

Plant Dissections

Dissecting plants is a simple way to introduce young students to the anatomy of plants and the relationship between structure and function. It gives them the building blocks for future understanding of biology and provides them with an intimate knowledge of the living things around them.

GRADES: 2nd – 5th

INTENDED OUTCOMES: Head, Feet

SUGGESTED SUPPLIES:

- Paper, pens, markers
- Plants or parts of plants (fruit, flowers) – collected from the yard or purchased
- Scissors, knives, tweezers
- Plates or paper towels

SUGGESTED STEPS:

- Collect or purchase plants or plant parts. If you are collecting, be mindful of not collecting from protected areas or of taking all of a certain type in a certain area.
 - Pass out a plant to each student or small group. You can use plates or paper towels to protect workspaces if necessary. Scissors, dull knives, or tweezers can be used as dissection tools, though are not necessary for all plants or plant parts.
 - For an exploratory approach, you can start by encouraging students to study their plant. They can cut it open or pull it apart. Their goal is to discover what it's parts are – just how humans have parts that do different things – eyes that see, legs that walk, mouths that eat, etc.
 - Alternately, you can tell them that the three major parts of (almost) any plant are the stem or stalk, roots, and leaves and then have them identify these on their own specimens. (For fruit, it's the seed and the pericarp, though each of these can of course be broken down further. For flowers it's petals, sepals, ovule, pistil and/or stamen - simple diagrams are easy to find online.)
 - Once they know what the different parts are, they can guess what each one does.
 - Use the paper, markers, pens, etc. to record observations. They can trace or even tape down the various parts as well. (Don't do this with fruit, which will rot.)
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TIPS AND TRICKS

- Try starting with a fruit like an orange or apple that has distinct and easily visible (seeds, skin, flesh). If you select full plant, look something that easily shows roots, stalk, and leaves. Slightly older students with more fine motor skills can tackle a flower. The kind of sprouts found in the salad/greens section of the grocery store can work well as tiny plants!
- Once students can correctly identify roots, stems, and leaves in their own plant, you can have them explore the schoolyard and play a tag game where they have to run (or walk quickly) to find and then touch the stem/stalk of a plant, the leaves, the seeds, etc.



Relevant Standards

SC09-GR.2-S.2-GLE1