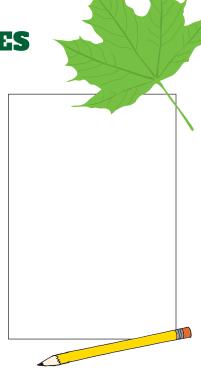


LOOKING AT LEAVES

Find a leaf to observe on a plant.
What size is it? How does it feel?
What shape is it? Sketch your leaf
and write about its unique features.



Describe the habitat the plant is growing in.

Now find a leaf to look at on a plant that lives in a different habitat. How are the leaves similar? How are they different? Share your observations below.



Have you ever wondered why plant leaves come in so many different shapes, sizes, colors, and textures?

Plants live in many different environments. These environments can be hot or cold, dry or wet, windy or calm. All plants have **adaptations**, characteristics that help them meet their needs and survive in their environments. Variations in leaf shape, size, texture, and color are adaptations the plant uses to survive.

In desert habitats—which have extreme temperatures, lots of wind, poor soil, and little rain—leaves are fleshy to store water.



In a rain forest—where it is shady, hot, and humid from all the rain—leaves are large to collect more sunlight for photosynthesis. They too have a waxy texture to their leaves. However, this texture allows the rain to roll off the leaves quickly. The leaf's surface dries quicker so that disease does not grow and harm the plant.

Use the search sheet on the following pages to discover more amazing leaf adaptations.

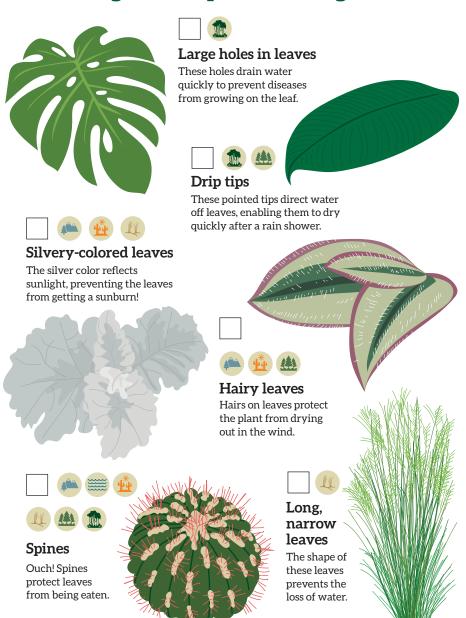
Did you know? Some leaves contain poisons or glass-like crystals called "silica." These chemicals protect the leaves from being eaten by predators.



2 PLANT HEROES LOOKING AT LEAVES 3

LEAF ADAPTATIONS SEARCH SHEET

How many leaf adaptations can you find?



Habitat Hints

Use the habitat icons to help you know where to look!













Alpine

Aquatic Habitats

Desert

Prairie

Temperate Forest

Rain **Forest**





fleshy leaves





These leaves are filled with water, helping the plant to survive in dry environments.



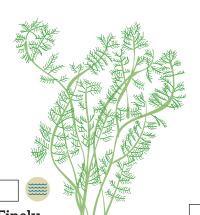






Needlelike leaves

These leaves enable the plant to photosynthesize all year long in cold, dry environments.





Water moves easier through dissected leaves, preventing them from tearing.



Floating leaves

Horizontal leaves that float on water enable the plant to capture more sunlight for photosynthesis.

CREATE YOUR OWN LEAF

Now use your imagination to invent a super leaf adapted to survive in the habitat of your choosing.

Circle your choices below to describe the environment where your plant lives.

My plant lives in the: Temperate Forest Aquatic Prairie Alpine Desert Rain Forest Habitats The temperature my My plant needs this plant thrives in is: amount of water: 000 000 000 dry average Warm The leaves of my plant My plant grows in: are protected by: shade part shade hair spines poison

Draw your leaf and label all its unique adaptations.
What adaptations does your leaf have?
How do these adaptations help it to survive?
Name your plant based on the unique features of its leaf! My plant's name is

Sketch of Mu Leaf

