



Model Fossil Formation

You will model the process of fossil formation and make your own cast fossil. You will exchange fossils with another group and make inferences about the items that made the other group's fossil.

Procedure and Analysis

STEP 1 Select two or more items to make a cast fossil.

STEP 2 Press the clay to form a flat, thick surface. Make it thick enough so that you can push your chosen items into it.

STEP 3 Arrange the items on the clay. Then press them into the clay to make a detailed impression. What do the modeling clay and the small objects represent in this model of a fossilization process?

STEP 4 Carefully remove the items from the clay. Try not to disturb the impressions. The clay impression forms a mold.

STEP 5 Fill the mold with white glue and let it dry.

STEP 6 When the glue has dried, peel it back. The dried glue shape is a cast of your items.

STEP 7 Exchange cast fossils with another group. Make inferences about the items used to make their cost fossils, and explain your reasoning.

STEP 8 Confirm what items were used to make the trace fossils that you analyzed.

Materials

- modeling clay
- various items to form cast fossils
- white glue



This cast fossil of *Uintacrinus socialis*, an extinct marine animal, gives an impression of the size and shape of the organism when it was alive.

Name:

Date:

STEP 9 What were you able to infer from the cast fossil you analyzed? Did your inferences correctly reflect the original items that made the fossil?

STEP 10 What about the “fossilization process” made it difficult to accurately or completely identify the original item?
