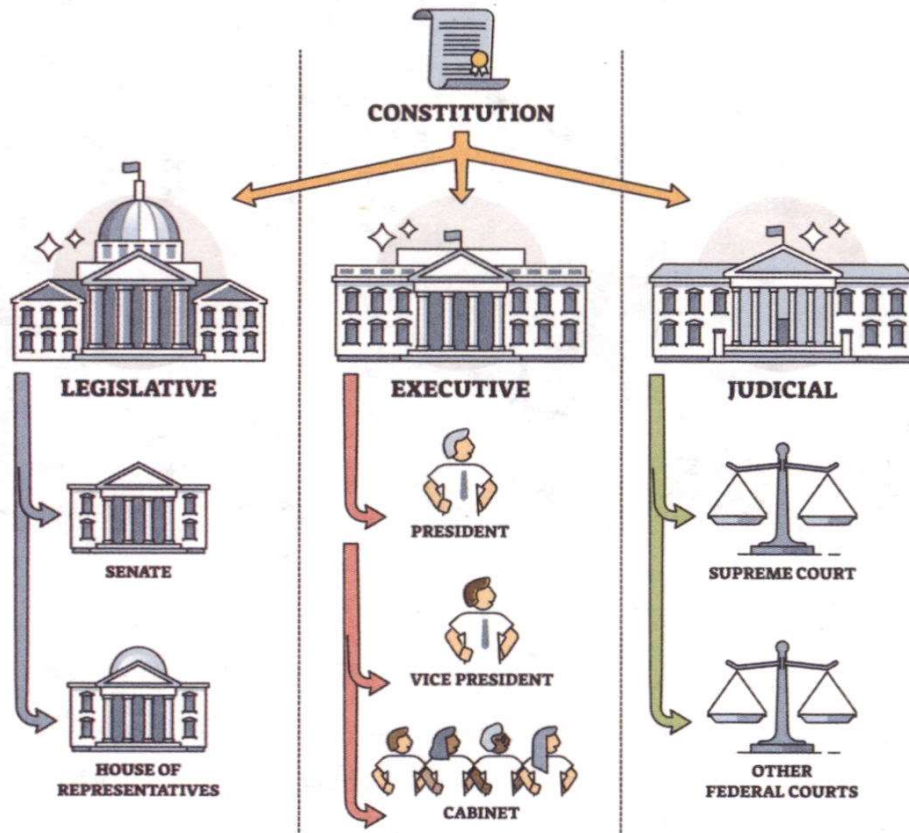
Here are some questions you may consider asking:

- ▶ When did you first get elected?
- ▶ How often is the election held for your position?
- ▶ Is there a limit on how long you can be in the position?
- ▶ Were you elected by a majority or plurality?
- ▶ How many votes did you receive?
- ▶ What percentage of people eligible to vote in your election actually voted?

REQUIREMENT 3

Choose a federal law and create a timeline of the history of the law. Include the involvement of the three branches of government.

BRANCHES OF GOVERNMENT



There is a process for something to become a law for the whole country. To start off, there are three branches of the federal government, and each has a responsibility when it comes to making new laws.

Executive Branch

The executive branch of the government is the Office of the President of the United States. This branch is led by the president of the United States, but the president does not do it alone. There are many departments and people that work for the executive branch.

Legislative Branch

The legislative branch is where the citizens of the United States are represented. The legislative branch of the United States government is called Congress. Congress is made up of two different chambers, the House of Representatives and the Senate. The House of Representatives has 435 members that are elected from local areas called congressional districts. Congressional districts change often to reflect the changes in population. The United States Senate has 100 members, two senators for each state. This balance provides a representation of local populations and equal representation for each state.

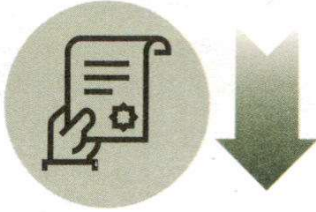
Judicial Branch

The judicial branch is led by the United States Supreme Court and also includes other federal courts. The U.S. Supreme Court is the final decision maker on whether something is legal. They interpret the U.S. Constitution and how laws are to be followed. The United States Supreme Court is made up of the chief justice and eight associate justices for a total of nine justices. The odd number of judges helps to prevent a tie when making decisions.

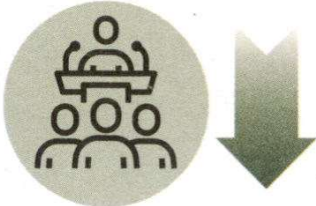
No one branch of the United States government is stronger or more powerful than the others. To keep power in balance, the U.S. Constitution, which outlines how our government is to function, has rules and laws in place. These are referred to as "checks and balances."

Checks and Balances in Action

Each branch of the government has a responsibility for making laws for the whole country. The legislative branch has the first responsibility when it comes to making laws. This starts with identifying the need to have a law. This could come from a group of citizens who talk to their representatives in Congress.



A bill is written and introduced by its sponsor, a member of the House of Representatives or the U.S. Senate



Representatives or senators meet in small groups to research, debate, and propose changes to the bill.



A final version of the bill is voted on by the full House of Representatives or the Senate.



The president has 10 days to sign the bill into law or veto it.

Their representative will talk to other members of Congress in either the House of Representatives or the Senate. If there is enough interest, the idea is drafted into what is called a bill. A bill is the first step to something becoming a law. The bill is shared with other members of the legislative branch. When there is enough interest in the bill, it is put to a vote. A bill must pass both the House of Representatives and the Senate to move to the next step.

Once both chambers of Congress have passed a bill, it is given to the president of the United States to approve. If the president approves it, the bill now becomes a law.

The president can decide not to approve a bill (this action is called a veto). Congress may then choose to override the president's veto to make the bill a law. Both of these are part of the checks and balances system.

When something is put into law, the judicial branch of the government then has the responsibility to ensure that the law does not break the rules that are part of the United States Constitution or break other federal laws. This is part of the judicial branch's system of checks and balances.

Now that you know about the branches of government and how a bill becomes a law, investigate a federal law, and build a timeline of the things that happened to make it a federal law. Include how each branch of the government was involved.

REQUIREMENT 4

Participate in a service project.



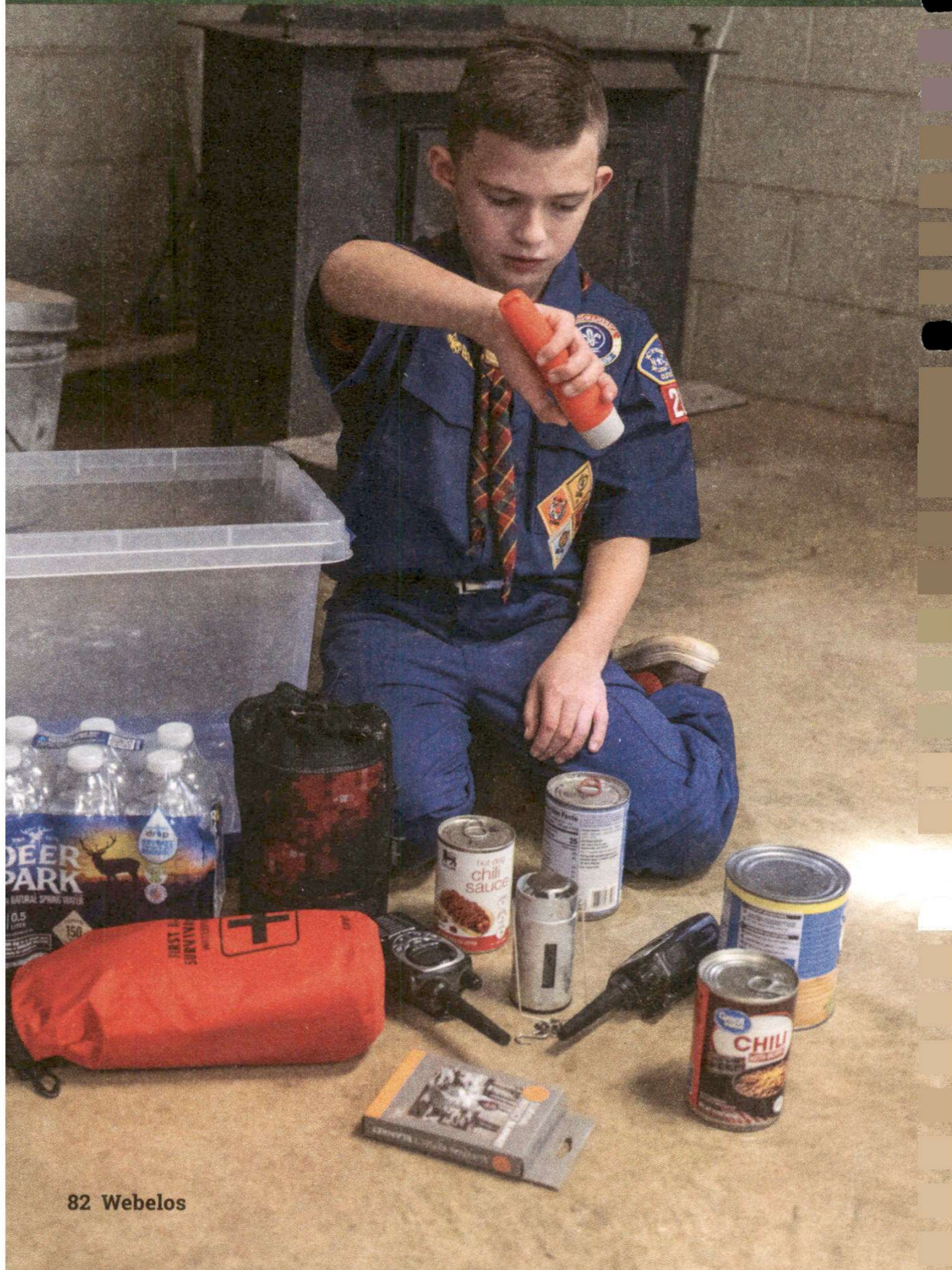
Being a good citizen of the United States requires action. Some examples of actions are understanding what the issues are in your community, voting, and serving those in need. It means doing what you can to make where you live a better place.

With your den, pack, or family, participate in a service project. This can be one that is planned by your den, pack, or family, or it can be a project that is organized by your community.

Maybe your den, pack, or family can contact a food bank or a local shelter that helps families who are homeless find a new place to live. Ask them what types of things they need to help others, then conduct a drive for those things to donate to the food bank or shelter.

MY SAFETY

PERSONAL SAFETY



SNAPSHOT OF ADVENTURE



In this Adventure, you will strengthen your ability to keep yourself safe with the *Protect Yourself Rules* and learn ways to keep your home and meeting space safe.

REQUIREMENTS

Approved by _____

1. With permission from your parent or legal guardian, watch the *Protect Yourself Rules* video for the Webelos rank. _____
2. Identify items in your house that are hazardous and make sure they are stored properly. Identify where on the package it describes what to do if someone is accidentally exposed to the product. _____
3. Identify ways you and your family keep your home or your meeting space safe. _____
4. Complete a "Be Prepared for Natural Events" worksheet for at least two natural events most likely to happen near where you live. _____



- Required Adventure
- Scan for this Adventure page

REQUIREMENT 1

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

In the *Protect Yourself Rules* video for Webelos, you'll meet Darius and Mia, who will share with you their experiences and the six "Protect Yourself Rules."



You can watch the video by going to scouting.org or by following the QR code below.



The Protect Yourself Rules



REQUIREMENT 2

Identify items in your house that are hazardous and make sure they are stored properly. Identify where on the package it describes what to do if someone is accidentally exposed to the product.

There are many different types of soap. There is soap for our hands, our faces, our dishes, and our clothes. Soap keeps us and the things we touch clean, but even soap can be harmful when not used properly. Soap is made for the outside of our body, but if soap gets inside our body, it is harmful.

Take a look around where you live with your parent or legal guardian. Find items that are hazardous. Here are labels to look for and what they mean:



This symbol means the contents are flammable. They can easily catch fire or cause a fire.

This symbol means the contents are poisonous. If you think someone has been poisoned, call the Poison Health Line at 1-800-222-1222. You will be connected to your local poison control center. Make sure you have the container of the product that caused the poisoning.





This symbol means the contents are corrosive, meaning the contents can cause metals and other materials to break down. If exposed to a corrosive material, it will cause your skin to burn.

All hazardous products are required to have a warning label and directions on what to do if exposed.

Hazardous products must be stored in the right place.

Flammable materials should be stored outside in a metal cabinet. This reduces the chances of a fire spreading if the product catches or causes a fire.

Corrosive items should be kept in their original containers. They are best stored in a plastic bin to contain the product in case it leaks or spills.

All hazardous items should be stored in a place that is out of reach of small children and in a place where animals cannot get to them. High places or places with a latch or lock are best.

REQUIREMENT 3

Identify ways you and your family keep your home or your meeting space safe.

With your den or family, take a walk around your meeting space or home, and complete the following checklist:

THE MEETING ROOM

YES NO

- | | | |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | Large enough? |
| <input type="checkbox"/> | <input type="checkbox"/> | Well heated or cooled? (between 62°F and 70°F) |
| <input type="checkbox"/> | <input type="checkbox"/> | Well ventilated? |
| <input type="checkbox"/> | <input type="checkbox"/> | Dry? |
| <input type="checkbox"/> | <input type="checkbox"/> | Clean? |
| <input type="checkbox"/> | <input type="checkbox"/> | Windows in good condition? |
| <input type="checkbox"/> | <input type="checkbox"/> | Floor in good condition? |
| <input type="checkbox"/> | <input type="checkbox"/> | Adequate lighting? |
| <input type="checkbox"/> | <input type="checkbox"/> | Hand-washing facility? |
| <input type="checkbox"/> | <input type="checkbox"/> | Clean toilet facility? |
| <input type="checkbox"/> | <input type="checkbox"/> | Sanitary drinking facility? |
| <input type="checkbox"/> | <input type="checkbox"/> | Emergency flashlights on hand? |
| <input type="checkbox"/> | <input type="checkbox"/> | First-aid kits on hand? |

EXITS

YES NO

- Two or more emergency exits available?
- Unlocked and easily accessible?
- Sufficiently far apart?
- Crash bar on doors?
- Exit signs installed?
- Exit signs lighted?
- All doors swing out?

IF THE ROOM IS ABOVE FIRST FLOOR

YES NO

- Close to stairs (less than 100 feet)?
- Doors and stairs unobstructed, litter free?
- Stairs in good repair?
- Stair handrail provided?
- Stairway lighted?
- Stairs wide enough for two persons?
- Carpets or treads secure?
- Stairway enclosed?
- Enclosures fitted with fire doors?
- Outside fire escape installed?
- Fire escape in good repair?
- Fire escape used for fire drills?

FIRE PROTECTION

YES NO

- Portable extinguisher available and properly located?
- Extinguisher is suitable for the following types of fires?
- A. Ordinary combustibles?
- B. Flammable liquids?
- C. Electrical equipment?
- Extinguisher ready to use? (should be tagged to show inspection within one year)
- Any hazard from rubbish or flammable materials?
- Any hazard from oily rags or mops? (spontaneous combustion)
- Smoke alarm system installed and tested?
- Heating system inspected within a year?
- Walls, ceilings, floors protected from stoves or pipes overheating?
- Open fireplaces protected by screens?
- Electric wiring, switches, extension cords in good repair?
- Accessible telephone in building?
- Fire department number posted?
- Location of nearest fire alarm known to all members?
- Alarm procedures taught to members?

FIRE DRILL

YES NO

- Has the unit an organization plan for conducting fire drills?
- Is a fire plan posted on the unit bulletin board?
- Are fire evacuation drills practiced frequently?
- Was a drill demonstrated or taught to members at inspection time?
- Are members able to evacuate building if filled with smoke or if lights go out?
- Do training drills include use of alternate exits?
- Are members trained in home fire safety plan and exit drill?

Write your recommendations on a separate sheet of paper. Note any other conditions that are hazardous to health, personal safety, or fire safety.

REQUIREMENT 4

Complete a “Be Prepared For Natural Events” worksheet for at least two natural events most likely to happen near where you live.

A natural disaster is when nature causes great damage. Some natural disasters like hurricanes take a long time to develop, and there is plenty of time to prepare. Other natural disasters like tornadoes or earthquakes happen so fast that we must be prepared ahead of time.

Preparing for Natural Disasters

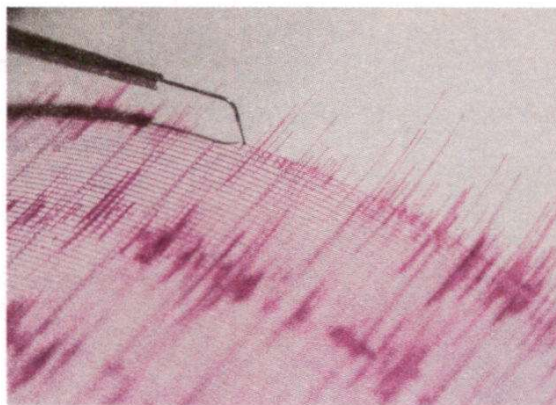
It's always best to be prepared for a natural disaster before it happens. At times, a natural disaster can cause a loss of power and water. Loss of power can impact your ability to keep and cook food. The water may run in your house but may become unsafe to drink.

According to the American Red Cross, you should have at a minimum the following items:

- ▶ Water — One gallon per person, per day (three-day supply for evacuation, two-week supply for home)
- ▶ Food — Non-perishable, easy-to-prepare items (three-day supply for evacuation, two-week supply for home)
- ▶ Flashlight
- ▶ Battery-powered or hand-crank radio (NOAA Weather Radio, if possible)
- ▶ Extra batteries
- ▶ First-aid kit
- ▶ Medications (seven-day supply) and medical items

- ▶ Multipurpose tool
- ▶ Sanitation and personal hygiene items
- ▶ Copies of personal documents (medication list and pertinent medical information, proof of address, deed/lease to home, passports, birth certificates, insurance policies)
- ▶ Cell phone with chargers
- ▶ Family and emergency contact information
- ▶ Extra cash
- ▶ Emergency blanket
- ▶ Map(s) of the area

Earthquakes — Earthquakes occur at fault lines. The San Andreas, which runs through California, is the largest fault line in America. This causes earthquakes in California and surrounding states such as Nevada, Wyoming, and Utah.



During an earthquake, you should Drop, Cover, and Hold On to protect yourself from falling debris. Practice with your entire household so everyone knows what to do. Here's how to practice:

DROP where you are onto your hands and knees. This position protects you from being knocked down and allows you to crawl to a protected space.

COVER your head and neck with your arms. If a sturdy table or desk is nearby, crawl underneath it for protection. If you cannot find a protected space, crawl to an interior wall (away from windows). Stay on your knees and bend over to protect yourself from injury.

HOLD ON until the shaking stops. If you're under a table or desk, hold onto it as things will be moving. Use an arm to protect your head and neck. If you are not under a protected space, protect your head and neck with both arms.

Mudslides — Mudslides and landslides occur when an excess of water, usually from rain, weakens and moves the ground. Areas that have tall hills and mountains can have mudslides. They can happen when you are walking, hiking, or camping. Mudslides can damage houses and whole neighborhoods.

If you suspect imminent danger, evacuate immediately. Inform affected neighbors if you can, and contact your public works, fire, or police department.

Listen for unusual sounds that might indicate moving debris, such as trees cracking or boulders knocking together. If you're near a stream or channel, be alert for any sudden increase or decrease in water flow and notice whether the water changes from clear to muddy. Such changes may mean there is debris flow activity upstream, so be prepared to move quickly.

If you are ordered or decide to evacuate, take your animals with you.



Flooding — While flooding can impact any state, coastal communities and those near rivers are at an increased risk of water damage.

Flash floods can be sudden and violent. You may have little to no warning. Designate a place on higher ground that you can get to quickly. Plan to move to higher ground before flooding begins.

River floods — Know if you're in an area that is prone to river floods. Review your evacuation plan so you can leave quickly if officials advise you to evacuate.



Storm surge — Be prepared to evacuate immediately if local officials advise. A storm surge can cause water levels to rise quickly and flood large areas in just minutes.

Coastal flooding — Be prepared to evacuate immediately if local officials advise. Move inland before flooding begins.

Hurricanes — Hurricanes hit the East Coast of America. Florida, Texas, North Carolina, and Louisiana have seen the most over the years due to their proximity to the Atlantic Ocean and the Gulf of Mexico. These states experience hurricanes anywhere from June 1 to November 30, which is called hurricane season.



If local authorities advise you to evacuate, go right away:

- ▶ Bring your emergency supplies.
- ▶ Follow evacuation routes and do not try to take shortcuts because they may be blocked.
- ▶ Check with local officials for shelter locations.

If you are not ordered to evacuate and decide to stay:

- ▶ Determine your best protection for high winds and flooding.
- ▶ Take shelter in a designated storm shelter or an interior room for high winds.
- ▶ Stay away from glass windows and doors.
- ▶ Move to higher ground before flooding begins.

Tornadoes — Tornadoes come from severe thunderstorms in warm, moist, unstable air along and ahead of cold fronts. Such thunderstorms also may generate large hail and damaging winds. Tornadoes can happen in any place, but some parts of the country have more tornadoes than others. Ask your parent or legal guardian if you live in one of those areas.



A **tornado WATCH** means tornadoes are possible in and near your area. Be ready to act fast!

A **tornado WARNING** means **Take Action!** A tornado is nearby. There is danger. Move to a safe location right away.

At your house — If you are under a tornado warning, go to your basement, safe room, or an interior room away from windows. Don't forget pets if time allows.

Outside — Seek shelter inside a sturdy building immediately if a tornado is approaching. Sheds and storage facilities are not safe. Neither is a mobile home or tent. If you have time, get to a safe building.

In a vehicle — Being in a vehicle during a tornado is not safe. The best course of action is to drive to the closest shelter. If you're unable to make it to a safe shelter, either get down in your car and cover your head or abandon your car and seek shelter in a low-lying area such as a ditch or ravine.



Tsunamis — Tsunamis are giant waves caused by earthquakes or volcanic eruptions under the sea. Out in the depths of the ocean, tsunami waves do not dramatically increase in height. But as the waves travel inland, they build up to higher and

higher heights. The West Coast of the United States, Hawaii, and Alaska can be affected by tsunamis.

Get to higher ground as far inland as possible. Watching a tsunami from the beach or cliffs could put you in grave danger. If you can see the wave, you are too close to escape it.

Avoid downed power lines and stay away from buildings and bridges from which heavy objects might fall during an aftershock.

Stay away until local officials tell you it is safe. A tsunami is a series of waves that may continue for hours. Do not assume that after one wave the danger is over. The next wave may be larger than the first one.

BE PREPARED FOR NATURAL EVENTS

Type of natural event:

Things you can do to prepare prior to the event:

What to do immediately to keep yourself safe:

What to do during the event:

What to do after the event short term:

What to do after the event long term:

MY FAMILY

FAMILY & REVERENCE



SNAPSHOT OF ADVENTURE



Understanding your religious beliefs and the beliefs of others can help you make sense of the world around you. This Adventure lets you learn about your own faith and family and explore ways to continue your faith practices in the future.

You may earn this Adventure by either completing the requirements below or earning the religious emblem of your choosing. To learn more about available religious emblems, visit scouting.org or scan this QR code.



REQUIREMENTS

Approved by _____

1. With your parent or legal guardian, talk about your family's faith traditions. Identify three holidays or celebrations that are part of your family's faith traditions. Make a craft, work of art, or a food item that is part of your family's faith tradition, holiday, or celebration. _____
2. Carry out an act of kindness. _____
3. With your parent or legal guardian, identify a religion or faith that is different from your own. Identify two things that it has in common with your family's beliefs. _____
4. Discuss with your parent or legal guardian what it means to be reverent. Tell how you practice being reverent in your daily life. _____



- Required Adventure
- Scan for this Adventure page

REQUIREMENT 1

With your parent or legal guardian, talk about your family's faith traditions. Identify three holidays or celebrations that are part of your family's faith traditions. Make a craft, work of art, or a food item that is part of your family's faith tradition, holiday, or celebration.

Art is often used to express how someone feels about their faith and/or to share their faith with others. Before there were schools, most people did not know how to read. If you wanted to share something with others, it had to be done with pictures. Some pictures become symbols.



A symbol can be a picture, sign, or word that comes to represent an idea, object, or relationship. Symbols allow us to make a connection between something common and something special.



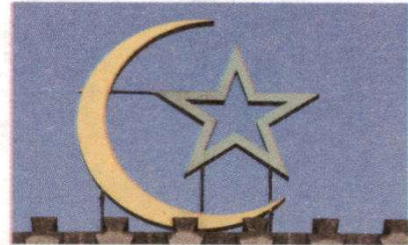
Christianity has many symbols; the most common is the sign of the cross. The use of the fish as a symbol of Christianity started as early as 100 A.D., almost 2,000 years ago. It was used as a secret way to identify other Christians during a time when Christians were often persecuted.





The Star of David is named after King David, who was the second king of ancient Israel. It is thought that this star was used on King David's shield. It is now a symbol of Judaism and is on the flag of Israel.

The faith of Islam is symbolized by the crescent and star. The crescent is the early phase of the moon and represents progress. The star signifies illumination with the light of knowledge. Islam by definition means submission and has the extended meaning of peace.



Buddhism's dharma wheel and its eight points symbolize the various types of living (known as the eightfold path) that lead to a peaceful existence in the world. The Buddha, reputed to have lived in India during the sixth century B.C.E., is an example of individual peace and the end to suffering through enlightenment.



Taoism/Daoism are Chinese religions and philosophies. The yin, the dark swirl, is associated with shadows, femininity, and the trough of a wave; the yang, the light swirl, represents brightness, passion, and growth.



There are many other religions and faith traditions in the world. If you choose to do a work of art for this requirement, it may be appropriate to use a symbol that represents your family's faith traditions.

REQUIREMENT 2

Carry out an act of kindness.



As you get older, your ability to help others increases. An act of kindness can be simple. The most important part of an act of kindness is that you do it without wanting or expecting any reward or recognition.

The story of how the BSA started comes from an act of kindness.

Scouting was started in England by Lord Baden-Powell. An American businessman from Chicago, William D. Boyce, was visiting London before Scouting came to the United States. Mr. Boyce was lost in the city when a Scout came to him and guided him to where he was going. The Scout didn't just give him directions; he walked him to where he needed to go.

When Mr. Boyce arrived safely, he offered to give the Scout a reward. The Scout refused. Mr. Boyce was impressed that the Scout refused to accept a reward. He asked him why he wouldn't take anything for his service. The Scout informed Mr. Boyce that he was a Scout and that the Scout Oath tells him to help other people at all times, so he was just doing his duty as a Scout.

Before returning to the United States, Mr. Boyce met with Lord Baden-Powell and took information back with him. Soon after that, William D. Boyce incorporated the BSA on February 8, 1910.

The simple act of kindness of one Scout brought the Scouting movement to the United States.

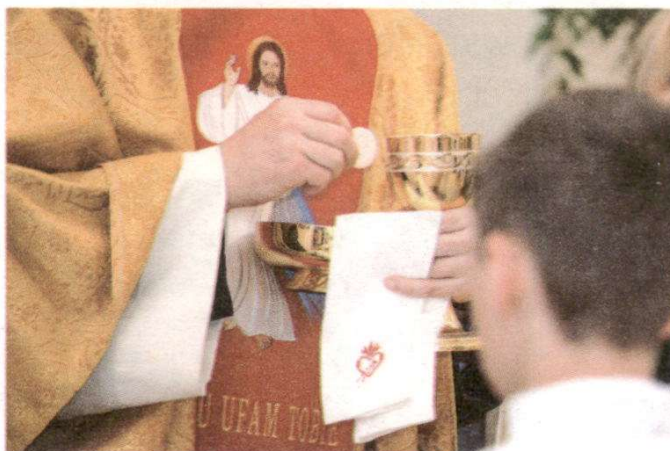
REQUIREMENT 3

With your parent or legal guardian, identify a religion or faith that is different from your own. Identify two things that it has in common with your family's beliefs.

