

# SORT MICROFOSSILS FROM AN ANCIENT ECOSYSTEM

INTRODUCTION 5 min



# **READING TIME** 5 min

# STEM TIME

60-90 min

## Materials:

- 🔵 Meeka microscopes
- 🔵 Toby tweezers
- Petri dish
- Microfossil sediment
- Lab sheet
- Fossil identification guide



"I don't get philosophical. Love fish. Love sharks. Keep the water and their habitats as clean and protected as possible." — Eugenie Clark

Say: "Did you know your school could have once been underwater? Yes, it's true! There could have been giant Megalodon sharks swimming around, and we would have looked like tiny bite-sized skittles. Fossils from the Miocene era tell us a lot about life in the past. The Miocene epoch was 24 to 5 million years ago. We have fossils here that are 20 million years old!

Read the story of the day to learn more about microfossils.

## **Observe and sort microfossils**

Say: "There are lots of creatures to observe on your dive into the fossils. Sort them into the columns on your sheet, and look at them carefully under your microscope. How many different organisms can you identify? If you find a really special fossil, remember to not take it. Have fun!"

- 1. Watch the teacher prep video before conducting the lab.
- 2. Show students the in-class video.

3. Students get tweezers to help them sort, and a petri dish to scoop up sediment to take to their desk.

4. Students dump the sediment on the lab sheets. Give them 20 minutes to observe without the microscopes. Students can use the lab sheet and fossil identification guide to help them sort.
5. After the 20 minutes, bring out the microscopes for the students to look more closely at the microfossils. Let them make a detailed drawing of the coolest fossil they found on their sheet. Remind them to sort the fossils into columns and to keep a tally at the bottom of the column. Say: "Collecting data and keeping an accurate count is part of the scientific method."