

Forest Ranger Trainee Patch Program

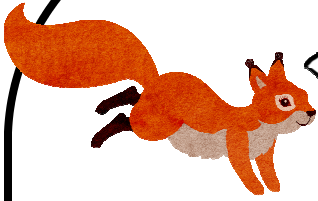
[Complete 3 requirements to earn this patch]

A Forest Ranger Trainee is a person that wants to learn more about the National Forests and forests around them. This patch program encourages children to enjoy the outdoors, take care of the forests, plant trees, explore forests and learn more about what lives there. Never venture outdoors without an adult.



1. Plant a tree to assist in restoring the forests. When you purchased the "Forest Ranger in Training" kit your donation was used to plant a tree in a National Forest.
2. Learn how to use a compass through the science of orienteering. With an adult, turn your compass until the needle is vertical and pointing at the "N". Holding your map, turn until the "North" indicator on the map (usually on the bottom) is pointing the same direction that your compass is pointing. Now that you are facing North, you can find the other directions. South is behind you, East is to your right, and West is to your left. Try to find a simple location on the map such as a mountain, body of water, or campsite. Learn to measure out distance and write down locations of places using the scale that is included with the map (For example: 1 grid square = 1 mile). A sample map is included in this kit.
3. Search trees that grow locally in your state or a forest that you have visited. Identify two different types of trees that live there. Look at the leaves or seeds and either take a picture or trace out the items on paper. Use the leaves or other identifying information to find the tree names. (Use the Leaf Identification worksheet in this kit to identify trees by leaves.)
4. Visit a national forest. What was the name of it? Where was it located? Was there anything interesting about the National Forest? Did it have a Forest Ranger station?
5. Did you know that the bald eagle, the national bird of the United States of America, is protected. What animals or plants can be found in National Forests that are protected or learn more about the bald eagle? These can be species that are endangered, threatened, or protected for other reasons.
6. Posters have been created for decades with messages on how to prevent forest fires and the "Smokey the Bear" mascot. Create a poster on paper that has your own wildfire prevention message or take the "Million Tree Challenge" which assists in planting trees to restore forests destroyed by wildfires.
7. Observe the area where you live. You may live near a forest or wooded area. What type of terrain can be found in these areas? Are there signs of local wildlife such as animal tracks, nests, habitats such as dams or burrows, or fur and feathers? Are there trails or signs? What type of insects or foliage did you see?
8. Learn about the parts of a tree. Why do trees have rings inside their trunks? Why do some trees lose their leaves and others don't?
9. There are many animals that live in the forest. Some live in the tops of trees, in nests, or in a home they made themselves. Choose two animals to learn more about that live in forests.
10. In some forests there are designated camping areas. At campsites there are places where you can set up tents or shelters to sleep in, a campfire area, and sometimes a hiking trail or water area for other activities. Choose a day to camp with your family or group. What camping skills did you use or did you learn a new skill?
11. Meet or interview a real Forest Ranger. Ask what their duties are or what a typical day entails? Do they live in the ranger station?

Learn more about a National Forest. Choose one and research it on the internet or in person.



Blank banner for Name of the National Forest

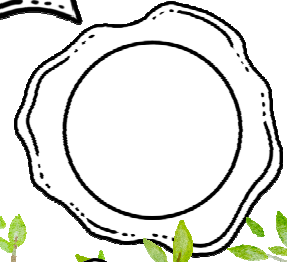
Name of the National Forest

Is it near you?

