

WHO POOPED IN THE PAST?

Ginny Switt, Denise Porcello, Pam Plummer, Sue Coller, John Westgaard



Introduction

A lesson for primary elementary schoolers (grades 1-3) that focuses on coprolites (fossilized animal waste).

The purpose of this lesson is for students to realize the different types of information that can come from studying animal waste.

Materials and methods

Coprolite from fossil kit

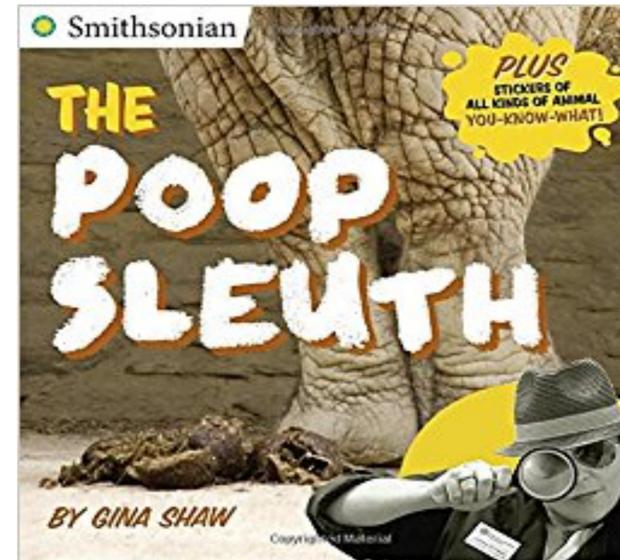
“Who Pooped in the Park?” Yellowstone National Park: Scat and Tracks for Kids: Gary Robson, Elijah Clark

“The Poop Sleuth” Gina Shaw

Brainstorming worksheet (Take image of skeleton, coprolite, and leaf imprint, and determine what clues that gives us to answer the following questions: What animal is it? What time period did it live in?)

Lesson Plan

- 1) Review unit and ask students, “What is a Fossil?”
- 2) Tell students that you are handing them a fossil, but not telling them what it is or what animal it is from. Hand out coprolite. Have students break into groups (or use table groups) to brainstorm what body part they think it is from.
- 3) Use whiteboard to write down student ideas. Ask them how they came to that conclusion.
- 4) Ask them to examine more closely. Smell it, feel the patterns.
- 5) Tell them what it is. Wait for the screams ☹
- 6) Explain that like a fossil, coprolite has changed into a rock. The germs and odor that would have existed when it was fresh no longer exist now that it is fossilized.
- 7) What is a trace fossil? Explain, brainstorm different types of trace fossils that may provide clues.
- 8) Hand out worksheet. Ask students to figure out how a paleontologist could use clues to figure out what kind of animal is found, what environment it lived in, how long ago it lived, and what it ate.
- 9) Possible extension activity: Making salt dough coprolites
- 10) Possible extension activity: Skype with “Poosium”
- 11) Wrap up assignment.



Conclusions

- * Review what students have learned.
- * Talk about impact on paleontology once we can figure out what the animal ate, what time period they were in, and how the environment looked.



Coprolite with deer bone inclusion



Ichthyosaur coprolite with fish scales

Literature cited

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Further information

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