



# First Grade Science

## Pollination: Best of Bugs

Dear Families,

Here is what your child is learning in First Grade, during the study of pollination with some specific ways you can help. Look for additional newsletters for upcoming units.

### Pollination: Best of Bugs

#### Students need to:

- Identify Mariana's problem by asking questions after listening to excerpts from Mariana Becomes a Butterfly.
- Explain that flowers have parts that do specific jobs important to the pollination process through a flower dissection.
- Observe and describe insect behavior by sketching two examples of pollination while observing the school grounds.
- Explore ways to solve the problem of pests eating crops.
- Create a definition for technology and apply the definition to create or explain how technology is a manmade item developed to solve a problem.
- Examine materials available to carry pollen and list three properties that accurately describe each material.
- Evaluate the effectiveness of available materials to determine which materials and related properties are most useful when creating a hand pollinator.
- Identify the effective properties of materials to select appropriate materials to develop a hand pollinator design for a specific flower model.
- Create their hand pollinator, following their plan and using materials whose properties allow for success in picking up and dropping off pollen.
- Evaluate the success of their hand pollinators and improve their hand pollinator design using finding from their testing phase.

#### Key Vocabulary

Characteristics: a feature or quality that describes a person, place, or object

Crops: grains, fruits, or vegetables that are grown

Engineering Design Process: a series of steps engineers use to solve a problem (see the following page for an example of the process)

Evaluate: to determine how well something worked or did not work

Hand Pollinator: a tool used to pollinate flowers

Observe: to watch and listen to something carefully

Pests: insects

Pollen: a powdery substance found in flowers that is used during pollination

Pollination: the process in which pollen is transferred from one plant to another to grow more plants.

Pollinator: anything that is used to pollinate (insects, animals, people, etc.)

Properties: a characteristic of an object

Technology: a manmade object created to solve a problem

#### Ways FAMILIES Can Help

- Use the Discovery Education link to find more information about plant pollination and pollinators.
- Take a nature walk with your child and look for bees going from flower to flower. Have your child look for other pollinators.
- Have your child use the Engineering Design Process to create their own hand pollinator made from materials you have at home.
- Discuss with your child the different ways that seeds can travel (wind, water, animals, and land).

An example of the Engineering Design Process:

