

Stay at Home Science

Flower Dissection

What You Need

- Small plant (preferably with flowers and roots intact)
- Scissors
- Paper
- Writing utensil (pencil, crayon, marker, etc.)



What You Do

1. Place the plant on a tray or other easy to clean surface. Begin gently removing the dirt from the roots.
2. Look for the points where the roots, leaves, and flowers attach to the stem.
3. Separate a leaf and a flower from the stem of the plant. Trace or draw them on a sheet of paper. Pay close attention to their shape, the number of lobes on the leaf, the number of petals on the flower, the colors and size.
4. Observe the roots of the plant. Draw a picture to show how they divide into branches as they grow.
5. Use scissors to carefully take apart the plant. Separate and sort the roots, leaves, flowers and stems. For older children, divide these parts further by separating the petals, sepals, pistils and stamen.

Questions to ask

- Are all of the leaves the same size and shape? Where are the larger leaves? Where are the smaller leaves?
- How many petals do you see on the flower? What shape are they? Is this true for all of the flowers on this plant?
- Do the roots grow out from one large "taproot"? Or do they begin branching where they meet the stem?

What's the Science?

Plants have four main parts: roots, stems, leaves and flowers. The **roots** of a plant act like straws to absorb water and minerals from the soil. They also anchor the plant into the ground to hold it in place and can store extra nutrients for the plant to use in the future. **Stems** serve many purposes for a plant, including moving water and nutrients from the roots to other parts of the plant and supporting the plant to keep it upright. The **leaves** of a plant are responsible for capturing the energy from sunlight that is used by the plant to create food through **photosynthesis**. The **flowers** of a plant aid in reproduction. The **stamen** of a flower produces pollen that can be received by the **pistil** of that flower or another flower. When flowers are **pollinated** in this way, they produce **seeds** that are contained and protected within a **fruit**.

Try This

Use science vocabulary: Use related science words such as **plant, flower, stem, leaf, photosynthesis, root, taproot, petal, stamen, pistil, pollination and fruit** as you talk and play together. Children learn new vocabulary words when they hear grown-ups use them in context.

Extend your experiments: Try this dissection with different plants! Observe and document similarities and differences between them such as the size, shape and texture of the plants structures. Do the leaves and grow in different patterns along the stem? Do the flowers have different numbers or shape of petals?

Keep in Mind

- Children are natural scientists; let them lead the way in their experimentation!
- The order suggested is not the only right or perfect way. Adjust the activities based on the age, ability, and interests of the children.

Additional Resources

- From Seed to Plant* by Gail Gibbons
- Flowers are Calling* by Rita Gray