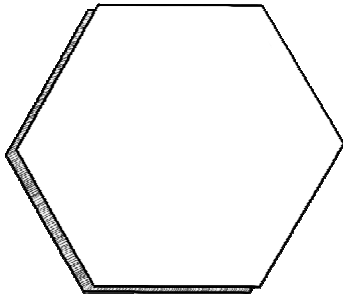


Blank banner for Location (State or States)

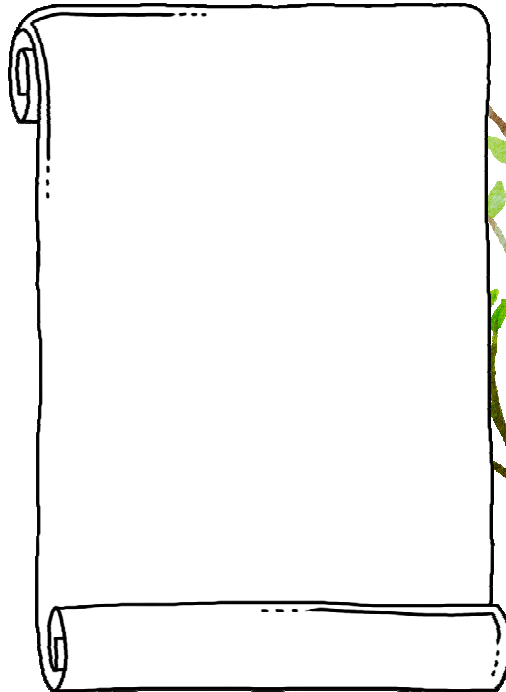
Location (State or States)



Approximate Size
acres/miles etc.



Any lakes, waterfalls,
other water features



Monuments or Special Sites.



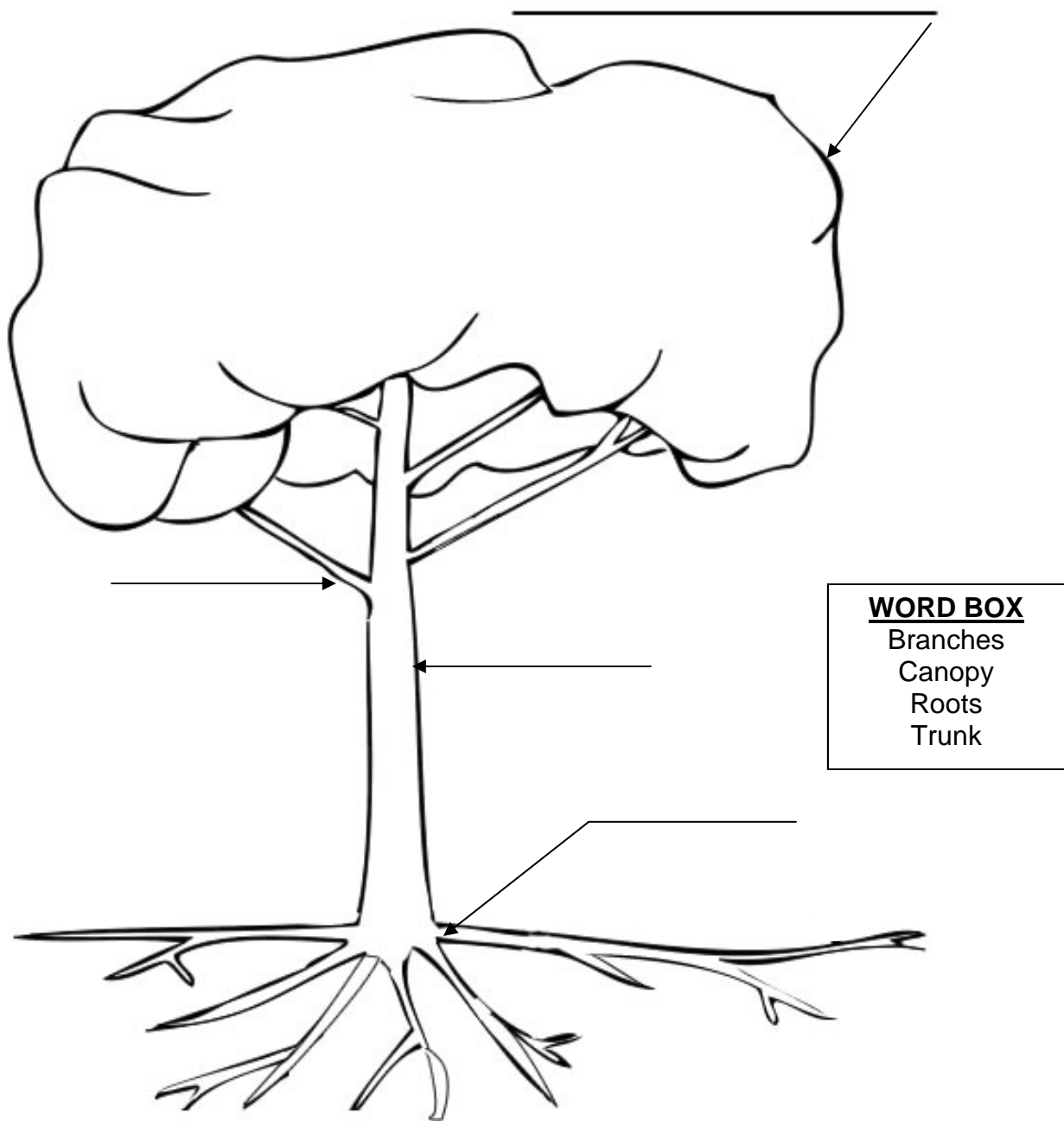
Types of Trees or
Leaves.

