

Scientific Observation and Journaling for Grades 2–3

Lesson 1: Simple Leaf



Teacher Preparation Bring simple leaves to class, one for each student, or take students outdoors to pick them. All leaves should come from the same kind of tree or bush. Store them in a plastic bag in the refrigerator until you're ready to use them.

Optional: cut a branch to show your students how the leaves are arranged.

Materials For each student, one leaf, pencil, science journal, colored pencils

Time One or two class periods

Procedure

1. **What do we know about leaves?** Draw a web on your board. Ask students to share what they know about leaves as you record answers. Then pass out science journals and leaves.
2. Have students **examine leaves and describe their qualities** as you **write a list** of their observations on the board. *What shape and color is your leaf? What does it smell like? How does it feel to your fingertip (rough, smooth, bumpy)? Is it marked? What is the edge like?* Then students **write their lists** in their journals.
3. Next have students **count, measure, and record numbers in their journals**. *What can you count? How many stems, notches, veins, spots, colors does your leaf have?* Have students trace their leaf on the first grid in their journal, then measure length and width to the half square.
4. **Demonstrate scientific drawing** (see teacher's guide). Then have students **draw** leaves on the second grid, paying careful attention to the shape, edge, petiole, and veins. *Are you looking closely? Keep looking and draw what you see.* **Optional:** after drawing in the journal, have students draw on unlined paper.
5. **Demonstrate labeling**. Draw lines between words and parts: *petiole, blade, veins, edge; entire, serrated or toothed edge or lobe*. Students then **label** their drawings. Have them use **colored pencils** to color the leaf accurately.
6. Have students **enlarging** their drawing to 2× (see the teacher's guide for step-by-step instructions).
7. **Reflect on observations**. Practice making **analogies**, describing **feelings and memories**, and **asking questions**. *What does your leaf look like? What does it remind you of? "The shape of the leaf reminds me of ____." "The design on the leaf looks like ____."* Students should **write three or more sentences** in their journals.
8. **Clean-up** by collecting leaves to compost.
9. **Assess students' work** by having them complete the rubric and then complete it yourself for comparison. Grading is optional.
10. **Collect feedback** with a quick class discussion. *What did you like about this activity? What did you learn? Was anything difficult or confusing?*