

Date: _____

Your Name: _____



**NEW ENGLAND
COMMON ASSESSMENT PROGRAM**

Released Science Inquiry Task

Bees and Pollinators

2013

Grade 4

Student Answer Booklet

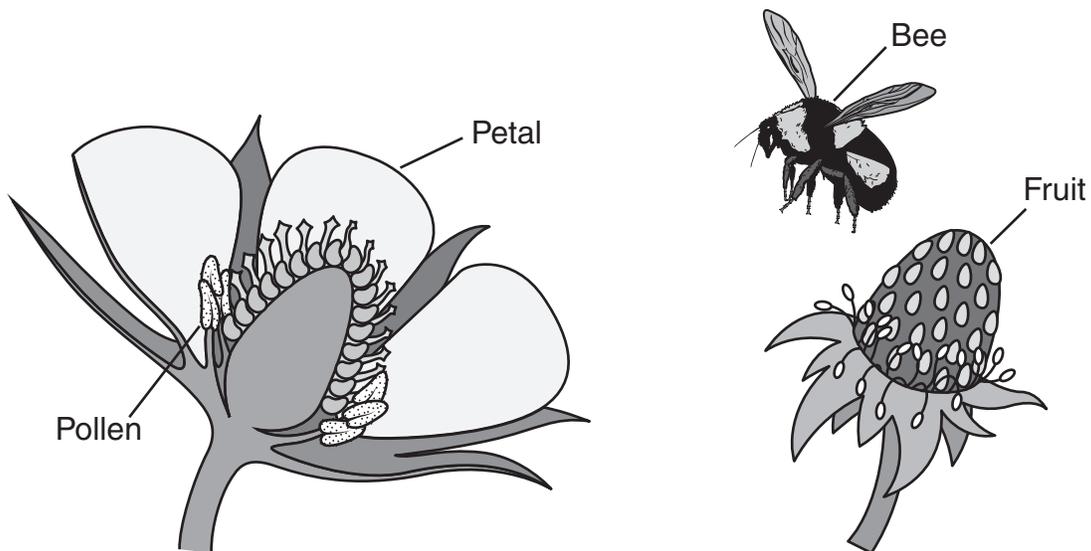
SCIENCE

Directions: You will work **on your own** for this part of the inquiry task. You will use the results of your investigation to construct two bar graphs and answer questions.

Word Bank

Median	the middle value in a list of ordered measurements Example: The median for 2 cm, 4 cm, and 5 cm is 4 cm.
Model	a testable idea used to learn about the natural world
Pollen	a yellow-orange powder made by a flowering plant that helps the plant produce seeds and fruit
Pollinate	to move pollen from one plant to another of the same kind
Pollinator	an animal that carries pollen from one flower to another
Texture	the feel or look of something

Strawberry Plant



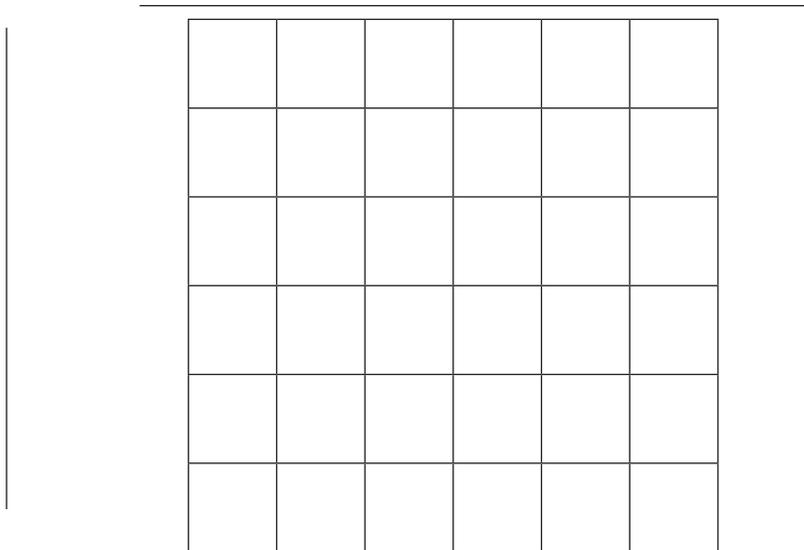
SCIENCE

Copy the data from your investigation into Data Table 1 below. You can find your data on page 6 in your Inquiry Booklet.