When looking for common beliefs between your religion or faith and another, it may be helpful to compare each to the Scout Law to see if there are any points in common.



What does your religion or faith say about being trustworthy or kind? Is there a common belief that people should be trustworthy and kind?



The BSA, including Cub Scouting, is part of the World Organization of the Scout Movement. There are 173 different countries that participate. The world is made up of

many different faiths and beliefs. As Scouts, we come together because we focus on what we have in common.

REQUIREMENT 4

Discuss with your parent or legal guardian what it means to be reverent. Tell how you practice being reverent in your daily life.

Reverent is the 12th point of the Scout Law. Reverence starts with a feeling. Some people say it's an attitude of appreciation, even awe, for our world. It's a natural response to the marvels around us — the beauty of nature or the harmony of a piece of music or art. It's a feeling of quiet respect and love.

Have you ever thought about what reverence might mean in terms of what people say or do?

What have you seen other people do to show that feeling of respect and love?

In your conversation with your parent or legal guardian, discuss times when you have felt reverent. Then explain times when you have seen someone show respect and love through their actions. Talk about how you personally show reverence by what you do in your daily life — at home, at school, or wherever you are — and how that is connected to your family's faith traditions.



AQUANAUT

ELECTIVE ADVENTURE



SNAPSHOT OF ADVENTURE



Swimming is great exercise and a whole lot of fun. It is also an important skill to learn when you consider that 70% of the Earth is covered in water.

In this Adventure, you'll discover how to enjoy swimming and how to respond to water emergencies. Time to grab your swimsuit and your buddy tag and hit the water.

REQUIREMENTS

Approved by

1. State the safety precautions you need to take before doing any swimming activity.
2. Explain the meaning of "order of rescue" and demonstrate the reach and throw rescue techniques from land.
3. Learn how to prevent and treat hypothermia.
4. Attempt to tread water.
5. Attempt the BSA swimmer test.
6. Have 30 minutes, or more, of free swim time where 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 swimming.



- Elective Adventure
- Scan for this Adventure page

REQUIREMENT 1

State the safety precautions you need to take before doing any swimming activity.

While swimming and boating are lots of fun, they do 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 the rules 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

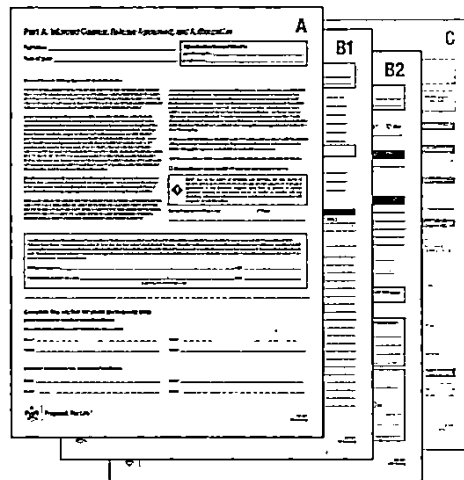
All swimming activity must be supervised by a mature and conscientious adult age 21 or older who understands and knowingly accepts responsibility for the well-being and safety of those in their care, and who is trained in and



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, in Swimming and Water Rescue, or as a 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

The image shows a stack of BSA Annual Health and Medical Record forms. The top form is labeled 'Part A. Medical History, Allergy Assessment, and Education' and is divided into sections A, B1, B2, and C. Section A contains a large text area for medical history and a box for 'Current Medications'. Section B1 is for 'Allergies', B2 for 'Immunizations', and C for 'Other Information'. The forms are stacked, with the top form being the most prominent.

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

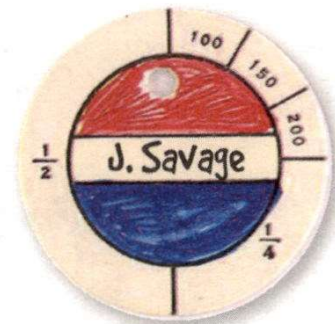
The lookout continuously monitors the conduct of the swim, identifies any departures from Safe Swim Defense guidelines, alerts rescue personnel as needed, and monitors the weather and environment. The lookout should have a clear view of the entire area but be close enough for easy verbal communication. 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

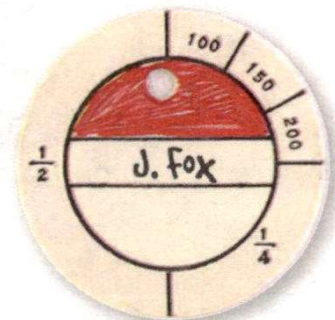
All youth and adult participants are designated as swimmers, beginners, or nonswimmers based on swimming ability confirmed by standardized BSA swim classification tests. Each group is assigned a specific swimming area with depths consistent with those abilities. The classification tests must be renewed annually, preferably at the beginning of the season even if the youth has earned the Swimming merit badge.

7. Buddy System

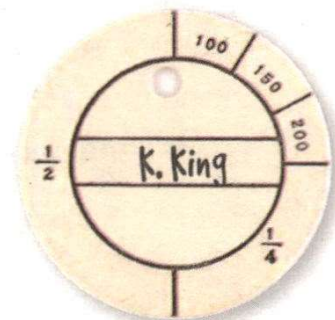
Every participant is paired with another. Buddies stay together, monitor each other, and alert the safety team if either needs assistance or is missing.



Swimmer



Beginner



Nonswimmer

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 of the same ability group, then they swim in the area assigned to the buddy with the lesser ability.

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." Buddies are expected to raise each other's hand before completion of a slow, audible count to 10. 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.

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.

Every 10 minutes or so, the lookout will call for a buddy check. As quickly as possible, get to your buddy and raise each other's hand. See if you can be the first buddy pair to do this!

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 techniques 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 this 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 a Webelos Scout, you are 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 don't 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. Next are some tips to make your rescues more effective.

Reach Rescues

- ▶ Lie down on the shore or pier so you are more stable and are closer to the victim's level.
- ▶ Be sure to anchor yourself so you don't 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

- ▶ Don't throw a ring buoy or float directly at the victim; you don't want to bonk them on the head!
- ▶ If the object you're 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

Learn how to prevent and treat hypothermia.

Hypothermia can develop when a person's body is losing more heat than it's able to produce, which causes the core temperature to drop. This could happen to anyone who is not dressed warmly enough or is swimming in water that is too cold for too long.

The signs of hypothermia include:

- ▶ Feeling cold and numb.
- ▶ Tired and unable to think straight.
- ▶ Shivering uncontrollably.
- ▶ Unable to make good decisions.
- ▶ Irritable.
- ▶ Stumbling, falling, or losing consciousness.

To treat hypothermia, the first step is to prevent the victim from getting colder. The next is to bring their body temperature up to normal.

- ▶ Move them into a warm shelter
- ▶ Take the person out of wet clothes and get them into dry clothes
- ▶ Wrap them in blankets or put them into a dry sleeping bag
- ▶ Cover their head to help them get warm in addition to the sleeping bag or blankets
- ▶ If they are able, have them drink warm liquids
- ▶ Call for help

REQUIREMENT 4

Attempt to tread water.

Following Safe Swim Defense with proper supervision, attempt to tread water. The goal of treading water is to keep your mouth and nose above the water so you can breathe while using the least amount of energy.



When in the water, position yourself vertically with your feet toward the bottom. Then, move your arms back and forth horizontally to keep your upper body afloat and move your legs around in a circular motion.

REQUIREMENT 4

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 and kayaking. To be classified as a swimmer, you must pass this test:

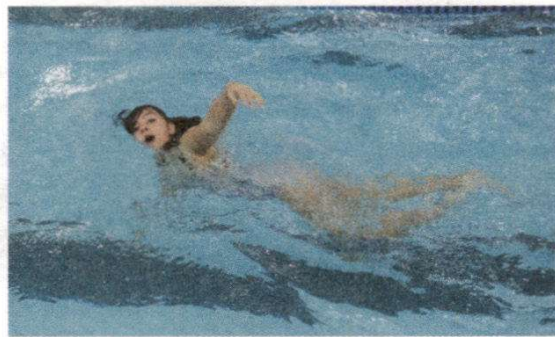
- ▶ Jump feet first into water that's over your head in depth.
- ▶ Level off and swim 100 yards in one swim (without stops and including at least one sharp turn). The first 75 yards must be done in a strong manner using one or more of the following strokes: sidestroke, breaststroke, trudgen, or crawl; 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. Next 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're 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 6

Have 30 minutes, or more, of free swim time where 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 den or family. Follow Safe Swim Defense to help keep you and your den or family safe.





ART EXPLOSION

ELECTIVE ADVENTURE



SNAPSHOT OF ADVENTURE



Art is a powerful way to capture a moment in time, an idea, or an emotion. It's a lot of fun, too. You get to work with all sorts of gooey and gloppy materials, and you never have to worry about getting the right answer, because everybody's art is different. Whether you're into drawing, painting, sculpture, computer illustration, or photography, you'll find something to love in this Adventure.

REQUIREMENTS

Approved by

1. Create a piece of art by exploring drawing techniques using pencils.
2. Using a digital image, explore the effect of filters by changing an image using different editing or in-camera techniques.
3. Create a piece of art using paint as your medium.
4. Create a piece of art combining at least two media.

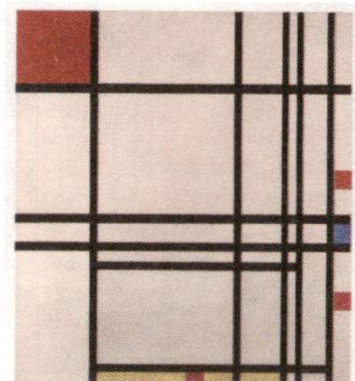
Art is everywhere! You might find posters, drawings, photographs, sculptures, and copies of famous paintings around your home, at school, on television, on the internet, and at stores you visit. Many works of art have been turned into T-shirts, umbrellas, and memes. You can find art while driving down the road. Street overpasses may have art built right into them, or walls may have murals painted on them. Art exists outside in sculpture gardens.



- Elective Adventure
- Scan for this Adventure page

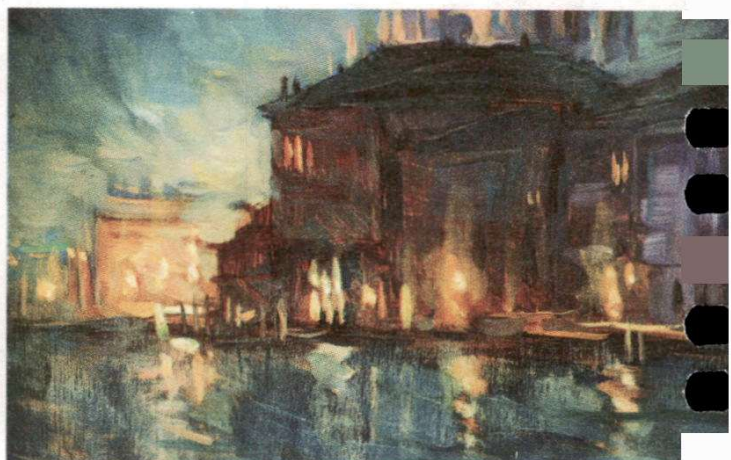
An art museum, of course, is a museum that focuses on art. In a museum, works of art may be grouped by artist, theme, or when they were created. Often there will be a sign that will help you understand what you're seeing. An art gallery is similar to a museum except that the art is for sale. An art exhibit takes art out of the museum or gallery into a place like a library or school so that more people can enjoy it. One thing you'll discover is that artists have produced very different styles of art at different times in history. Here are some styles you may encounter:

▶ **Abstract** art uses color and shape to express emotion. You won't see subjects that you can recognize, but you may be able to sense what the artist was feeling when they created the art.

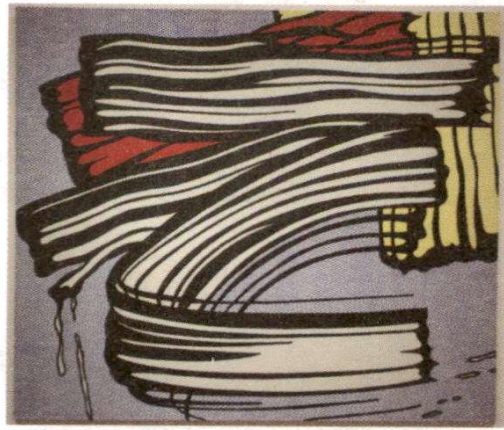


▶ **Expressionism** art also expresses feeling. Here, the subjects are recognizable, but certain features are emphasized, like the scariness of a thunderstorm.

▶ **Impressionism** art is designed to show the artist's first impressions of looking at the subject. Impressionism paintings often show outdoor scenes and focus on how light and color appear.



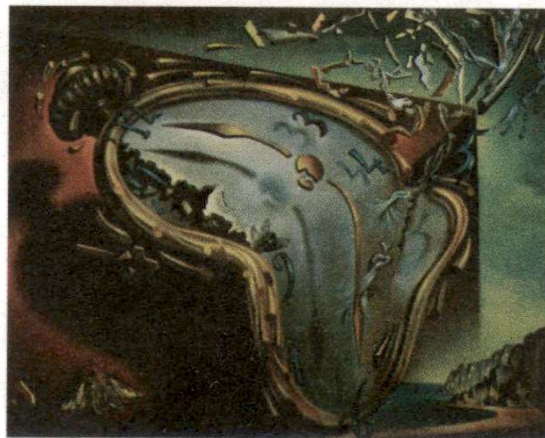
► **Pop art** uses everyday objects and bright colors to communicate ideas. Some pop art looks like comic strips or collages.



► **Realism** art is designed to accurately record what the subject looks like — almost like taking a photograph. Realism was popular before photography was invented because there was no other way to record how something looked.



► **Surrealism** art is often based on dreams or nightmares. The subjects may look recognizable, but something about them will be strange — sometimes very strange.

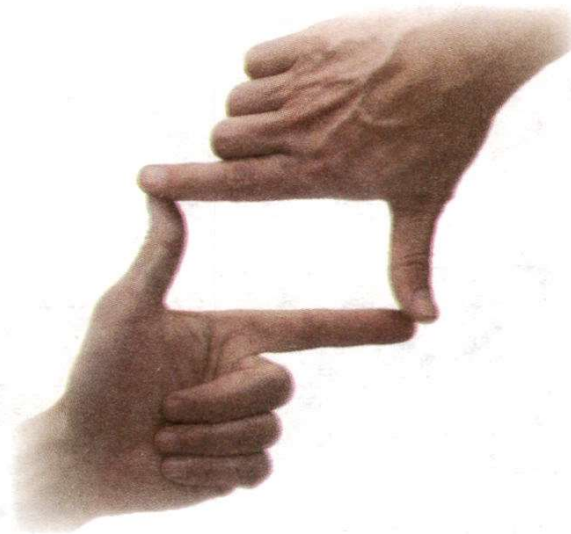


REQUIREMENT 1

Create a piece of art by exploring drawing techniques using pencils.

PICKING YOUR SUBJECT

To create a picture for this requirement, start by deciding what you want your picture to depict. Will it be your home? A scene in a nearby park? The playground at your school? (Be sure not to pick something that won't sit still, like a dog!)



Decide where your picture will begin and end. Hold your hands up to form a frame and move them around until you've enclosed just the parts of the scene you want to capture.

Types of Pencils

Graphite pencils are the most common types of pencil and are encased in wood. They are made of a mixture of clay and graphite, and their darkness varies from light gray to black. You're probably familiar with the type of pencil you use for school. The most common pencil is the No. 2. The number refers to how hard the graphite in the pencil is. No. 2 is in the middle between soft and hard. No. 1 is a soft pencil that smudges easily, and No. 3 is hard and used for fine details.





Sketching pencils

Sketching pencils are made for just that, drawing and sketching. They often come in sets because they have more than three types of graphite. The best types of pencils for sketching would be the HB, the 2B, 6B, and even the 9B. The harder the pencil type, the lighter the drawing, and the softer the pencil type, the darker the drawing will be.

Colored pencils

There are three main types of colored pencils: wax-based, oil-based, and water-soluble. You can also get color sticks and woodless pencils, which consist of the same “lead” material.

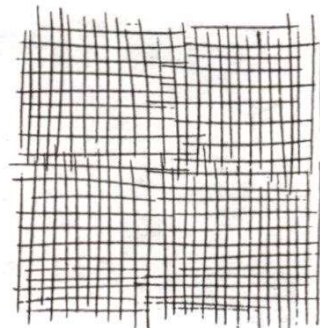
PENCIL TECHNIQUES

Hatching and Crosshatching

These methods are very common and effective ways to add depth to your sketches through shading. Hatching is a series of lines drawn along the main line of your drawing to create shadow and depth. These lines shouldn't touch. Crosshatching is a series of lines used in the same way but in this case they intersect or cross each other. The closer these lines are, the darker the shading in your drawing will be.



Hatching



Crosshatching



Stippling

Stippling is the art of using dots to add shading and depth, like hatching or crosshatching. The closer the dots, the deeper the effect. To ensure that your dots show up and make a better impact, it's best to use softer graphite for this effect, as it comes out darker.

Scribbling

The characteristics of a scribbled sketch can be identified by the uneven and definitely not straight lines within the piece. Using random movements across the paper will result in a somewhat deconstructed image, and the more irregular lines created closer together, the darker it will appear.



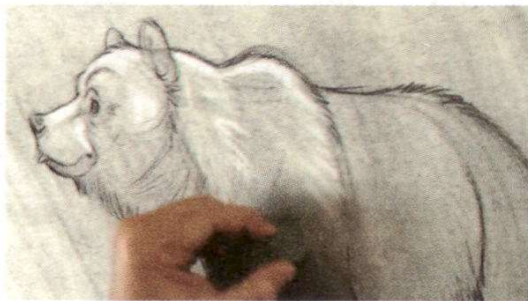
Circling

Control the tone your pencil produces by simply adjusting the amount of pressure you place on it. To create smooth transitions, you can make small circular strokes that give you a more blended appearance. For this approach, a duller pencil works best.



Smooth Shading and Blending

To add a cleaner shading element to your drawing, you can try smooth shading. This can be done in a number of ways, including using your finger or a rolled-up piece of paper to blend in hatching or crosshatching. This will give your sketch a smoother appearance. You can also blend simply by angling your pencil to utilize the wider edge, creating thicker lines that give the appearance of shadows and shading.



Creating Highlights

Just as you would add shading to create depth and shadows to your sketch, you can also create highlights. Highlights can help indicate where your light source is coming from and add extra detail, showing reflective surfaces. One great way to create this effect is by using an eraser to remove some of the pigment or shading to create lighter areas to indicate the absence of darkness.

Rendering

The practice of rendering takes the above technique to the next level. Rendering is essentially an approach to pencil sketching in which you apply graphite to your paper, and then remove some with your eraser to add the highlighting effect. It's an ongoing process of applying and removing the graphite and results in a very soft, almost blurred effect.



REQUIREMENT 2

Using a digital image, explore the effect of filters by changing an image using different editing or in-camera techniques.

Have you ever wondered why the photos you see in books and magazines may look better than your family snapshots? One reason is that professional photographers use cameras that can be adjusted and have a lot of practice using them! Another reason is that they use photo-editing software to improve the pictures they take.

You can do the same thing. Most computers include simple photo-editing software, and photo-editing apps are available for smartphones and tablets.

Here are some common tools to look for:



Crop tool – This tool lets you remove parts of the photo you don't want.



Brightness tool – This tool lets you make the overall photo lighter or darker.



Contrast tool – This tool lets you separately adjust the difference between your photo's light and dark areas.



Red-eye reduction tool – This tool fixes a problem where the camera flash makes a subject's eyes look bright red.

Filters on cameras change the type of light that is allowed into the camera. Most cameras today are digital and allow for edits to be made after the picture is taken. Computer software can take the image and simulate the effect a filter would have on a more traditional camera.

Many digital cameras have filters that can be applied to your picture after you take it. Here are some filters you may find on a phone camera:

Vivid — Creates more contrast. Contrast in photography is the ratio of different tones in an image. Tone refers to the levels of brightness in the photograph, from solid black to pure white. Shadows are dark tones; highlights are bright tones. This difference is what creates the textures, highlights, shadows, colors, and clarity in a photograph.

Shadows are dark tones; highlights are bright tones. This difference is what creates the textures, highlights, shadows, colors, and clarity in a photograph.

Vivid Warm — Adds the vivid filter with a yellow tint.

Vivid Cool — Adds the vivid filter with a blue tint.

Dramatic — Boosts the shadows and lowers the highlights.

Dramatic Warm — Adds the dramatic filter with a yellow tint.

Dramatic Cool — Adds the dramatic filter with a blue tint.

Mono — Turns into basic black and white.

Silvertone — Turns into black and white with more shadows.

Noir — Turns into black and white with high contrast.



Original



Vivid



Vivid Warm



Vivid Cool



Dramatic



Dramatic Warm



Dramatic Cool



Mono



Silvertone



Noir

REQUIREMENT 3

Create a piece of art using paint as your medium.

Before you start painting, you'll need to decide what picture you want to paint. Many artists who use paint will first sketch out what they want to paint. For this requirement, you may want to take the piece of art you made with pencil and use it as the subject for your painting.

Types of Paint

Here are some good choices for paint that cleans up with soap and water from your skin or a surface (all paints may stain your clothing):

- ▶ **Watercolor paint** comes as a set in a box. To use watercolor, you dab it with a wet brush. Watercolor paint won't hide a color you've already painted, but it lets the white of the paper show through, adding light to the color. You can paint on drawing paper or special watercolor paper.



- ▶ **Tempera paint** (poster paint) is liquid and dries quickly. It comes in small bottles or large squeeze bottles. You may use it on manila paper or heavy white drawing paper.

- ▶ **Acrylic paint** comes in large squeeze bottles or in tubes. You may use acrylic paint on canvas board or heavy paper. With tempera and acrylic paint, you can paint over areas you want to change.



For painting, you will need some other supplies:



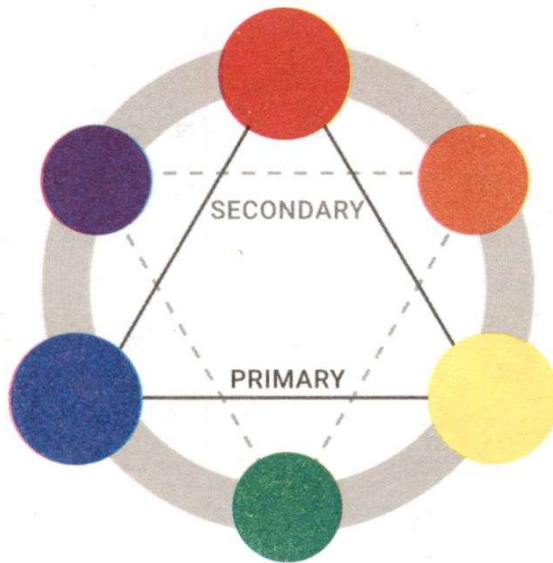
- ▶ **Brushes.** Inexpensive brushes with synthetic bristles will work for tempera and acrylic paint. (For acrylic, you must have synthetic bristles because the paint will ruin natural-hair bristles.) Watercolor brushes are softer, and camel hair is the least expensive. It's helpful to have two sizes of brushes – one for larger areas and one for detail.
- ▶ **A mixing palette or tray.** You can use a large plastic lid from a food container for tube acrylics. For tempera, school acrylics, and watercolor, which are runny, use several jar lids, or buy an inexpensive plastic paint tray with wells for colors.
- ▶ **A palette knife.** You will need this flexible mixing tool if you're using tube acrylics. For other paints, mix colors with your brush.
- ▶ **A sturdy water container.** You'll need to rinse paint from brushes before switching colors. Be sure to change the water often.
- ▶ **A sponge.** Use this to press excess water from your brush before dipping it in paint.
- ▶ **Cleanup supplies.** You'll need a rag for spills and soap and water to wash your brushes and other tools when you're done.

Paint can be messy. Wear clothes that can get paint on them or wear a smock to keep your clothes clean. Work at a table with a washable surface, or cover the table with a drop cloth or plastic. When you stop working, promptly wash your brushes and tools. Store brushes with the bristles pointing up in a jar, can, or mug.

Mixing Paint

A fun thing about painting is mixing paints to create different colors. From just a few basic colors, you can create just about any color for your paintings.

Look at the color wheel to the right. The primary colors are red, yellow, and blue. The secondary colors are orange, green, and violet. You can mix equal amounts of yellow and blue (primary colors) to make green (a secondary color). If you add more yellow, you'll get a yellow green; if you add more blue, you'll get a blue green.



To make a color lighter, add a small amount of white. To make it darker, add a little black.

If you're not sure about a color you've mixed, try it first on a piece of scrap paper. The more you paint, the more you'll learn about mixing colors.



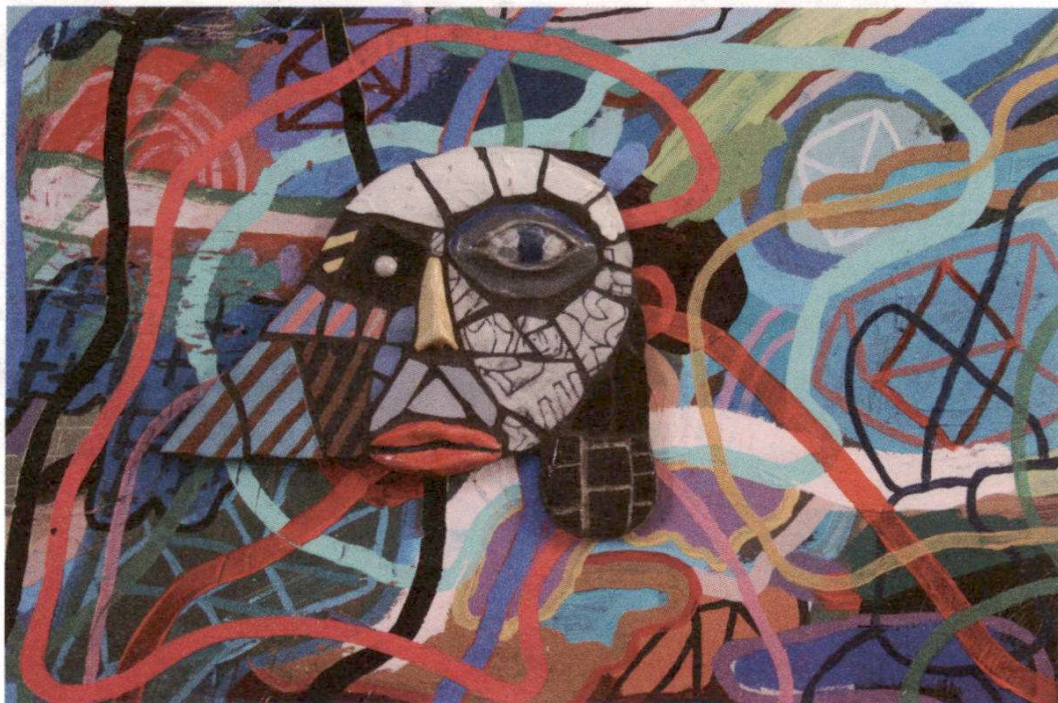
Art supply stores sell paints in many colors. After working with the primary colors, you may decide to buy a few other colors to see what they are like.

REQUIREMENT 4

Create a piece of art combining at least two media.

A medium is the type of materials you use to create your art. For this Adventure, you have used two media: pencil and paint. Other media include ink (pens and markers), chalk, charcoal, and clay for sculpting.

Here are some examples of art that combine different media.



