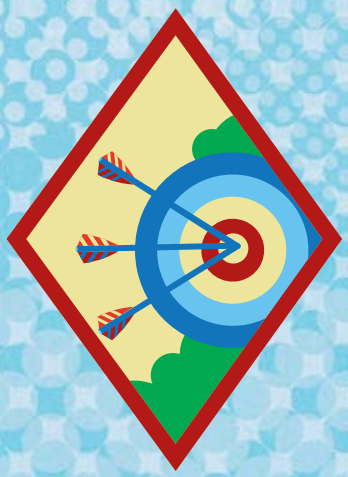


"Focus, believe in yourself, and shoot only one arrow at a time."

—Doreen Wilber, Olympic gold medalist

Made possible by a generous grant from the Elliott Wildlife Values Project



Archery

Picture this: You nock (or place) an arrow onto a bow, hook your fingers around the string, draw it back, eye your target, and release! Bull's-eye! Archery is an exciting sport that takes strength, focus, good form, and practice. Get ready to challenge yourself as you build your archery skills and learn how to shoot on a range.

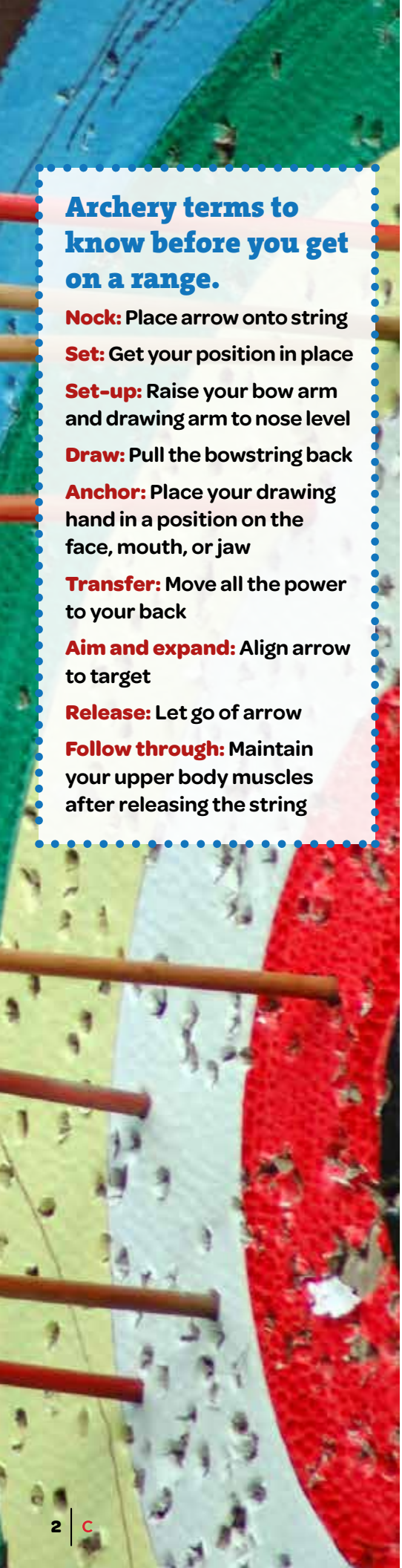
Steps

1. Get to know archery equipment
2. Learn about archery safety
3. Practice archery before you go on a range
4. Shoot on an archery range
5. Create an archery challenge

Purpose

When I've earned this badge, I'll know how to take aim outdoors with my archery skills.





Archery terms to know before you get on a range.

Nock: Place arrow onto string

Set: Get your position in place

Set-up: Raise your bow arm and drawing arm to nose level

Draw: Pull the bowstring back

Anchor: Place your drawing hand in a position on the face, mouth, or jaw

Transfer: Move all the power to your back

Aim and expand: Align arrow to target

Release: Let go of arrow

Follow through: Maintain your upper body muscles after releasing the string

Before You Start

- Let your camp counselor, troop volunteer, or an adult know you'll need to shoot using a bow and arrow at an archery range.
- Find out where you can shoot archery. You might be able to sign up for lessons at a local range, take classes from a recreational facility, or sign up for archery at a Girl Scout camp.

STEP 1

Get to know archery equipment

Proper equipment leads to a better performance. Find out what gear you need and how to get it properly fitted.

