

DINO FOSSILS

An activity in which students sequence pictures depicting the process of fossilization

ARIZONA SCIENCE STANDARDS: 1SC-R2, 1SC-R3, 1SC-R4, 1SC-R6, 6SC-F1

OBJECTIVES

• Students should: Demonstrate an understanding of fossilization by sequencing pictures depicting the process.

MATERIALS

- 1 Transparency Master - *How do Fossils Form?*
- Student Handout - *How do Fossils Form?* 1 copy for each student
- Scissors
- Construction paper, 1 sheet for each student.
- Glue sticks

VOCABULARY

Decay
Erosion
Fossil
Minerals
Skeleton

GETTING READY

Prepare the materials listed on the left.

DOING THE ACTIVITY

SETTING THE STAGE

1) Explain that we can learn about dinosaurs by studying **fossils** then comparing these fossilized parts to animals with similar body parts that live today. Fossils are the traces (like footprints) or remains (like bones) of ancient life. They have been found everywhere, maybe even near where you live!

2) How does an animal become a fossil? Here are the steps that would happen. (Show the overhead transparency *How do Fossils Form?*)

- A fish dies and falls to the bottom of a swamp.
- It is covered with mud.
- The flesh rots (**decays**) leaving the **skeleton** behind.
- Mud layers build up above the bones. Over time, water seeping from above deposits **minerals** that harden the bones into stone. It is now a fossil. Around this fossil, the mud becomes rock.
- Millions of years later, the rock layers are worn away by wind and rain (**erosion**) and the fossil becomes visible. That's when we find it!

SEQUENCING THE PICTURES

- 1) Hand out one copy of *Student Handout - How does a Fossil Form?* to each student.
- 2) Hand out one sheet of construction paper to each student and a pair of scissors.
- 3) Have students cut out the pictures on

the dotted lines and then place them on their construction paper in the proper sequence.

3) After you have checked each student's paper to be sure the pictures are correctly sequenced, Have students number them in the box in the upper left corner. Hand out glue sticks and have students glue their sequenced pictures to their construction paper.

DISCUSSION

- 1) Usually, only the hard, outer coverings of animals, like crabs and lobsters and insects, and some parts of animals, like bones and teeth, have better chances of becoming fossils. What happens to the soft parts? (They rot.)
- 2) Are there other things that could fossilize? (Yes, under special conditions some plants, tracks, coprolite (poop), etc. may also become fossilized.)

EXTENSIONS

- 1) Have students determine which types of sediments would best preserve fossils. Students can press shells or bones into various thick mixtures, such as sand and water; clay and water; and gravel, clay and water. The ability of a mixture to "preserve" should be judged on the clarity of the imprint made. (Clay will hold the best imprint. Gravel will be the least able to hold an imprint.)
- 2) Make a bulletin board display showing how a dinosaur could become fossilized.