AWARE AND CARE

ELECTIVE ADVENTURE



SNAPSHOT OF ADVENTURE



Everyone has differences, and everyone faces challenges. That's what makes us human. In this Adventure, you'll learn about the challenges other people face by looking at the world through their eyes. The more you understand, the more helpful you can be – and the more you can show your friends how to be nice to everyone, including people who are different. After all, we are all different in one way or another.

REQUIREMENTS

Approved by _____

1. Do an activity that shows the challenges of being visually impaired. _____
2. Do an activity that shows the challenges of being hearing impaired. _____
3. Explore barriers to access. _____
4. Meet someone who has a disability or someone who works with people with disabilities about what obstacles they must overcome and how they do it. _____



- Elective Adventure
- Scan for this Adventure page

REQUIREMENT 1

Do an activity that shows the challenges of being visually impaired.

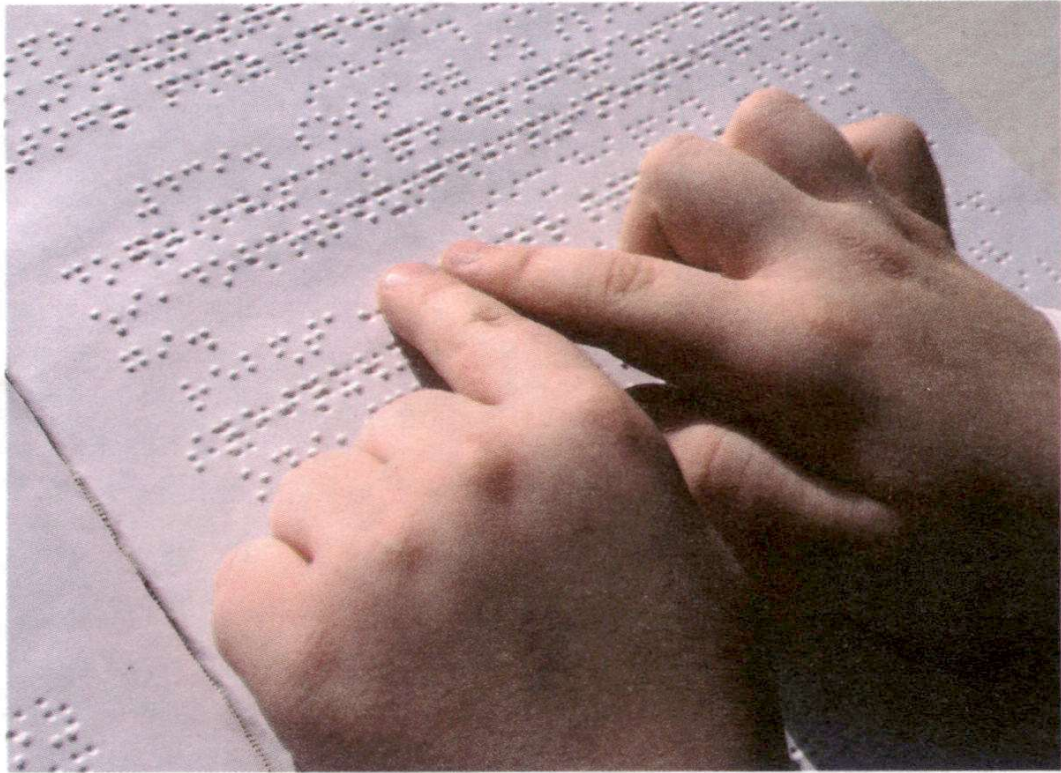
If you are visually impaired, you may complete this requirement by sharing with your den or den leader some ways you overcome the challenges that come with being visually impaired.

Vision is the ability to see with your eyes. Blindness is a lack of vision. Some people are totally blind, meaning they can't see anything at all. Others have partial blindness. They might see things as vague shadows or not be able to see at all after dark. Some people are born blind; others lose all or part of their vision as they age or due to an illness.

People who are totally blind use their other senses to make up for their lack of vision. For example, when people who are blind cross a street, they can't look and listen for cars like other people can; instead, they can only listen, which means they must listen very carefully. They also can't see the walk signs that sighted people rely on. That's why some communities have beeping or talking walk signs.

Many visually impaired people use service dogs or canes to help them get around. They read books in Braille, which is a system that uses raised dots on the page to stand for letters. They may use voice activation on computers or smart devices that read webpages out loud. They also rely on sighted friends to help them out from time to time, especially in unfamiliar surroundings.





You can simulate what it's like to be visually impaired by covering your eyes and walking around your home. (Have a friend or family member serve as a spotter so you don't hurt yourself.) Try this activity: Walk to your kitchen, fix a snack, sit down at the table, and eat. Were you successful? That's something people who are blind do every day.

With your den or family, reflect on what you learned and how this activity made you feel.



REQUIREMENT 2

Do an activity that shows the challenges of being hearing impaired.

If you have hearing loss, you may complete this requirement by sharing with your den or den leader some ways you overcome the challenges that come with having hearing loss.

Like visual impairments, there are many degrees of hearing loss. Some people are totally deaf, meaning they can't hear anything. Others have trouble understanding what someone is saying when there is a lot of background noise. Some people are born deaf. Others lose all or part of their hearing as they age or due to an illness. In fact, everyone loses the ability to hear very high-pitched sounds when they get older. As a Webelos Scout, you can hear some sounds that your parents and den leader can't hear at all.

There are many ways to address hearing loss. Hearing aids are a great tool for people who have some hearing. These devices go in or behind the ear and make sounds louder or easier to hear. Some people who are deaf learn to read lips. Others use sign language, which is a language that is "spoken" with the hands.

Sign language uses the shape, placement, and movement of the hands, as well as facial expressions and body movement, to convey meaning. Just as there are many different spoken languages, there are many different sign languages. American



Sign Language is used mostly in the United States and Canada. A good way to experience what it's like to be deaf or hearing impaired is to watch television with the sound turned off (or with the sound turned low and a radio blaring nearby). Watch a favorite show that you've seen before and try to read the lips of the actors. Can you follow the story? What happens when you can't see an actor's lips?

With your den or family, reflect on what you learned and how this activity made you feel.



Scout



Oath ("Promise")



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 ("people")



("help") (other) people





at all times ("always"); To (keep)



(myself) physically

strong,



mentally

awake, (and)



morally

straight.

Note: Did you notice that some English words are not signed in American Sign Language? American Sign Language is a conceptual language, which means that not every word of spoken English is signed. Some words are also signed in a different order. For example, the phrase "help other people at all times" can be signed as "people, help, always."

REQUIREMENT 3

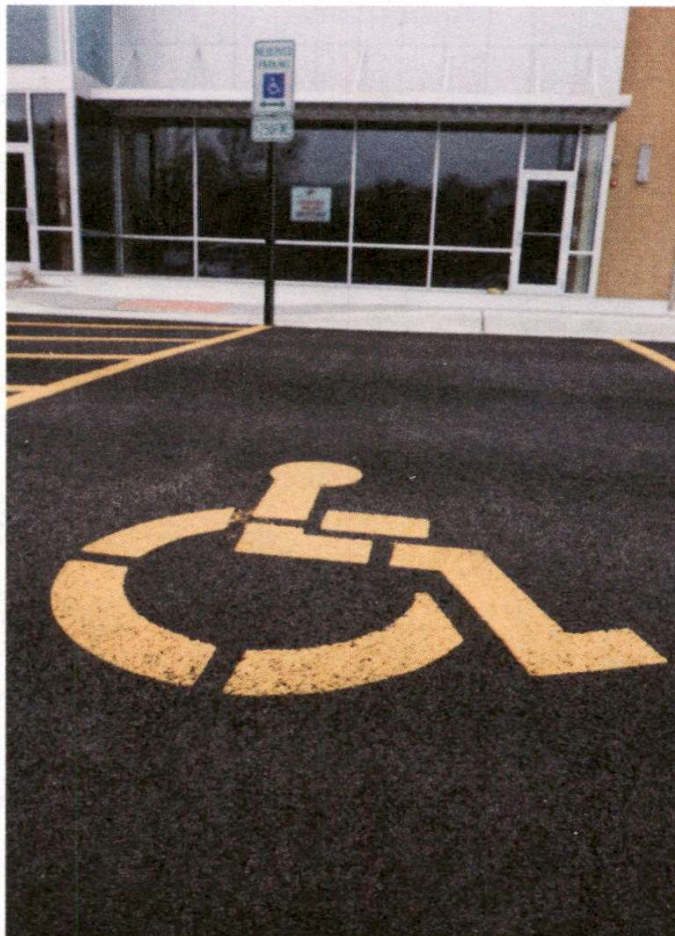
Explore barriers to access.

Mobility impairment means a reduced ability to get around on your legs. Some people are born with a mobility impairment because of conditions like spina bifida. Others lose the ability to walk due to age, illness, or accidents. Someone who breaks a leg and must wear a cast for a few months has a temporary mobility impairment.

Like other disabilities, there are ways to compensate for mobility impairments. Many people use crutches, walkers, or wheelchairs to get around. People who have lost parts of their legs might even have prosthetic replacements that let them run, jump, and play sports.

A big obstacle for many people with mobility impairments is accessibility in homes and businesses. If you used a wheelchair, would you be able to get from the street to your bedroom? Are the doors in your home wide enough for a wheelchair to go through (at least 32 inches wide)?

If you're able to borrow a wheelchair or crutches, you can simulate a mobility impairment by trying to maneuver around your home or school. Or you could immobilize one of



your legs by tying a long stick or splint to it both above and below your knee. See what it's like to walk when you can't bend your leg.

With your den or family, reflect on what you learned and how this activity made you feel.



Dexterity refers to the ability to use your hands and fingers to do everything from getting dressed to playing a musical instrument to shooting a basketball. Someone who breaks a finger or develops a condition like arthritis may find activities like fastening buttons or tying shoes a challenge.

To see what it's like to have a dexterity impairment, try to get dressed while wearing a pair of thick winter gloves. For an even harder challenge, tape a couple of the glove's fingers together.

With your den or family, reflect on what you learned and how this activity made you feel.

REQUIREMENT 4

Meet someone who has a disability or someone who works with people with disabilities about what obstacles they must overcome and how they do it.

If you have a physical disability or mobility impairment, you may complete this requirement by sharing with your den or den leader some ways you experience and/or overcome challenges you face.



It's one thing to ride in a wheelchair for 10 or 15 minutes. It's another thing entirely to use a wheelchair all day, every day. Talk with someone who has a physical impairment and find out about the challenges they face and how they experience or overcome them.

All sorts of people work with those who have disabilities. Some have disabilities themselves; others just want to make the world a better place for everyone. Learn more about one of these people, what their responsibilities are like, and what they enjoy about their job.





BUILD IT

ELECTIVE ADVENTURE



SNAPSHOT OF ADVENTURE



If you visit a lumber store, you'll see rows and rows of all sorts of wood: boards, dowel rods, sheets of plywood, cedar shingles, and more. With some tools and time, a skilled craftsman can turn that wood into toys, bookcases, or even an entire house. You won't build a house in this Adventure, but you will build a smaller carpentry project. You'll also learn about the tools you could use to build just about anything you can dream up. So, grab your tool belt, and let's get started.

REQUIREMENTS

Approved by

1. Learn about some basic tools and the proper use of each tool. Learn about and understand the need for safety when you work with tools. _____
2. Demonstrate how to check for plumb, level, and square when building. _____
3. With the guidance of your Webelos den leader, parent, or legal guardian, select a carpentry project that requires it to be either plumb, level, and/or square. Create a list of materials and tools you will need to complete the project. _____
4. Build your carpentry project. _____

The Boy Scouts of America does not authorize Webelos Scouts to use power tools as part of the Webelos program.



- Elective Adventure
- Scan for this Adventure page

REQUIREMENT 1

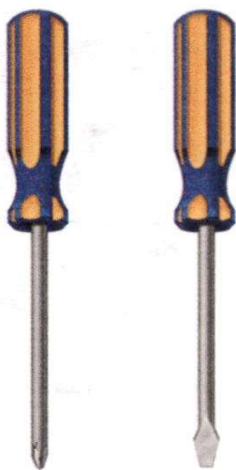
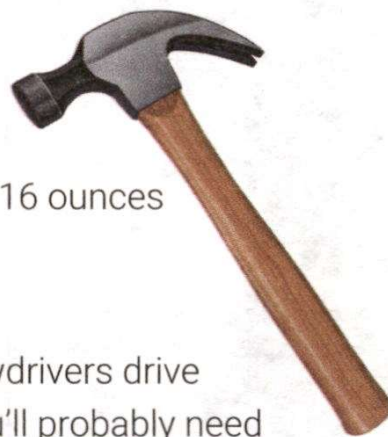
Learn about some basic tools and the proper use of each tool. Learn about and understand the need for safety when you work with tools.

When you are building something, it's important to have the right tools. Imagine trying to cut a board in half with a pocketknife or pounding a nail with a rock. You might get the job done, but it would take a long time, and you could easily hurt yourself. With the right tools, those jobs are much easier and safer to do.

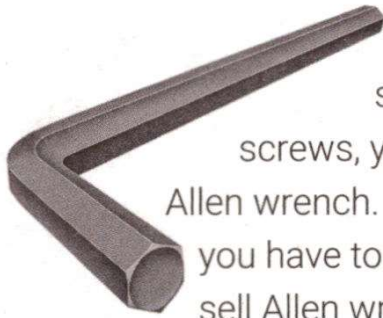
Basic Tools and Their Uses

Skilled tradesmen, including carpenters, plumbers, electricians, and bricklayers, use tools that are designed for their specific trades. For carpenters, those tools include hammers, saws, screwdrivers, and more.

Hammer — A hammer drives and pulls nails. A common hammer weighs 12 to 16 ounces and has a curved claw for pulling nails.



Screwdrivers — Screwdrivers drive screws into wood. You'll probably need small, medium, and large screwdrivers for both slotted screws, which have straight slots on their heads, and Phillips screws, which have X-shaped slots.



Allen wrenches — Some screws have six-sided holes on top. To drive one of those screws, you need an L-shaped metal tool called an Allen wrench. Allen wrenches come in various sizes, and you have to use exactly the right size. Hardware stores sell Allen wrenches separately and in a tool that looks like a jackknife.

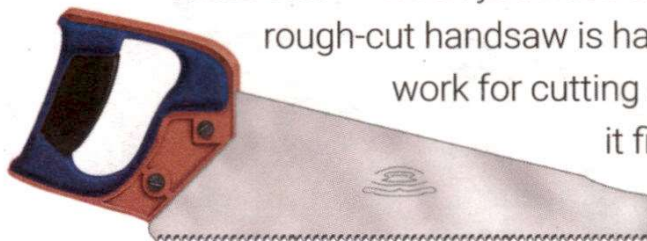


Chisel — A chisel looks somewhat like a flathead screwdriver. It has a sharper tip, however, and is used for shaving away small amounts of wood. To use it, you hold it against the wood and hit the end of the handle with a mallet.

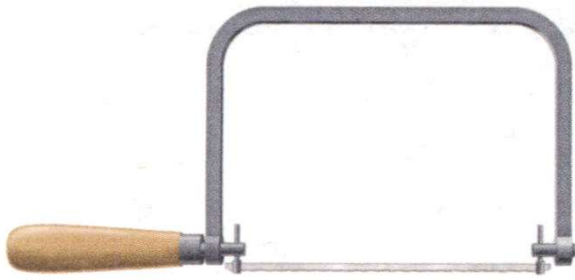


Awl — An awl is a tool used for making small holes in wood and leather. It has a wooden handle and a thin, sharp metal point.

Pliers — Pliers are versatile tools that let you grip and twist things, bend and snip wire, and do other tasks that require strength. Pliers come in many types, including needle-nose pliers, standard/slip-joint pliers, locking pliers, and wire-cutter pliers. It's useful to have several sizes and types in your toolbox.



Hand saw — When you need to cut a board in half, a 14-inch rough-cut handsaw is handy to have. It will certainly work for cutting smaller pieces of wood. Since it fits into your toolbox, it will always be close at hand.



Coping saw — When you want to make detailed or curved cuts in wood, plastic, or foam, you will need a coping saw.

Sanding block — A sanding block is a tool that you attach sandpaper to. (You can also use soft foam sanding blocks that allow you to sand curved or contoured objects.) Sandpaper comes in various grit sizes. The smaller the number, the coarser the sandpaper. You might use 50-grit sandpaper to shape a piece of wood and then 150-grit sandpaper to smooth the wood before you paint it.



File — A file is a metal tool used for making wood or metal smooth. It can also be used to sharpen metal blades and tools.



Rasp — A rasp is a metal tool with a rough surface that is used to shape or remove excess material from wood or metal.



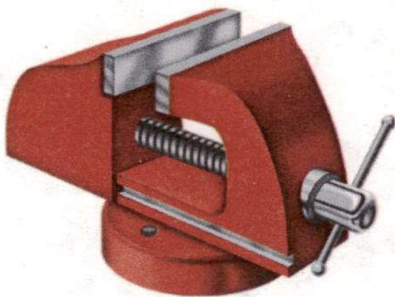
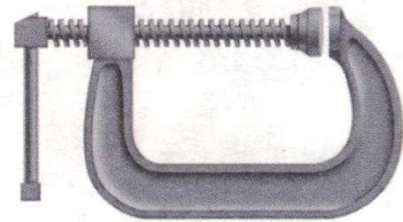
Tape measure — A tape measure lets you accurately measure pieces of wood up to several feet long. A 12- or 16-foot retractable tape measure will handle most jobs around the home. Most retract automatically and have a locking mechanism to keep the tape from recoiling (rolling up inside the case) before you're ready.

Carpenter's square — A carpenter's square helps you make perpendicular (right-angle) cuts. A 6-inch quick square will handle most small jobs.



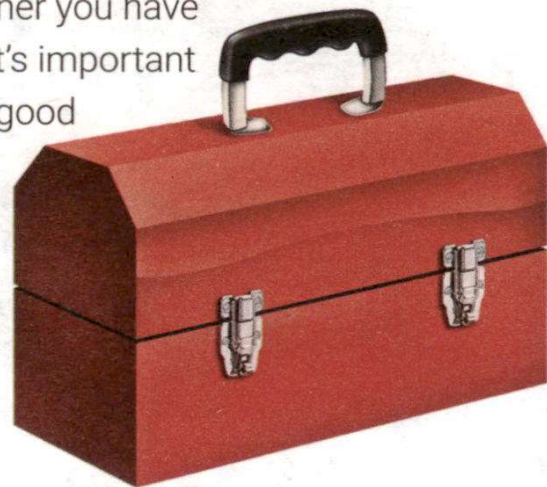
Level — When you need to hang something, such as a picture, a level helps you make sure it doesn't tilt to one side. For most small jobs, a 9-inch torpedo level works fine.

Clamp — A clamp is used to hold pieces of wood together firmly for cutting or gluing. C-clamps are common and come in many sizes. You will also find clamps that look somewhat like giant (and really strong) clothespins.



Vise — A vise does much of the same job as a wood clamp. The main difference is that it is mounted to a workbench.

Toolbox or tool bag — Whether you have a few tools or a few dozen, it's important to keep them all together. A good place to store them is in a latching toolbox or tool bag that you can carry to wherever you are working.



Here's some important gear to use:

Hand protection – Wear gloves when handling lumber, carrying boxes of nails, and using saws. Even with gloves on, always know where all your fingers are when you are cutting and hammering.



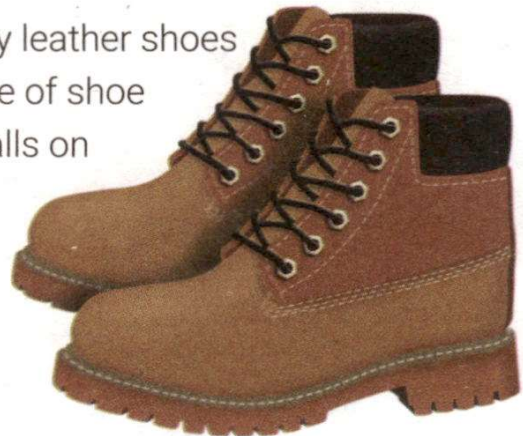
Head protection – Always wear a hardhat when you are working in an area that may have falling items or debris.

Ear protection – Your hearing can be damaged very easily. Be certain to wear good quality ear protection when you are in an area that may have construction noise.



Eye protection – Safety glasses are a must on every project. If you wear prescription glasses, you can get safety glasses that fit over your glasses, or you can buy side shields that slip onto the earpiece of your glasses. Safety glasses prevent debris and dust from entering your eyes.

Foot protection – Wear good quality leather shoes with thick soles, if possible. This type of shoe will protect your foot if something falls on it and will prevent a puncture if you step on a nail. Never wear sandals, flip-flops, or open-toed shoes when working with tools.



Lung protection – Cutting, drilling, and especially sanding creates small dust particles that can irritate your lungs if you breathe them in. You can protect yourself by wearing a dust mask (preferred) or by tying a bandanna or neckerchief around the lower part of your face.



How you use and care for your tools is also important:

- ▶ Tools that cut – such as saws, knives, and shears – should be kept sharp. If they are dull, you will have to use too much force, and they may slip and cut you.
- ▶ Keep your hands away from saw teeth and knife blades so that if the tool slips, you won't get hurt.
- ▶ When using a saw, make sure that the item you are cutting is held securely. If it slips while you are cutting it, you could accidentally cut yourself.
- ▶ Be careful when you are hammering. If you miss the nail head, you don't want to hit your thumb. Ouch!
- ▶ Practice using your tools with an adult until you know how to handle them well.

REQUIREMENT 2

Demonstrate how to check for plumb, level, and square when building.

When you use a standard door, you expect the door will work in a certain way. You expect the door to open easily, you expect when you open it that it will stay open, and you expect the door will not hit the floor when you open or close it. If you have ever used a door that didn't work right, chances are it wasn't plumb, level, and/or square.

Plumb

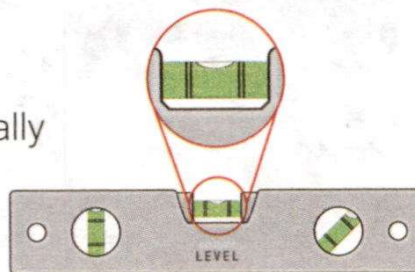
Plumb means that something is straight vertically (up and down). You expect the walls of a building to be plumb as it makes a right angle (90 degrees) with the ceiling and floor. If a wall isn't plumb, a standard window or door will not fit correctly into the wall.



Checking to see if something is plumb is simple. Take a string and attach a weight to it. Attach the free end of the string to the top of the item you're checking, and let the weight pull the string down. Make sure the weight doesn't touch the ground. This string is plumb and can be used as a guide.

Level

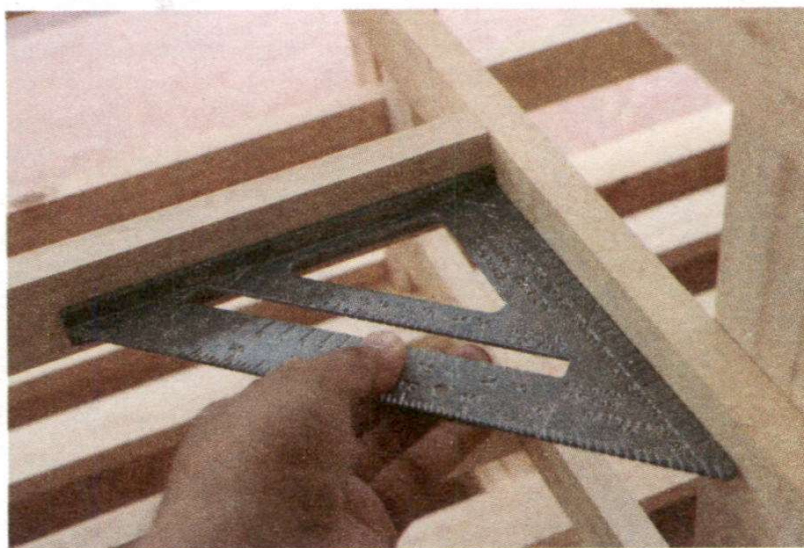
Level means something is flat horizontally (side to side). You expect tables and shelves to be level so that when you place an object on them, it doesn't roll or slide off.



To check to see if something is level, we use a tool called a level. There are several different types of levels, but they all have a small tube of colored water that has a bubble in it. When the level is placed on a flat surface, the bubble will be in the center of the tube. If something is not level, the bubble will float to the side that is too high.

Square

You may have learned in school that a square has four 90-degree angles and four equal sides. When something is square in carpentry, it means that the corners are at 90-degree angles.



To check for square, we use a tool called a square. It is a right triangle (a triangle with a 90-degree angle) made from metal

or plastic. You place the corner of the square against what you're checking to see if it lines up. You can also use a square to help you cut at a 90-degree right angle or at a 45-degree angle. Make a mark on the item you want to cut.

REQUIREMENT 3

With the guidance of your Webelos den leader, parent, or legal guardian, select a carpentry project that requires it to be either plumb, level, and/or square. Create a list of materials and tools you will need to complete the project.

The best way to learn how to use tools is to actually use them on a project. For requirements 2 and 3, pick a carpentry project and build it. When you're finished, update the list on the next page to include all the tools you used. Put a checkmark next to those that you used safely and those that you used for the first time.

When choosing a project to build, you should first look at the instructions and consider the following.

Who will be with you when building the project? An adult is to be with you the whole time.

- ▶ Do you have the right tools to make the project? If you don't, how will you get them?
- ▶ Do you have the materials needed to make the project? If you don't, how will you get them?
- ▶ How much time will it take to complete the project? Does it require time for glue or paint to dry?
- ▶ Where will you build your project?
- ▶ Is the location safe for the tools you are using?
- ▶ If you can't finish your project right away, is there a safe place to keep it until you can finish it?

My carpentry project is

MY TOOL LIST

Tool	Used Safely	Used for the First Time
Hammer		
Chisel		
Allen wrench		
Pliers		
Hand saw		
Coping saw		
Awl		
Sanding block or sanding sponge		
File		
Rasp		
Carpenter's square		
Level		
Clamp		
Vise		

What type of wood will you use?

If your instructions don't tell you the type of wood you need for your project, you can decide this by asking yourself some questions.

- ▶ Do I want to paint or stain my project? Some wood might hold paint better than stain. Also, you may want to paint inexpensive wood that has a few flaws. You may choose to stain one that has a color or pattern.
- ▶ Does my project need sturdy wood to hold it up (like a stool, chair, or a table)?
- ▶ Is my project a showpiece (like a stand for a Pinewood Derby car) that will show off a pretty color or pattern of wood? Using wood with a pretty color or an interesting pattern is a fun way to make the project more attractive.
- ▶ Will my project ever be outside? If your project stays outside (like a flower box), use a strong wood that takes paint well. Also use a good sealant so the weather won't damage it. Or you may choose to use a pressure-treated wood that is designed to be outdoors.

Here are common types of wood you might use:

- ▶ Pine, cedar, fir, cypress, and spruce are soft and easy to work with.
- ▶ Oak, walnut, hickory, maple, birch, and elm are hard and sturdier.
- ▶ Oak and walnut have interesting grains.
- ▶ Cedar has pretty colors and a nice smell.

If the type of wood you want to use is not important, think about finding wood that has been recycled. Your parent, legal guardian, or den leader can help you locate a place to find recycled wood. Some ideas are reclaimed building supply stores, cabinet shops, or wooden pallet companies.

REQUIREMENT 4

Build your carpentry project.

The next few pages show three projects you can build. You can find many more ideas in books or, with your parent's help, on the internet. Your parent, legal guardian, or den leader can also give you some ideas, or you can try making your own plans. Think about what you want to make, then draw a simple picture of each separate piece and of the completed project. Decide how big the pieces should be and write the dimensions on your drawing. Review your drawing with an adult to be certain your measuring is accurate, then go to work.