Data Table 1: Median Amount of Pollen Picked Up by Each Texture

Stick	Median
X	
Y	
Z	

1. Use the data you recorded in **Data Table 1** to graph the median amount of pollen you were able to pick up with each texture. Label and title your graph.



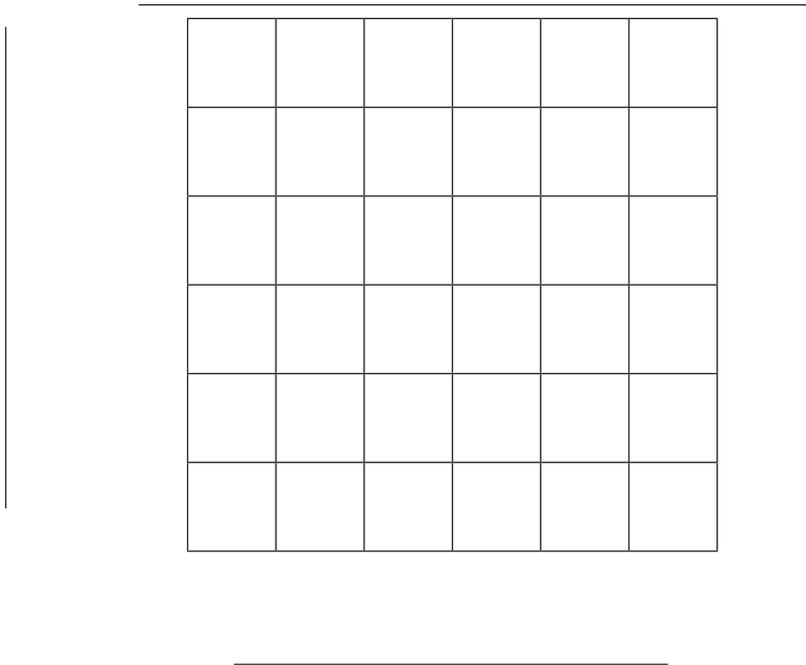
SCIENCE

Copy the data from your investigation into Data Table 2 below. You can find your data on page 6 in your Inquiry Booklet.

Data Table 2: Median Amount of Pollen Dropped Off by Each Texture

Stick	Median
X	
Y	
Z	

- 2.** Use the data you recorded in **Data Table 2** to graph the median amount of pollen you were able to drop off with each texture. Label and title your graph.



SCIENCE

- 3.** Look at your description of the pollinating sticks in the table on page 4 in your Inquiry Booklet.

Use your data (tables and graphs) to explain how the texture of the material on each stick affects the amount of pollen that it can both pick up and drop off.

Analyzing Your Results

- 4.** Which texture works best to pollinate a flowering plant? Use your data (tables and graphs) to explain your answer.

SCIENCE

Copy your prediction and explanation from page 3 in your Inquiry Booklet on the lines below.

I predict

because

5. Check the box next to the statement that best describes whether your data supported your prediction.

Yes, the data **supported** my prediction.

No, the data **did not support** my prediction.

Use evidence from your investigation to explain why your data (tables and graphs) and observations did or did not support your prediction.

SCIENCE

- 6.** Explain why the texture of a bee's body is important to a flowering plant. Use what you learned in your investigation about texture **and** what you know about how bees help plants.

Applying What You've Learned

- 7.** What can the students in the classroom in the story do to pollinate the strawberry plants without the help of bees? Based on the results of your investigation, explain your answer.

SCIENCE

8. Look at the pictures of the pollinators below.



Bee



Butterfly



Hummingbird

Based on what you learned in your investigation about the textures of materials, describe what makes these animals good pollinators. Use evidence from your investigation to support your answer.