What did you like best about this National Forest? Campsites,
Recreation areas, canoeing, fishing, scenic trails, etc



Parts of a Tree and What Can One Tree Do?

Add animals and other living things to the tree. What kind of tree do you want it to be? Color the tree and label the parts of the tree from the word box.



What can one tree do?

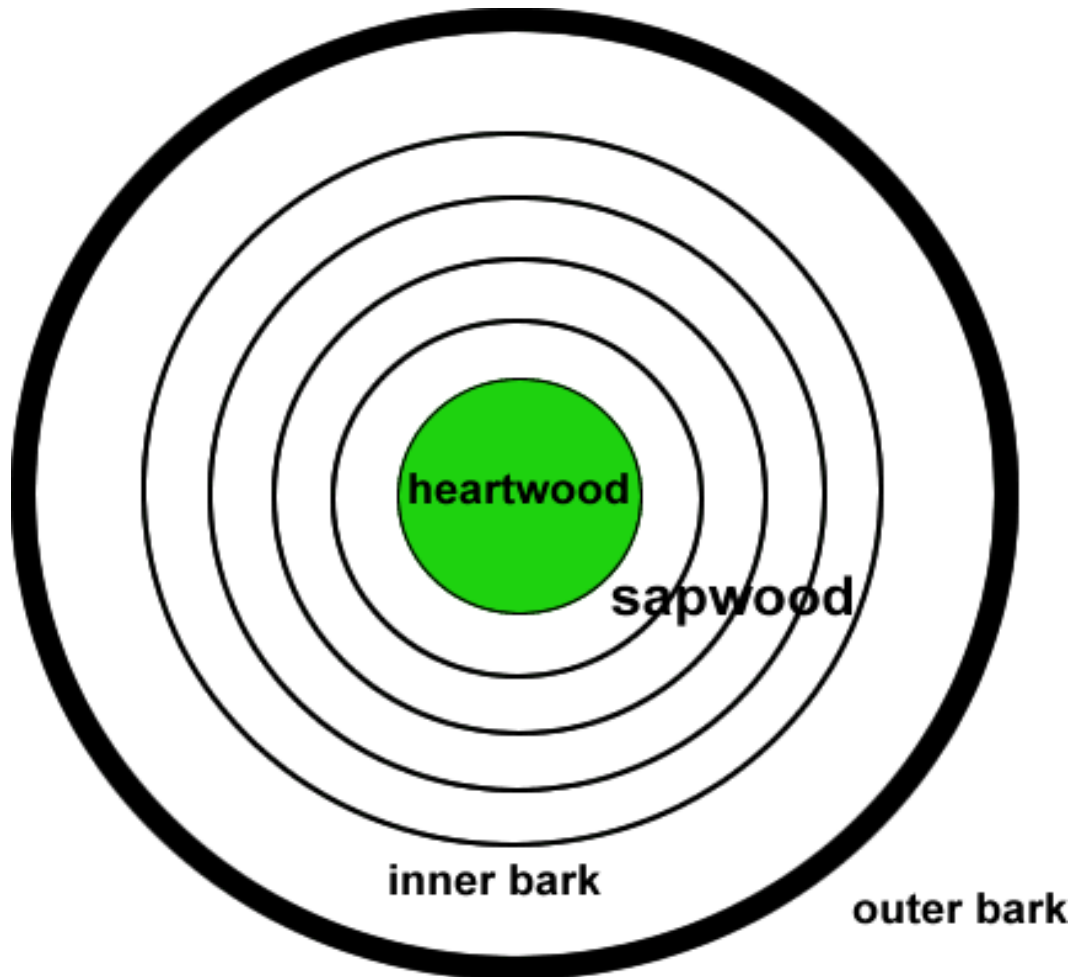
- Provides a day of oxygen for 4 people
- Lifts water from the ground and releases it in the air
- Keeps soil from washing away
- Creates homes for animals
- Provides shady area to relax
- Provides food to eat [apples, peaches, bananas, nuts, and syrup]
- Place to play and build a tree house

