

# Lesson Plan: Un-BEE-Lievable Science

## Subject

Understanding how pollination works; understanding how honeybees communicate; understanding how honey is made; identifying different flavours in honey; understanding why bees are vital to our ecosystem; understanding what we can do to help bees survive

## Audience

Grades 3 - 6. Any number of attendees could be accommodated.

## Learning Objectives

- Students can articulate why bees are a vital part of our ecosystem
- Successful students are able to identify at least 3 different flavours in honey
- Successful students are able to grow a bee friendly flower

## Content Outline (1 hour)

- I. Introduction (3-4 mins)
  - a. What do you know about bees?
  - b. Preassessment: True or false bee trivia, ending with the question “Are bees vital to human survival?”
  - c. Can anyone tell me why bees are vital to our ecosystem?
- II. Pollination (10 mins)
  - a. Plants need the pollen of other plants to reproduce
  - b. Humans need bees because pollination is vital to:
    - a. Our food supply
    - b. Clean air
    - c. Clean water
  - c. Pollination Activity
    - a. Each student has a cardstock flower with a cup in the center filled with Cheetos
    - b. They have to go from flower to flower, eating Cheetos, and rubbing their cheesy fingers on the petal of the next flower
      - i. Ideally, each flower would have a different kind of Cheetos to help visualize the spread of pollen
    - c. Students should visualize the effect of pollination, and can explain how this experiment applies to the real world
- III. Bee Communication (10 minutes)
  - a. The waggle dance
    - a. Honeybees use body movements to communicate which direction and how far a source of food, water, our housing is
  - b. Bee Charades Activity
    - a. Students will break into 2 teams
    - b. They have to use The Waggle Code (each letter of the alphabet is assigned to a gross motor movement) to spell a word to their group.
    - c. Whichever team is able to spell the most words in 2 minutes wins
    - d. Discuss the difficulty of communication using only large body movements
- IV. Honey (15 minutes)

- a. How honey is made
- b. What does honey taste like
- c. Honey Tasting
  - a. Students will try 5 honeys produced by different hives
  - b. Students will take notes, and by thinking critically about the flavours will try to guess which plants grew around the hive

V. Bee Friendly Flowers (15 minutes)

- a. Which types of flowers are attractive to bees and why
- b. Assessment: Flower Quiz
  - a. Students will look at a picture of a flower and vote on whether or not it is Bee Friendly
- c. Plant a flower
  - a. Students will plant a bee friendly flower and learn how to take care of it

VI. Conclusion and Post-Assessment Discussion (5 minutes)

- a. Why do we need bees?
- b. What are some of the reasons why bees are incredible?
- c. Students are encouraged to continue learning about bees, and are given a handout and access to a book display