



# The Book of Stuff to Do Outside

Here are a bunch of fun activities that will help you learn about nature and our environment:

1. Can You Match the Animal Tracks?
2. Create a Leaf or Bark Rubbing
3. What Lives Under That Dead Tree?
4. Find Direction without a Compass
5. Scavenger Hunt
6. Make a Water Scope
7. Create a Nature Collage
8. Listen to Nature
9. Make a Difference! Clean Up a Natural Area
10. Keep a Nature Journal



# Can You Match the Animal Tracks?

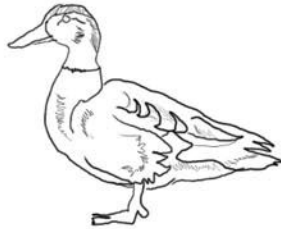
Visit your local forest or park, or other woods in your neighborhood, and look around for animal tracks. Muddy or damp ground and the banks of streams and creeks are especially good. In the winter, look on fresh snow. Think about where animals get their food, water, and where they live. See if you can recognize the tracks on the list and check the boxes as you find them.

## DID YOU KNOW?

A Grizzly Bear's (also known as a Brown Bear) hind paw track can be 12 to 16 inches long and 8 to 10.5 inches wide. How does that compare to your foot?



Squirrel



Duck



Deer



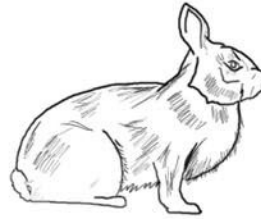
Black Bear



Raccoon



Beaver



Rabbit



Wolf

You can also try to draw the shape and size of tracks you find that are not on the list and look them up later. Take notes on where you found them, and guess which animals live there. If you live in a city or town, you may find different tracks than a kid who lives in the country.

Remember to be safe in nature! Be careful not to get close to wild animals or disturb their homes.

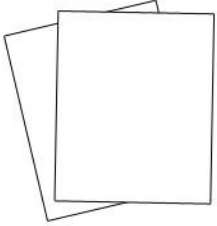
# Create a Leaf or Bark Rubbing

Trees provide food and shelter for animals and humans. They're also a great way to make art! Go outside and collect some leaves. Get out your crayons, colored pencils or pens. Then place a leaf on a clipboard or table, put a piece of paper over it, and rub the crayon, pencil or pen across the paper.

## DID YOU KNOW?

The largest tree in the U.S. is a sequoia tree known as the General Sherman Tree in Sequoia National Park in California. It stands 275 feet tall and has a diameter of over 36 feet at the base.

### Things You'll Need:



**PAPER**

This can be regular white paper or colored paper



**CRAYONS, PENS  
OR COLORED PENCILS**



**LEAVES**

Don't forget pine needles and other evergreens



**HARD SURFACE**

Like a clipboard (to take outside with you) or a table

You'll begin to see the form of the leaf. You can try different leaves and colors to make a real piece of art. You could also put a piece of paper on the side of a tree to make a rubbing of the bark.

Practice a leaf rubbing here first.

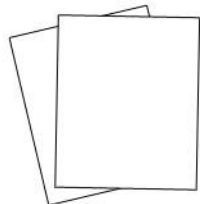


Oak Leaf

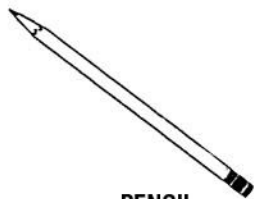
# What Lives Under That Dead Tree?

Trees in forests are homes for lots of creatures in nature, even after they die and fall down. There are a whole bunch of plants and animals that only live under dead trees and piles of mulch or leaves. They help to “decompose” the tree, or break it down, using it for food and shelter. Rocks can provide shelter in the same way.

## Things You’ll Need:



PAPER



PENCIL



CLEAR CONTAINERS WITH LIDS

Jars, plastic bags  
or containers



OPTIONAL STUFF

Camera, magnifying lens, and field guides  
for insects, mosses, lichens and fungi

Go to the forest and look at what’s under a fallen tree or rock, or look under a pile of leaves in your own yard. You’ll see mosses, fungi, lichens, and other plants growing there. You might also see small animals living there.