Tree Rings

The **giant sequoia tree**, found in California, has a reddish-brown bark. They are one of the oldest living trees on earth and one of the fastest-growing trees, eventually reaching 270 feet or more in height.

The taller and more slender **California coast redwood**, has a reddish-brown bark. On average, redwoods grow to heights of 275 to more than 300 feet.

How old do you think this tree is? _____



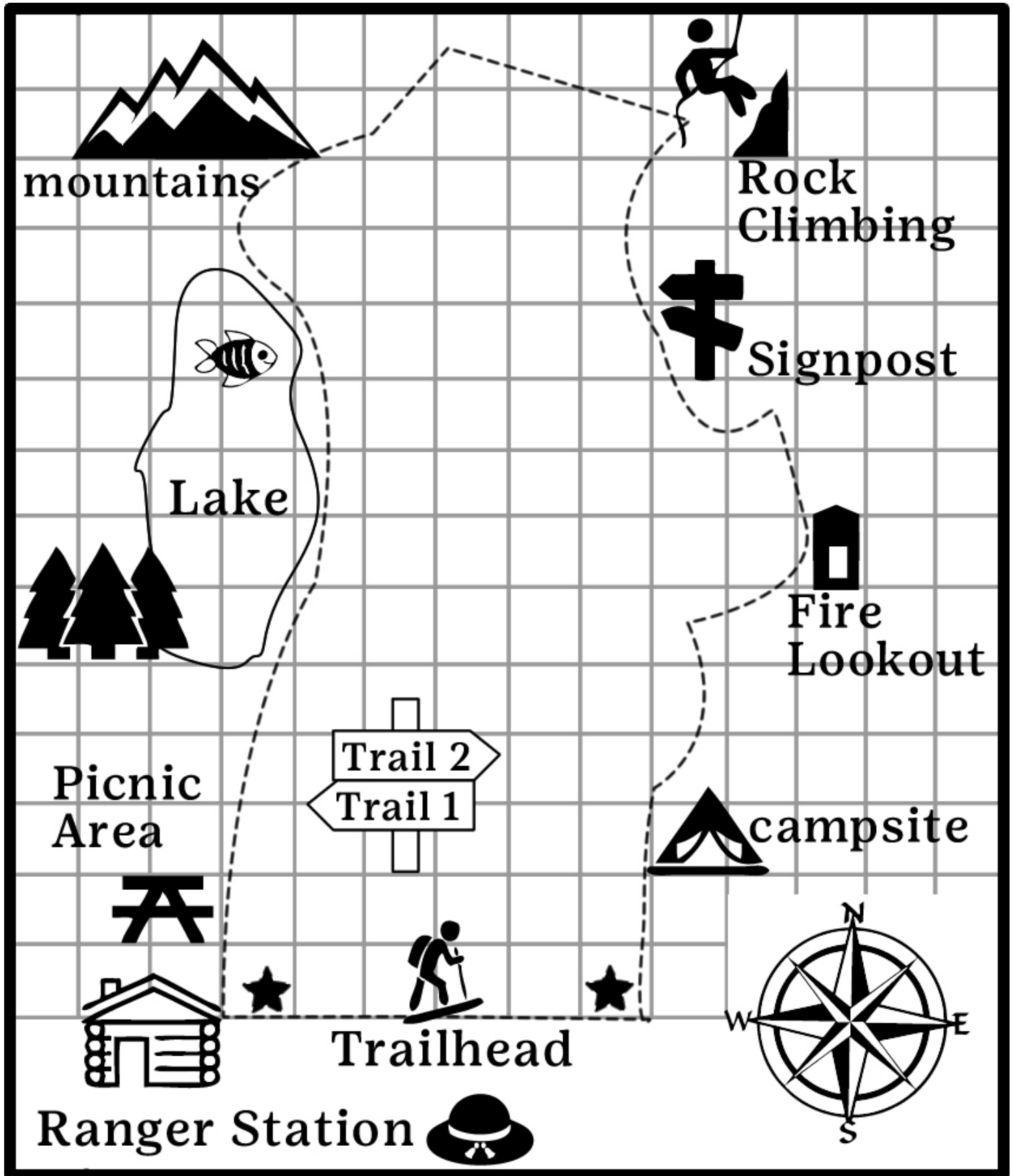
outer bark - the protective outer layer of the trunk. (Color it **BROWN** or **reddish Brown**)

