## **Observing Pollinators Kit: Teacher's Guide**

Grade levels: 1-5

**Background:** This Guide is designed to support classroom discussions and group activities for the *Observing Pollinators* citizen science kit (<u>SciStarter.org/library-kits</u>) where students will 1) observe plants for a few minutes, 2) count the pollinators that visit them, and 3) with your help, share observations with scientists.

**Prepare:** Teachers - Build your own confidence on the basics of citizen science by completing the self-guided *Foundations of Citizen Science* tutorial at SciStarter.org/training (one hour). Then, review the Observing Pollinators Kit activity guide (15 minutes) and complete the featured project on your own: <a href="https://scistarter.org/library-kits/observing-pollinators">https://scistarter.org/library-kits/observing-pollinators</a> (15 minutes).

Read Alouds: Introduce pollinators through these recommended books:

Rubilito: the Traveling Hummingbird

by Ralph Dessau and Alvaro Miranda (a bilingual pollinator series for ages 6-10)

National Geographic Readers: Bees

by Laura Marsh (ages 5-8)

Follow That Bee, a first look at bees in the city

by Scot Ritchie (ages 6-10)

The Girl Who Drew Butterflies

by Joyce Sidman (ages 10 and up)

Local wildflower book or guide to identify flowering

plants in your area

**Color and Discuss:** Download, print and distribute: *Help Count Pollinators Near You* <a href="https://bit.ly/3fWDZA5">https://bit.ly/3fWDZA5</a> and the *Insect Pollinators* coloring sheet (for younger students), <a href="https://bit.ly/3igOaO8">https://bit.ly/3igOaO8</a>

**Complete Worksheets:** Download, print, and distribute: *Breakfast Made Possible by Pollinators*, *Match Pollinators* to *Their Plants*, and Saguaro National Park's *Pollinator Workbook* <a href="https://www.nps.gov/sagu/learn/kidsyouth/upload/pollinator-activity-booklet.pdf">https://www.nps.gov/sagu/learn/kidsyouth/upload/pollinator-activity-booklet.pdf</a>

It's time to use the *Observing Pollinators Kit* to make observations and share data with scientists!

Review the Activity Guide in the Kit and Project Instructions on <a href="https://scistarter.org/library-kits/observing-pollinators">https://scistarter.org/library-kits/observing-pollinators</a> with your students.

Print and distribute copies of the data worksheets included in the Kit and give each student a pencil.

Pick the plants your students will observe (go outside or look through a window).

Assign small groups to **observe** specific plants.

Assist each group in observing the plant for at least **five minutes** and counting the pollinators that visit that plant. Help the students identify the type of pollinators they see and remind students to use the data sheet to write down the number of pollinators they see.

Remember to collect their worksheets and log the data as instructed on <a href="https://scistarter.org/library-kits/observing-pollinators">https://scistarter.org/library-kits/observing-pollinators</a> so scientists can use your students' important observations to learn about and protect pollinators!

## Optional Math Activity: Classroom Pollinator Bar Graph

Have students color in the number that corresponds to the pollinator to create a classroom graph of observations.

## **POLLINATOR COUNTS**

9				
8				
7				
6				
5				
4				
3				
2				
1				
	bee	fly	butterfly	bird

Discussion prompts:					
How many	_ visited the plants we observed?				
How many pollinat	ors visited the plants in total?				
How many more	visited the plants than	?			
What plants attrac	t pollinators?				

What can we do to attract more pollinators?

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