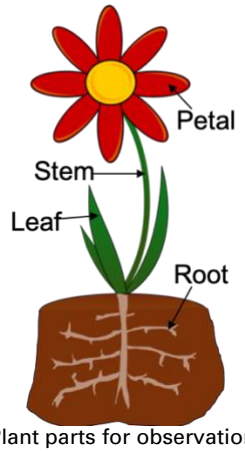
DISSECTING PLANTS

ACTIVITY

EXPLORE PARTS OF DIFFERENT FLOWERING PLANTS.

TIME
30 minutes

MATERIALS
- ✓ Fresh flowers (1 per child; get an inexpensive bouquet with a variety of flowers)
- ✓ Flowering plants (optional, in place of cut flowers; 1 per group; plants need enough flowers to allow 1 per child)
- ✓ Paper plates (5 per group)
- ✓ Scissors (1 per child)
- ✓ Hand lenses (optional, 1 per child)



Plant parts for observation

DOING SCIENCE
Children carefully take apart a plant or a flower. They **observe**, describe, and **compare** the stems, leaves, and petals of different flowering plants.

SCIENCE BIG IDEAS
Flowering plants have the same parts. These plant parts can look different on different kinds of flowering plants. The plant parts can have different sizes, shapes, colors, and textures (feel).

SCIENCE QUESTIONS
How are the parts of these flowering plants the same? How are the parts of these flowering plants different?

5 MIN: INTRO (whole group)
1. Say, *We will use the same Superpowers of Science that scientists use. The questions we will investigate are, How are the parts of these flowering plants the same? How are the parts of these flowering plants different?*
2. Ask the children to name their favorite flower or flowering plant. Have them describe what they like about the flowering plant. *How does it look? Smell? Feel?*
3. Show the children one of the flowering plants or flowers. With the help of the children, identify and name the petals, stem, leaves, and roots (if present). (See picture above.)
4. Ask, *What do you think we can find out about this flowering plant?*

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25 MIN: EXPLORE (pairs, small groups: 4 children)

Check in with children while they explore. Listen for Science Big Ideas and Science Talk.

5. **Investigate 1: Observe the Plant**
    - Show children two different flowers, including stem and leaves (and roots if present). Ask, *How are the flowers the same? How are the flowers different?* Have children briefly discuss with a partner.
    - Explain that each child needs to observe a flower. Point out that they each need to observe the flower's petals, stem, and leaves and that they can gently feel and smell the flowers.
    - Have each child choose one flower, or give each group a flowering plant. Allow several minutes for children to observe.
    - (Optional) Pass out hand lenses for detailed observations.
    - Have children share what they observed about their flowers with a partner. Ask, How is your flower the same as the other flower? How is your flower different from the other flower?
6. Say, *I want to observe more about the different parts of the flower. So I am going to take it apart. How do you think I can carefully take apart the flower?* Have the children discuss with a partner.
7. Briefly demonstrate carefully taking apart a flower, observing and sorting the basic parts—stem, leaves, roots (if any), and flower head. Sort the parts onto a piece of paper or a paper plate.
8. **Investigate 2: Dissect the Plant**
    - Put the children in groups of four. Give each group paper plates, and give scissors to each child. Explain that the plates are for sorting the parts after carefully taking them off the flower.
    - Tell the groups that they have permission to take apart the plants to do science like a real scientist. Remind them that at home they need to ask the adult in charge before taking apart plants.
    - Have the children start by dissecting and sorting the basic parts into similar groups: roots (if any), stem, flower, and leaves. They will not dissect the flower heads yet.
    - Ask, *What did you notice about the parts of this flowering plant?* Have children briefly share with a partner.
9. **Investigate 3: Dissect the Flower**
    - Point out a petal on one of the flowers. Say, *I want to see the inside of the flower.*
    - Ask, *What do you think you will observe inside the flower?* Have children briefly discuss with a partner.
    - Have the children dissect the flower and sort the petals and other parts into similar groups as they did with the plant parts.
    - Have a few children share what they observed inside the flower with the whole group.

5 MIN: REFLECT (whole group)

10. Display one plant or flower. Have the group identify and name the plant's petals, stem, leaves, and roots (if present). Point to each part of the plant. (See picture above.)
11. Say, *We observed different flowers and investigated the parts of the flowers.*
12. Ask, *What did you observe about the flowers?* Have a few children briefly describe what they observed.
13. Ask, *What did you observe inside the flower?* Have children share with a new partner.

WRAP UP

14. Say, *We investigated plants, just like scientists. We observed that plants have different parts, such as stems, leaves, petals, and roots (if any).*

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SCIENCE TALK

Use these words when talking with children. Listen for children to use these ideas.

SUPERPOWERS OF SCIENCE	CHILD-FRIENDLY LANGUAGE
collect information	collect information • find evidence • get data
compare	compare • what's the same and what's different
explain	explain • figure out what happened • use evidence to explain
investigate	find out • investigate
make sense of information	make sense of data • make sense of information • what does that tell you
observe	notice • observe
share what you know	share your ideas • share information • talk about what you found out

SCIENCE WORDS
flower • leaf • petal • plant • root • seed • stem

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