inner bark - the layer of the trunk through which the tree's food flows - it is located between the outer bark and the sapwood. (Color it **RED**)

sapwood - the layers of wood just outside the heartwood. Each year a new layer of wood is formed, creating the time line of the tree. (Color the rings in different colors, representing the rings of its life)

heartwood - the core of the trunk (Color it a color you have not used yet)

National Forest Map

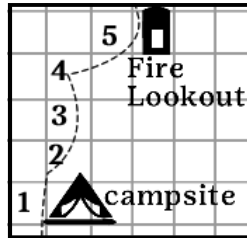


Using the National Forest Map

Use your national forest map located on the previous page to take an imaginary hike. First locate the Trailhead. Choose trail 1 or 2 when answering the following questions. The starting location is noted by a star. This is where you'll be starting from.

Use the map scale (1 square equals 1 mile). Follow the dotted line, the trail, to measure the squares. The first one is completed for you. The compass on the map will help you with directions.

1. About how many miles is it from the campsite to the fire lookout?



2. Look at the compass on the map.

N=NORTH S=SOUTH

E=EAST W=WEST

If you are at the Fire Lookout and want to go to the campsite, what direction would you go?

2. How many miles is it from the mountains to the lake opening with fish?

A) 2 B) 3 C) 4 D) 5

3. If you are at the mountains and want to go to rock climbing What direction would you go?

A) North B) South C) East D) West

4. How many miles is it from the Trail 1 starting point, noted by a star, to the picnic area?

A) 1 B) 2 C) 3 D) 5

5. If you are at the signpost and want to go to campsite What direction would you go?

A) North B) South C) East D) West

6. How many miles is it from the Trail 2 starting point, noted by a star, to the campsite?

A) 1 B) 2 C) 3 D) 5

7. If you are at the Ranger Station and want to go to campsite What direction would you go?

A) North B) South C) East D) West

Use the below area to design more map symbols or measure out more locations.

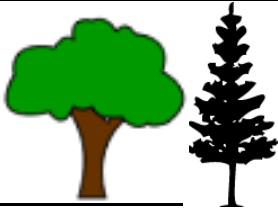
Observing Your Backyard

Observe the area where you live. You may have a forest in your backyard or near your home or school. Visit an area to explore and complete the worksheet below. Always have adult supervision when you are exploring. Do not approach animals or disturb their habitat area.

