



The Fossilization Game

Adapted from www.ucmp.berkeley.edu/fosrec/Breithaupt2.html

Grade Level: 2-8

Concepts Addressed

- A fossil is evidence of past life.
- The process of fossilization occurs under specific conditions and in certain environments.

Materials

- Fossilization card set (attached)

Background

It is not easy to become a fossil. Many plants and animals never have the chance to be preserved as fossils. The fossilization game is a fantasy and role-playing exercise that helps children understand fossilization processes.

Procedure

1. As a group, decide which depositional environment to use for the game: lake, pond, stream, river in a forest, or sea floor. Ask students to use their imaginations to describe this setting in as much detail as possible.
2. Each student chooses a role as an animal or plant inhabitant of the environmental setting chosen. For example, in the aquatic settings, possible roles include not only snails, clams, fish, salamanders, turtles, alligators, and other aquatic animals, but also horses, deer, monkeys, rabbits, and birds that come there to drink.
3. Begin play by asking the children to act out their roles, with each one given a turn to make vocalizations or gestures. After each has a turn, encourage the students to act out natural interaction between these animals in their environment. For example, the carnivores could chase the herbivores.
4. Continue character interaction. At a point of the instructor's choosing, say "freeze". All action must stop immediately. At this point each student gets a "fate" card which will determine whether or not he or she is fossilized. If you make your own "fate" cards, the proportion of "fossilization" cards to "destruction" cards should be small, mimicking the small chance of becoming fossilized in the real world.
5. When the entire class has drawn cards, have each student discuss his or her role as an organism and what happened to this organism after it died. Which animals became fossils? Which were destroyed? Make lists of fossilized and destroyed organisms on the blackboard. Remember, the only animals and plants future paleontologists will know anything about are the ones that become fossils. You will become aware of the important question of bias in the fossil record when you compare the list of fossils with the complete list of living animals. Is the list of fossils a good representation of the living community? Why not?

6. If time allows, play the game again with the same animals and plants. How are the results similar or different?

Fossilization Game Card Set

DRY UP	DRY UP
ROT AWAY	ROT AWAY
ROT AWAY	SWALLOWED BY AN ALLIGATOR
SWALLOWED BY A CROCODILE	SWALLOWED BY A CROCODILE
SWALLOWED BY A BIG FISH	SWALLOWED BY A BIG FISH
EATEN BY SCAVENGERS	EATEN BY SCAVENGERS
BURIED IN SOFT MUD – YOU BECOME A FOSSIL!	BURIED IN SOFT MUD – YOU BECOME A FOSSIL!
WASHED AWAY BY WAVES	WASHED AWAY BY WAVES
WASHED AWAY BY CURRENT	WASHED AWAY BY CURRENT