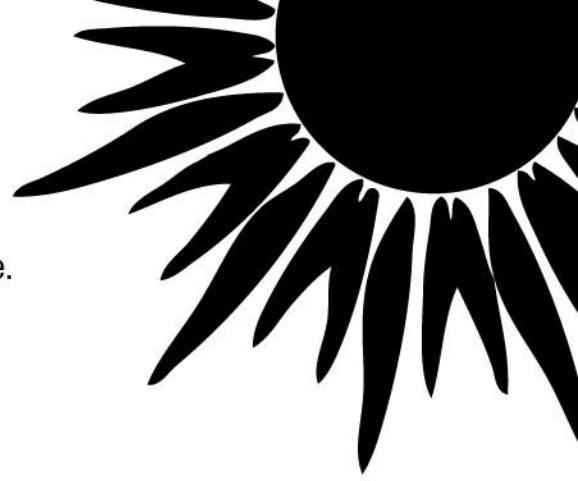
Try to draw what they look like and look them up in a field guide or on the internet. If the animals move too fast to draw them, take a picture, or make a sketch of what your impression is. For small animals, try to catch them and put them in a container for enough time to draw them or identify them. Then carefully put them back where you found them and replace their shelter.

At some point in their lives, 40%  
of all forest animals are dependent  
on standing or fallen dead trees  
for some of their habitat needs.

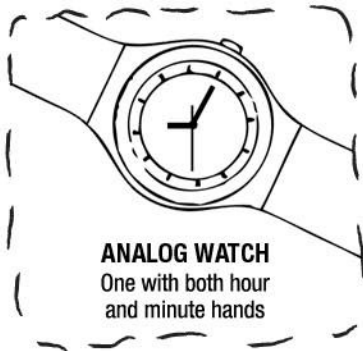
## DID YOU KNOW?

# Find Direction Without a Compass

The Earth has a magnetic field that allows the needle of a compass to point north so you can always find your direction. But what if you don't have a compass? Here are several ways to find your direction without one. They are all for the northern hemisphere. And here's a helpful tip to remember – the Sun always rises in the east and sets in the west.



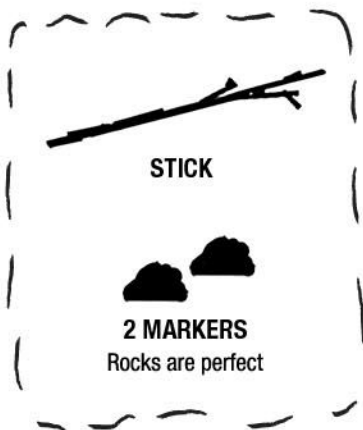
## Things You'll Need:



## 1. WATCH METHOD

Put the watch on the ground or a flat surface. Point the hour hand at the sun. Then find the center point between the hour hand and the 12 o'clock mark on the watch. That's the north/south line. If you're in the northern hemisphere and facing north, the sun will be on your right, or to the east, in the morning, and on your left, or to the west, in the afternoon.