Location: _____

Date: _____ **Time of Day:** _____

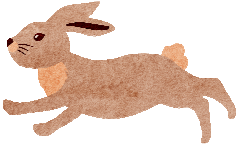
Trees



Draw one of the leaves you saw?

Did you see any acorns, pine cones, etc?

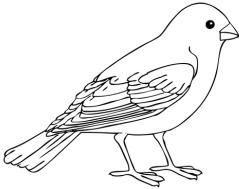
Animals



Did you see any animals?

Did you see any areas where animals may be living?

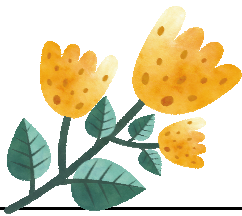
Birds



Did you see any birds?

Did you see any areas where animals may be living?

Flowers



Did you see any flowers?

Did you see any petals on the ground?

Insects
& Bugs



Did you see any insects?

Did you see any bugs on leaves, trees, etc?

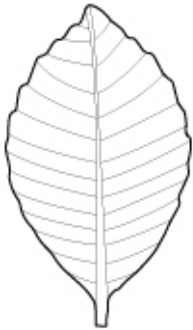
Other Things

Leaf Identification

Below are some common leaves you may find in your backyard or local forest. Visit an area to explore and complete the below worksheet. Always have adult supervision when you are exploring. Do not approach animals or disturb their habitat area.

Check off the leaves you saw.

Elm

☐

White Oak

☐

Maple

☐

Ginkgo

☐

Walnut

☐

Sweetgum

☐

Aspen

☐

Box Elder

☐

White Ash

☐

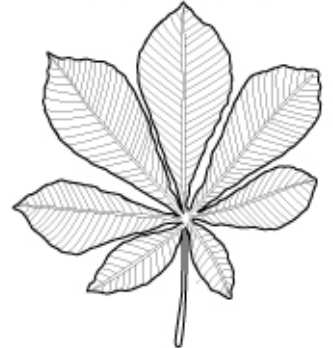
Birch

☐

Pecan

☐

Chestnut

☐

Bald Eagle

Native to
North America.

The Bald Eagle has been the national emblem
of the United States since 1782.

Bald Eagles can live
a long time. The
oldest recorded bird in
the wild was at least
38 years old

Nests are
typically built near the
trunk of a tree high up
in the top.

They
build some of the
largest of all bird nests
Typically 5 to 6 feet in
round and 2 to 4 feet tall

The adult male is about
36 inches long and has a
wingspan of 6 feet.

Females weigh
10-15 pounds.

Adult females is about 43
inches long and have a
wingspan of 8 feet.

Males weigh 6 to
9 pounds.

Eagles learn to
fly at three
months of age.

Bald Eagles
eat mainly fish.

Eagles can fly
up to 30 m.p.h. and
can dive at speeds up
to 100 m.p.h.

They lay 1-3 eggs
at a time.

Length: 2 to 3 inches

Width: 2 to 2.5 inches

Hatches in about 35 days.

They are born with gray
feathers, brown eyes and
pink skin.

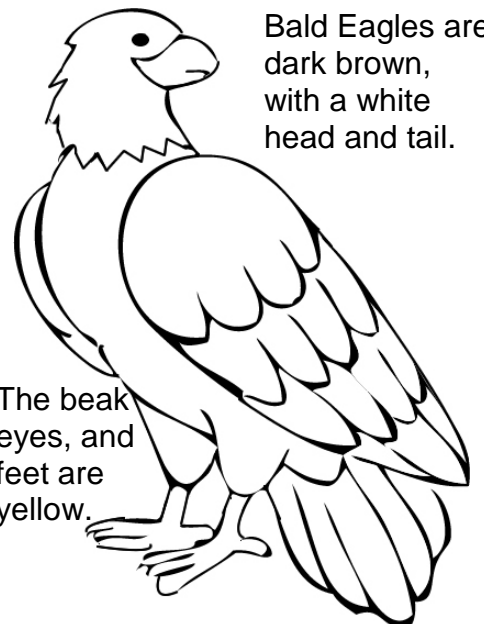
They stay in the nest
about 98 days.

