

LEAF IT!

Objective: Students will learn the parts of a tree and ways trees help the environment by answering tree trivia questions.

Illinois State Goals: 12.A., 12. B.,12.E.

Top Book Hits:

A Tree Is Nice by Janice May Udry; **ISBN-13:** 978-0064431477

Red Leaf, Yellow Leaf by Lois Ehler; **ISBN-13:** 978-0152661977

Why Do Leaves Change Color? by Betsy Maestro; **ISBN-13:** 978-0064451260

The Giving Tree by Shel Silverstein; **ISBN-13:** 978-0060586751



Materials Needed:

- Tree bulletin board kit or art supplies to make a tree trunk with branches and leaves
- Scissors
- Tape and/or velcro
- “Leaf It” questions
- Rock, pine cone, pine needles, piece of bark, orange, acorn
- Recorded music with player (optional)
- Beanbag (optional)

Activity Preparation:

- Fashion a tree trunk with branches to stand approximately 4 foot from the floor using a bulletin board kit or brown construction/craft paper. If needed, use green construction paper to cut out leaves. There should be enough leaves for each student to have at least one or two. **NOTE:** You may wish to laminate all the pieces for long term use.
- Tape or hang the tree on the wall at a height that students can reach. Place a circle of tape or Velcro dot on various spots on the branches. If using Velcro, place the other part of the Velcro on the back of each leaf. Place the leaves in a pile near the tree.
- Select the “Leaf It” questions that are provided or develop some of your own to complement your tree study unit. Cut the questions into strips and place in a container for each student to draw out of.

Procedure:

Have students sit in a semicircle around the tree. Explain that everyone will have the opportunity to re-leaf the tree. Before a student can put a leaf on the tree, he or she must answer a tree question.

1. Place the questions in a bag. Instruct each student to select a question. Read the question to them. Offer hints if the student is having difficulty.
2. After the student answers the question correctly, he or she can take one of the leaves from the leaf pile and stick it on one of the velcro or tape spots.
3. Continue playing until all the leaves are on the tree.

Option: Music may be used with this activity. Set up the music so it can be stopped and started easily. Start the music, and direct students to pass a bean bag around the circle. When the music stops, the student with bean bag gets to answer a tree question.

Give credit where credit is due...adapted from NatureScope: Trees are Terrific!

Leaf It Questions

Hold up a “non-tree” object such as a rock and ask, “Is this part of a tree?”

What happens to some tree leaves in the fall?

On some trees (most deciduous trees), the leaves turn different colors and fall off in one season. On most pines and other evergreens, they don't change colors and they don't fall off during one season.

Can you think of a way a bird might use a tree?

Many birds perch in trees, build nests in trees, and/or roost (sleep) in trees. Also, some birds eat a tree's fruit or nuts or eat insects that live in or on trees.

Can you think of a way a tree's bark can help the tree?

Bark protects a tree from certain insects, cold weather, animals, and other things that could harm it.

Hold up a pine cone and ask, “What is this?”

Can you name a kind of food that people get from trees?

Apples, oranges, cherries and other fruits; also walnuts, pecans, and many other nuts.

Is a tree a living thing?

YES

Hold up some pine needles and ask, “What are these?”

Can you name a kind of animal that lives in trees?

Many bats, birds, insects, spiders, squirrels; and other animals live in trees.

Is a tree a plant or an animal?

Plant

Can you name something made from trees that people use every day?

Paper, pencils, and wooden furniture are just a few examples

What color are most trees' leaves most of the time.

Green

Can you name a color some leaves become in the fall?

Yellow, red, orange, purple and brown. The leaves of some trees stay green all year long.

When there are no leaves on a tree in winter, does that necessarily mean the tree is dead?

NO. Trees that lose their leaves in fall stay alive all through the winter in a kind of resting stage.

Would trees be able to grow if the earth never got any sunshine?

NO. Trees, like most plants need sunshine to grow.

Can you name a way an insect might use a tree?

Some insects eat tree leaves, bark, seeds, and other tree parts; some insects lay their eggs on or in trees; some katydids and other insects “sing” from perches in trees.

What is a big group of trees all living in the same place called?

A woods or forest

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What do a tree's roots do?

They absorb water and minerals and help hold the tree steady in the soil.

When you grow up, will you be taller or shorter than most kinds of trees that are the same age?

Shorter

If there were tall trees all around your house, would you feel warmer or cooler in the house on a hot summer day?

Cooler

Hold up an orange and ask, "Is this part of a tree?"

An orange is the fruit of an orange tree.

Name two ways animals use trees.

For food, shelter and nesting sites

Hold up an acorn and ask, "What would this grow into if it were planted?"

An oak tree

TRUE or FALSE - Pine needles are leaves.

TRUE

Hold up a piece of bark and ask, "Is this part of a tree?" Also ask where is bark is found on a tree?

On the trunk, branches, and roots

What are deciduous trees?

Trees that lose their leaves each year.

What gives green plants their green color?

A pigment called chlorophyll

Name one function of a tree's trunk.

Support rod and transport system

You live in a place that is windy. If you plant big pine trees around your house, would as much wind blow against your house as it did before the trees were planted?

NO. Trees make good windbreaks.

A tree's outer covering or _____, protects it from injury, insect damage, and disease.

Bark

What is the seed of an oak tree called?

An Acorn

Name three products that people get from trees.

Lumber, paper, food, spices, rubber, cork, drugs, fabric and more!

The sap from the sugar maple is used to make what product?

Maple Syrup

Native Americans used bark from birch trees to make what?

The white bark of the birch tree was used to make light-weight canoes.

What is the state animal of Illinois?

The White-tailed Deer

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TRUE or FALSE - Trees are considered to be annuals.

FALSE. Annuals are plants that sprout, reproduce, and die in one season. Trees are a type of perennial, which means they live for many seasons.

The buckeye tree got its name because it has a shiny nut that looks like the eye of what animal?

The buckeye has a seed that looks like the eye of a deer.

What is a compound leaf?

A leaf made up of many leaflets.

The shagbark hickory is named for its shaggy what?

The bark on a mature shagbark tree separates from the trunk in narrow strips, which gives it a shaggy look.

The sapwood carries _____ and _____ from the roots to the leaves.

Nutrients, Water

What do people traditionally plant on Arbor Day?

Trees

What is the state tree of Illinois?

The White Oak

When is Earth Day?

Earth Day is celebrated on April 22nd of each year. The first celebration was held in 1970.

What is one way that scientists can tell how old a tree might be?

Count the annual growth rings

What is the state bird of Illinois?

The Northern Cardinal

What is name for the single layer of living cells called that produces the sapwood and the inner bark?

Cambium

Name one way trees help the environment.

Roots help hold soil in place to prevent erosion and trees help clean the air.

What is the name for the part of the tree that is located in the center of the trunk and contains very strong, dead tissue that supports the tree?

Heartwood

These tiny holes in leaves of a tree, take carbon dioxide gas from the air. They turn this gas into oxygen and release it. What are they called?

Stomata

What is the food making process called where the leaves of the tree use the energy in sunlight, chlorophyll (the green substance in leaves), water and nutrients from the soil?

Photosynthesis

TRUE or FALSE – After a tree dies it has no value to the environment.

FALSE – Even after a tree dies it can be a home for insects, animals, and birds. As the tree begins to decompose, it enriches the soil.

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