Here are four things you need to know about archery equipment:

- **Parts and types of bows.** What's the difference between a long bow, compound bow, and recurve bow? Do you need a left or right-handed bow? What size bow will you need?
- **Parts and types of arrows.** What are different types of arrows, and what are they used for? What's the proper arrow length for you?
- **Gear you need to wear.** Find out about protective wear. Do you need an arm guard, finger tabs, or a chest protector that keeps clothing out of the way?
- **Archery equipment maintenance and care.** Find out how to store, care, and repair bows and arrows. Learn how to wax a bowstring and tighten strings. Find out why you need spare strings and arrows, and how to test the tension on your bowstring to make sure it's right.

CHOICES – DO ONE:

☐ **Visit an outdoor outfitter or a sporting goods store.** Ask an archery expert to show you the different types of bows, arrows, and protective gear. Find out how to test and take care of equipment.

OR

☐ **Invite an archery expert to talk to your troop.** It could be an older Girl Scout who is experienced with archery, or an instructor from a Girl Scout camp or local range. Ask her to give your group a show-and-tell and teach you the four things you need to know about archery equipment.

OR



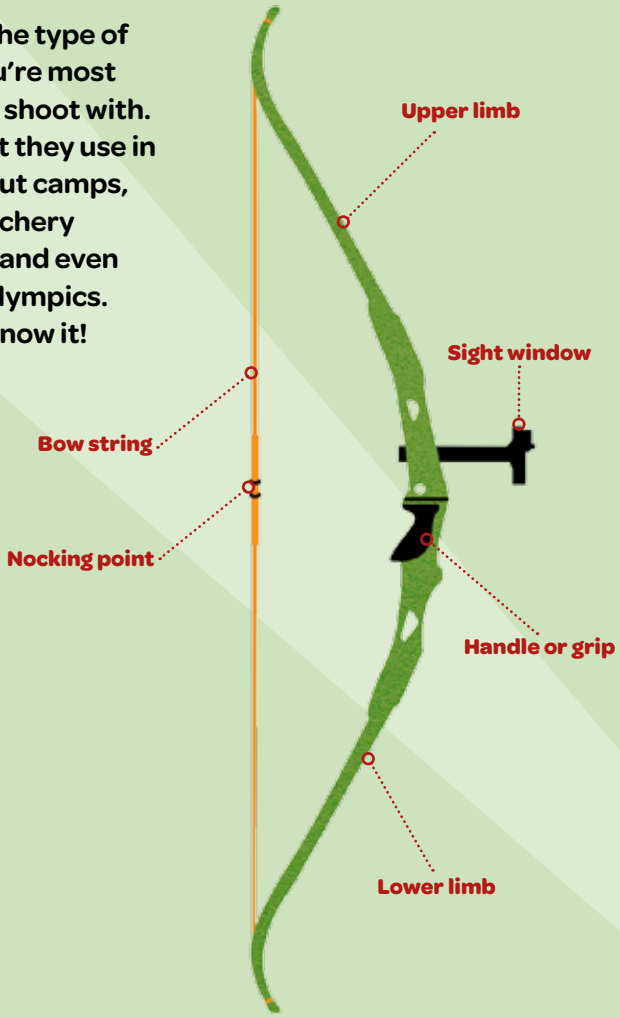
☐ **Work with an archery expert at a range or Girl Scout camp.** Spend time with an archery instructor to find out the four things you need to know about archery equipment.

FOR MORE **FUN!** Learn how to string and unstring a bow. Ask an archery expert to show you how.

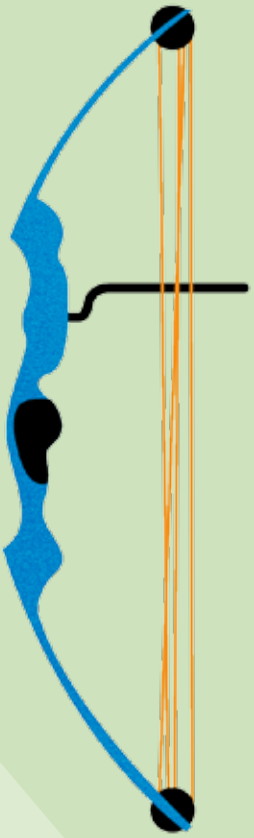
Parts of a Bow and Arrow

Recurve Bow

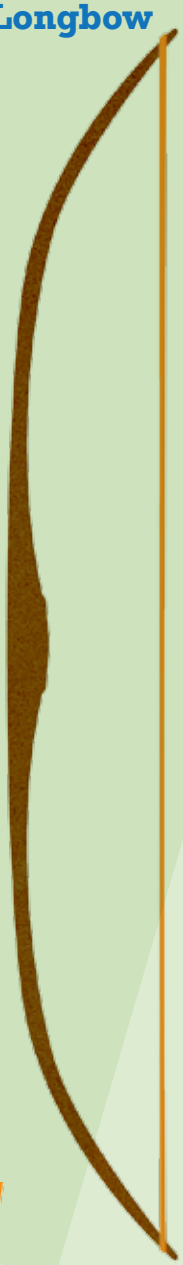
This is the type of bow you're most likely to shoot with. It's what they use in Girl Scout camps, most archery ranges, and even in the Olympics. Get to know it!