## Things You'll Need:

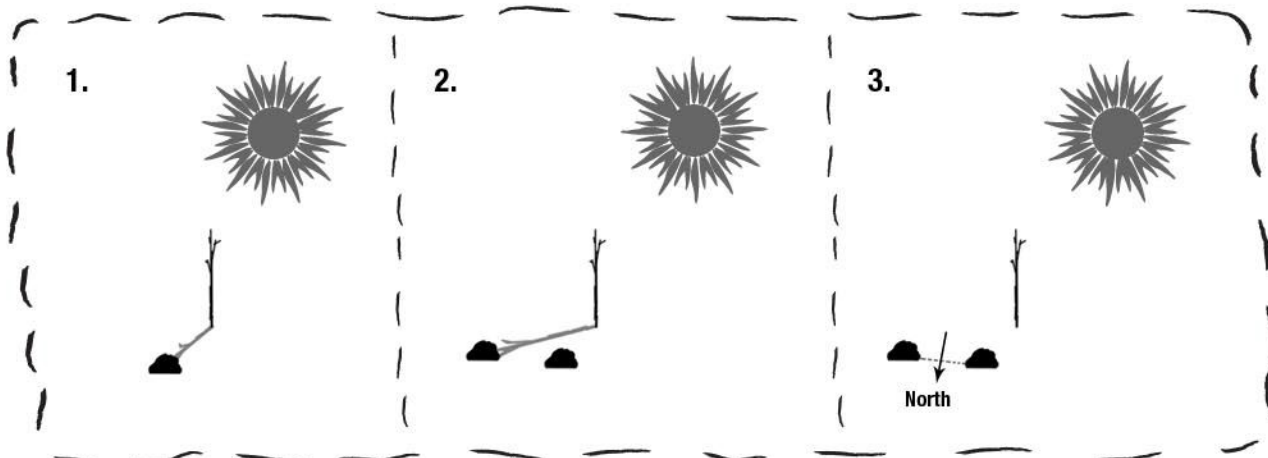


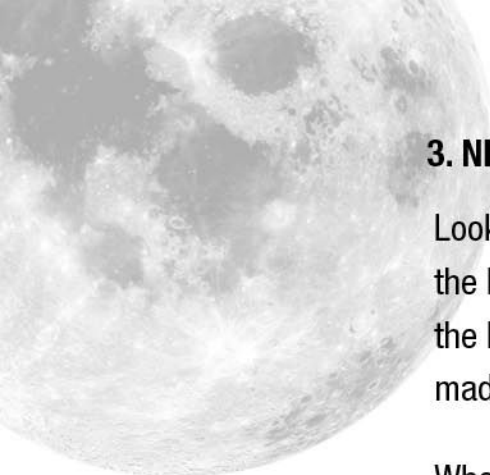
## 2. DAYTIME SUN SHADOW METHOD

The sun moves across the sky from east to west and its shadow gradually changes in length, which is what makes this direction finding method work.

Clear a flat area of dirt or sand. Grass will work, but not as well. Find a stick about 2 or 3 feet long and poke it into the ground so it stands up. Get a marker like a rock and place it exactly on the end of the shadow line. Relax for a half hour – enjoy being outside, sit in the shade of a tree and look for insects or something. After a half hour, place another marker at the end of the new shadow.

The line between the two markers runs in an east-west direction, with the first mark being west and the second being east. If you are in the northern hemisphere, north is perpendicular to the east-west line heading away from the sun.



