

INDEPENDENT FIELD TRIP FOR GRADES 3-5



This independent field trip can be completed during any 1+ hour hike on the Whitefish Trail, other local trails, or even in your backyard!

3rd - 5th graders will practice science, math, and language while they explore their local trails and forest through hands-on interactive lessons, games, and activities with their family or caregivers.

MATERIALS NEEDED: Paper and pencil, measuring tape. Optional: magnifying glass

EXPLORATION: TREE HUNT

DIRECTIONS: Complete this scavenger hunt by observing trees from afar and up close. Find a tree...

- With a crooked trunk
- That is tall
- That is short
- With a scar
- That leans
- With moss growing on it
- That has lichen in its branches
- With needles
- With buds on the limbs
- That has rough bark
- That has smooth bark
- That smells good
- With sticky sap
- With an insect on it
- In the shade
- In the sun
- With gnarly roots
- That has fallen
- That is dying
- That has a bird in it
- That is home to an animal
- That stands alone
- That stands near other trees
- That has a huge trunk
- That has a skinny trunk
- With low branches

PLAY: WHICH TREE AM I?

DIRECTIONS: Take turns having one person picking out a tree you can see. Have everyone else try and figure out which tree it is using only yes or no questions ("Is your tree in the sun?", "Does your tree have needles?", etc.)

PROCESS: FOREST POET-TREE

DIRECTIONS: Think about the trees you observed on your hike and write poem about them using paper and a pencil. Review what a syllable is: "A syllable is a part of a word that contains sounds (phonemes) of a word. It usually has a vowel in it. It is also called a 'beat.'" Write a cinquain poem with 5 lines about a tree or the forest following these rules:

1st line is a title with 2 syllables, 2nd line describes the title in 4 syllables, 3rd line is a description of action in 6 syllables, 4th line is a description of a feeling in 8 syllables, and 5th line is another word for the title in 2 syllables. Here's an example (from *Project Learning Tree*)

Forests

Graceful, growing

Climbing among the clouds

Calmly awaiting the sunrise

Alive.

DISCOVERY: WHAT IS UNDER THE LOG

DIRECTIONS: Find a log and get close and inspect with a magnifying glass if you brought one.

Questions to discuss: What do you notice about this fallen log? Are there any living creatures on or under it? Is anything growing on it? Why do you think those things are on it? What are they doing? What is helping this log to decompose and break down into soil? Do you think it fell a long time ago or recently? What could have caused it to fall? What will it look like in 10 years? Find another log and compare them.

OBSERVATION: MEASURING A TREE

DIRECTIONS: Find a tree and estimate the size of the tree's diameter (distance from one side of the outer edge of the trunk to the other), radius (distance from center of the tree to outer edge of the trunk), circumference (distance around the outer circle of the tree) by using parts of your body. For example: "the radius is about the length of my thumb", "the circumference is the length of two hands around it". Then do the same measurements using your measuring tape. Use this comparison to calculate the length of the body part you used to measure.

If it is sunny, find a tree that is casting a shadow. Measure the height of the child and the length of their shadow either using the measuring tape or a part of the body as a unit of measurement. Measure the shadow of their body using the same unit of measurement. Measure the shadow of the tree with the same unit of measurement. Estimate the height of the tree using this ratio:

$$\frac{\text{Tree's Height?}}{\text{Tree's Shadow}} = \frac{\text{Child's Height}}{\text{Child's Shadow}}$$

Estimate the age of the tree. Notice anything that might help or hinder the tree's growth (rocky soil, shade/light, water, competition with other trees, etc.) From this estimate how fast the tree has grown using:

$$\frac{\text{Tree's Height}}{\text{Age of tree}}$$