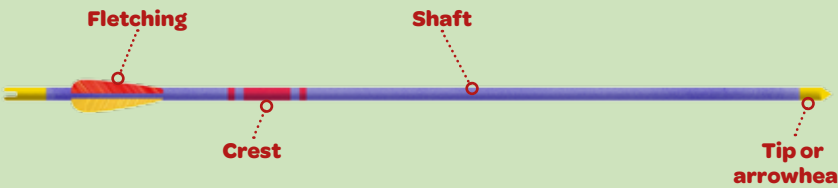
Compound bow

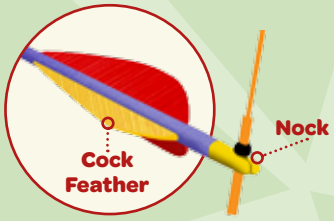


Longbow



Arrow







Inspector Archer

Many archery-related accidents occur when bows are damaged or strings are improperly strung. Always inspect your bow and arrows by checking for cracks, chips, and any wear and tear.

STEP 2 Learn about archery safety

Archery is lots of fun, but like any other sport, it has rules to keep you safe. Make sure to know them before you get started.

Here are important safety rules to know:

- **Range rules.** Every range has its own guidelines. You might find that all archers load, aim, shoot, and retrieve arrows at the same time. But wherever you shoot, no matter what, never stand in front of a person with a loaded bow.
- **Whistles and voice commands.** When the range leader or instructor blows the whistle or shouts out a command, know what it means! Common whistle commands are:
  - **1 whistle means OK to shoot**
  - **2 means you can approach the shooting line**
  - **3 means OK to retrieve arrows**
  - **4 or more means stop shooting immediately**
- **How to safely retrieve an arrow.** Most archery accidents tend to occur during arrow retrieval. Find out the range rules for where you'll be shooting. Do archers wait for a signal to retrieve arrows? Is it OK to bring your bow to retrieve your arrows, or should you set it down first?
- **Range-safe attire.** Find out what you should wear and what not to wear. For example, avoid rings or bracelets, dangling earrings, loose clothing, scarves, hoodies, and anything else that can get caught while you shoot. If you have long hair, tie it back and get it off your face.

CHOICES –DO ONE:

☐ **Visit an archery range.** Spend time with an archery instructor to find out what you need to know about safety, and ask her any questions you may have.

OR

☐ **Invite an archery expert to talk to your troop.** This might be someone who teaches archery at a range, at a community center, recreational facility, or a campsite. Find out the things you need to know about safety and ask any questions you may have.

OR

☐ **Take an archery workshop at a Girl Scout camp.** Ask your instructor the things you need to know about safety, and ask her any questions you may have.

What to Wear on an Archery Range

Don't wear



Do wear



ARCHERY FITNESS

Archery is a really physical sport that takes strength and flexibility. You might feel a strain in your back, shoulders, and hands. Here are some exercises you can do to help:



<< Get a grip. Work out your hand with a grip trainer. (A V-shaped device you hold in your hand and squeeze.) Or you can squeeze a tennis ball.

>> Do push-ups and lift light hand weights. This builds your shoulder and forearm muscles.





<< Shoulder stretch

- Place your right arm across your chest toward your left shoulder.
- Take your left palm and place it on your upper right arm, above your elbow.
- Use your left palm to press into your right arm to stretch your right shoulder. Hold for 5 seconds. Repeat on the opposite side.



<< Hugging stretch

- Wrap both arms around your body toward your back.
- Raise your elbows slightly until you feel a stretch.
- Hold for 20 seconds.

STEP

3 Practice archery before you go on a range

It takes a lot of practice to land that arrow smack in the middle of the target! Even if you can't get to a range, you can still sharpen your skills.