In 1940, The U.S.
government's
Bald Eagle
Protection Act
made it illegal
to kill bald eagles.

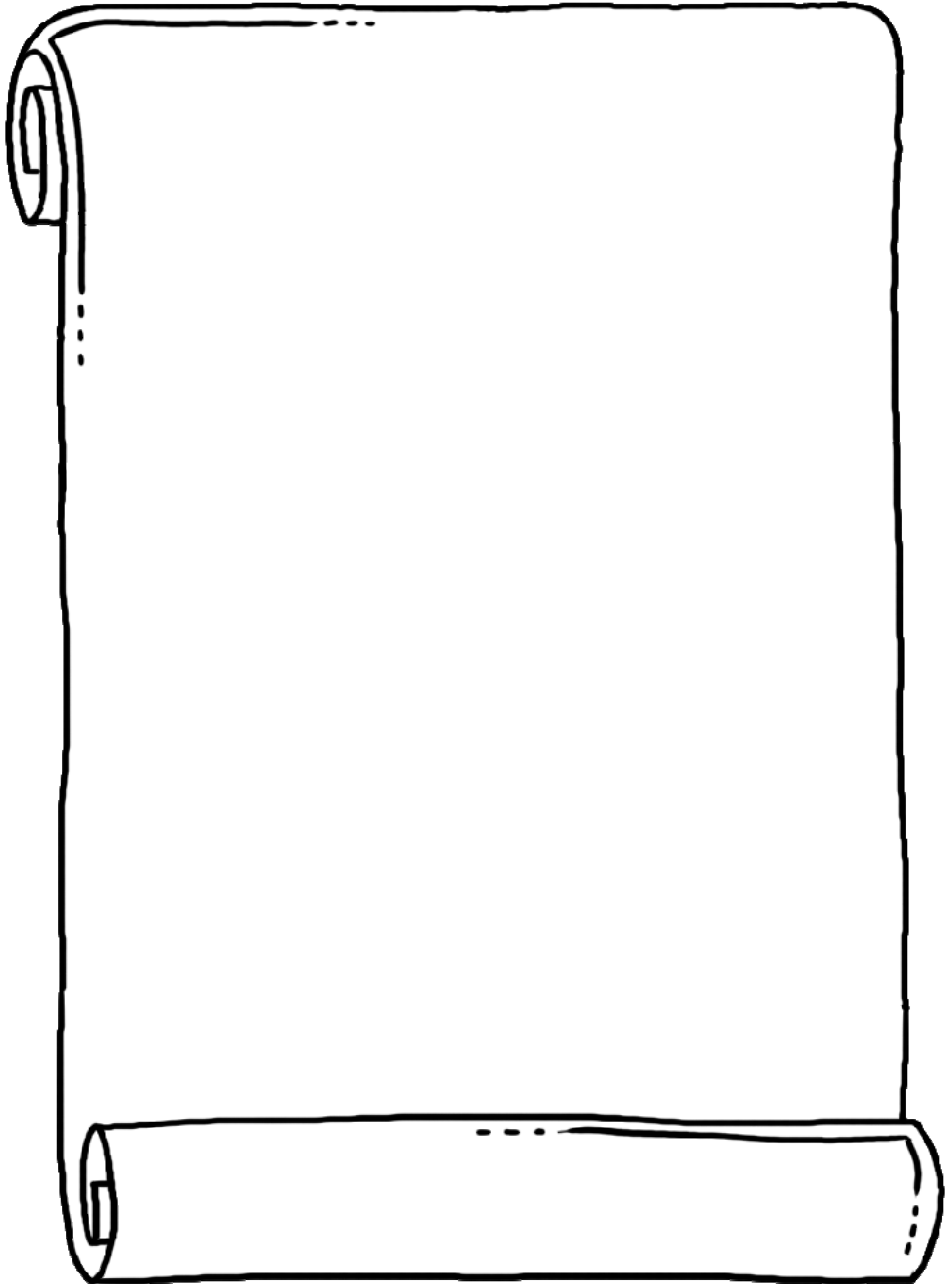
Bald
eagles develop
a white head and tail
feathers by 4-6
years of
age.