Building a project can sometimes be expensive. If possible, reuse wood from construction sites or previous projects. (Be sure to get an adult's permission before visiting a construction site and ask the construction workers if you can have the wood.) Your parent, legal guardian, or den leader can help you find the materials you need.



STEP STOOL

Materials and Tools

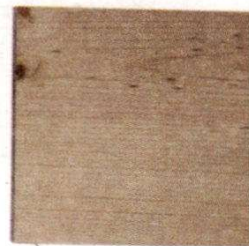
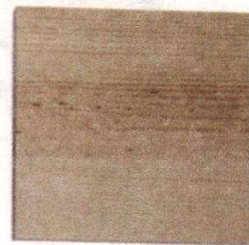
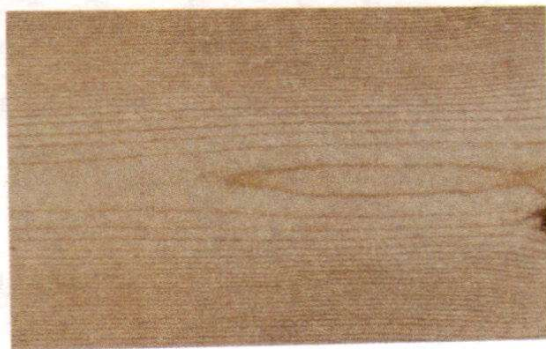
- ▶ A piece of wood that is 12 inches wide and 36 inches long, cut from a 1-by-12-inch board or $\frac{3}{4}$ -inch plywood
- ▶ Clamp
- ▶ Finishing nails
- ▶ Wood putty
- ▶ Sandpaper
- ▶ Rag
- ▶ Paint or stain
- ▶ Paintbrush



Measure carefully so you don't waste any of the wood. Always remember to measure twice and cut once.

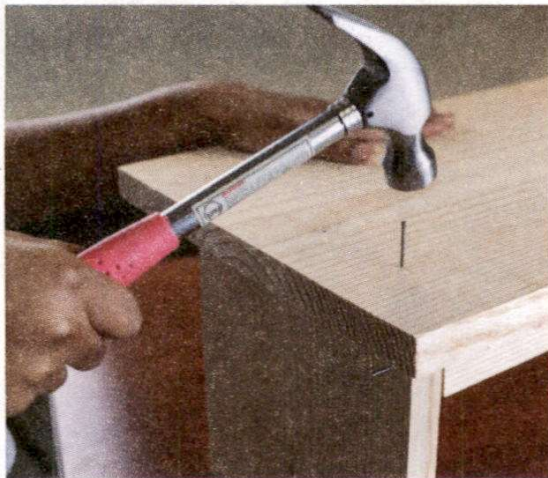
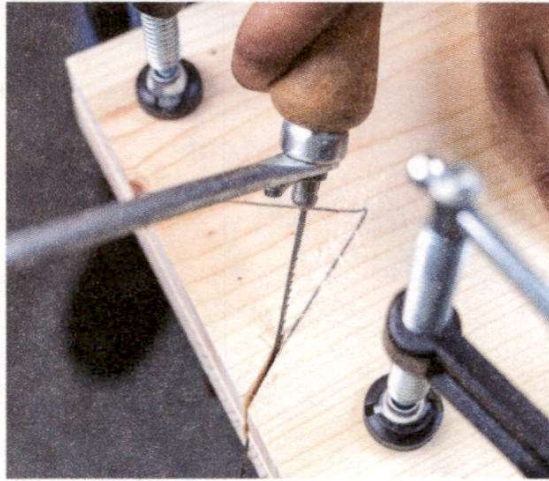
Instructions

1. Cut a piece of wood 18 inches long for the top of the stool.
2. Cut two 8-by-8-inch pieces for the legs.



3. Clamp the two leg pieces together, and mark where you will cut the notches shown in the picture.

4. Saw the notches out while the legs are clamped together. This will make the legs exactly the same.



5. Cut two $\frac{3}{4}$ -by-2-by-14-inch pieces for the side braces.

6. Using finishing nails, nail the legs to the top piece 2 inches from each end. Measure carefully before you drive the nails to be sure they go into the legs.

7. Countersink each nail. To do this, place another nail on top of the nail you've already driven, then tap it with your hammer until the first nail is completely below the surface of the wood.

8. Fill the nail holes with wood putty.



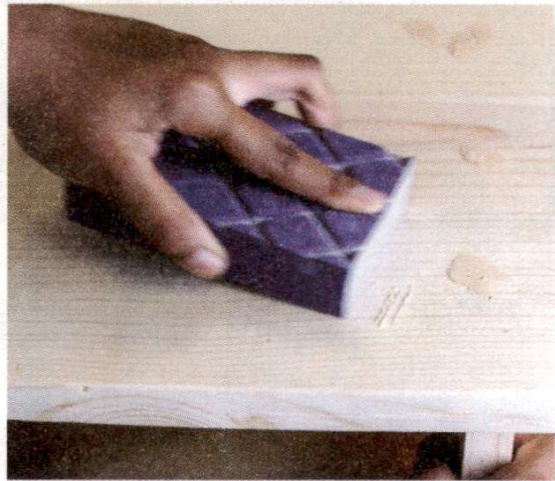


9. Nail the side braces to the legs. Fit them just under the top of the stool and inside the legs. The braces will keep your stool stable.

10. Countersink the nails and fill the nail holes with putty.



11. Sand the stool all over. Use a damp rag to clean any grit from the stool before applying the finish.



12. Stain the stool to match other furniture or paint it any color you like.

PAPER TOWEL HOLDER

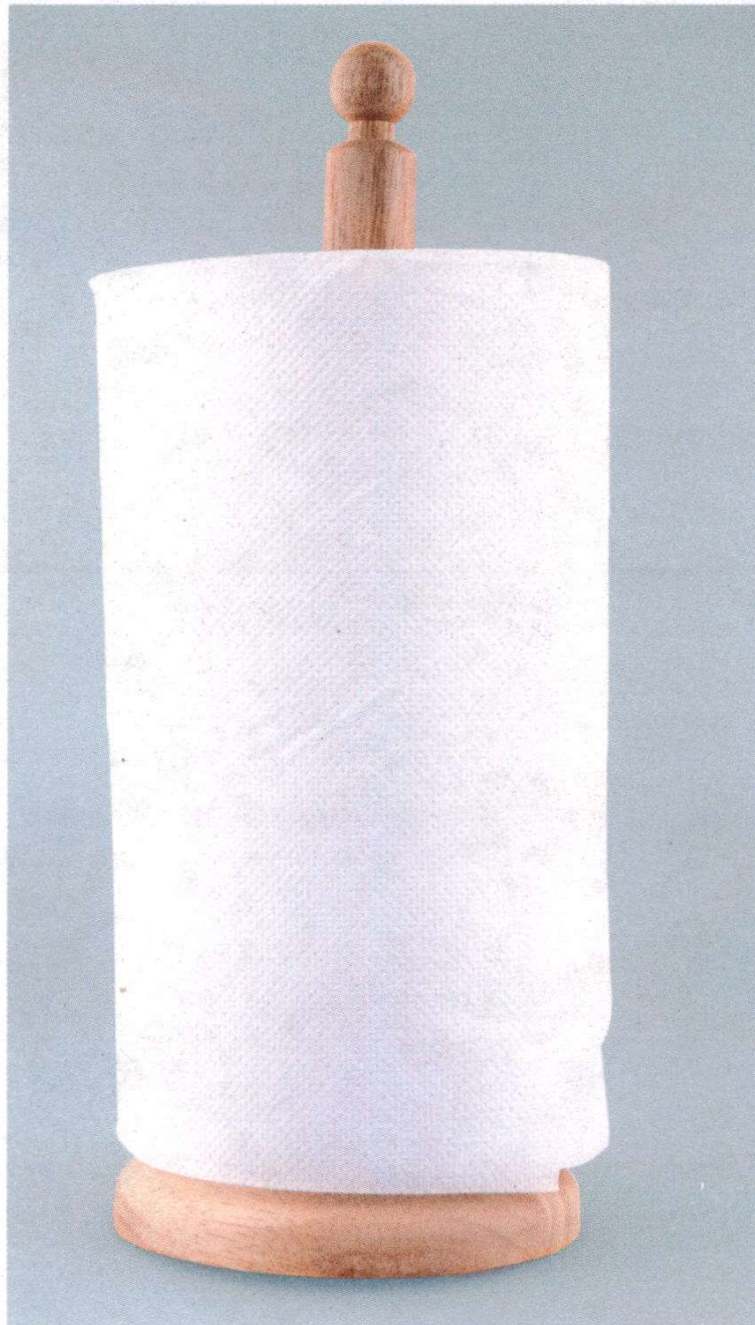
Materials and Tools

- ▶ Round or square base
- ▶ Dowel rod that measures 1¼ inches in diameter
- ▶ Sandpaper
- ▶ Measuring tape
- ▶ Pencil
- ▶ Screw
- ▶ Felt or pieces of cork, if desired
- ▶ Glue
- ▶ Decorative piece for the top of the dowel rod, if desired
- ▶ Paint or stain
- ▶ Paintbrush

Instructions

1. Cut the dowel rod to 14 inches.
2. Sand the dowel rod and base.
3. Using a measuring tape, find and mark the exact center of the base on both the top and the bottom.
4. Stand the dowel rod up and place the base on top of it. Make sure the dowel rod is in the center of the base.
5. Drive a screw through the center mark on the base into the dowel rod. This will be easier to do if an adult first drills a pilot hole with a power drill. (A pilot hole is a hole that is smaller than the screw.)

6. If desired, glue a decorative knob on the top of the dowel rod. Look for a knob that has a hole the same circumference as your dowel rod so it will slide onto the end. Make sure that the center of a paper towel roll will fit over the knob.
7. If desired, you may paint or stain the towel holder. You may then glue a square of felt or pieces of cork to the bottom of the towel holder. This will protect the countertop and keep the towel holder from sliding.



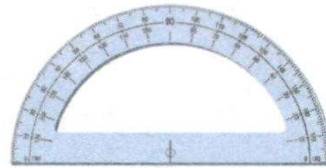
WALL SHELF

Materials and Tools

- ▶ 8-inch piece of 1-by-4-inch board
- ▶ 6-inch piece of 1-by-4-inch board
- ▶ Protractor
- ▶ Coping saw
- ▶ Pencil
- ▶ Sandpaper
- ▶ Glue
- ▶ Finishing nails
- ▶ 1-inch angle brackets, screws, and wall anchors
- ▶ Paint or stain
- ▶ Paintbrush
- ▶ Wall fasteners

Instructions

1. Using a protractor or a cooking pot as a guide, draw a half-circle on the 8-inch board. Make the shelf by carefully cutting along the line with a coping saw.
2. Draw a diagonal line on the 6-inch board. Make the brace by carefully cutting along the line with a coping saw.



Protractor



Coping saw

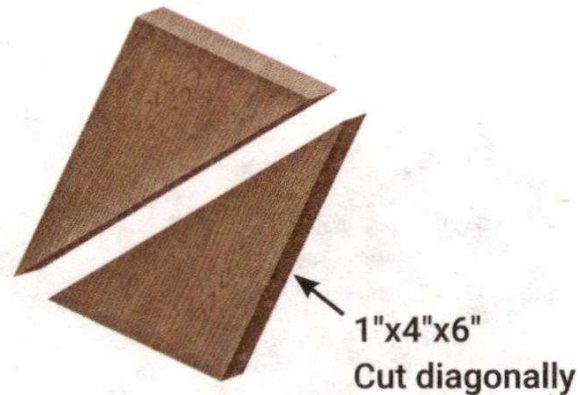
3. Sand all the edges smooth.

4. Paint or stain the shelf and brace as desired.

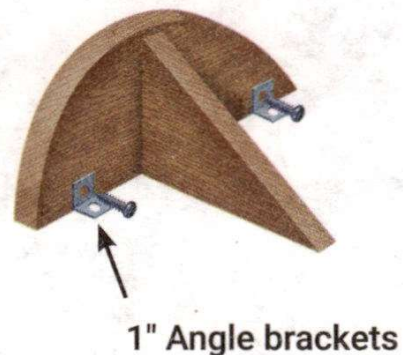
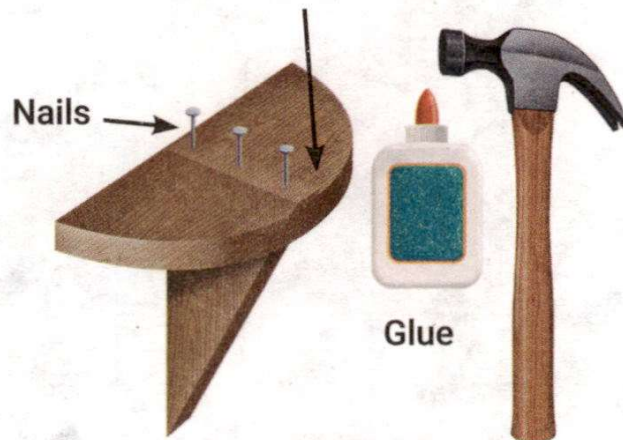
5. Use glue and finishing nails to attach the brace to the bottom of the shelf.

6. Screw angle brackets to the bottom of the shelf at the back edge.

7. With an adult's help, use wall fasteners to attach your shelf to the wall. (You may need hollow wall anchors to attach the shelf securely to the wall.)

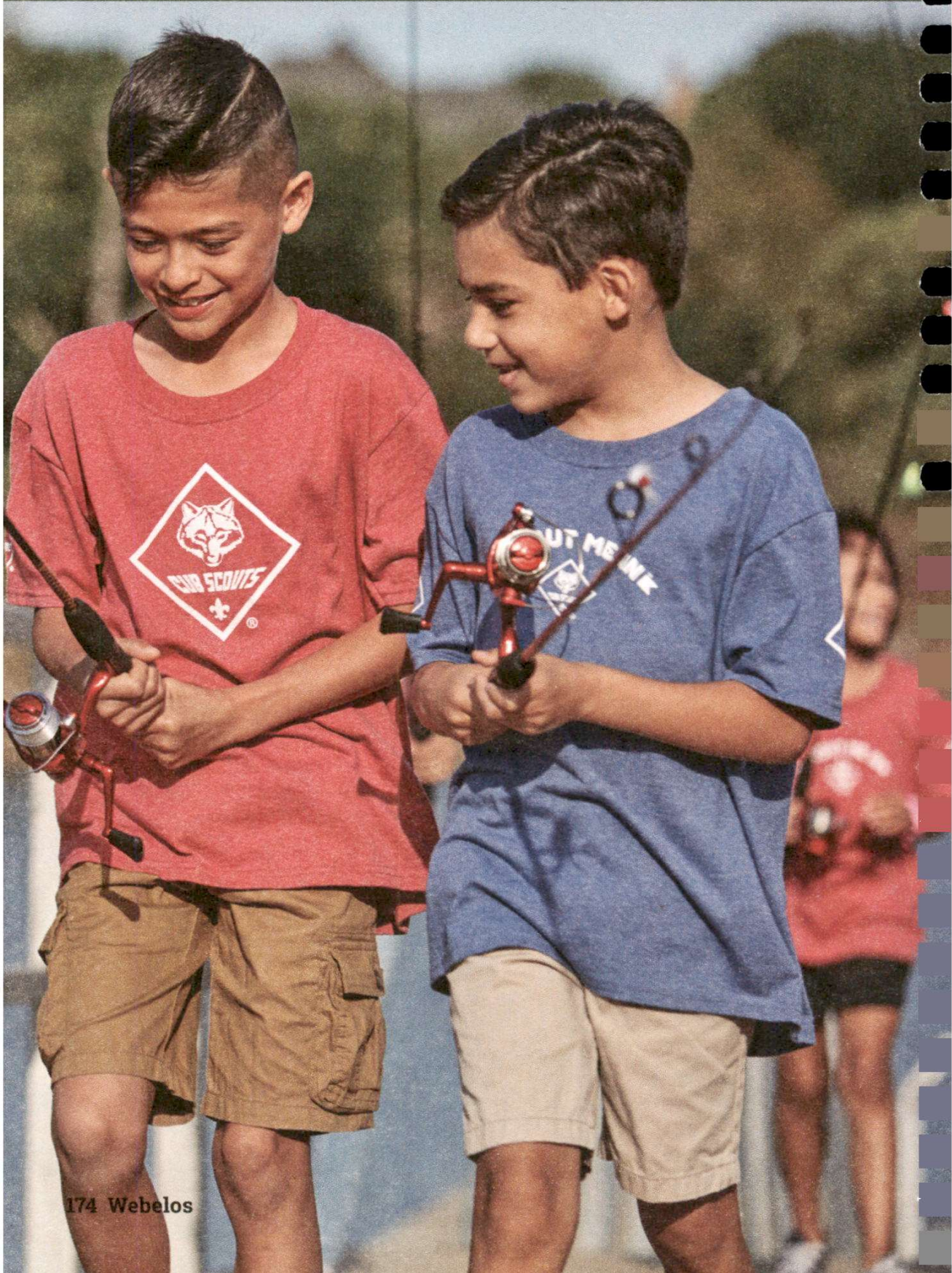


Glue 4-inch edge of this piece.



CATCH THE BIG ONE

ELECTIVE ADVENTURE



SNAPSHOT OF ADVENTURE



Humans started fishing as a way to get food. Many cities and towns were established and grew because they were close to a source of fish. Today, most people fish as a hobby, releasing what they catch. Fishing gives you a chance to be outdoors near the water and have fun.

REQUIREMENTS

Approved by _____

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



- Elective Adventure
- Scan for this Adventure page

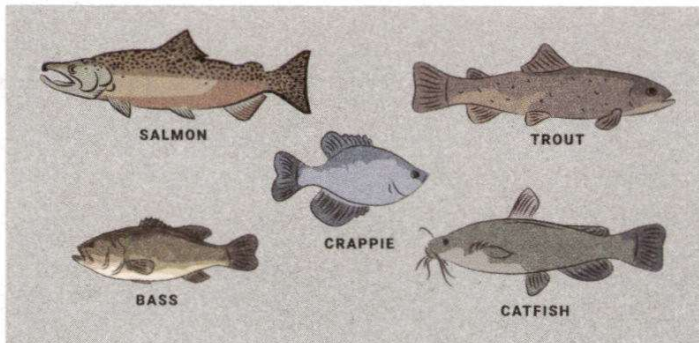
REQUIREMENT 1

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

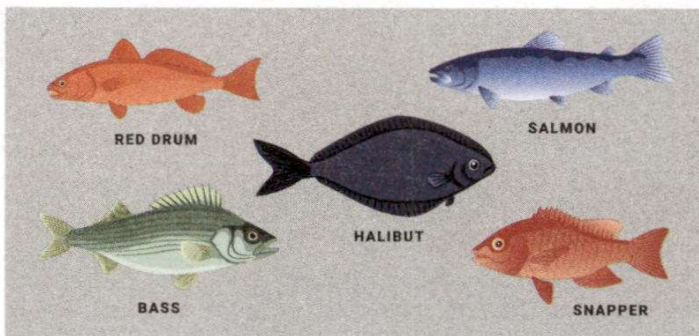
Fishing is popular because there are so many different places to fish and because most people live in an area that is not too far away from a fishing spot. Your fishing spot may be a man-made lake that is stocked with fish, a stream known for fly fishing, or an ocean pier.

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

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



Freshwater species

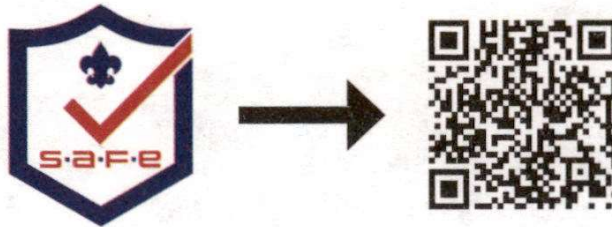


Saltwater species

REQUIREMENT 2

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

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



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

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

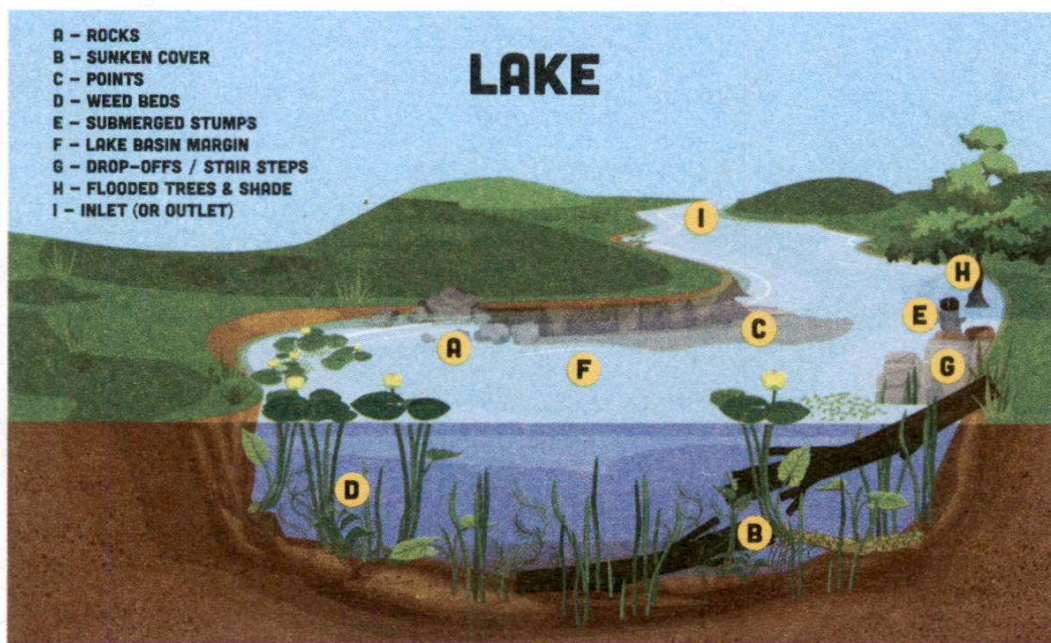
REQUIREMENT 3

Describe the environment where the fish might be found.

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

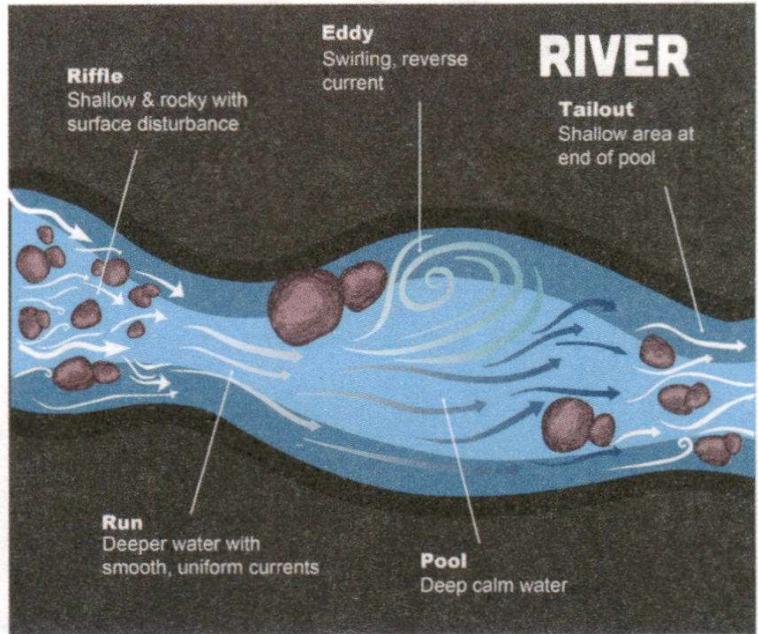
Most big fish eat little fish. To survive, little fish move fast, and they find places to hide where big fish cannot go. Little fish need food, too, so if you know what the little fish eat, chances are you'll find bigger fish nearby.

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

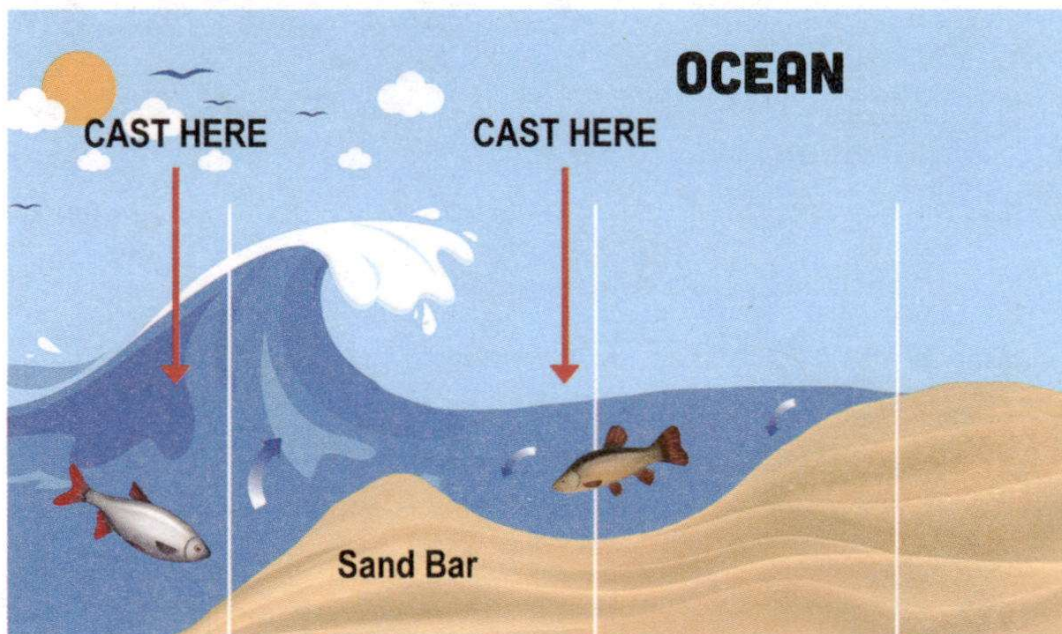


Where do the fish you want to catch live?

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



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



REQUIREMENT 4

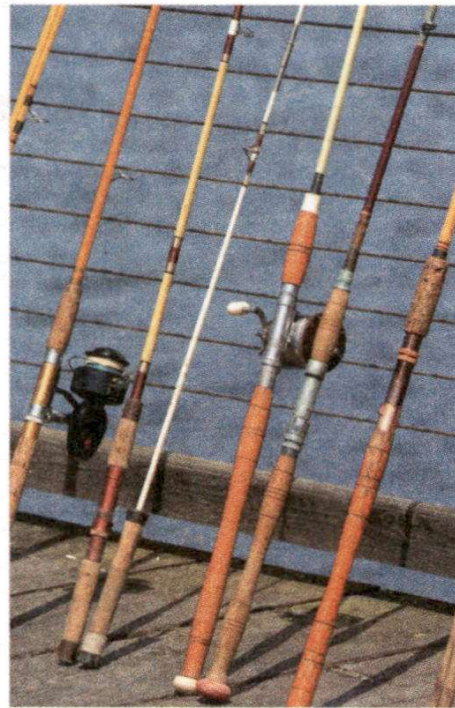
Make a list of equipment and materials you will need to fish.