Things you need to know for your archery practice:

- **How to judge the distance to your target.** Throw a ball underhand, see where it lands, and measure the distance. If you can, use a range finder or measuring tape to see how far you threw.
- **How to have good form.** Leave the arrows at home, and use just your bow to practice your grip, pullback, and firing stance.
- **How to shoot accurately.** Practice target-less shooting using a rubber band. First draw a bull's-eye on a paper or set up a target, such as an empty water bottle. Hook one end of the rubber band over the tip of your thumb. Point your thumb in the direction you want the rubber band to go. With your other hand, pull the rubber band as far as it will go, then release! Make notes and improve your distance, accuracy, and power over a series of days.
- **How to score.** Learn how to score your own target practice. How do they score for the Olympics?

CHOICES –DO ONE:

☐ **Work with an instructor or older girl with archery experience.** Have her help you figure out your stance, how to judge distance, shoot accurately, and learn how to score.

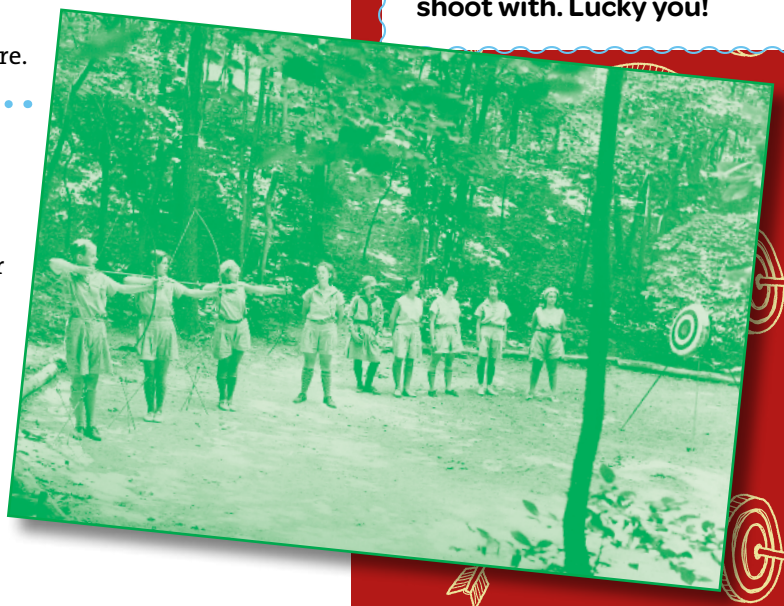
OR

☐ **Join an archery class at a community center, range, or Girl Scout camp.** Practice your form, how to judge your distance, shoot accurately, and learn how to score.

OR

☐ **Practice targetless shooting outdoors by yourself.** Research instructions for proper shooting. Practice good form by getting into your stance. Learn how to score, then score your target practice.

FOR MORE FUN! Have a friend or family member take videos or photos of your practice. It's a great way to spot mistakes and fix errors.



Power Eye

When you shoot, you'll use your dominant eye to find the target. Most right-handed people use their right eye and left-handed people use their left eye, but not always. Do this simple test to find your power eye.

- With both eyes open, raise your thumb out at arm's length.
- While holding your arm out, center the thumb over an object about 10 feet away.
- Close your left eye and observe the object's position. Is your thumb still centered on the object? Then try it with the other eye.
- The eye that kept the object centered is your dominant eye.

Note: In a rare case, you might have central vision, which means you can shoot with either eye, no matter which hand you shoot with. Lucky you!

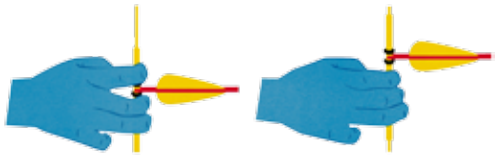
WHAT YOU NEED TO KNOW

To complete Step 4, learn these things to help you become skilled in archery.

Proper shooting stance

How are your feet placed? How far apart? Are your shoulders pushed downward?





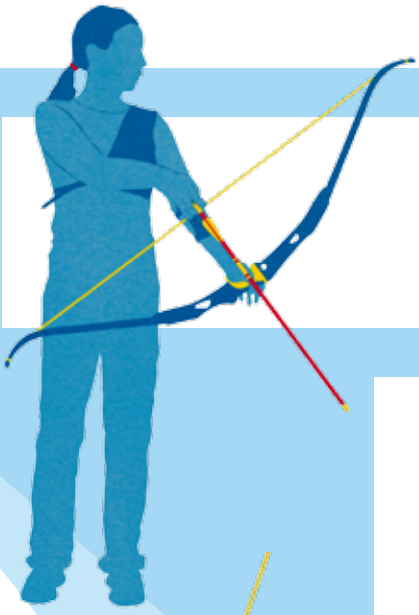
Finger placement

There are two types of commonly used finger placement: split-finger and three under. Use the placement your trainer suggests is right for you.