Bald Eagles are
dark brown,
with a white
head and tail.

The beak,
eyes, and
feet are
yellow.



Create a poster below that has your own wildfire prevention message.

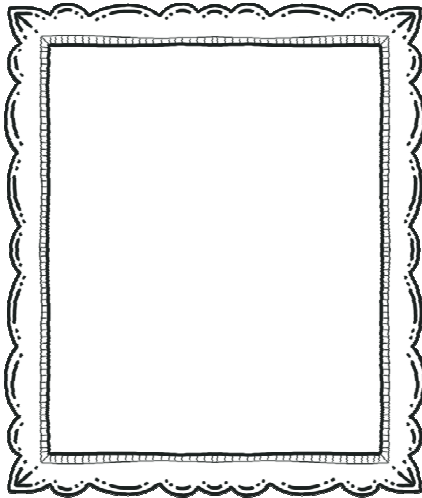


Wildlife

Animals

There are many animals that live in the forest. Some live in the tops of trees, in nests, or in a home they made themselves. Choose two animals to learn more about that live in forests. Examples are: bears squirrels, rabbits, foxes, owls, and more.

Name of animal



Draw a picture of the animal

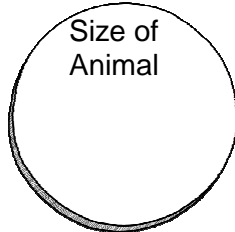
Characteristics of animal

- ☐ Fur ☐ Claws
- ☐ Feathers ☐ Beak
- ☐ Feet-- How many?
- ☐ Scales ☐ Shell
- ☐ Wings ☐ Tail
- Other:

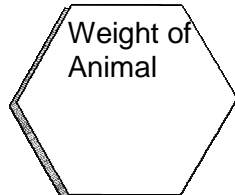
Color of Animal



Size of Animal



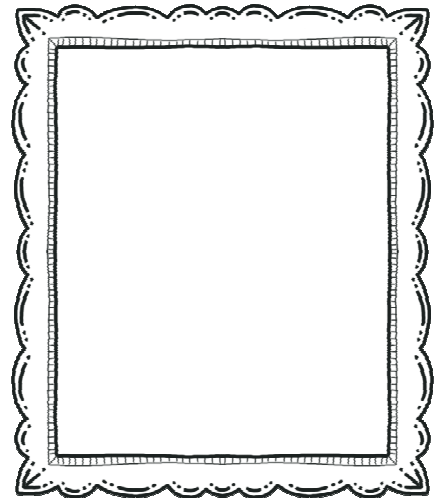
Weight of Animal



Where does it live?

Other unique information.

Name of animal



Draw a picture of the animal

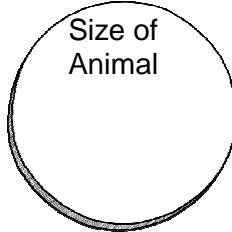
Characteristics of animal

- ☐ Fur ☐ Claws
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- ☐ Feet-- How many?
- ☐ Scales ☐ Shell
- ☐ Wings ☐ Tail
- Other:

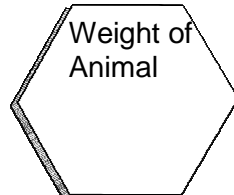
Color of Animal



Size of Animal



Weight of Animal



Where does it live?

Other unique information.

Any similarities in the two animals? Fur, where they live, eat, etc.

My “Planting a Tree” Game [First to 4 in a row wins]

The first person to plant four [4] of their trees in a row wins. [Diagonal, vertical, or horizontal.] Cut out the leaves below and use them for markers in the above squares.

