



Lesson Developed by:

Lesson 1: The Power of Pollination

Lesson Description: Students will learn how pollination yields fruit via insect services.

Concepts:

- Pollination - What is pollination and how does it yield fruit?
- Fertilization
- Flower & Insect Anatomy

Estimated Time: 60 minutes

PowerPoint presentation (17 slides): allow 45+ minutes; includes ample time for Q & A/ discussion, and sharing time (students share experiences and observations).

Flower Anatomy Activity (worksheet) – allow 15+ minutes; Option: do activity at a later date (brief review of slide show concepts, followed by activity).

Materials & Essential Files:

- Power of Pollination PowerPoint file - (~17 slides; “plug and play” presentation with script in notes; includes an embedded video of bumble bee buzz pollination).
- Basic Flower Anatomy Worksheet/Activity- (students label and color basic parts of a flower; two worksheet options).

Vocabulary: Pollen, Pollinator, Pollination, Buzz Pollination, Species, Nectar, Fertilization; Flower Anatomy: petals, sepals, stamen, anthers, ovary, ovules, filaments, style, pollen tube, pistil, stigma

Procedures:

1. Following the PowerPoint presentation, leave the flower anatomy slide up (Slide 12) which has a flower with all parts labelled. Note: the flower on the screen looks different than the worksheet flowers, challenging the students to figure out which parts are which on a flower with a different shape and overall look).
2. Students follow worksheet prompts... (color and label the flower parts).





Standards:

NGSS DCIs (Core ideas linked to lesson):

PS2B – Types of Interactions

LS1A – Structure and Function

LS2A – Interdependent Relationships in Ecosystems

LS3B - Variation of Traits

LS1B – Growth & Development of Organisms

LS4B – Natural Selection

ESS3A – Natural Resources

Literacy Outcomes:

Students will be able to demonstrate what they learned with the following statements:

- I can explain how pollination works.
- I can name two different types of pollinators.
- I can explain how pollinators are needed to produce apples/pears/peaches on our orchard trees.



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