

Activity Options

Students can choose from one of the following three learning activity options, or complete all three.

- ◆ Stratigraphy Exercise
- ◆ Virtual Field Trip Log
- ◆ Deep Time Exercise



OPTION ONE: Stratigraphy Exercise

Let's look at how impressions and fossils are preserved using modeling clay.

- 1** Create homemade clay! Mix 2 cups of flour, 1 cup of salt, and 1 cup of water in a bowl and stir with your hands or a spatula. