

Essential Question:

What adaptations do plants have to help them survive?

Objective:

Students will be able explore their outdoor space and identify and investigate plant adaptations.

Background:

Adaptations are special features that allow plants and animals to live in their particular habitats. Plants have many different types of adaptations to help them gather sunlight, water, air, and nutrients. Adaptations also provide protection for plants, giving them a better chance to survive.

Materials: White paper and a few crayons without the paper wrapper on

Safety: Remember to explore in safe areas with an adult's supervision. We recommend daily tick checks after exploring outside. Tick numbers here have risen in recent years. Here is a link to a Maine Tick/Lyme Disease Information Sheet for your reference: <u>Tick Information Card</u>

Procedure:

<u>INTRO</u>

Step out into an outside space and walk around. Check out the different types of plants here. Ask yourself, "What can I see on this plant that helps it survive?"

LEAVES

Leaves on plants allow them to soak in the sun's energy and make food. Look at the leaves around your space.

How many plants have needle leaves? NEEDLE-LIKE LEAVES help shake the snow off the plant in the winter, and they also help the plant hold in water.

How many plants have flat leaves? FLAT LEAVES give more space to capture the sun's energy to make food.

Does your yard have more plants with big flat leaves or more plants with skinny, needle-like leaves?



<u>ROOTS</u>

Can you find a tree's root in your outdoor space? Point these out. How do the roots help the tree survive? The roots are adaptations to give support to the tree and bring in water and nutrients from the soil.



<u>MOSS</u>

Try to find a patch of moss. If it's a safe area, touch it gently with your finger. Is it dry or wet? Moss is different than trees. It is also a plant, but it does not have the same kind of true root system.

Have you ever used a sponge in the kitchen? What happens when it touches water? Instead of true roots, moss have parts that act like a sponge to pull in and hold water. That's why mosses can still be wet even after things around them are dry.



<u>BARK</u>

Check out the bark on a tree! Bark helps protect plants from many things like the cold, some insects, the wind, and even fire. How would you describe the bark you see? Is it bumpy and lumpy? Smooth? Crunchy? Flaky? Try making a Bark Rubbing! Hold up white paper to the bark of a tree that is in a safe space. Rub on the paper with a crayon on its side without its wrapper. Try using different colors for different trees. You can even do rubbings on the same piece of paper so you can compare different bark types.



Conclusion and Assessment:

Draw a picture of the plants that live in this outside space. Circle their adaptations. These bark rubbings make great cards! Fold it in half, and write a thank-you note to someone!