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

ROD

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

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



REEL

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

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

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

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

FISHING LINE

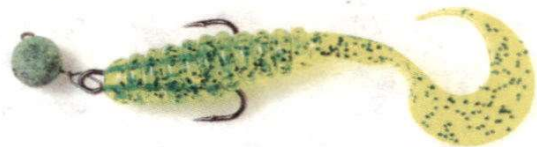
There are many types and colors of fishing line. Some line is meant to catch fish that weigh less than a pound. Some is meant to catch fish that weigh 10, 20, or even 50 or more pounds. Be sure to use line that is strong enough for the fish you want to catch. Otherwise, a fish can break the line and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



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

BAIT

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





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

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

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

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



TACKLE BOX

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



Here are some things to carry in your tackle box:

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

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

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

REQUIREMENT 5

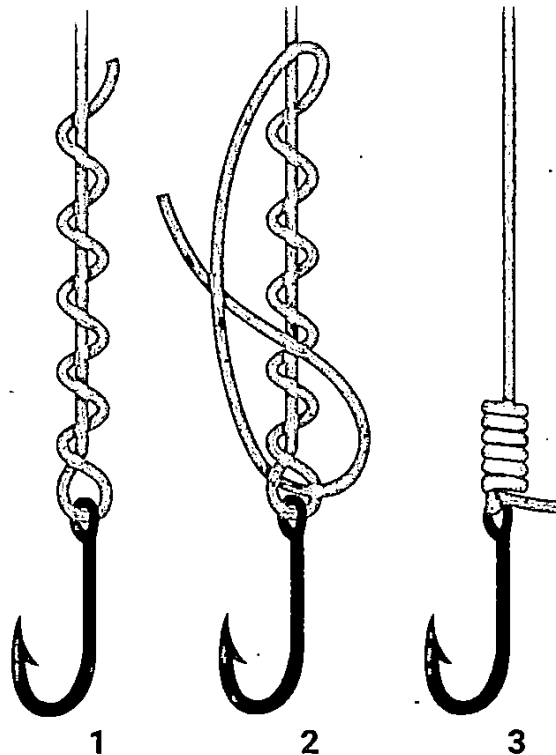
Determine the best type of knot to tie your hook to your line and tie it.

FISHING KNOTS

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

Improved clinch knot.

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



Palomar knot.

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



REQUIREMENT 6

Choose the appropriate type of fishing rod and tackle you will be using. Have an adult review your gear.

Things to check before going fishing:

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



REQUIREMENT 7

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

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

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





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

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

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

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

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

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

Fishing tips:

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

CHAMPIONS FOR NATURE

ELECTIVE ADVENTURE



SNAPSHOT OF ADVENTURE



It is estimated that 80% of Earth's species (including humans) live on land. We share the planet with a lot of different animal species on land. Humans can make a positive impact on wildlife. Using what we have learned about wildlife, humans have been able to limit negative impacts on wildlife. We have successfully protected and increased the populations of many animals, including the American bald eagle, American alligator, green sea turtle, and the whooping crane. In this Adventure, you will learn more about the wildlife we share our planet with. You may put what you learn into action with a conservation project.

REQUIREMENTS

Approved by

1. Explore the four components that make up a habitat: food, water, shelter, and space. _____
2. Pick an animal that is currently threatened or endangered to complete requirements 3, 4, and 5. _____
3. Identify the characteristics that classify an animal as a threatened or endangered species. _____
4. Explore what caused this animal to be threatened or endangered. _____
5. Research what is currently being done to protect the animal. _____
6. Participate in a conservation service project. _____



- Elective Adventure
- Scan for this Adventure page

REQUIREMENT 1

Explore the four components that make up a habitat: food, water, shelter, and space.

Wildlife habitats include all the factors that make the survival of wildlife possible. The major components needed for life are food, water, shelter, and space.

Food

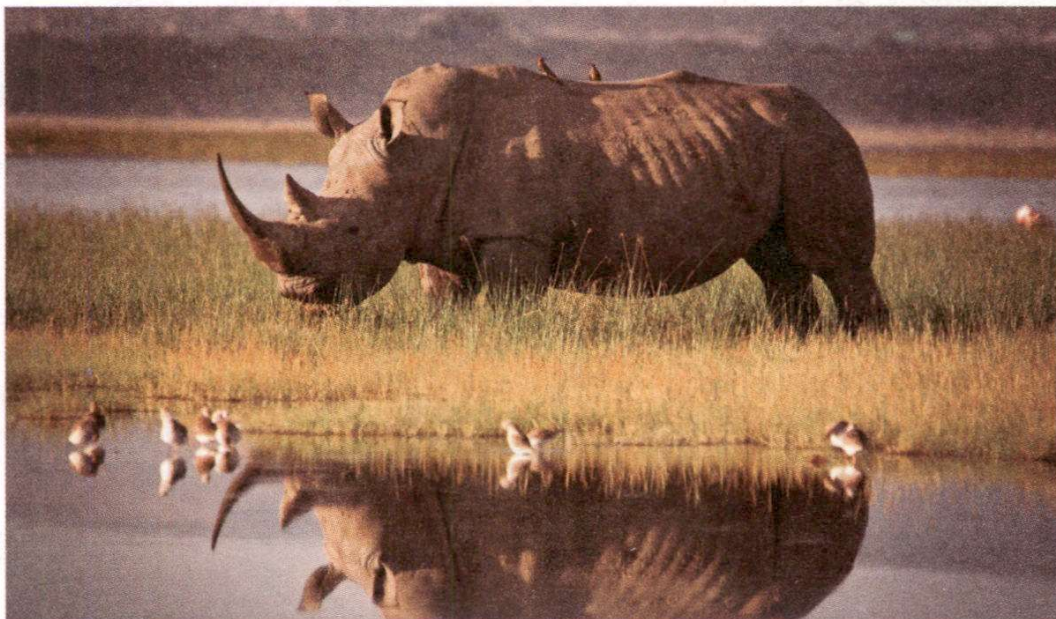
All living things need food for survival. The availability of food is a crucial part of a habitat's arrangement. Too little food may cause animals to die off or move away from the habitat.



Too much food can also be disruptive. Freshwater algae blooms may absorb oxygen, destroying fish and plants.

Water

Safe access to clean water is not just important for humans; it's important to all living things.

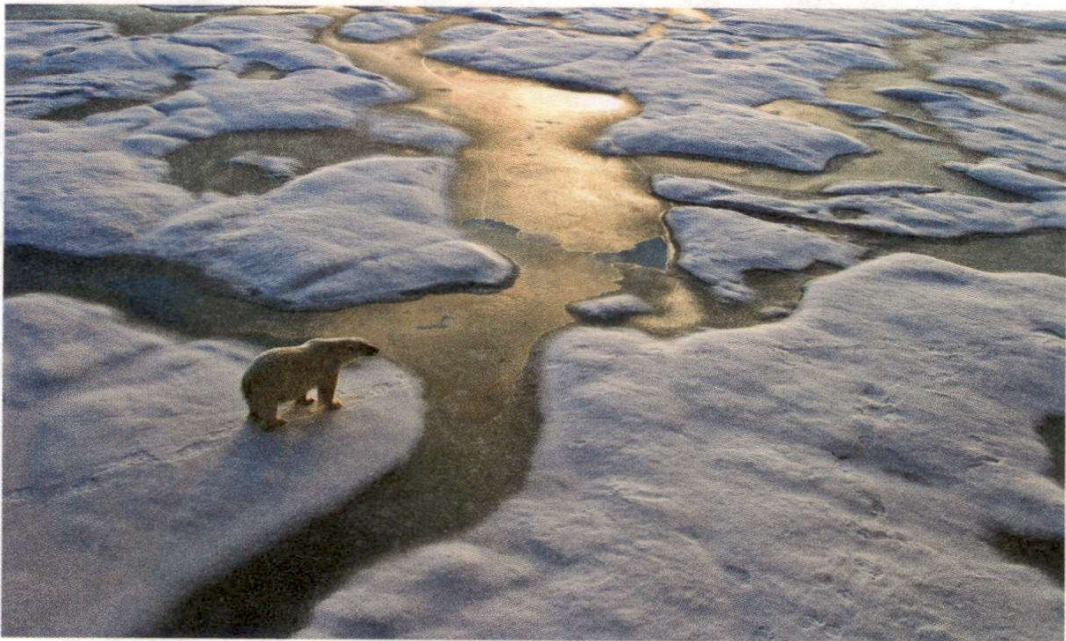


Shelter

Wildlife may not build houses or apartments like humans, but they do have places they live. Some wildlife build their shelter. Others use naturally occurring elements like trees, holes, or caves. They



may use their shelter to give birth to and nurture their young or for protection from other wildlife and weather.



Space

All animals need adequate space in a suitable environment to provide access to sufficient food and water, as well as enough territory for mating and nesting and cover or shelter from weather and predators.

REQUIREMENT 2

Pick an animal that is currently threatened or endangered to complete requirements 3, 4, and 5.

This requirement asks you to pick an animal that is currently threatened or endangered. You'll research some things about this animal in the next three requirements. How can you find out what animals are classified as threatened or endangered? Several organizations and government agencies keep track of this information, including the United States Fish and Wildlife Service. With an adult, you can search their websites on the internet to learn about them.



REQUIREMENT 3

Identify the characteristics that classify an animal as a threatened or endangered species.

"Species" is a group of living things that can reproduce with one another in nature and produce fertile offspring. Animal species can be identified by their physical characteristics or what they look like. Scientists have discovered 1.2 million animal species living on Earth. Most of these discovered species live on land, rather than in the water.

Threatened animals are any animals that are vulnerable to extinction in the near future. Extinction is when the population of an animal species reaches zero.



An **endangered species** is a species that is very likely to become extinct in the near future, either worldwide or in a specific area. Endangered species may be at risk due to factors such as habitat loss, poaching, or invasive species.

REQUIREMENT 4

Explore what caused this animal to be threatened or endangered.

Several factors can cause an animal to become threatened or endangered. Sometimes these factors are naturally occurring, and other times they are caused by humans.

Naturally occurring events have caused some animals to go extinct. Things like invasive species and natural disasters can have an impact on the population of a species.



Humans can negatively impact a species when human activity affects that animal's access to water, food, shelter, or needed space.

What are the things that have caused your animal to be threatened or endangered?



REQUIREMENT 5

Research what is currently being done to protect the animal.

With your den or family, identify what can be done or is being done to protect the animal you chose. In your research, identify the following facts.

Is the population of your animal increasing or decreasing?

How quickly is your animal's population expected to increase or decrease?

Are there any current laws protecting your animal?

In your opinion, do you believe that the things that are currently being done to protect the animal are working? If not, what do you believe could be done?



REQUIREMENT 6

Participate in a conservation service project.

With your den, pack, or family, conduct a conservation service project. Maybe you can conduct a project that will help one of the animals that you or a member of your den studied.



Here are some projects that can help increase the population of some important wildlife.

Build a bee bath, and place it in a garden. Bees are important pollinators and are key to just about every food web.



Build a bat house. Bats keep insect populations in balance and also are pollinators.



CHEF'S KNIFE

ELECTIVE ADVENTURE



SNAPSHOT OF ADVENTURE



The most common use of a knife is in the kitchen. In this Adventure, you will learn the safety rules about using a knife in the kitchen and some basic instructions on how to use a kitchen knife. It's time to slice and dice.

This Adventure is required in order for you to use any knife during a Cub Scout activity. Even if you earned the Whittling Adventure as a Bear, you must earn the Chef's Knife Adventure as a Webelos to earn the privilege of using a knife during a Cub Scout activity.

REQUIREMENTS

Approved by

1. Read, understand, and promise to follow the Cub Scout Knife Safety Rules.
2. Demonstrate the knife safety circle.
3. Demonstrate that you know how to care for a kitchen knife safely.
4. Choose the correct cooking knife, and demonstrate how to properly slice, dice, and mince.



- Elective Adventure
- Scan for this Adventure page

TYPES OF 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.



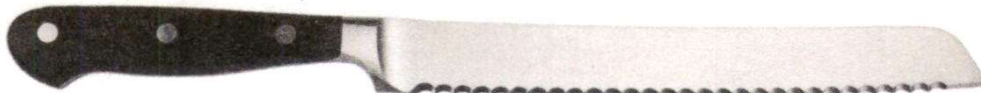
Chef's Knife (8 inches or 10 inches)

A chef's knife is the most common knife. It can be used to slice, dice, 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 has a blade with ridges. These ridges work like a saw and prevent the bread from getting squished when cutting.



Slicing/Carving Knife (10 inches)

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

REQUIREMENT 1

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

There are four Cub Scout Knife Safety Rules that focus on knife safety. A parent, den leader, or another adult 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 I MUST FOLLOW

REQUIREMENT 2

Demonstrate the knife safety circle.

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



REQUIREMENT 3

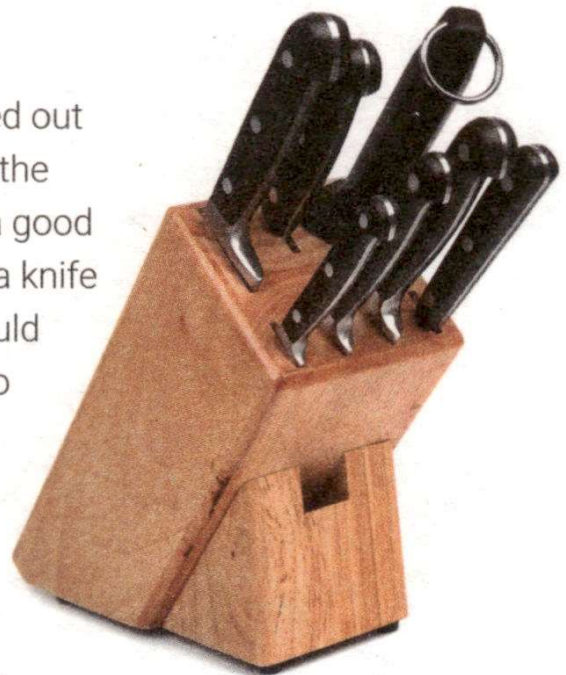
Demonstrate that you know how to care for a kitchen knife safely.

KEEPING YOUR KNIFE SHARP

It is recommended that you have a professional sharpen kitchen knives. 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. Or, if a knife block is not available, knives should be stored with their knife guard to prevent unwanted injury.



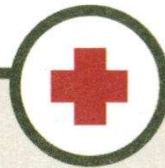
USING KITCHEN KNIVES

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. Knives should always be placed blade side down into the utensil basket. If the kitchen knife has a wooden handle, chances are it is not dishwasher safe.



First Aid for Knife Cuts

Accidents can happen even when you are being careful. It is important that you know what to do if you or one of your fellow Cub Scouts is cut while using a knife.

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 cream and cover with a dry, sterile dressing or an adhesive bandage to help prevent infection and protect the wound. Clean and rebandage wounds daily. If the cut is more serious, get help from an adult immediately.

Taking proper care of a wound will help prevent other health issues like an infection.

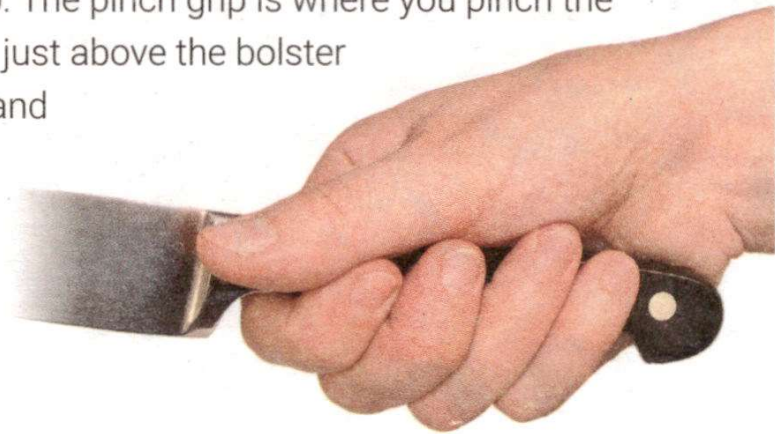
REQUIREMENT 4

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 where you pinch the blade of the knife just above the bolster with your thumb and forefinger, then wrap the other fingers around the handle.



THE CLAW

When holding the object you are cutting, use the claw technique to keep the object stable and your fingers out of the way. To make a claw, shape your free hand into a claw by tucking four fingers behind your middle finger. Tightly grip the food with your claw hand, using all five fingers to hold it steady, with the thumb and pinky finger stabilizing the sides. Make sure the fingertips are always farther back from the knife edge than the knuckles.





SLICE

Move the knife in a rocking, tip-to-heel motion to cleanly slice 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.



EARTH ROCKS

ELECTIVE ADVENTURE



SNAPSHOT OF ADVENTURE



Rocks and minerals are more than just things that lie in the ground. Yes, they help form our planet, but people also use them to create things that make our lives easier. In this Adventure, you'll dig into the world of rocks and minerals and discover some surprises about the science of geology – like how the ground beneath your feet is constantly on the move.

REQUIREMENTS

Approved by

1. Examine the three types of rocks: sedimentary, igneous, and metamorphic. _____
2. Find a rock, safely break it apart, and examine it. _____
3. Make a mineral test kit and test minerals according to the Mohs scale of mineral hardness. Using the rock cycle chart or one like it, discuss how hardness determines which materials can be used in homes, in landscapes, or for recreation. _____
4. Grow a crystal. _____



- Elective Adventure
- Scan for this Adventure page

REQUIREMENT 1

**Examine the three types of rocks:
sedimentary, igneous, and metamorphic.**

Everywhere you look, there are rocks and minerals. They are part of your world every day. Some rocks are small pebbles, and some are gigantic mountains. Your own backyard and neighborhood are good places to begin collecting rocks. Think about how these rocks were formed and how they ended up where you found them.

COLLECTING SPECIMENS

One way to begin a collection of geologic specimens is to visit a business that sells building or landscaping stones. These businesses might have small scraps of marble, granite, sandstone, limestone, pumice, shale, or slate they will give you. A nearby science museum might also have rock specimens for sale.

You can also go on a field trip. If possible, go with a rockhound (a collector who knows a lot about rocks). A rockhound will know which rocks contain useful materials. Look for minerals in gravel or sand pits, road cuts, diggings, mountains, hills, and stream banks. Keep your rock samples small. Small ones are easier to carry and easier to care for. Safety is very important when on a rock hunt. Always have an adult with you. Stay away from dangerous areas like cliffs, quarries, mines, and mine dump heaps. Be careful when climbing on rocks. And watch out for snakes. They may live under rocks, so always poke around a rock with a long stick before reaching under it.

Collecting rocks is not allowed in national parks and in many state parks. Ask permission before you collect anywhere. If you aren't permitted to collect rock samples, take pictures of your findings to use in a display.

KINDS OF ROCKS

All rocks belong to one of the three main groups that make up the Earth's crust. They are igneous, sedimentary, and metamorphic rocks.

Igneous Rock

Igneous rock is any rock made by cooling magma (hot, molten material that flows under the Earth's surface) or lava (molten rock that comes out of a volcano). Examples of igneous rock include basalt, granite, and obsidian.



Basalt



Granite



Obsidian

Sedimentary Rock

Sediment is gravel, sand, clay, or soil that settles and hardens out of water in riverbeds, ponds, lakes, and oceans. Sediment may contain shells and skeletons. Sedimentary rock is formed in layers, like a giant cake, after sediment has been under great pressure for millions of years. If the sediment was originally sand, it becomes sandstone. Clay turns into shale. Shells and skeletons make limestone. Small pebbles and sand form conglomerate.



Sandstone



Shale



Limestone

Metamorphic Rock

Metamorphic rock has been through a process much like baking. (Meta means "changed," and morphic means "form.") The change is caused by intense heat and great pressure deep in the Earth. Under these conditions, sedimentary limestone becomes marble. Sedimentary sandstone turns into quartzite. Igneous granite changes into gneiss (pronounced "nice").



Marble



Quartzite



Gneiss



REQUIREMENT 2

Find a rock, safely break it apart,
and examine it.

Geologist's Equipment

- ▶ Written or verbal permission to collect rocks.
- ▶ Safety glasses to protect your eyes.
- ▶ A pocket magnifier for seeing things up close.
- ▶ A geologist's hammer for pulling rocks out of hillsides and breaking them open.
- ▶ A cold chisel, half-an-inch to 1-inch wide, for chipping stone with a hammer and for digging things loose.
- ▶ Clear plastic food storage bags; write the number of the rock sample on paper and slip it into the bag with the rock sample.
- ▶ A small notebook and pencil for recording where and when you found a sample; number each sample in the notebook.
- ▶ Heavy gloves for rough work.
- ▶ A small daypack for carrying equipment and rocks.

Using appropriate safety gear, wrap a rock in a rag to hold it in place. Use a hammer and chisel to try to break the rock apart. With a magnifying glass, take a close look at the pieces. Determine any difference between pieces.



REQUIREMENT 3

Make a mineral test kit and test minerals according to the Mohs scale of mineral hardness. Using the rock cycle chart or one like it, discuss how hardness determines which materials can be used in homes, in landscapes, or for recreation.

Using a guide to rocks and minerals, identify what you have collected or taken pictures of. With a magnifying glass, take a closer look at your collection. Do you see anything different when looking closely? Share what you see with your family or den.

Geologists use the following tests to identify minerals.

- ▶ Color test – Scratch the specimen on a plate of unglazed porcelain or the back of a piece of tile. The color that appears helps to identify it.
- ▶ Luster test – How does the specimen look when light is reflected from it? Is it shiny, dull, or greasy?
- ▶ Cleavage test – How does it split or break up? Does it turn into powder or split in layers? If it breaks into crystals, how many sides does a crystal have?
- ▶ Chemical test – Does it contain limestone? If a drop of vinegar bubbles on it, the answer is yes.
- ▶ Hardness test – How hard is it?

USEFUL MINERALS

The Earth contains many useful minerals. Some, like silica (sand), are easy to see and collect. Others, like iron and zinc, are found in rocks. They must be removed from the rock by a process called smelting or refining.

There are three categories of useful minerals: metals, nonmetallic minerals, and fuels.

TESTING MINERALS

A long time ago, a geologist named Friedrich Mohs figured out that you can test the hardness of minerals by seeing whether they can scratch other materials or whether other materials can scratch them. He created a scale that gives different minerals hardness values from 1 to 10.

Mohs Hardness Scale		
Scale No.	Mineral Example	Scratch Test
1	Talc	Scratches easily with fingernail
2	Gypsum	Barely scratches with fingernail
3	Calcite	Barely scratches with copper penny
4	Fluorite	Scratches easily with file or knife blade
5	Apatite	Barely scratches with file or knife blade
6	Feldspar	Doesn't scratch with file or knife blade, scratches easily with glass
7	Quartz	Easily marks steel and hard glass
8	Topaz	Is harder than common minerals
9	Corundum	Scratches topaz
10	Diamond	Scratches corundum; hardest mineral

MAKE A MINERAL TEST KIT

Many experienced rock collectors carry a mineral testing kit on their rock-hunting trips to test hardness and other mineral characteristics. Knowing the hardness of a mineral won't always tell you its identity, but it will help rule out some possibilities. You can buy a mineral test kit, but it's more fun to make one yourself using materials you can find around your home or buy cheaply.

Here's what you need:

- ▶ Penny
- ▶ Small piece of glass
- ▶ Piece of unglazed tile
- ▶ File or pocketknife
- ▶ Small bottle of vinegar
- ▶ Eyedropper
- ▶ Minerals



Here's how to use your kit:

1. Scratch the tile with your mineral to determine the "streak" of the mineral. The streak is the color of the resulting powder. It's usually a more consistent color than the apparent color of the mineral. You can refer to a mineral identification chart to find out what minerals have this streak.
2. Use the eyedropper to put a drop of vinegar on the mineral. If the vinegar fizzes, that means the mineral contains calcium carbonate.

3. Test the hardness of the mineral by trying to scratch it, in order, with your fingernail, the penny, and the file or knife. Then, try to scratch the file or knife and the glass with the mineral. Refer to the chart to determine the mineral's hardness. For example, if you can scratch the mineral with your fingernail, it measures 1 or 2 on the scale. If the mineral can scratch the file or knife, it measures at least 7 on the scale.



REQUIREMENT 4

Grow a crystal.

CRYSTALS

A crystal is a group of atoms that come together in a certain way to form a molecule. Each kind of crystal has special and unique characteristics and shapes. For example, sugar crystals are oval-shaped and slanted at the ends, while salt crystals are in the shape of little cubes. Crystals can be used in many ways: for eating (like sugar and salt) or as jewelry. Diamonds, rubies, sapphires, and emeralds are all different kinds of crystals, formed by different elements and atoms.

Rock Candy

This is one of the simplest sugar candies you can make. All you need is sugar and water and a few basic materials. While you should start to see changes within the first few hours, it may take three to seven days for the rock candy to form.

Keep in mind that the exact quantity of sugar syrup you will need depends on the size of the jars you're using and how many candies you want. For example, the recipe's measurements work for four 12-ounce jars or one quart-sized Mason jar. You can easily double or triple the recipe and make more rock candy at once.

Ingredients

- ▶ 2 cups water
- ▶ 6 cups granulated sugar
- ▶ 2 to 3 drops food coloring, optional
- ▶ ½ to 1 teaspoon flavoring extract or oil, optional



Materials

- ▶ Glass jar
- ▶ Wooden skewer or string
- ▶ Clothes pins

Instructions

Prepare Your Materials

1. Clean the glass jars thoroughly with hot water.
2. For each jar, use a wooden skewer or string that hangs about 1 inch from the bottom of the jar. Use clothespins that are balanced across the top of the jar to hold the skewer in place.

Make Your Rock Candy

Gather the ingredients.

1. Wet each wooden skewer or string with water and roll it in granulated sugar. This base layer gives the sugar crystals something to grab when they start forming. Set these aside to dry while you prepare the sugar syrup.



2. Place the 2 cups of water in a medium-sized pan and bring it to a boil. Begin adding the sugar, 1 cup at a time, stirring after each addition. You'll notice that it takes longer for the sugar to dissolve after each cup you add. Continue to stir and boil the syrup until all of the sugar has been added and it's completely dissolved. Remove the pan from the heat.



3. If you're using colors or flavorings, add 2 to 3 drops of food coloring and stir it in to ensure an even, smooth color. When using an extract, add 1 teaspoon of the extract; for flavoring oils, only add $\frac{1}{2}$ teaspoon. Make sure you don't stand right in front of the pan because the scent can be very strong as it rises in the steam.



4. Allow the sugar syrup to cool for 20 to 30 minutes.

5. Pour the syrup into the clean, prepared jars.



6. Lower one sugared skewer or string into each jar until it hangs about 1 inch from the bottom.

7. Carefully place your jar in a cool place, away from harsh lights, where it can sit undisturbed. Cover the top loosely with plastic wrap or a paper towel.



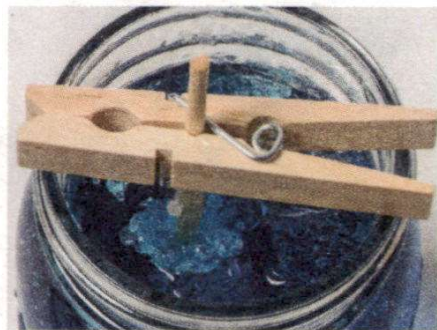
8. You should start to see sugar crystals forming within two to four hours. If you see no change after 24 hours, try boiling the sugar syrup again and dissolve another cup of sugar into it. Then pour it back into the jar and insert the skewer or string again.



9. Allow the rock candy to grow until it is the size you want. Don't let it grow too large; otherwise, it might start growing onto the sides of your jar.



10. Note that a top layer of crystal will form. This is OK. Once the candy has reached the desired size, break that top layer of crystal up with a fork before removing the candy.

