

## THE POWER OF POLLINATION

GRADE LEVEL: 5-6

ESTIMATED TIME:

DAY 1: ~60-minute lesson

**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).

PURPOSE:

To explain how pollination yields fruit via insect services.

CONCEPTS:

- ✓ Pollination – What is Pollination & How Does it Yield Fruit?
- ✓ Fertilization
- ✓ Flower & Insect Anatomy

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, attached).

VOCABULARY:

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

NGSS DCIs (CORE IDEAS LINKED TO LESSON):

P2SB – Types of Interactions  
LS1A – Structure and Function  
LS2A – Interdependent Relationships in Ecosystems  
LS3B - Variation of Traits  
LS1B – Growth & Development of Organisms  
L24B – Natural Selection

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.*

PROCEDURES:

**Classroom Activity: Worksheets**

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)

**Example slides**



**The Power of Pollination!**

Meet the Heroes of the Orchard!

ReTreeUS  
Planting trees of fruit and seeds of thought

FIRST LIGHT  
wildlife habitats

**POLLINATION =**

Pollen (male part) gets to the female part of another flower by:

WIND 

.....or 

**INSECTS!** (bees and other “pollinators”)



Did you know....?

At least 1 out of every 3 mouthfuls of food you eat is brought to you by insect pollinators!



That means that **1/3 of our food** would never even EXIST without the work of bees and other insects!



**Without bees & other pollinators, we wouldn't have:**



YUM!!



You may be wondering... WHY do I visit the flowers in the first place?



**NECTAR!**



**WOW!**

FUN FACT: One bee can visit more than 2,000 flowers in a single day!