

LESSON PLAN Step 2

Understanding How Pollination Affects the World's Food Supply

Objectives

■ Interpret the links between pollination and food production.

Materials

■ Copies of Activity Page 2.
■ Pens or pencils.

Subject

■ Science

Procedure

1. Explain to your class that most of the foods we eat (one out of every three bites) are the result of a pollination partnership. Add that different species of bees pollinate many of the plants that make up our food supply. Ask your students whether they like bees. Naysayers will undoubtedly mention that bees sting or that they are allergic to bees. Tell your students that they are going to explore a world without bees and, in particular, what the food supply would be like if bees no longer existed.

2. Direct your students to Activity Page 2. Ask students to imagine a world without bee-pollinated plants: the “Bee-Free Zone.” Explain that they are going to attend a barbecue in the Bee-Free Zone and that hamburgers are on the menu. Have the students read the list of bee-pollinated plants that appears at the top of the page.

3. Tell your students that they have chosen a hamburger or hot dog from the grill. Explain that they can now choose what they will have with their hamburger or hot dog. Remind them that this is the bee-free barbecue and that the foods listed under “Plants Pollinated by Bees” won’t be available. These include tomatoes, onions, cucumbers, lettuce, oil for frying potatoes, oranges, lemons, limes, mustard seed, cacao bean used in making chocolate, vanilla,

almonds, watermelon, and apples.

4. Have your students select the items on the checklist that they could not have at the bee-free barbecue. After they’ve eliminated the bee-pollinated items from the list, have them describe the meal that would remain.

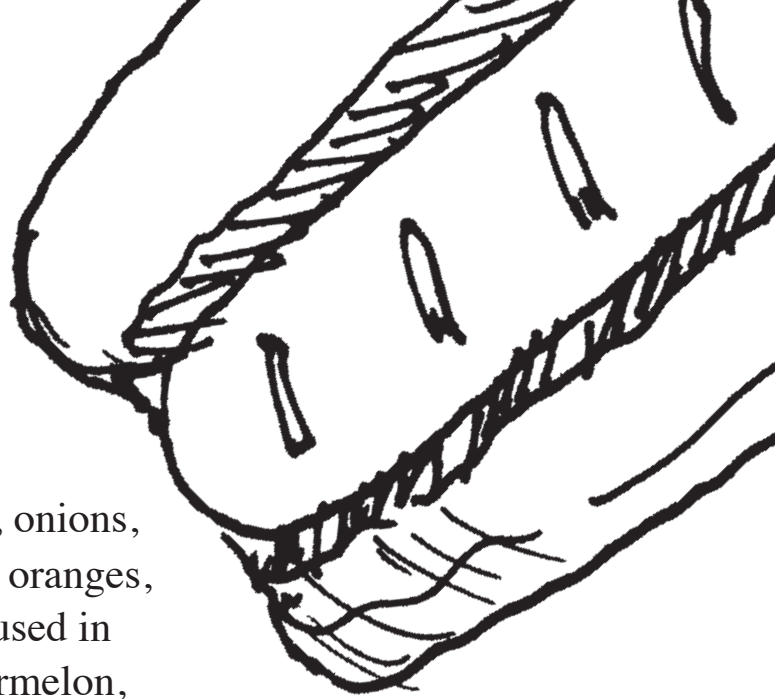
5. Conclude the lesson by asking

your class to decide whether the availability of bee-pollinated food items is worth the risk of getting stung by a bee in their lifetimes.



ACTIVITY PAGE 2

Bee-Free Barbecue



Some of the more common products from animal-pollinated plants include tomatoes, onions, cucumbers, lettuce, oil for frying potatoes, oranges, lemons, limes, mustard seed, cacao bean (used in making chocolate), vanilla, almonds, watermelon, and apples



Welcome to the Bee-Free Barbecue!

If all the animal pollinators were to become extinct, which of the foods listed below could you not have with your hamburger or hot dog?

- | | |
|---|---|
| <input type="checkbox"/> mustard | <input type="checkbox"/> mayonnaise |
| <input type="checkbox"/> lemonade | <input type="checkbox"/> french fries |
| <input type="checkbox"/> ketchup | <input type="checkbox"/> onions |
| <input type="checkbox"/> potato chips | <input type="checkbox"/> hot fudge sundae |
| <input type="checkbox"/> pickles | <input type="checkbox"/> tomatoes |
| <input type="checkbox"/> strawberry milkshake | <input type="checkbox"/> apple pie |
| <input type="checkbox"/> cheese | <input type="checkbox"/> watermelon |

Describe the rather dull meal you would have left.