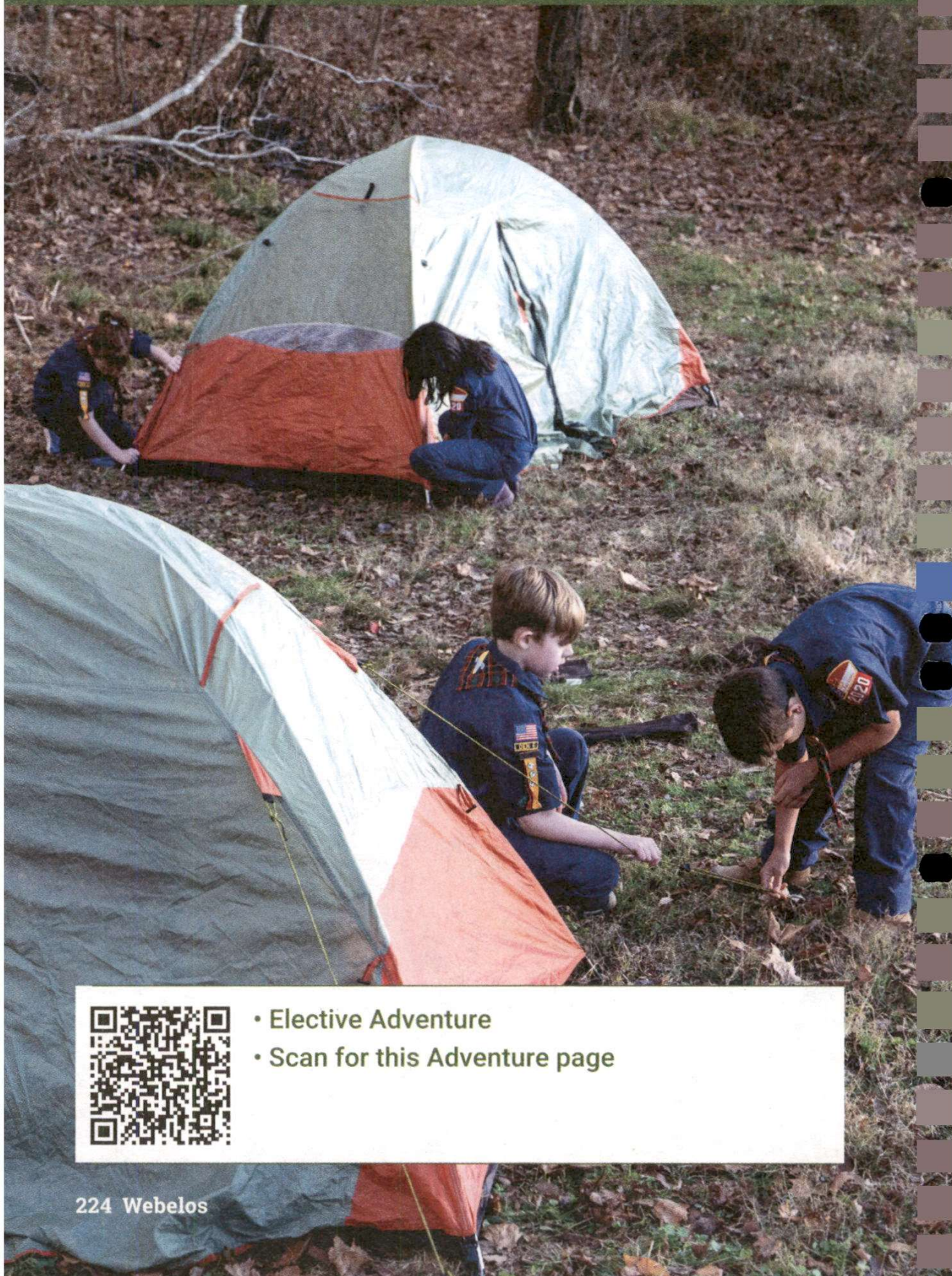


11. Transfer the rock candy to an empty jar or glass (keep the clothespins to balance it) and allow it to dry for one to two hours.



LET'S CAMP

ELECTIVE ADVENTURE



- Elective Adventure
- Scan for this Adventure page

SNAPSHOT OF ADVENTURE



There's nothing like the great outdoors! In this Adventure, you will get the chance to plan and participate in a campout. You'll learn how to be prepared for extreme weather events, and you'll also demonstrate how to leave no trace when you're outdoors.

REQUIREMENTS

Approved by _____

1. With your den, pack, or family, plan and participate in a campout. _____
2. Upon arrival at the campground, determine where to set up a tent. _____
3. Set up a tent without help from an adult. _____
4. Identify a potential weather hazard that could occur in your area. Determine the action you will take if you experience the weather hazard during the campout. _____
5. Show how to tie a bowline. Explain when this knot should be used and why. _____
6. Know the fire safety rules. Using those rules, locate a safe area to build a campfire. _____
7. Using tinder, kindling, and fuel wood, properly build a teepee fire lay. If circumstances permit and there is no local restriction on fires, show how to safely light the fire while under adult supervision. After allowing the fire to burn safely, extinguish the flames with minimal impact to the fire site. _____
8. Recite the Outdoor Code and Leave No Trace Principles for Kids from memory. _____
9. After your campout, share the things you did to follow the Outdoor Code and Leave No Trace Principles for Kids with your den or family. _____

REQUIREMENT 1

With your den, pack, or family, plan and participate in a campout.

If you went camping when you were younger, your parents or other adults may have done all the planning. As a Webelos Scout, you get to help plan this Adventure. Work with your den leader or another adult in charge of your campout to help plan. Pick out a location and determine the dates. Make a list of activities that you could do on the campout.

Our Campout

Location _____

Departure Date and Time _____

Return Date and Time _____

Adult Leader in Charge _____

Activities _____

Special Equipment We Need _____

Campout Ideas

What can you do on your campout? Here are some ideas:

- ▶ Take a hike.
- ▶ Complete a compass course or geocaching game.
- ▶ Play a wide game like capture the flag.
- ▶ Have a first-aid relay.
- ▶ Compete in a sports tournament.

- ▶ Have a special cooking contest.
- ▶ Go stargazing.
- ▶ Do nature crafts.
- ▶ Have a scavenger hunt.
- ▶ Complete a service project.
- ▶ Plan and participate in a campfire program.
- ▶ Conduct a flag ceremony or flag retirement.
- ▶ Plan and participate in an interfaith worship service.

Camping Gear

A big part of being prepared is taking the right equipment on camping trips. On the next page are things you should take on den or pack outings. This list is like the Cub Scout Six Essentials you might have used before, but it includes some additional items to consider for your campout. You can borrow some items until you are ready to invest in new equipment.



* Find out more about the Cub Scout Six Essentials on page 24.

Overnight Gear

- ▶ Tent or tarp, poles, and stakes
- ▶ Ground cloth
- ▶ Sleeping bag
- ▶ Pillow
- ▶ Air mattress or pad
- ▶ Warm jacket
- ▶ Sweatshirt (try to avoid cotton)
- ▶ Sweatpants (for sleeping, try to avoid cotton)
- ▶ Socks (avoid cotton)
- ▶ Cup, bowl, knife, fork, spoon, mesh bag
- ▶ Insect repellent
- ▶ Extra clothing
- ▶ Toothpaste, toothbrush, soap, washcloth, towel, comb, personal medications**
- ▶ Webelos Scout uniform
- ▶ Durable shoes/boots (depending on weather)
- ▶ Hat or cap

Optional Items

- ▶ Camera
- ▶ Binoculars
- ▶ Sunglasses
- ▶ Fishing gear
- ▶ Notebook and pencil
- ▶ Nature books
- ▶ Swimsuit
- ▶ Bath towel
- ▶ Bible, testament, prayer book, or another book for your faith

**Personal medications should be given to the adult in charge.

REQUIREMENT 2

Upon arrival at the campground,
determine where to set up a tent.

There are many things you can do to make your camp home as nice as possible, even if your tent may not be quite as comfortable as your bed back home. When you get to your campsite, spend a few minutes finding the best possible spot for your tent.



First look for a designated tent site. If there is not one, then look for a site that is flat or almost flat. A grassy area or an area covered in leaves will be softer than bare dirt. If bare dirt is the only option, a sleeping pad or inflatable mattress is a good idea!

Look around to make sure the site is not in a natural drainage area or on a trail or path. Look up to make sure there are no dead tree limbs overhead that might fall in a storm. Leave some space between your tent and the next one for privacy.

Once you've picked your tent site, move aside any rocks, pinecones, or sticks that would be uncomfortable to sleep on. Do not remove bushes or small plants; instead, put your tent in a spot where you will have only a small impact on nature. After the campout, restore the site to the way it looked when you arrived. Scouts always leave places better than they found them.

Now, work with your tentmate or other Webelos Scouts to set up your tent. Put your gear inside and get ready to start your camping adventure.

REQUIREMENT 3

Set up a tent without help from an adult.

Tents come in different shapes and sizes. Regardless of the details of how your tent is set up, below are some basic steps to follow. Make sure to read the directions that came with your tent before setting it up and follow those directions.



1. Roll out the tent.



2. Check that you have all the pieces, poles, tents, etc.



3. Lay out the ground cloth.



4. Lay out the tent over the ground cloth.



5. Insert the poles for the tent.



6. Stake down the tent at its base.



7. Add the rainfly and stake down any guylines.

Taking Care of Your Tent

Your tent will last for years if you take care of it. (Remember that a Scout is thrifty.) Here are some tips:

- ▶ Always pitch it on a ground cloth, which is a sheet of plastic or tarp that protects the floor from dirt, sharp objects, and moisture. (Fold the corners of the tarp under the tent so the ground cloth is no bigger than the tent; otherwise, rain can get in between.)
- ▶ Don't wear your shoes inside the tent.
- ▶ Keep tent vents open to let moisture escape.
- ▶ Keep all flames away from tents. Never use candles, matches, stoves, heaters, or lanterns in or near a tent. No tent is fireproof. All tents can burn or melt when exposed to heat.
- ▶ Let the tent dry in the sun before you take it down. If you have to pack it up wet, set it up again as soon as you get home or hang it indoors until it dries completely. That will prevent mildew from ruining the fabric — and making it stink.

REQUIREMENT 4

Identify a potential weather hazard that could occur in your area. Determine the action you will take if you experience the weather hazard during the campout.

On most campouts or other outdoor activities, the worst weather you'll see is rain and heat or cold. Sometimes, however, the weather can be dangerous. It's important to be prepared for bad situations.

Severe Rain and Flooding



Flash floods can occur when there is very heavy rain over several hours or steady rain over several days. Because flash floods can strike with little warning, you should never camp on low ground next to streams when rain is expected.

When you're camping in the mountains or desert, be aware of the weather upstream from your campsite. Heavy rain miles away can turn into flash floods downstream.

If flooding occurs, move to higher ground immediately. Stay out of streams, ditches, and other flooded areas. Adults should never try to drive through flood waters, no matter how shallow they may seem. Just a few inches of water can carry off a car!

Severe Thunderstorms, Lightning, and Tornadoes

Thunderstorms can be loud and scary. Sometimes they produce dangerous lightning and tornadoes.



Lightning can strike 10 miles from a thunderstorm, so you should take shelter in a building or vehicle as soon as you hear thunder – even if the sun is shining overhead. Make sure you’re not the highest object in the area, and avoid water, open areas, isolated trees, picnic shelters, and metal objects. If you’re caught in the open, spread out 100 feet apart and crouch down like you do when you play leapfrog.

Tornadoes are funnel clouds that can form in spring and summer thunderstorms. The best place to be if a tornado hits is indoors, either in a basement or closet or against an interior wall. If you’re caught outside, get in a ditch, and lie as flat as possible.



Dust and Sandstorms

Dust and sandstorms are among nature’s most violent and unpredictable phenomena. High winds lift dirt or sand particles into the air, unleashing a turbulent, suffocating cloud that can reduce visibility to almost nothing in a matter of seconds and cause property damage, injuries, and deaths. No matter where you live, it’s a good idea to know what to do if you see a wall of sand racing toward you.



If you are caught in a sandstorm, cover your mouth, nose, and eyes for protection. Seek shelter, and if none is available, seek higher ground.

Tip: The National Weather Service issues watches when conditions are right for severe weather and warnings when severe weather is occurring. Your leader can carry a portable weather radio or use a mobile phone application to receive information about watches, warnings, and forecasts for your area.

Fires, Earthquakes, and Other Disasters

In very rare cases, such as if there's a forest fire, you may have to evacuate your campsite. Your leader will tell the den where to meet, take attendance, and move the group to safety.

Staying Found — Anyone can get lost, even adults. But you can do some things to avoid getting lost — and to stay safe if you do get lost.

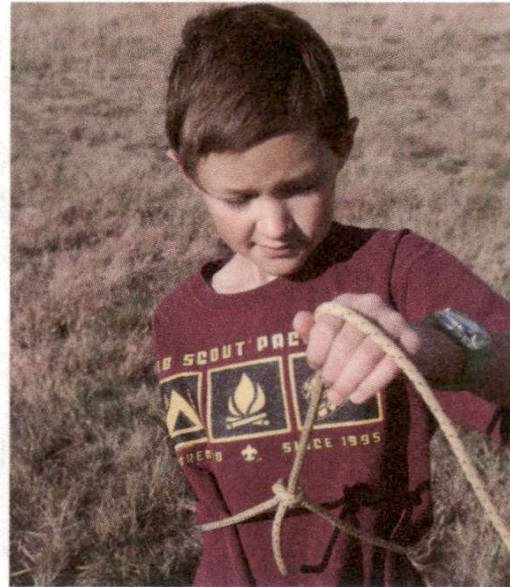
- ▶ Always stay with a buddy.
- ▶ Tell an adult if you and your buddy need to leave the group and where you are going.
- ▶ Carry a whistle to signal for help. Three blasts in a row are the universal distress call.
- ▶ If you think you are lost, remember to "STOP!" Stay where you are and stay calm. Think about how you can help others search for you. Observe your surroundings and watch for searchers. Plan how to stay warm and dry until help arrives.



REQUIREMENT 5

Show how to tie a bowline. Explain when this knot should be used and why.

A bowline is a very useful knot to learn. It makes a fixed loop in a rope that won't slip. The bowline can be used to anchor one end of a rope to a tree or other stationary object, or as the loop around the person's chest in a rescue situation — such as pulling a person out of a hole or off the side of a cliff.



1. Make a small overhand loop in the standing part of the rope.
2. Bring the rope end up through the loop, around behind the standing part, and back down into the loop.
3. Tighten the bowline by pulling the standing part of the rope away from the loop.



REQUIREMENT 6

Know the fire safety rules. Using those rules, locate a safe area to build a campfire.



Picking a Campfire Spot

- ▶ Do not build a campfire if the campground area or event rules prohibit them. Sometimes digging of pits may be prohibited due to archaeological or other concerns.
- ▶ Do not build a campfire in hazardous, dry conditions.
- ▶ Find out if the campground has an existing fire ring or fire pit.
- ▶ If there is not an existing fire pit and pits are allowed, choose a site at least 15 feet from tent walls, shrubs, trees, or other flammable objects. Beware of low-hanging branches.

- ▶ Choose an open, level location away from heavy fuels such as logs, brush, or decaying leaves.
- ▶ Take wind and its direction into account when choosing the site. Choose a spot that's protected from gusts.

Be Careful With Fire

- ▶ Webelos light fires only under supervision of a den leader or another adult.
- ▶ Clear anything that could burn from an area at least 5 feet in all directions from your fire.
- ▶ Never play in or around the fire.
- ▶ Never leave the fire unattended.
- ▶ Make sure the fire is completely out before you leave.

Champions for Nature Tips

- ▶ To help protect the Earth, never cut live trees for firewood. (Green wood doesn't burn.)
- ▶ Don't bring firewood from home. Doing that can spread pests that hurt trees.

REQUIREMENT 7

Using tinder, kindling, and fuel wood, properly build a teepee fire lay. If circumstances permit and there is no local restriction on fires, show how to safely light the fire while under adult supervision. After allowing the fire to burn safely, extinguish the flames with minimal impact to the fire site.



To start a fire, you need three things: heat, oxygen, and fuel. Heat comes from matches or a lighter, oxygen comes from the air, and fuel comes from wood. However, not just any wood will do. It needs to be dry and well-seasoned — never freshly cut. Also, you can't just hold a match to a big log to start a fire. Instead, you must build your fire slowly using tinder, kindling, and logs.

Tinder is anything that burns as soon as you light it. It can include small twigs, dry leaves, pine needles, tree bark, wood shavings, paper, or even dryer lint you bring from home. (Really!) Kindling is small sticks, no bigger than a pencil, which will burn

easily but not as fast as tinder. Fuel wood is bigger pieces of wood that will burn a long time. You don't need huge logs, by the way; look for pieces no thicker than your wrist.

To lay a fire, first gather all the tinder, kindling, and fuel wood you think you will need. Then follow these steps:

- ▶ Build a teepee out of kindling and put some tinder inside it. Add some fuel wood.
- ▶ Light the tinder and blow gently or fan, if necessary, to supply oxygen.
- ▶ As the kindling burns, have an adult help add larger sticks and then small logs.

After you're done with the campfire, be sure to put out your fire completely. You can cover a small fire with a metal can. For larger fires, you can use water or sand and stir the coals. Carefully feel for heat near the fire and continue extinguishing until the area is completely cold to the touch.



REQUIREMENT 8

Recite the Outdoor Code and Leave No Trace Principles for Kids from memory.

Imagine arriving at a campsite and finding damaged trees, a smoldering campfire, and bags of trash that animals have torn into. Now imagine arriving at a campsite and feeling like you're the first group that's ever been there. Which campsite would you like more? The second one, of course.

The Outdoor Code is a promise all Scouts make to help care for the environment. It's important to even the youngest Cub Scouts and the most seasoned leaders. Now it's time to be sure you've learned it by heart.



Leave No Trace is a way of living in the outdoors that respects the environment and other people. By following Leave No Trace principles, we can take care of outdoor spaces and help preserve them for the Scouts of tomorrow. Are you ready to learn these principles, too?

Find the Outdoor Code and Leave No Trace Principles for Kids in the front of your Webelos handbook. Read them and say them aloud until you have them memorized. When you're ready, recite them to your den leader or parent or legal guardian.

REQUIREMENT 9

After your campout, share the things you did to follow the Outdoor Code and Leave No Trace Principles for Kids with your den or family.

What did you and your den do to demonstrate the Outdoor Code and Leave No Trace Principles for Kids while on your campout or outdoor activity?



MATH ON THE TRAIL

ELECTIVE ADVENTURE



SNAPSHOT OF ADVENTURE



In this Adventure, you will learn how to estimate the time it takes you to take a walk. If you know your pace, you can estimate how long it will take you and others to walk any given distance.

REQUIREMENTS

Approved by

1. Determine your walking pace by walking $\frac{1}{4}$ mile. Make a projection of how long it would take you to walk 2 miles.
2. Walk 2 miles and record the time it took you to complete them.
3. Make a projection of how long it would take you to hike a 20-mile trail over two days. List all the factors to consider for your projection.



- Elective Adventure
- Scan for this Adventure page

REQUIREMENT 1

Determine your walking pace by walking $\frac{1}{4}$ mile. Make a projection of how long it would take you to walk 2 miles.



If you have access to a track, find out if it is a standard-length track. If the track is around a football field, there is a good chance it's a standard track. Most outdoor tracks are 400 meters around, as measured in lane 1. That's slightly less than one-quarter of a mile (0.2485 to be exact).

If you don't have access to a track, you can use a smartphone app, a pedometer, or a fitness tracker to track your distance.

Time how long it takes you to walk at a relaxed pace around the track one time.

Since the track is one-quarter of a mile, multiplying your time around the track by 4 will give you an estimation of how long it would take you to walk 1 mile (four times around the track).

Now you have an estimation of how long it takes you to go 1 mile. How long would it take you to go 2 miles?

REQUIREMENT 2

Walk 2 miles and record the time it took you to complete them.

Now that you have estimated how long it should take you to walk 2 miles, determine if your estimate is accurate. Record your actual time walking 2 miles (eight times around the track).

Compare your estimate to your actual time. How close was it? If it was within a couple of minutes, you have a good estimation of your pace. If you were off by 15 minutes or more, you may want to check the math on your estimation.



REQUIREMENT 3

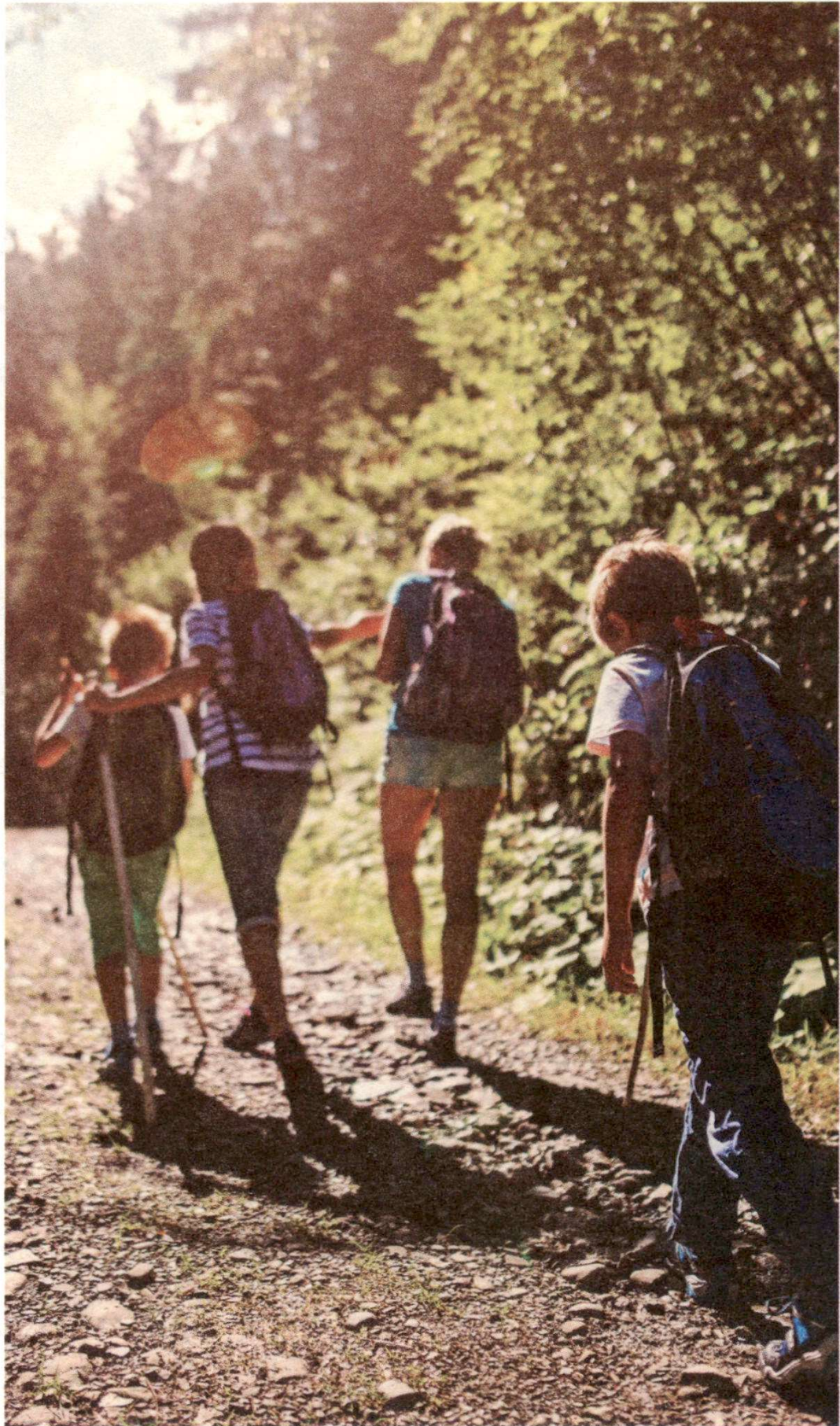
Make a projection of how long it would take you to hike a 20-mile trail over two days. List all the factors to consider for your projection.

When hiking, chances are you won't be on a flat surface the whole time. There may be hills, rocks, mud, and other types of obstacles. You might want to stop and look at the scenery or listen to the animals. (You'll definitely want to take plenty of water breaks.) When you go on a hike, you won't walk in a straight line. These are just some examples of things that will slow you down.

Here are factors you want to consider that will impact your time:

- ▶ **Difficulty rating.** Hiking trails usually have their difficulty level clearly marked, and the designations range from easy to hard. There's no universal standard for evaluating trails, however, so these classifications are open to interpretation.
- ▶ **Distance.** It's best to consider the total length of the trail and whether it's a loop or a one-way route. If it's not a loop, determine the distance to your destination and back. You'll also notice that your pace may slow down toward the end of your hike, as your den or family may be more tired compared to when you started.
- ▶ **Grade.** How steep the trail is, or the difference between its lowest and highest points, will impact the difficulty of the hike.
- ▶ **Terrain.** It's harder to walk on loose sand than it is on hard, packed earth.

On a long hike, you'll also want to plan time to rest, see points of interest, and maybe even eat lunch.

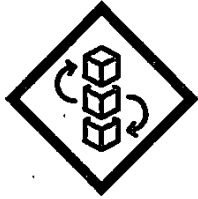


MODULAR DESIGN

ELECTIVE ADVENTURE



SNAPSHOT OF ADVENTURE



Some of your favorite building toys are probably modular. Learning to build using modular design is a good way to conserve resources. In this Adventure, you will gain an understanding of modular design, build using modular-based materials, and practice making directions for others to follow.

REQUIREMENTS

Approved by _____

1. Learn what modular design is and identify three things that use modular design in their construction. _____
2. Using modular-based building pieces, build a model without a set of instructions. _____
3. Using the model made in requirement 2, create a set of step-by-step instructions on how to make your model. _____
4. Have someone make your model using your instructions. _____
5. Using the same modular pieces used in requirement 2, build another model of something different. _____
6. With your parent or legal guardian's permission, watch a video demonstrating how something was built using modular design. _____



- Elective Adventure
- Scan for this Adventure page

REQUIREMENT 1

Learn what modular design is and identify three things that use modular design in their construction.

Modular design is a design principle that takes a project and divides it into smaller parts. These smaller parts are called modules. Modules can be independently created, modified, replaced, or exchanged with other modules or between different systems.



Another way to think of modular design is that it allows you to take smaller pieces that are easier to make and fit them together

easily to form a bigger item. Instead of each piece of the building being unique (one of a kind), the pieces can be used in different parts of the build.

The earliest form of modular design was in the 1830s when modular homes were first built. A modular home uses the same doors, windows, floors, walls, and materials for each house instead of each house using items that were custom made for just one house.

One of the first hotels in Walt Disney World, the Contemporary, was built using modular design. The frame of the building was made first, then each room was built on the ground at a separate location. The rooms even had all the same furniture in them. When a room was finished, it was transported to the hotel site and then lifted with a crane and slid into the frame of the hotel.

REQUIREMENT 2

Using modular-based building pieces, build a model without a set of instructions.

Modular-based building pieces are pieces that are easy to connect with each other. The pieces often have the same shape or have a part of them that is made to connect to another piece.

Before you start making your model, read over the other requirements for this Adventure. You don't want to make your model too big or use too many parts, and you will want to remember how you made it so you can create directions for requirement 3.



REQUIREMENT 3

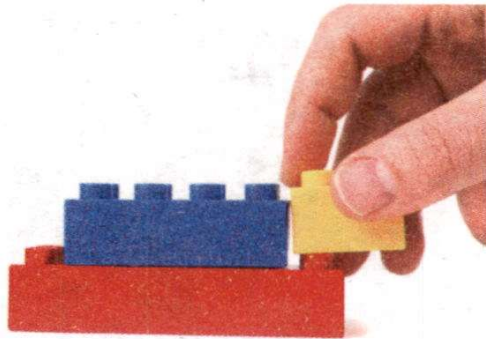
Using the model made in Requirement 2, create a set of step-by-step instructions on how to make your model.

You can write your directions, use photos for them, or use a combination of both. You may even choose to make a short video. Think about the instructions you have used to make models. Which ones did you find the easiest to follow?

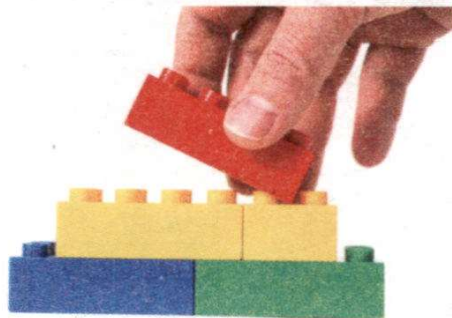
1



2



3



REQUIREMENT 4

Have someone make your model using your instructions.

