

FOSSIL MAKING

STANDARDS

See summary of National Science Education Standards.

Original: <http://books.nap.edu/readingroom/books/nses/>

Standard Concept	General standard	Specific standard	General standard	Specific standard	General standard	Specific standard
Grade Level		K-4		5-8		9-12
Science as inquiry (A)	Abilities ... to do ... inquiry	A.1.4.1	Abilities ... to do ... inquiry	A.1.8.4	Abilities ... to do ... inquiry	A.1.12.5
		A.1.4.2				
		A.1.4.4				
		A.1.4.5				
	Understandings about ... inquiry	A.2.4.2	Understandings about ... inquiry	A.2.8.1	Understandings about ... inquiry	
Physical Science (B)	Properties of ... materials	B.1.4.2				
Earth Science (D)	Properties of earth materials	D.1.4.3	Structure of Earth system	D.1.8.4		
Science and Technology (E)	Understanding about Science and Technology	E.2.4.1				



FOSSIL MAKING

INTRODUCTION

Sedimentary rocks sometimes contain the remains of plants and animals from millions of years ago, called fossils. Various types of fossils include bones, shells, leaves, and petrified wood. The activity described below provides an opportunity for students to observe how a fossil is formed.

PURPOSE

The activity below gives students an opportunity to create a model of a fossil as a way to provide observations of the way a fossil formed.

MATERIALS

- Plaster of Paris
- Paper cups
- Small familiar objects (such as: leaves, branches, shells, etc.)

PROCEDURE (teacher instructions)

- 1) Mix Plaster of Paris as directed on the box.
- 2) Pour immediately into cups until the cups are half full.
- 3) While the mixture is fresh, press an object halfway into the plaster.
- 4) Let the plaster of Paris dry and set for 30 minutes
 - a) Remove the object.
- 5) This model of a fossil is the imprint of an object. To make a cast, put Vaseline onto the imprint, and then add more newly mixed Plaster of Paris onto the fossil.
- 6) Again, let the Plaster of Paris dry and set for 30 minutes.
- 7) Tear the cup from the dried plaster of Paris, and then separate the two halves of the model fossil. The half that is indented into the Plaster of Paris is the imprint, while the half with the raised material is the case of the object

EVALUATION

- 1) Look at an actual fossil
 - a) Describe ways in which the actual fossil is like the model fossil and rock containing fossil.
 - b) Describe ways in which the actual fossil is not like the model fossil.
- 2) What conditions are necessary for the formation of a clear fossil?
 - a) What must the surrounding material be like?
 - b) What must the fossil making object be like?

