

Activity 11: Plant-Animal Interactions

Guiding Question: How do specialized plant structures and traits affect the probability of successful reproduction in plants?

Key Words: *pollination, pollinator*

Get Started:

1. Do plants, like animals, have traits that increase their reproductive success? What are some of these traits?

2. Read the introduction and Guiding Question to Activity 11, “Plant-Animal Interactions,” in your Student Book.

Do the Activity:

Part A: Pollination Patterns

1. Read the descriptions of the four plants in your Student Book. Complete the table based on what you read.

Plant descriptions

Plant	Color	Scent	Shape	Size
Gardenia				
Agave				
Cardinal Flower				
Corpse Flower				

Name _____

Date _____

2. Read the box in your Student Book titled “Function of Flowers” about the function of flowers in plant reproduction.

3. Read the descriptions of four kinds of animals that are important to plant pollinators found in your Student Book. As you read about these animals, think about which of them might pollinate each of the four kinds of flowers you read about in Step 1. Complete the table based on what you read.

Animal descriptions

Animal	Description	Feed on	Sight	Smell
Hummingbird				
Bat				
Fly				
Moth				

4. Begin matching each pollinator with a flower. Think about what evidence from the text you are using to make each match. Record the matches in the data table shown.

Widowbird Experiment

PLANT	ANIMAL POLLINATOR	SCENT
Gardenia		
Agave		
Cardinal flower		
Corpse flower		

Name _____

Date _____

5. **When you return to class, you will complete steps 4-6.** Take turns passing around the Scratch-and-Sniff card, scratch and take note of the odor.

Note: You should only need to scratch the patch lightly a couple of times. Do not scratch too hard.

6. Think about the pollinator that you matched with each flower. Now match the scent with the flower that you think produces it.

7. Answer Analysis item 1 as instructed by your teacher.

Part B: Making Predictions

7. Read about the plants California Poppy and Big Bluestem, in your Student Book, and answer the following questions:

- How do you think these two flowers are pollinated?
- What is your evidence and reasoning?

Name _____

Date _____

Analysis:

Analysis item 1 must be completed after you return to class.

1. Create an argument that explains how and why you matched each plant, scent, and pollinator. How certain are you that your argument is correct?

Name _____

Date _____

2. If you wanted to plant a garden that would attract butterflies and hummingbirds, what types of flowers would you want to plant and why?

3. Bees are important pollinators for many wildflowers, but they are also important for pollination of fruit crops, like apples, melons, and cherries. Populations of bees are declining because of pesticides and diseases. Predict what will happen if bee populations continue to decline, and explain your prediction.
