



ENTOMOLOGY EXPEDITION

EXPLORE LOCAL INSECTS AND MAKE OBSERVATIONS

INTRODUCTION

5 min

"In my youth, I spent my time investigating insects."

– Maria Sibylla Merian

Greet your students and talk about the quote of the day above.

Say: "If I were to ask you to draw an insect, what might you include in your drawing?"

What do you think of? (Example: Antennae, eyes, skinny legs, maybe wings or pinchers, etc.) There are lots of different body shapes for insects! Today we'll get to go look for as many types as we can find! Ask: Do we need to know the names of all the insects we find? Example: No, names are good but not as important as looking at them. Ask: What do you think a life cycle is?

Example: Where animals come from (maybe an egg) and what they grow up to be.

Ask: Give me a thumbs up if you've heard the word metamorphosis before. Can anyone tell me what they think it means for an animal to go through metamorphosis? Example: I think it means when a caterpillar changes into a butterfly.

READING

10-15 min

Read the article:

Read the scientist profile of the day, and discuss as a class.

STEM TIME

60-90 min

Explore your school for bugs

Objective: Students go outside to search for an insect they can observe and care for. Today students will be going outside to observe the bugs on campus, and they will write about their observations.

1. Allow students to take time to explore! Encourage them to look under rocks, in the grass, in the bushes, and up in the air.
2. If they find a bug, they may observe it in a test tube under the microscope or between 2 petri dishes. Remind them to be gentle with the bug and release it outside when they have finished.
3. Allow students 15 minutes or so to write and draw a nature journal entry about the things they noticed and learned during their exploration. Some might not find a bug, and that's okay! The joy is in the exploration.



STEM TIME

60-90 min

Materials:

- Tedros test tubes
- Meeka microscopes
- Petri dishes
- Tobey tweezers
- Blank sheets of paper
- Mezzie measuring tape
- Student lab sheets
- Larvae (if using)

Look for insects to observe

Help your students explore the wildlife around them.

1. Show students the in-class videos.
2. Hand out Tedros test tubes and Tobey tweezers. Tell students they get to go on an adventure and look for insects around school. If they find one, they can put it in their test tube and bring it back to class to observe under Meeka microscope. Teach students to pick up insects gently with the tweezers. This is for safety. If you know the insect is safe (like a worm or a ladybug) they can pick it up with their bare hands. Give students lots of time to go on this bug hunt and let them show you all the cool things they find.

3. Return to class and have students put their insect in the Petri dish to observe under the microscope. Say: **"Take your time when drawing and writing about your insect. This is not an activity to hurry through; please do your best. On a blank sheet of paper, draw everything you can observe about your insect. Remember to add details, use colors, and count the things you draw (such as spots, legs, or fuzzy things). On the back of the paper, draw the habitat you think your insect lives in. What do you think it eats in the wild? Does it have any predators?"**

Note: Depending on the age of your students, the act of exploring and discovering may be enough. However, there are plenty of resources available to make this an extended adoption activity where students design a habitat and fill an adoption certificate. You can continue this observation for a few weeks. If possible, you can also purchase mealworms or butterfly/ladybug larvae online.

4. Say: **"Congratulations, you're all about to become parents! This is a lot of responsibility. What are some of the things you're going to need to think about to keep your insect alive and safe? (Food, water, temperature, a place it can hide.) We'll talk about what insects we have and how we'll keep them alive."**

Ask: **Have you ever made a home for an animal?**

Example: **I have made a bug home out of a jar and some leaves. I have kept a lizard in a box outside and fed it bugs!**

Talk to students about how to care for their insect.

5. Let students fill the adoption paperwork and share it with the class. Continue observing your pet insects and help students graph their growth consistently if that is applicable.

Clean up

Clean up. Put Meeka away carefully. Release the insect (if not adopting). Rinse Tedros and and your petri dish and allow them to dry with the lid off and put them in the bag, as well as Tobey tweezers. Make sure students wash their hands.

CLEAN UP

5 min