Provide someone in your den or family with the pieces you used to make your model and the instructions you created. Don't help them. Let them do it on their own.

When they are done, discuss with them what parts of your instructions were helpful and what parts, if any, they had difficulty understanding.

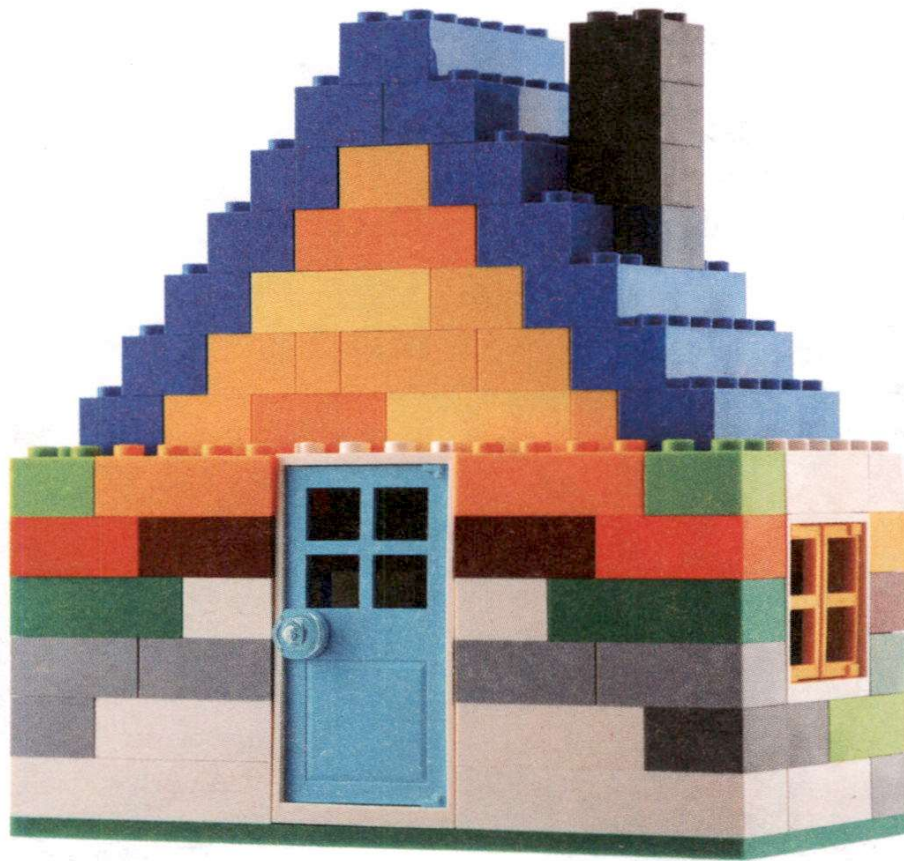
If you were to create your instructions again, how would you change them?



REQUIREMENT 5

Using the same modular pieces used in Requirement 2, build another model of something different.

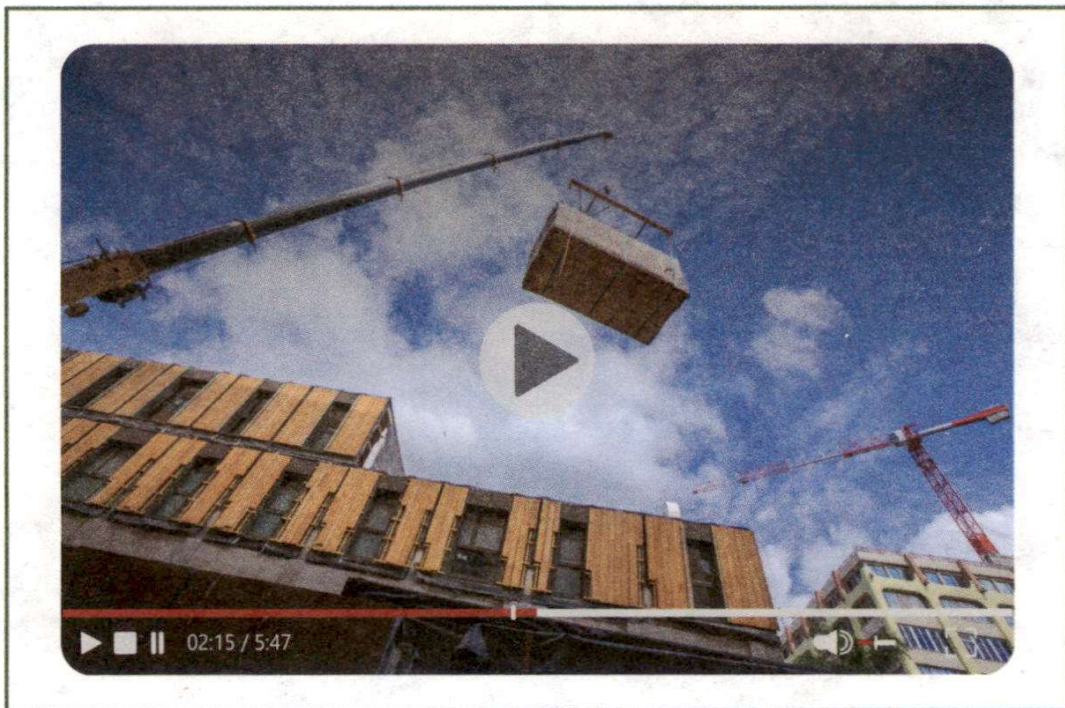
Using modular pieces allows you to make something completely different using the same parts. Imagine building a car in real life and then using those same pieces to build an airplane. That is the power and potential of modular design.



REQUIREMENT 6

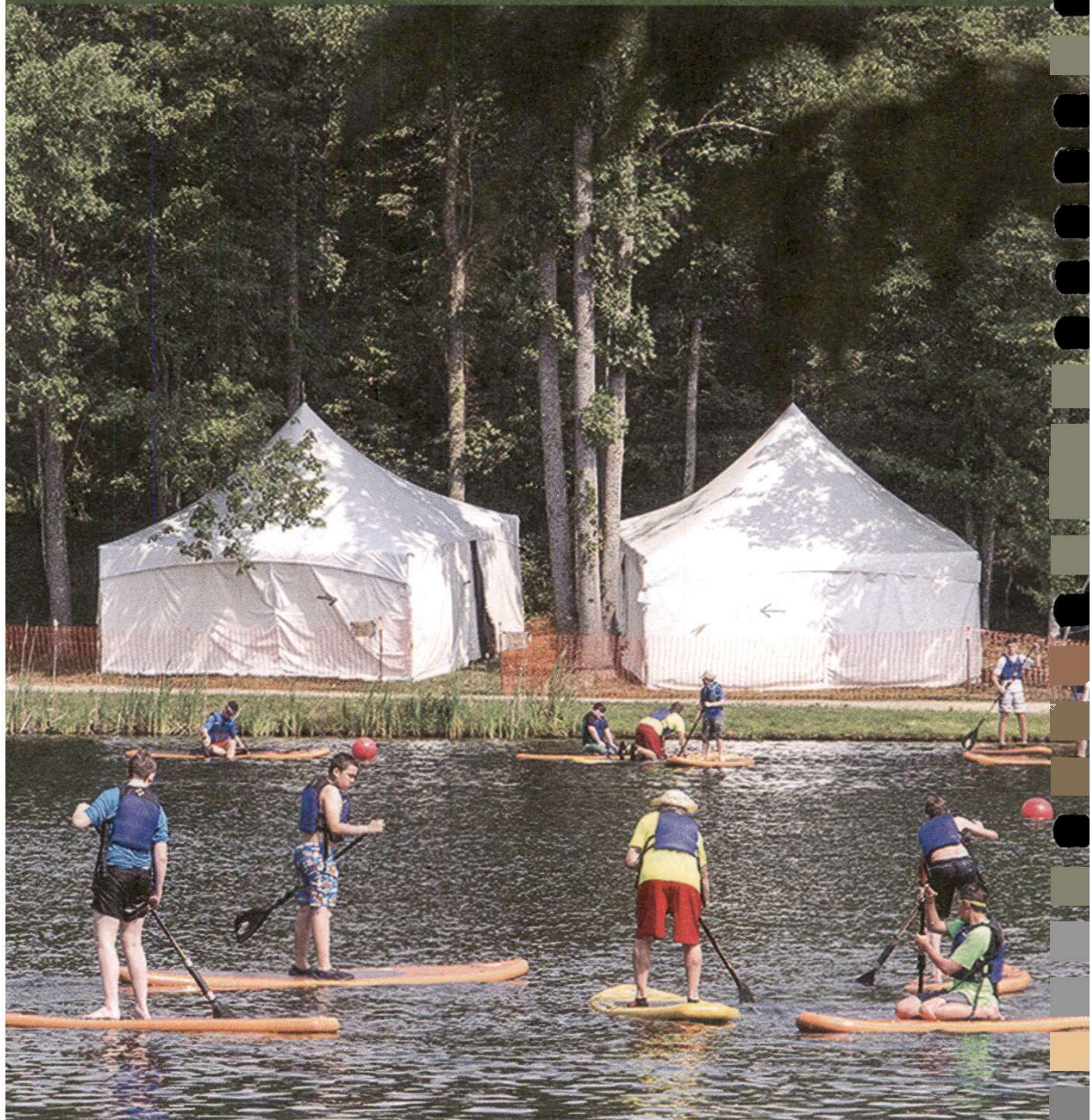
With your parent or legal guardian's permission, watch a video demonstrating how something was built using modular design.

With your parent or legal guardian, search the internet for "modular construction," as this term will give you the best results. The video doesn't need to be long. Some videos are a time-lapse, which means they take pictures at different times during the build and then show the pictures one after another. Some videos record the whole construction and then speed it up so you can see the entire process in a short period of time.



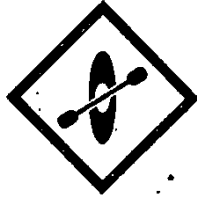
PADDLE ONWARD

ELECTIVE ADVENTURE



- Elective Adventure
- Scan for this Adventure page

SNAPSHOT OF ADVENTURE



Getting out on the water and paddling around is a great way to enjoy the outdoors and go places that you can only get to with a paddle craft. The boundary waters of Minnesota, the shoals of the Florida Keys, and countless rivers and lakes across the United States are available to only those who choose to paddle there. In this Adventure, you can choose a canoe, kayak, or stand-up paddle board to complete the requirements.

REQUIREMENTS

Approved by

1. Before attempting requirements 5, 6, 7, 8, and 9 for this Adventure, you must pass the BSA swimmer test: _____
2. Pick a paddle craft you'll use to complete all requirements: canoe, kayak, or stand-up paddle board. _____
3. Review Safety Afloat. _____
4. Demonstrate how to choose 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. Demonstrate how to enter and exit a canoe, kayak, or stand-up paddle board safely. _____
7. Discuss what to do if your canoe or kayak tips over or you fall off your stand-up paddle board. _____
8. Learn how to pick a paddle that is the right size for you. Explore how the paddle craft responds to moving the paddle. _____
9. Have 30 minutes or more of canoe, kayak, or stand-up paddle board paddle time. _____

REQUIREMENT 1

Before attempting requirements 5, 6, 7, 8, and 9 for this Adventure, you must pass the BSA swimmer test.



The swim classification test performed at a unit level should be conducted by one of the following council-approved resource people: aquatics instructor, BSA; BSA lifeguard; BSA swimming and water rescue; or other lifeguard, swimming instructor, etc.

The requirements for the BSA swimmer test are:

- ▶ Jump feet first into water over the head in depth, level off, and begin swimming.
- ▶ Swim 75 yards in a strong manner using one or more of the following strokes: side stroke, breaststroke, trudgen, or crawl; then swim 25 yards using an easy resting back stroke. The 100 yards must be swum continuously and include at least one sharp turn.
- ▶ After completing the swim, rest by floating.

Here are BSA's testing procedures so you know what to expect:

- ▶ The test is given one-on-one. The test administrator and the swimmer are buddies during the administration of the test.
- ▶ Each component of the test is important. The test must not be changed either to assist the Scout or to expedite the process.
- ▶ The test must be completed without aid or support. Aid includes lifejackets, wetsuits, fins, etc. Swim goggles may be used to avoid eye irritation.

To learn more about the BSA swimmer test, follow this QR code.

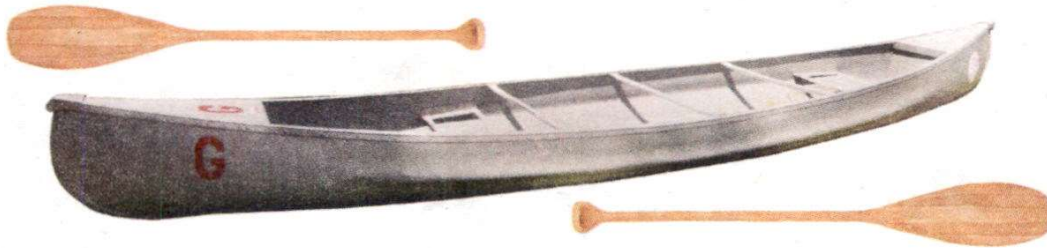


REQUIREMENT 2

Pick a paddle craft for which to complete all requirements:
canoe, kayak, or stand-up paddle board.

CANOE

A canoe is a narrow and usually lightweight boat that is pointed on both ends (the bow and stern) and is open. Canoes can be made out of wood, fiberglass, or aluminum. The most common type of canoe is aluminum since it's durable and easy to care for.



Like all boats, the front of a canoe is called the bow. It is identified by the distance the seat is positioned from the front of the boat, allowing for leg room. The back of the canoe is called the stern. The seat is positioned closer to the back of the boat since your legs will be toward the middle of the canoe.

The sides of the canoe are called the gunwales (pronounced "gun-l"), the middle of the canoe is called the centerline, and the braces across the top of the canoe are called the thwarts.

Canoes are designed for flat water like a lake or calm river.

KAYAK

A kayak is 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 as 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 PADDLE BOARD

A paddle board is like a giant surfboard. It is commonly made out of foam with a fiberglass coating. Some paddle boards are inflatable. You stand up on a paddle board and while standing use a long paddle to move about the water. It requires balance and strength.



REQUIREMENT 3

Review Safety Afloat.

Paddle crafts are all different types of boats. When boating during a Scouting activity, we follow the nine parts of Safety Afloat.



The first part of Safety Afloat is that for any boating activity in Cub Scouting, there must be an adult who has completed the Safety Afloat training and makes sure it's used

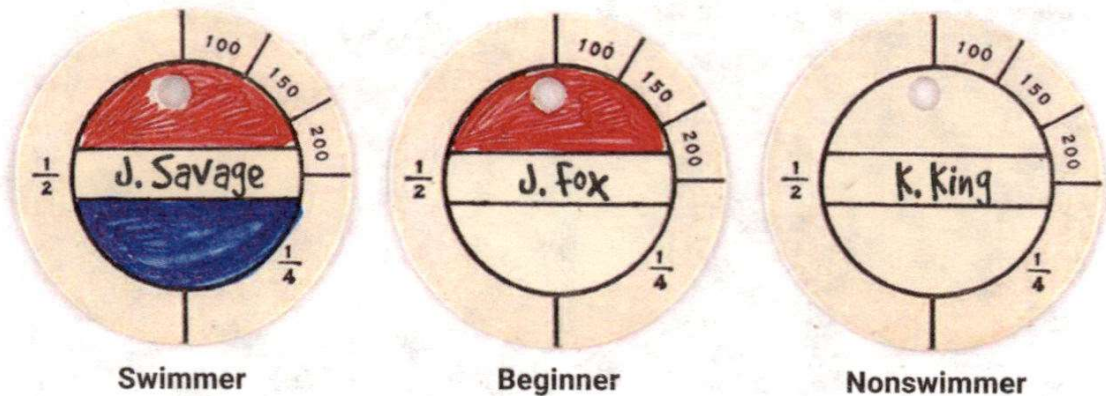
during the activity. Below is the definition of qualified supervision for Safety Afloat. After reading, discuss with your den or an adult what the responsibilities are of the adult who is serving as the qualified supervision.

It is best if the adult who will be the qualified supervisor for your paddle craft Adventure leads the conversation and gives details on Safety Afloat.

1. **Qualified Supervision** – All activity afloat (on the water) must be supervised by a mature and conscientious adult aged 21 or older who understands and knowingly accepts responsibility for the well-being and safety of those in their care and who is trained in and committed to compliance with the nine points of BSA Safety Afloat. That supervisor must be skilled in the safe operation of the craft for the specific activity, knowledgeable in accident prevention, and prepared for emergency situations. If the adult with Safety Afloat training lacks the necessary boat operating and safety skills, then they may serve as the supervisor only if assisted by other adults, camp staff personnel, or professional tour guides who have the appropriate skills. Additional leadership is provided in ratios of one trained adult, staff member, or guide per 5 Cub Scouts. At least one

leader must be trained in first aid including CPR. Any swimming done in conjunction with the activity afloat must be supervised in accordance with BSA Safe Swim Defense standards.

2. **Personal Health Review** — Completing the BSA Annual Health and Medical Record is required. Are there any restrictions on the part of the participant?
3. **Swimming Ability** — Complete an annual swim test. Do you know what that is?



4. **Life Jackets** — Properly fitted United States Coast Guard-approved life jackets are worn by everyone engaged in boating activities.
5. **Buddy System** — Make sure each member is accounted for, especially when in the water.
6. **Skill Proficiency** — Everyone in an activity afloat must have sufficient knowledge and skill to participate safely.
7. **Planning** — Check for weather and contingencies as needed prior to your activity.
8. **Equipment** — All craft must be suitable for the activity, be seaworthy, and be capable of floating if capsized.
9. **Discipline** — Remember that rules are only effective when they are followed.

REQUIREMENT 4

Demonstrate how to choose and properly wear a life jacket that is the correct size.

No matter what kind of boating you do, you must wear a properly fitted life jacket. The only life jacket you should use is one that has been approved by the United States Coast Guard.



Here is the performance list of United States Coast Guard-approved life jackets.

- ▶ Level 50 Buoyancy Aid — Not recommended for weak or non-swimmers. 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 the life jacket. The approval information must be clearly legible. If not, the life jacket has reached the end of its useful life and may not be worn.

It is required that everyone, Cub Scouts and adults, wear a level 70 life jacket or above during paddle craft activities.

To make sure your life jacket fits, do this:

- ▶ Check the label to see if it's designed for your size and weight.
- ▶ Put the jacket on, buckle it, and tighten the straps.
- ▶ Hold your arms over your head. Have a friend pull up on the tops of the arm openings. If the jacket rides up over your chin or face, it's too loose.

REQUIREMENT 5

Jump feet first into water over your head while wearing a life jacket.
Then swim 25 feet wearing the life jacket.



Swimming with a life jacket is a good way to gain confidence. If your paddle craft were to tip over or you were to fall off your stand-up paddle board, you would know how to be able to get back on your paddle craft. Paddle craft are designed to float even if they fill with water, so it is best to stay with your paddle craft if you tip over or fall off.



REQUIREMENT 6

Demonstrate how to enter and exit a canoe, kayak, or stand-up paddle board safely.

CANOE

Start with putting the canoe in the water with the stern (back of the boat) first. Make sure the canoe is fully in the water to avoid “bridging” where 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 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 get wet, so 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 PADDLE BOARD

Start with the stand-up paddle board on a shallow shoreline. Grab each side of the paddle board 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 paddle board. Holding on to the paddle shaft with both hands, slowly stand up while keeping hands on the paddle. Stay centered on the paddle board with your feet square to your shoulders and start to paddle.

To get off a stand-up paddle board, 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 paddle board to hit the shoreline, then grab each side of the paddle board with your hands and carefully step off.



REQUIREMENT 7

Discuss what to do if your canoe or kayak tips over or you fall off your stand-up paddle board.

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 paddle board, the first thing to do is remain calm.

The No. 1 rule is to stay with your paddle craft. If you can get back in your paddle craft safely, you'll be surprised to find out that most canoes and kayaks can be paddled even when they are full of water. Paddle your way back to safety. Your buddy boat is there to help.



REQUIREMENT 8

Learn how to pick a paddle that is the right size for you. Explore how the paddle craft responds to moving the paddle.

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 PADDLE BOARD PADDLE

The paddle for a stand-up paddle board 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.

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.

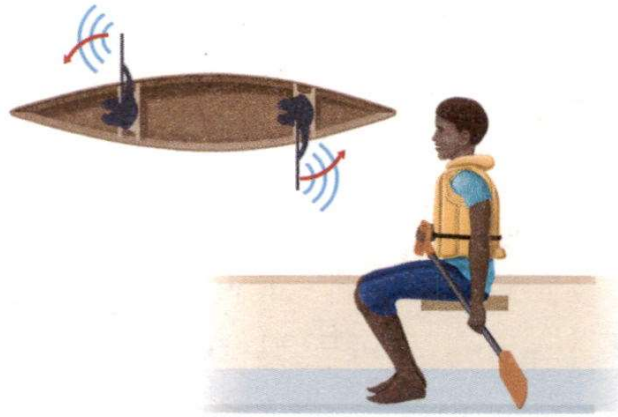
► **Power.** Pull backward.

► **Recover.** Position the paddle forward, ready to begin another stroke.

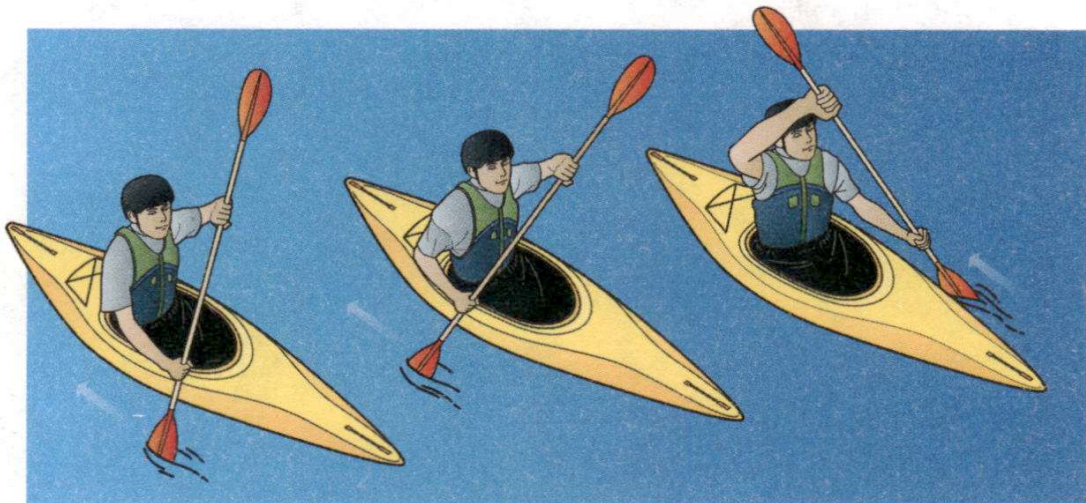


Backstroke. To do the backstroke, push on the paddle instead of pulling.

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.



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 paddle board 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.

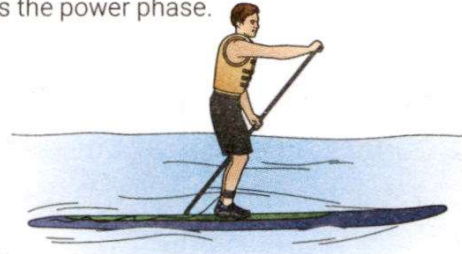
Now it's your chance to demonstrate these steps. You can practice before you get into a boat by standing in knee-high water and paddling like you would if you were in or on your paddle craft. Using a real paddle, demonstrate the correct form for paddling.



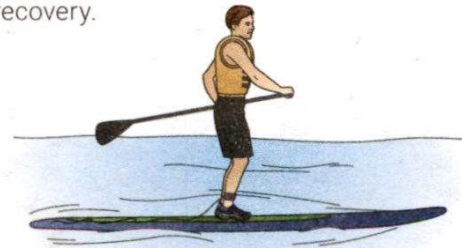
Reach forward by rotating your shoulders to plant the blade next to the board. This is called the catch.



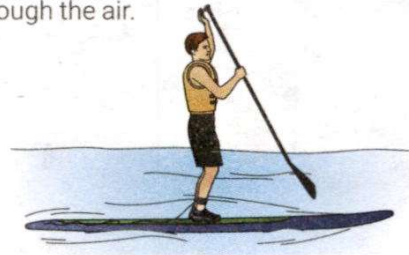
Pull the board toward the paddle blade. This is the power phase.



Before your lower hand reaches your hip, angle the blade out of the water to begin the recovery.



As you swing the blade back to the catch position, rotate your wrists to slice the blade through the air.



After a few strokes on the same side, switch sides to keep going straight.

REQUIREMENT 9

Have 30 minutes or more of canoe, kayak, or stand-up paddle board paddle 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 paddle boards are all different. You may find that you like one better than the other or that you like all of them.

PEDAL AWAY

ELECTIVE ADVENTURE



SNAPSHOT OF ADVENTURE



Get your helmet and your Cub Scout Six Essentials – we are going on a bike ride. Learn how the gears on a bike work and make it easier for you to pedal. Practice safety and good maintenance of your bike, and it will last a long time.

REQUIREMENTS

Approved by

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



- Elective Adventure
- Scan for this Adventure page

REQUIREMENT 1

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

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



Personal Biking Gear

- ▶ Bicycle helmet
- ▶ Bicycle gloves
- ▶ Proper shoes and clothes

Group Gear

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

REQUIREMENT 2

Discover how multigear bicycles work and how they benefit the rider.

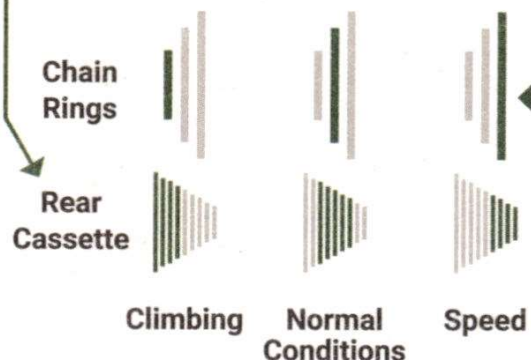
Gears are considered simple machines. Gears on a bike allow the rider to keep pedaling at a steady rate whether going uphill or downhill.

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

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



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



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

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

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

REQUIREMENT 3

Practice how to lubricate a chain.



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

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

REQUIREMENT 4

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

There are three main types of bike locks— chain, cable, and D-lock.



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

Cable locks are similar to chain locks but instead of chain, they're made of a strong metal cable. Cable locks weigh less and are more flexible than chain locks. Like the lock on a chain lock, the lock on a cable lock typically requires a key or a combination code to unlock it.



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

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

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

REQUIREMENT 5

With your den, pack, or family, use a map and plan a bicycle ride that is at least 5 miles.

It may take less than an hour for you to bike 5 miles. A professional cyclist can travel 25 miles or more per hour on a flat trail. For this Adventure, it's recommended that you find a designated bike trail that is flat, especially if you have younger Scouts or family members who will be joining you.

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

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

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



REQUIREMENT 6

With your den, pack, or family and using the buddy system, go on a bicycle ride that is a minimum of 5 miles.



A 5-mile bike ride will give you a chance to get comfortable with your bike and with riding with a group. Grab your Cub Scout Six Essentials, complete a bike safety check, wear your helmet and safety gear, and grab a buddy.

Bike rides are most enjoyable when taken on paths or trails designed for bikes, away from vehicle traffic and free of hazards. During your 5-mile bike ride, take a break and drink some water if you feel the need.

