

EarthWorks Orchard Curriculum

Flowers

Grade(s): 2-5	Topic: Flowers, Pollination, Plant Life Cycle	Season: Late Spring or Early Fall, when orchard blossoms or other flowers are in bloom
Timing: 50 minutes, including 5 minute RPK, 5 minute intro, 10 minute book reading, 30 minute outdoor scavenger hunt and worksheet, 5 minute conclusion		
Objectives: <ul style="list-style-type: none">• Students are able to distinguish between the different parts of flowers and explain their functions.• Students can differentiate between the purpose of flowers to plants (to make fruit and seeds and reproduce) and to humans (aesthetic, economic, and culinary value).		
Materials: <ul style="list-style-type: none">• <i>The Reason for a Flower</i> by Ruth Heller• <i>The Power of Flowers</i> worksheets• Magnifying glasses• Diagram or poster of flower anatomy• One or two cut open flowers to view cross sections		
Degree of need for extra teacher or parent helper? Low		
Journal Prompt: What is the reason for a flower, both for people and for the plant?		
Lesson Sequence: Reactivate Prior Knowledge (5 minutes) Pass around a flower to the class. Why are flowers important to people and why do we enjoy them? What different parts do they see inside the flower? Intro (5 minutes) Ask the students if they think flowers are important. When they tell you lots of reasons people enjoy them, say that they actually exist because they have a purpose for the plants they grow on. If the class is stumped, draw the plant life cycle and help them to connect the dots that without flowers there would be no fruits or seeds, and plants could not reproduce. Book Reading (10 minute) Read an excerpt or all of of <i>The Reason for a Flower</i> by Ruth Heller or another informative flower book to explain more. Orchard Flower Observation (25 minutes) Pass out The Power of Flowers worksheets and have students find a flower to observe. Make sure they take time to draw in detail what they see and look at the flower from several angles. If students are all working with the same type of flower, help them pick diverse blossoms and flowers throughout the orchard. Bring out the flower cross sections you have prepared as well (this will work best if they are laminated or suspended in glass (like a picture frame) and have students compare their flower with the anatomy they can see in your cross sections.		

Conclusion (5 minutes)

Review what the class has learned about flowers. If there is time remaining, play a stand up / sit down game with the following questions or others you create:

(True or False) A flower is useless to the plant it belongs to. (F)

(True or False) The **ONLY** purpose of colorful flowers is to make the world pretty. (F)

(True or False) If you take all the flowers off a plant or tree, it will still make fruit and seeds.

(True or False) Colorful petals help attract insects to a flower. (T)

(True or False) Plants need their flowers to make fruit and seeds. (T)

(True or False) Most trees have flowers (T)

Vocabulary

Anther

Flower

Nectar

Ovary

Ovule (egg)

Petal

Pistil

Pollen

Stamen

Stigma

Vocabulario

Antera

Estambre

Estigma

Flor

Néctar

Ovario

Óvulo (huevo)

Pétalo

Pistilo

Polen

Extensions / Homework Ideas:

Using a large poster or diagram, explain each part of the flower and its function. Next, pass out cut flowers for each group of 4 to study. Ask students to draw, label, and describe the outside of the flower. Next have them draw and label the inside of the flower (they can peel back the petals to see). Have students look for pollen and note what color it is. Finally, cut the flower open and look for ovules. Draw and label any found.