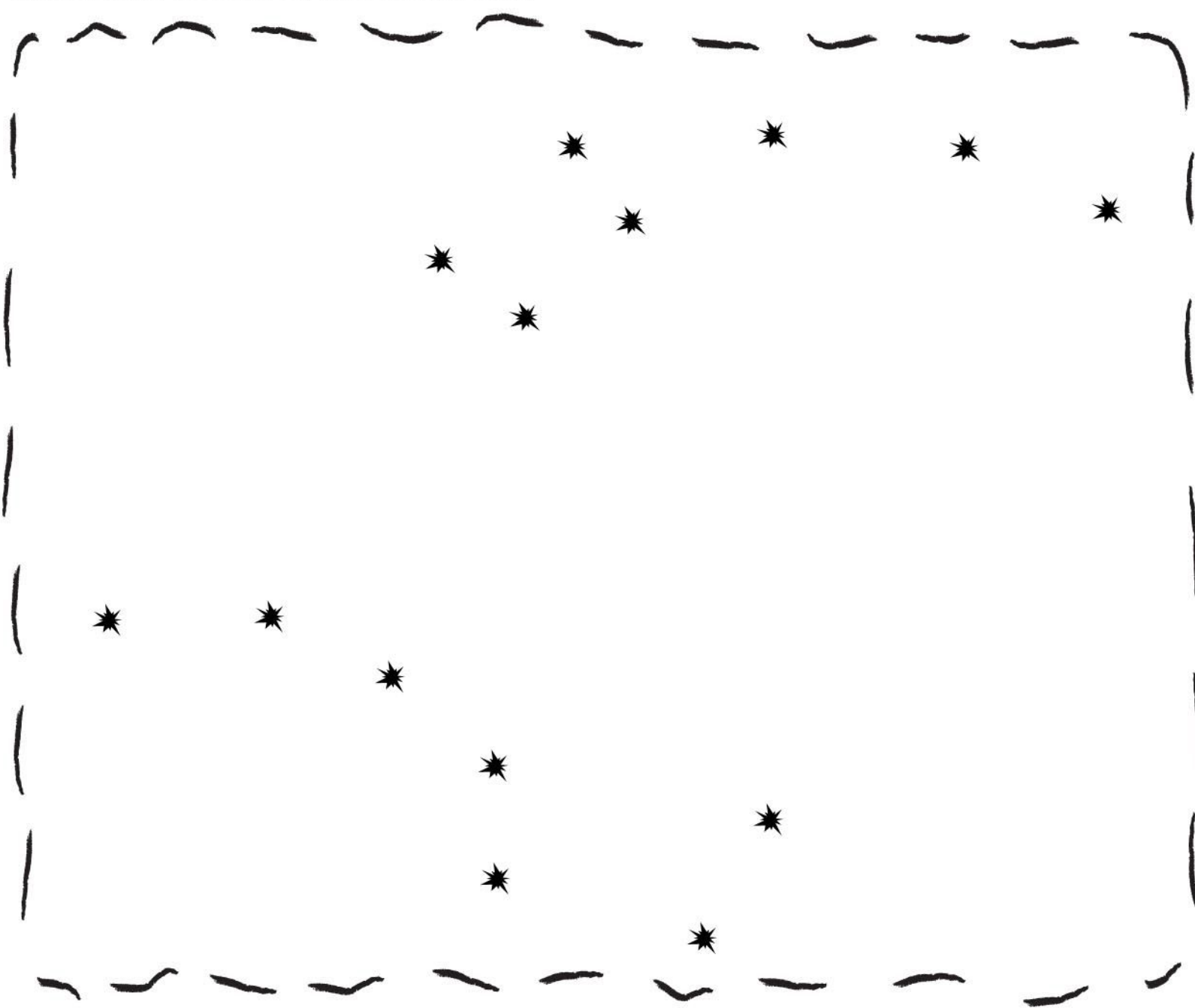


### 3. NIGHTTIME STAR METHOD

Look for the North Star, also called Polaris, in the sky at night. It's the last star in the handle of the Little Dipper. If you can't see the Little Dipper right away, look for the Big Dipper - it's a large pattern of stars that looks like a ladle. Follow a line made by the two stars at the front of the ladle and you will see Polaris.

When you see the North Star, draw an imaginary line from it straight down to Earth. This will be true north. Try to find a landmark in the distance to help you remember where it is.

Trace the stars of the two Dippers and find Polaris.

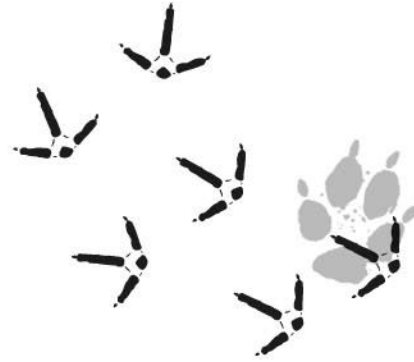


# Scavenger Hunt

You can find a lot of interesting things in nature. The more places you look, the more different things you will find. Every plant and animal has a special place that it lives, which is called its habitat. Some plants and animals can be found in a wide range of places, or habitats, while others can be found only in specific places.

You can do a scavenger hunt all by yourself, or you can invite a friend or several friends to do it with you. You could even make it a race to find all the things on the list. You can either check them off the list or collect some of them in a plastic container or bag. Be sure not to disturb plants and animals too much and put them back where you found them. Also, be sure not to leave your plastic container or bag out in nature!

- Mushroom (do not eat them!)
- Ant moving or carrying something
- Bird's nest (but don't disturb them!)
- Critter that lives under a log or rock
- Pine cone
- Animal track
- Spider web
- Bird feather
- Insects, such as a butterfly, dragonfly, grasshopper, or beetle
- Worm, caterpillar, ant, or other insects on a tree
- Colorful flower
- Moss
- Fungus on a tree
- Something that doesn't belong in nature (such as litter, which you would pick up anyway)
- Hole in a tree
- Pretty or interestingly shaped rock
- Interestingly shaped leaf or stick



## DID YOU KNOW?

The old saying, "moss only grows on the north side of trees," is not true in all areas.

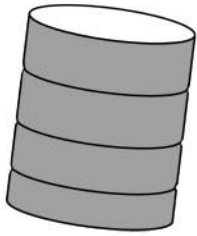
# Make a Water Scope

You'll see a whole new world living in ponds and streams with a water scope. There are different types of bugs and animals that live in the water, and depending on which kinds you see there, you'll know if the stream is healthy or not. Healthy water has highly sensitive bugs like the mayfly, dobsonfly, and stonefly. Polluted water may have bugs like leeches, bloodworms, and black flies.

