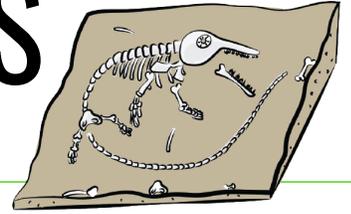




MICROFOSSILS

Grades 4th-7th



SORT MICROFOSSILS

Students sort 20 million year old microfossils.

G'DAY!

10 min

STORY & SNACK

20 min

SPORTS / GAMES

30 min

Materials:

- Volleyball
- Cones

G'day is Australian for hello!

Greet your students. Be friendly. Use their name, ask a question, give a high five, or thumbs-up! Take roll. Mark down which students took a snack and tally how many snacks were given out.

Read the story:

Today's story is called Mary Anning. Read the first half of the story to your students in small groups outside as they sit in a circle.

Human Net Volleyball

The students will play volleyball and work in their teams to hit the ball over the net and try to score a point.

Instructions- Organize students into three teams. Two teams will be the volleyball players, and the third team will be the human net. The human net will be lined up in the center of the court or play area. The students will play volleyball and work in their teams to hit the ball over the net and try to score a point. The catch is that the human net can catch the ball and keep it from going over to the other team. The net team will have a space marked either with cones or chalk that they cannot step out of. When one of the volleyball teams scores, they get a point. If the net catches the ball, they get a point. If the net steps outside of their space, they lose a point, and if either volleyball team steps into the nets space, they lose a point as well. The STEM Coach can decide how many points the game goes to.

STEM TIME

50 min

Materials:

- Tobey tweezers
- Meeka microscopes
- Petri dishes
- Microfossil sediment
- Fossil Identification Guides
- Fossil Sorting Sheets

NATURE JOURNALING

15 min

CLEAN UP / FREE PLAY

25 min

Sort microfossils

In this lab students will be sorting through a 20 million year old fossil-rich sediment from an age called the Miocene. The microfossils they will find will give them clues about what the ancient ecosystem was like.

Project link: <https://www.stemtaught.com/fossil-discovery>

Note: If you are using a STEMTaught fossil sediment sample, please notify students that they cannot keep the fossils and they must return them to their teacher after the activity. These fossils are very special samples for your school and scientific collections need to stay together!

Instructions:

1. Before administering this activity watch the teacher prep movie to get ready. (https://www.youtube.com/watch?v=w0N6eU_zB88)
2. Show class movie: "Digging for Fossils". (<https://youtu.be/YcvOjfDtcIM>)
3. Each student gets a scoop of sediment in a petri dish and takes it to their desk.
4. Students identify, tally, and graph the microfossils that they find using the Fossil Identification Guide.

Look through the guide with your students and have them sort their microfossils into categories and tally up the fossils of each type using the lab sheet.

5. Have students graph the fossils they found on their lab sheet.

Ask:

- "What kind of fossils did you guys find?"
- "What did you see under the microscope?"

Instructions:

Say - "Today we get to start our Nature Journals! Do you remember the illustrations of fossils in our story? Those were drawn by Mary Anning. She carefully looked at her fossils and drew every one. Today you are each going to get to draw a microscopic fossil! Take time to look carefully through your microscope and pick your favorite fossil. Carefully draw what you see. You can draw a small part of the object or the whole thing. Focus on the details you see in the fossil. Your drawing can be big or small"

Clean up/Free play/Dismissal

Allow your students some free time. Some students may wish to finish working on their STEM project. Others may want to journal or scrapbook about their day. Other students may want to go outside to play. Clean up, pack up.