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

- ▶ Remember to ride close enough to your buddy. You want to be the first person there if they fall or need help.

- ▶ Have a ride leader. This is the person who is at the front of the group. They set the speed or pace of the ride, but make sure that they do not ride so far ahead of others in the group that some struggle to keep up. The ride leader can switch out as needed.
- ▶ Have a ride sweeper. This is the person who is at the back of the group. The ride sweeper does not let anyone get behind them to ensure that no one gets left behind. If the group is riding too fast for some riders, the sweeper asks the faster riders to slow down. They also decide who the ride leader is so they can switch a ride leader who is going too fast with one who has a pace that is comfortable for everyone.
- ▶ Communicate. Talking and signaling to group members about what you plan to do (like stopping or turning) and about possible obstacles is important to keep the group safe. If you're uncomfortable taking one hand off your handlebar to signal, speak up and use your voice to communicate to other riders. Remember, everyone in the group must signal, not just those at the front. Point out and vocalize obstacles on the road that could cause flat tires or crashes if not avoided, and communicate if you need to stop for any reason.

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

- ▶ Always wear your helmet and other safety gear.
- ▶ Follow all rules of the trail and/or road.
- ▶ Let the group know if everyone is going too fast for you.
- ▶ Let the group know if you need to stop for any reason.
- ▶ If someone has to make a repair or just needs a break, be patient.
- ▶ Never overlap wheels with another rider.

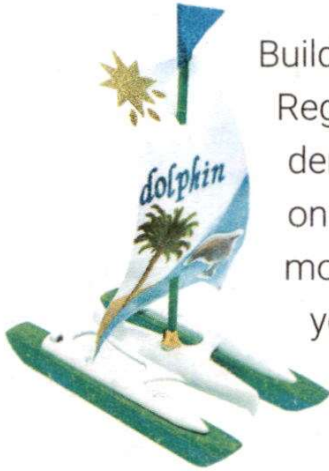
RACE TIME

ELECTIVE ADVENTURE



REQUIREMENT 1

With an adult, build either a Pinewood Derby car or a Raingutter Regatta boat.



Building a Pinewood Derby car or Raingutter Regatta boat is a fun way to spend time with your den or family. Here are some basic instructions on how to make these vehicles. You may find more advanced tips and tricks with your den 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
- ▶ Paintbrushes

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 to 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.



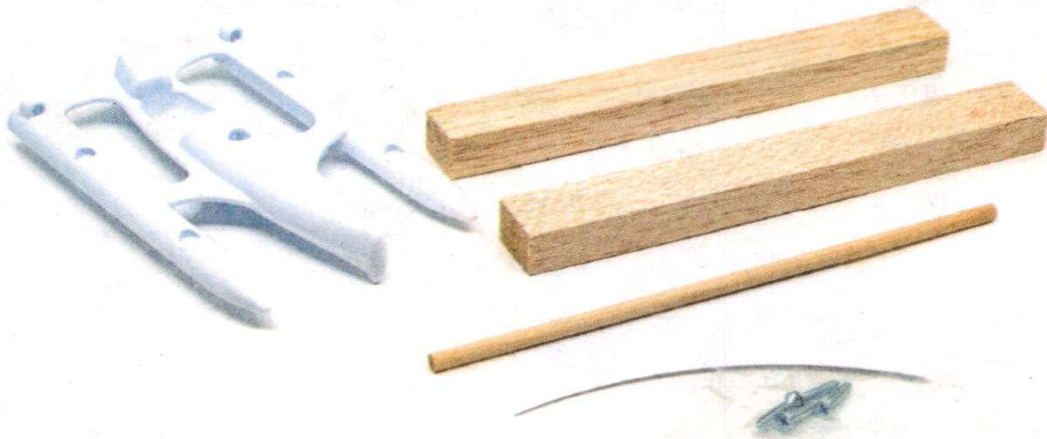
5. Assemble your car. Using the nails that came in your kit, attach the wheels that came

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 might turn and rub 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 made 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
- ▶ Paintbrushes
- ▶ 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's a tip. You can add wax to the bottom of your boat, the hull, to make it extra smooth. The smoother the hull, the faster your boat can go.

REQUIREMENT 2

Learn the rules of the race for the vehicle chosen in Requirement 1.

Rules are important so that everyone knows how to play. The rules to the Pinewood Derby or Raingutter Regatta should be kept short and simple so everyone can know and understand them. Rules for the Pinewood Derby and Raingutter Regatta are included in each kit. You can also find the rules online by following this QR code.



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 den first, and the winner of each den competing for the pack championship. Your pack may run races based on the fastest time. Understanding how your pack will conduct the race will help you understand what is going on during the race and how many times you might be racing.

REQUIREMENT 3

Explore the properties of friction and how it impacts your chosen vehicle.

To know how to make your vehicle go faster, you'll need to know what things make it move. There are a lot of different ways to make your vehicle go fast, and each of those ways is based on a science known as physics. Physics is the scientific way to understand how the universe and the things in the universe act. When you discover ways to make your vehicle go faster, you're exploring the physics of your vehicle.

There are things that your Pinewood Derby car, your Raingutter Régatta boat, or anything that moves have in common: force and friction. Learning about these two things will help us understand how to make our vehicle go faster.

In physics, a force is what causes the motion of an object to change its speed. If you take a ball and place it on the floor, it may roll around for a while, but eventually, it will stay in one place. If the wind blows, the ball will move. The wind is the force causing the ball to move. If you kick the ball, your foot provides the force causing the ball to move.

For the Pinewood Derby, there is only one force that is applied to your car. It is one of the most powerful forces in the universe. Gravity is the force that makes your Pinewood Derby car move. Gravity is the same for every Pinewood Derby car. You can't change gravity.

For the Raingutter Régatta, the force that makes your boat move is you, your breath, or air pump. Each Cub Scout is different, and the force that they put on their boat will be different. You can change the force for each Raingutter Régatta boat by how much force a Cub Scout can apply to it.

Friction is a type of force. When a force is applied to something that is moving one way and the force is going another way, it is called friction. Let's use the ball as our example. When you kicked the ball, the ball had to move through the air which caused friction, slowing down the ball. Gravity acted on the ball, too, by pulling the ball toward the ground. Gravity is a form of friction.

Any place where one thing is moving is going to have some type of friction. You may not be able to get rid of all the friction, but you may discover ways to lower it.



What could cause friction to the way your car moves down the track?

What could cause friction to the way your boat moves in the water?

REQUIREMENT 4

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



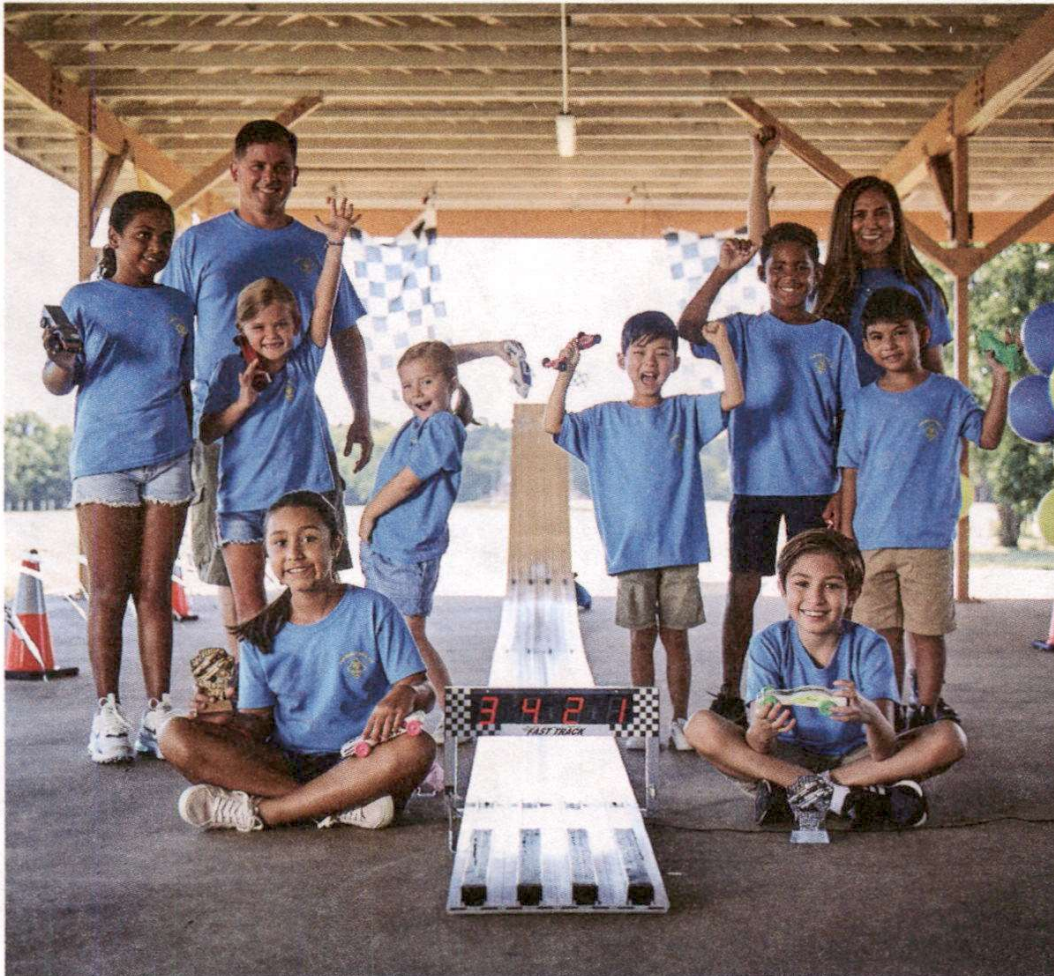
What really matters is having fun when building your car or boat. Just like any race, there is going to be someone with the fastest car or boat. Remember that the race is done to add excitement and fun. If you worked hard on your car or boat and can say that you did your best, then you have lived up to the Cub Scout motto — Do Your Best.

Think about the Scout Oath and the Scout Law. With your den or family, point out the parts of the Scout Oath and the Scout Law that will be helpful for everyone to follow during the race.

REQUIREMENT 5

Participate in a Pinewood Derby or a Raingutter Regatta.

It's race day! Time to take everything you have learned in this Adventure and have a great time with your den or pack.



SUMMERTIME FUN

ELECTIVE ADVENTURE



SNAPSHOT OF ADVENTURE



The summertime is a great time to get together with your den 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 den or pack get-together for a summertime picnic.

To earn this Adventure as a Webelos, you participate in summer activities during the summer after you have completed third grade. If you're just now learning about this Adventure, don't worry; the requirement to earn it as an Arrow of Light Cub Scout is exactly the same.

REQUIREMENT

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 den, or 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. Each day

you arrive for a day filled with adventures and come home to share with your family what you did.

Cub Scout Resident Camping

Cub Scout resident camping is held by local councils. Adults who serve as leaders for these camps are nationally trained and certified in all areas of the camp. Resident camping is over several nights, as you stay at camp the whole time sleeping in a tent or other shelter with a parent or legal guardian.





A Pack-Organized Event

Pack events during the summer may include a fun day at the park, a trek on a local trail, or a back-to-the-pack event right before school starts — or may even be an overnight campout.

A Den-Organized Event

It can be fun to have your den get together for a visit to a museum or zoo or even a baseball game.



TECH ON THE TRAIL

ELECTIVE ADVENTURE



SNAPSHOT OF ADVENTURE



Getting outside is a fun part of being a Cub Scout. Using technology outdoors can be an important part of helping you explore the world around you.

REQUIREMENTS

Approved by

1. Discuss how technology can help keep you safe in the outdoors.
2. Explore Global Positioning System (GPS) devices and how to use them.
3. With an adult, choose an online mapping program tool and plan a 2-mile trek.
4. Take your 2-mile trek.



- Elective Adventure
- Scan for this Adventure page

REQUIREMENT 1

Discuss how technology can help keep you safe in the outdoors.



Technology is part of our lives at home and at school. Have you ever thought about technology in the outdoors?

An important technology that has been continuously improving is the ability to predict and track the weather. Knowing what the weather will be like for your trek allows you

to know what type of clothes to wear. Knowing the weather forecast also allows you to make the most important decision of all: rescheduling the trek for another day when the weather is predicted to be severe.

In 1870, the National Ocean and Atmospheric Administration (NOAA) was established in the United States. NOAA's mission is to provide daily weather forecasts, severe storm warnings, climate monitoring to fisheries management, coastal restoration, and the supporting of marine commerce. For over 150 years, the United States has used technology to record and predict the weather. The more data and information NOAA gathers on the weather, the better their predictions become.

Instruments like thermometers that measure the temperature and barometers that measure the air pressure were invented in the 1600s. These two instruments are key to predicting the weather. In 1909, NOAA attached small thermometers and



barometers to a balloon to track the air temperature and pressure at high altitudes. With airplanes, data

can be more accurately recorded. But NOAA and other weather services worldwide still use daily radiosonde balloons to collect detailed data.

Computers aid in the collection of weather data and help build weather models that more accurately predict the weather. The use of radar combined with computers allows NOAA to track the difference between rain and fog and can even count the number of lightning strikes in a storm.

When the United States established the National Aeronautics and Space Administration (NASA), we were able to use satellites to take photos of the Earth for the first time. Launching the satellites allowed for more data to be gathered on weather patterns.

Today, NOAA operates supercomputers that collect, process, and analyze billions of observations from weather satellites, weather balloons, buoys, and surface stations around the world. All this power is now on mobile devices to give you the best prediction of what the weather will be like.

What are some other improvements in technology that you can think of that can help keep you safe in the outdoors?



REQUIREMENT 2

Explore Global Positioning System (GPS) devices and how to use them.



The Global Positioning System, known as GPS, is a satellite-based radio navigation system owned and operated by the United States government.

If you want to find a location on a flat surface, all you need are two pieces of information: one to tell you the location based on vertical, and one giving the location based on horizontal. On a flat map, vertical is called longitude (lines that go north and south),

and horizontal is called latitude (lines that go east and west).

When you have the latitude and longitude, you can place a location on a map. Latitude and longitude are divided in degrees ($^{\circ}$), minutes ($'$) and seconds ($''$). There are 60 minutes in a degree and 60 seconds in a minute (similar to measuring time).

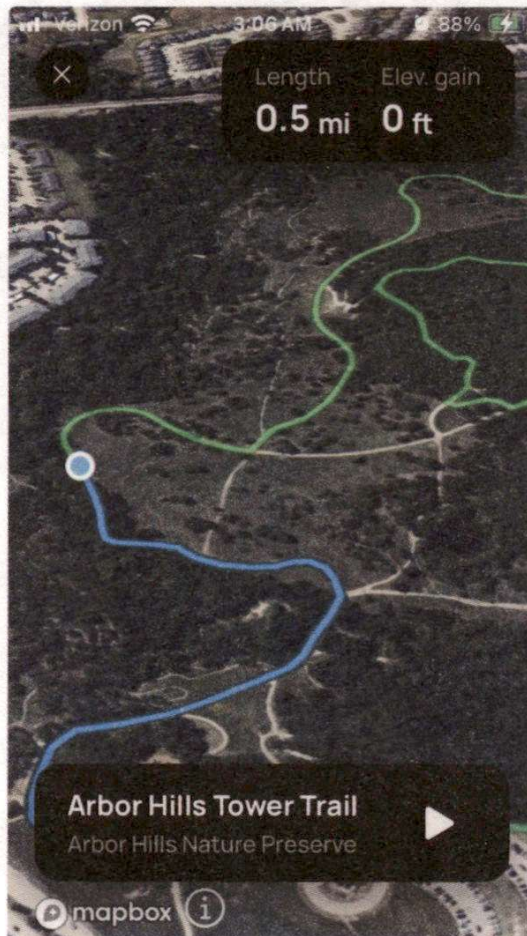
Each degree of latitude is about 69 miles apart. The most accurate location would be using degrees, minutes, and seconds. This gets the distance between coordinates to within 105.6 feet. GPS can pinpoint a location to within 16 feet. To be accurate, GPS uses a method called trilateration. Trilateration is determining a position by knowing your distance from at least three known points. When your GPS device receives a signal from at least three satellites, this gives the distance to each satellite and a very accurate location.

REQUIREMENT 3

With an adult, choose an online mapping program tool and plan a 2-mile trek.

GPS units can tell us where we are by using satellites. Satellites can also help us figure out where we want to go. Combining GPS and photos from satellites allows us to find the best path from one location to another. It can also give us images of what the path will look like.

With the help of your den leader or a parent, use an online mapping program to identify a path for your 2-mile trek. Use satellite images to identify potential obstacles and help determine distance. The mapping tool may even provide you with points of interest where you may want to stop.



REQUIREMENT 4

Take your 2-mile trek.



Your trek may be a walk, hike, or even on the water using paddle craft. It could be in the city, around a local camp, or on a lake. Follow the buddy system and bring along your Cub Scouts Six Essentials. Make sure to follow the BSA SAFE Checklist (page 55) when planning your trek.

YO-YO

ELECTIVE ADVENTURE



SNAPSHOT OF ADVENTURE



The sleeper, over the falls, walk the dog, and around the world are just some of the tricks to learn with a yo-yo. Did you know that there are world champions of yo-yo? There are professional yo-yo champions who tour the world giving demonstrations and competing.

REQUIREMENTS

Approved by

1. Learn the safety rules of using a yo-yo and always follow them.
2. Discover how to find the proper yo-yo string length for you.
3. Explain why it is important to have the correct string length and to be in the right location before throwing a yo-yo.
4. Demonstrate how to properly string a yo-yo using a slip knot.
5. Conduct the pendulum experiment with a yo-yo. Explain what happens to the yo-yo when the string is longer.
6. Show that you can properly wind a yo-yo.
7. Attempt each of the following: gravity pull, sleeper, breakaway.



- Elective Adventure
- Scan for this Adventure page

REQUIREMENT 1

Learn the safety rules of using a yo-yo and always follow them.

When using a yo-yo, you want to use it in a safe manner. Here are three simple rules to using a yo-yo:

- ▶ Only use a yo-yo in a safe area where there are no hazards or other people.
- ▶ Before you throw, always make sure your yo-yo is attached to the string and the string is securely attached to your finger.
- ▶ Be careful not to hit anyone (including yourself) or anything with your yo-yo.



REQUIREMENT 2

Discover how to find the proper yo-yo string length for you.

The length of your yo-yo string should be from your belly button to the floor.



REQUIREMENT 3

Explain why it is important to have the correct string length and to be in the right location before throwing a yo-yo.

What are some things that can happen if your yo-yo string is too long?

What are some things that can happen if your yo-yo string is too short?

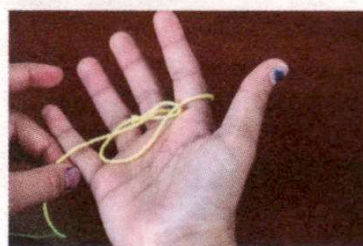
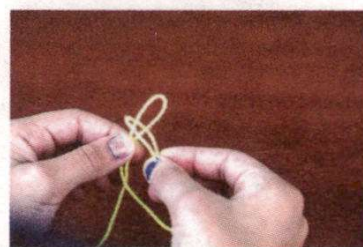
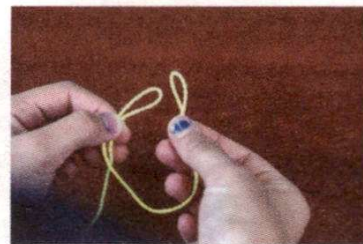
REQUIREMENT 4

Demonstrate how to properly string a yo-yo using a slip knot.

Use a yo-yo string. One end of the yo-yo string is twisted, and the other end has a loop. Untwist the twisted end so that it can slide over the yo-yo and attach to the axle. The next step is to make sure your yo-yo string is the right length. Hold on to the string and let the yo-yo go all the way down to the floor. With the yo-yo on the floor and the string in hand, put the string where your belly button is; this will be the proper length for your string. Keeping one finger on your belly button, loop the string around that finger. Now tie an overhand knot on a bight to form a loop. Cut off any extra string.

How to Tie a Slip Knot

- ▶ Make a loop by doubling the line back onto itself.
- ▶ Run the tag end back toward the loop and lay over the doubled lines.
- ▶ Make one or two turns with the tag end around the doubled lines and through a new loop created.

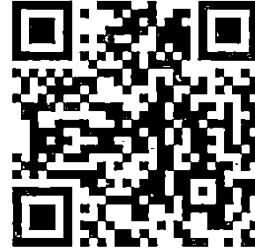


REQUIREMENT 5

Conduct the pendulum experiment with a yo-yo. Explain what happens to the yo-yo when the string is longer.

With your fingers, hold the yo-yo's string about a foot up from the yo-yo, and gently swing the yo-yo from side to side. A pendulum can accurately measure time, and the amount of time the yo-yo takes to swing from left to right and back again is known as a period.

Now, gently swing your yo-yo from side to side again, but this time hold the string farther from the yo-yo — and then closer to it.



How to Conduct
the Pendulum
Experiment

What happened to the yo-yo when you held the string farther away?

What happened to the yo-yo when you held the string closer?

REQUIREMENT 6

Show that you can properly wind a yo-yo.

Yo-yos with bearings or a loose axle will spin and won't wind if you just try to wrap the string around the yo-yo freely. Use your thumb to pin down the string against the side of the yo-yo when you begin winding. After a few winds around, you can release your thumb and finish winding the string.



How to String
a Yo-Yo



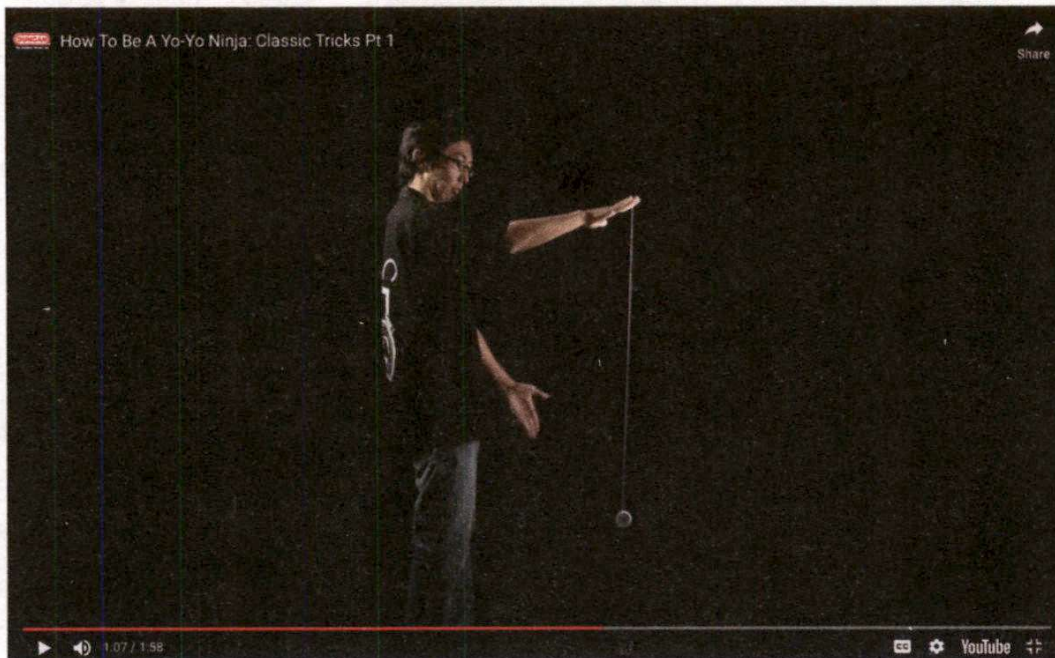
REQUIREMENT 7

Attempt each of the following:
gravity pull, sleeper, and breakaway.

With your den or family, it is best to learn these tricks by watching the tutorials on scouting.org. You can find them by following the QR code below.



Gravity Pull, Sleeper,
and Breakaway



Special Thank You

On behalf of the BSA, a special thank you to the more than 25,000 volunteers and parents who provided feedback and guidance in developing the updates for the Cub Scout program that are reflected in this handbook.

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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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Catch The Big One

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Math On The Trail

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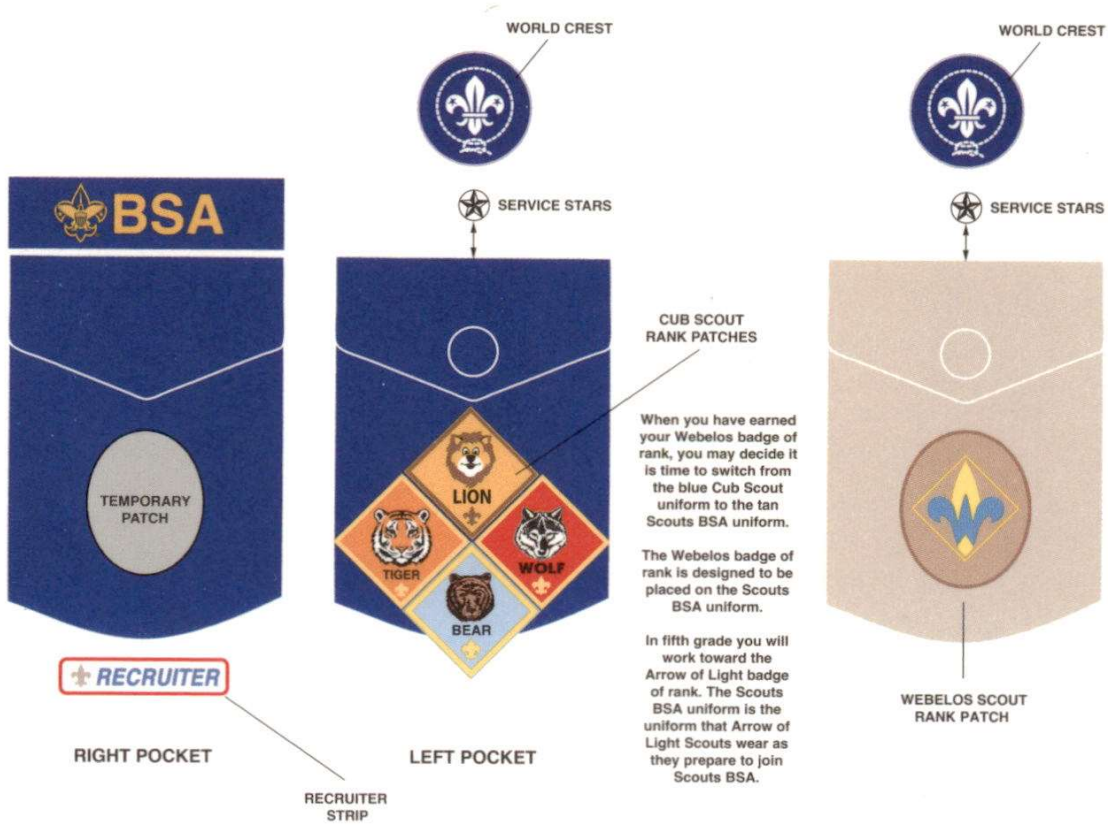
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BOBCAT
(CHARACTER & LEADERSHIP)

WEBELOS WALKABOUT
(OUTDOORS)

STRONGER, FASTER, HIGHER
(PERSONAL FITNESS)

MY COMMUNITY
(CITIZENSHIP)

MY SAFETY
(PERSONAL SAFETY AWARENESS)

MY FAMILY
(FAMILY & REVERENCE)

AQUANAUT

ART EXPLOSION

AWARE AND CARE

BUILD IT

CATCH THE BIG ONE

CHAMPIONS FOR NATURE

CHEF'S KNIFE

EARTH ROCKS

LET'S CAMP

MATH ON THE TRAIL

MODULAR DESIGN

PADDLE ONWARD

PEDAL AWAY

RACE TIME

SUMMERTIME FUN

TECH ON THE TRAIL

YO-YO

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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