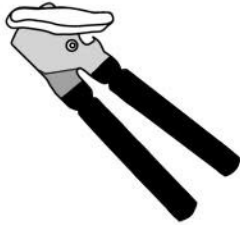
## DID YOU KNOW?

The most plentiful element in seawater is chlorine.

### Things You'll Need:



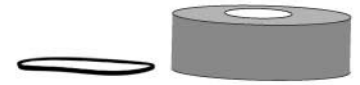
**CLEAN, EMPTY COFFEE CAN**  
(or juice, soup, beans, etc...)



**CAN OPENER**



**CLEAR PLASTIC FOOD WRAP**

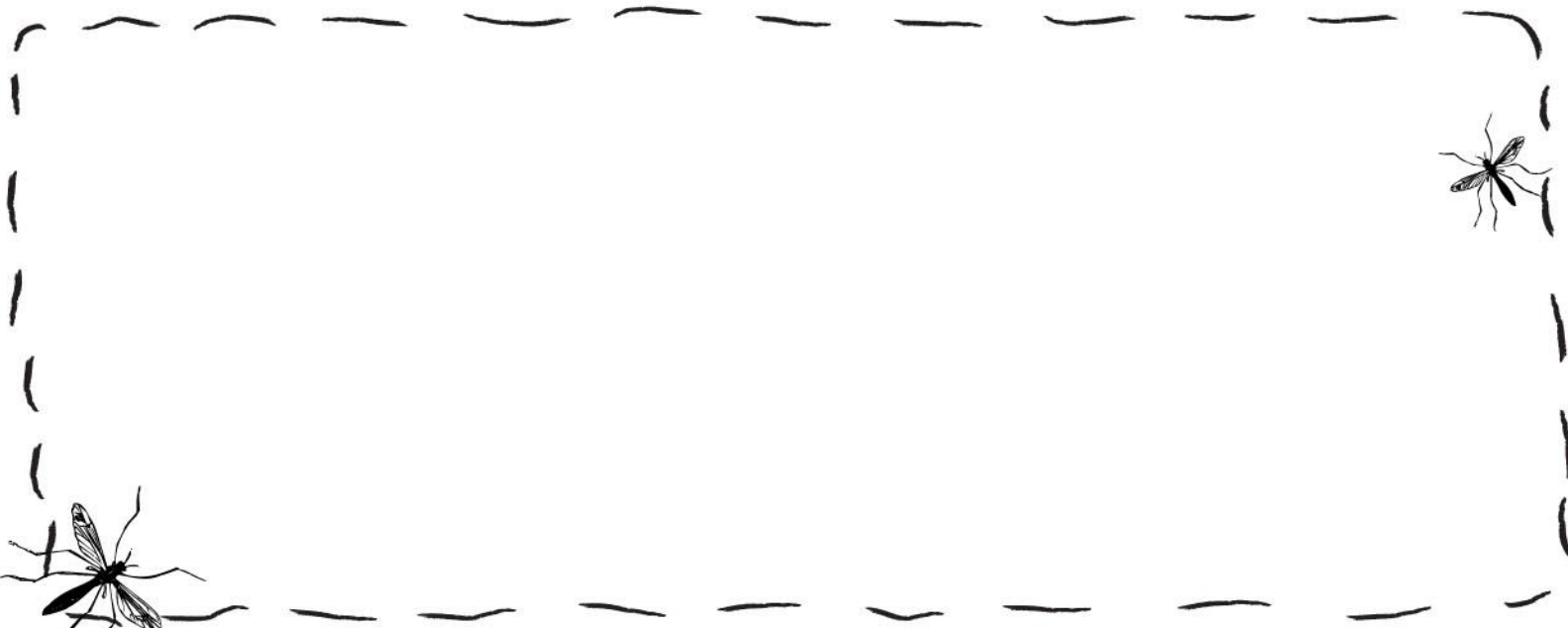


**RUBBER BAND AND/OR DUCT TAPE**

Remove both ends of the can to make a tube. Put clear plastic wrap over one end and secure it with a rubber band and/or duct tape. Go to the nearest beach, pond, lake, or stream and hold the can with the open end up (plastic wrap end in the water about an inch or two). The water pressure will push the plastic wrap upward so that it works like a magnifying glass, and you can see all the action under water.