How to set your bow hand on the grip

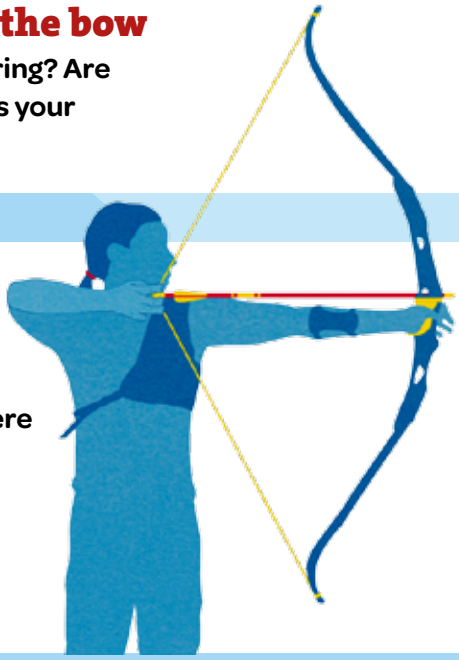
Where is your thumb pointing? Remember your hand must stay in place during the entire shot and be relaxed even after the bowstring is released.





How to set up and raise the bow

Are your fingers hooked on the string? Are your feet in the proper position? Is your bow-arm in the proper position?



How to draw and load

Did you draw the bowstring back toward the side of your face? Where is your index finger positioned? When you load, are you rotating your shoulder back and moving it down as low as possible?



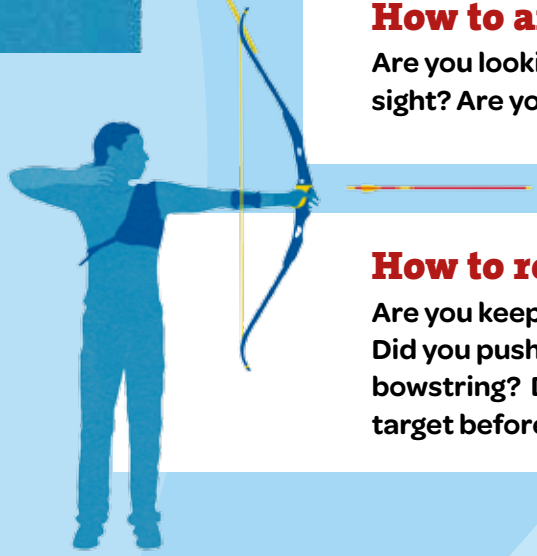
How to anchor, transfer, and hold

Is your weight evenly distributed on both feet? Is your hand pressed firmly on the side of your face?



How to aim and expand

Are you looking at your target through the bow sight? Are you prepared to execute your shot?



How to release and follow through

Are you keeping your balance after you release? Did you push your fingers out of the way of the bowstring? Did you wait until the arrow hit the target before you relaxed your position?

Mental Management

Archery's not just about technique, strength, and shooting accuracy. It also takes focus and concentration. Here are some ways to sharpen those skills:

- Concentrate 100% on each step. Block out all distractions.
- Don't shoot until you feel it's right.
- If you take a bad shot, think about what went wrong. Relax and try again.
- Picture your arrow landing on that bull's-eye!
- If you get frustrated or tired, stop and take a break.



STEP 4

Shoot on an archery range

You know the safety, the rules, and the proper equipment for you. You've even started to practice and know some archery lingo. Now it's time to get out on a range and take aim at a target!

CHOICES –DO ONE:

- ☐ **Take an archery class on a range, in your community center, or at a recreational facility.**

  OR

- ☐ **Work with an instructor or archery expert.**

  OR

- ☐ **Take part in archery at a Girl Scout camp.**



STEP 5 Create an archery challenge

Once you get the basics down, take your archery skills to the next level.

