

Don't you love when the leaves turn reddish orange and fall off the trees? This lesson provides a great way to clean up some of those leaves all while helping your students learn to classify different types of leaves.

Learning Objectives

Students will be able to identify and label different types of leaves.

Materials and preparation

- Pencils
- Poster board or paper
- Glue
- Markers
- Small bags for holding leaves
- Leaf Types worksheet
- Why do Leaves Change Color worksheet

Attachments

- Leaf Types (PDF)
- Why do Leaves Change Color (PDF)

Introduction (5 minutes)

- Tell students that they are going to be identifying and labeling different types of leaves.
- Let the students know that they will be going on a leaf scavenger hunt.
- Ask the students if they can come up with some different types of leaves.

Explicit Instruction/Teacher modeling (15 minutes)

- Distribute and go over the Types of Leaves worksheet.
- Tell your students that as we go on our scavenger hunt, we are going to be collecting leaves and putting them into our bags.
- You may want them to bring out a pencil so they can mark off leaves as they find them.
- They will only need one leaf of each. Note: Rather than trying to find every type of leaf, they will only be trying to find as many as they can in 30 minutes.

Guided Practice (30 minutes)

- Have students go outside with their worksheet, pencil, and bag.
- Let students collect leaves.

Independent working time (20 minutes)

- Once students are back in the classroom, have them take out all their leaves.
- Next, have them glue down the leaves to a poster board.

- Finally, have them label all of their leaves.

Differentiation

- **Enrichment:** Have advanced students complete the Why do Leaves Change Color worksheet.
- **Support:** Help struggling students by guiding them and checking on their progress as they work.

Assessment (5 minutes)

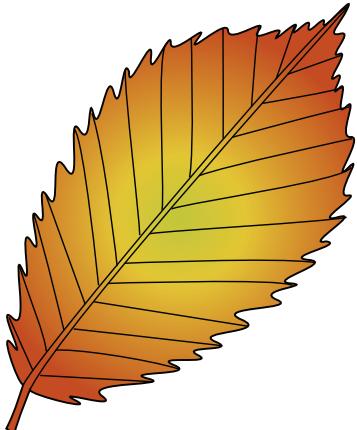
- Have them each list at least six types of leaves on a sheet of paper.
- Collect and review their sheets to assess their understanding of the lesson content.

Review and closing (10 minutes)

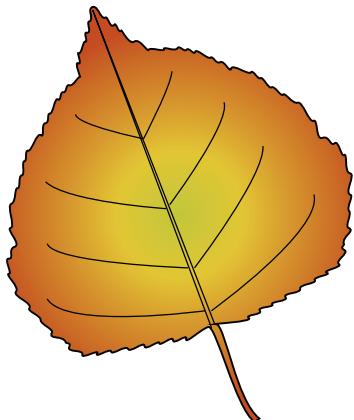
- Have students come back together as a whole group.
- Have them compare and contrast leaves.

Leaf Types

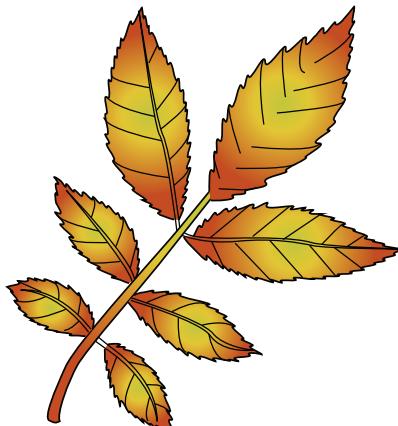
There are many types of leaves. Go outside and see if you can find any of these leaf shapes.



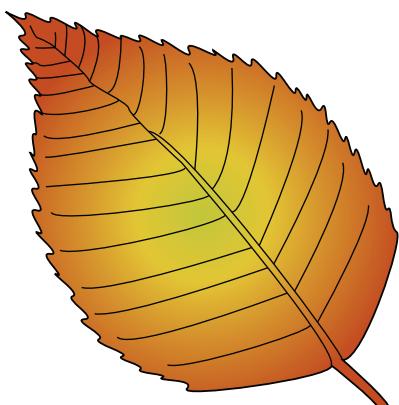
Elm



Poplar



Walnut



Birch



Maple



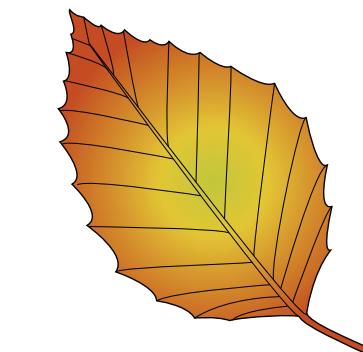
Oak



Willow



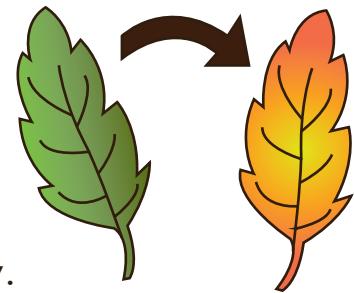
Ash



Beech

Find Out Why Leaves Change Color

Chlorophyll is a substance found in all leaves. It allows the leaves of the plant to photosynthesize, which is when they make energy from sunlight. Chlorophyll is green, and it hides the other colored pigments that are in leaves. In the fall, chlorophyll breaks down because there's not enough sunlight to perform photosynthesis. When the chlorophyll breaks down, the other pigments in the leaves start to show.



The mix of pigments in a leaf may be separated into bands of color. We can see this same effect by doing a *chromatography* experiment. Chromatography involves the separation of mixtures into individual components. By "absorption" and "capillarity," separation can take place. The paper holds the substances using absorption, while capillarity pulls the substances up the paper at different rates. Pigments are separated on the paper and show up as colored streaks or bands.