Be sure not to lose the plastic wrap or any other materials that make your water scope when you're done!

Draw what you saw through your water scope.

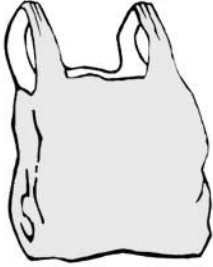




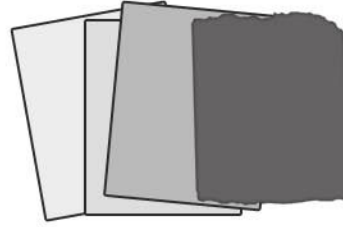
# Create a Nature Collage

One thing you can do to make your day in the forest memorable is create a nature collage out of things you gather while you're outdoors.

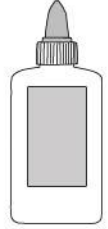
## Things You'll Need:



BASKET OR PLASTIC BAG FOR COLLECTING MATERIALS



CONSTRUCTION PAPER OR CARDBOARD



GLUE

Normal household glue will do just fine

Go for a walk outdoors or in a forest or park. As you go, find nice looking things that you can glue onto your paper. These can be anything you might find, such as leaves, twigs, feathers, flowers, shells, even small pebbles. When you get home, just lay your paper down and glue the items in a way that looks good. You can also draw or make rubbings of things to add to your collage.



**DID YOU KNOW?** Sunlight is made of all 7 colors of the rainbow: red, orange, yellow, green, blue, indigo, and violet.

# Listen to Nature



Nature can be very noisy, but in a different way than the sounds of humans. Birds and other animals use their calls to communicate with one another. If you've ever heard a squirrel scolding, it is telling you to get away. Cardinals have a sharp chirp when they are being territorial, but when they are trying to attract a mate they use a more melodious tune. Some animals cry out when danger approaches. Even though you mean them no harm, they will presume you are a danger to them because you are bigger than most of them.

You can have an interesting experience by just listening to nature. Go outside and find a wooded area. Sit quietly for 5 or 10 minutes and listen for the sounds of nature. You'll probably hear the wind in the trees even if you can't feel it, as well as birds, squirrels, frogs, and other animals. Tune out man-made sounds like traffic, and keep notes on what you hear. Try to identify what makes each sound, then compare your notes with a friend.

Keep track of the sounds of nature. Make sure to write down where you hear the sounds and the time of day.

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2. \_\_\_\_\_
3. \_\_\_\_\_
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5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_

A black silhouette of two frogs, one in the foreground and one behind it, both facing right.

People used to listen to frogs to predict the weather. Frogs croak when atmospheric pressure changes, which often indicates a change in the weather.

**DID YOU KNOW?**

# Make a Difference! Clean Up a Natural Area

The place where we live is our “habitat” and we all need to help make it better. It’s the same for nature – where plants and animals live. Just like at home, everyone can help to make it better.

If you have a special place in nature that you like to go, maybe you can help make it a better habitat for the plants and animals that live there. There are plenty of things you can do to make improvements:

Pick up litter

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Clear out dead grass or non-native plants

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Plant trees or other native plants

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Fix an eroding stream bank

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Repair or paint park benches and other facilities

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Remove graffiti from walls

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After you have a list of things that you could do, ask your parents or teacher to contact the people responsible for the area. You might be surprised how welcome your ideas are. You might even be able to organize a school or other group activity day to make improvements!

## DID YOU KNOW?

The largest service event in the world is Global Youth Service Day. Visit [www.gysd.org](http://www.gysd.org) to learn more.

# Keep a Nature Journal

Keeping a journal is a great way to remember all the cool things you've done. It can also come in handy when you're looking for something to do – you can just look up what you've done before!

You can use your journal to write down things you've done, draw pictures of the things you've seen, or make up your own stories about the places you've been. You can even put photos in it or press leaves and flowers between the pages.

No matter where you live, whether you're in the city or the wilderness, you can find some type of animal and plant life. Just think of it as a neighborhood safari every time you go outside. Write as much or as little as you want. Draw a picture of what you see. Or take a picture to show what it's like. Just make sure to keep something to help you remember it all. That way you can enjoy it again and again!



## DID YOU KNOW?

Snow crystals all have 6 sides. Snowflakes are made of snow crystals that are stuck together.