CHOICES –DO ONE:

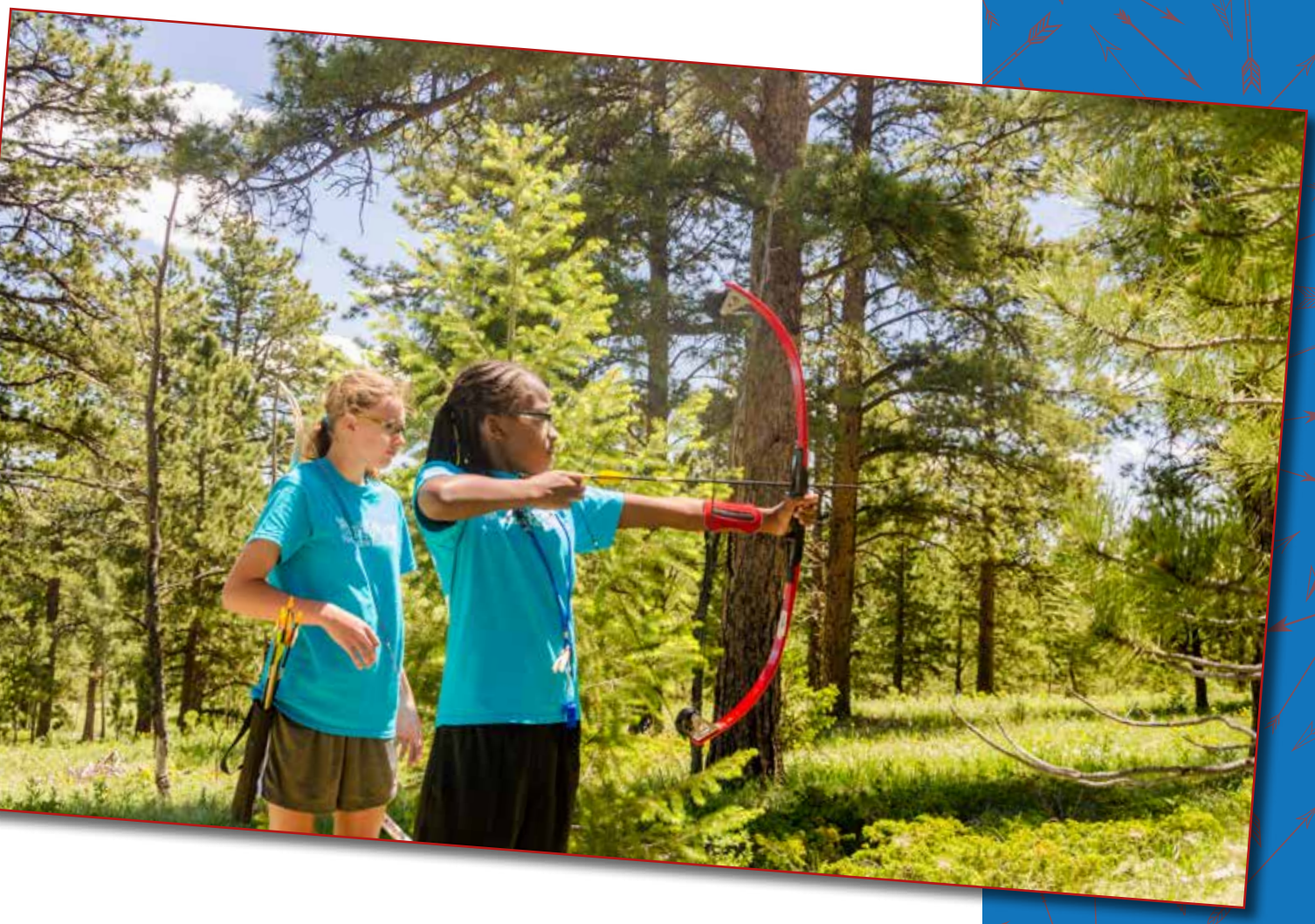
- ☐ **Challenge yourself.** Move the target back farther. Make a balloon target (balloon animals, candy in balloons), or design your own target.

OR

- ☐ **Take part in a group challenge.** Create an archery challenge of your choosing with your friends or join an archery tournament.

OR

- ☐ **Create a contest for a younger group of girls.** Design an archery game for beginners and help younger girls with their skills.



More to Explore

Shadow an archery instructor at a Girl Scout camp, recreation facility, or community center. Find out what kind of training and certification requirements she needed to become an instructor.



Add the Badge to Your Journey

Your *Breathe* Journey invites you to focus all your senses on the air. You use that same determined focus and concentration with archery when you learn to block out noise and hear only silence before you take your shot. Experience only the sounds of archery that you need: your steady breathing, the *whoosh* of your arrow, and the *smack* when it hits the target.

Now that I've earned this badge, I can give service by:

- Doing a demonstration for younger girls about archery and the requirements for safety. (Make sure you have an adult with you!)
- Volunteering to work on an archery range at a camp.
- Working with an archery range to help its staff provide a special archery class for kids who are differently-abled.





I'm inspired to:

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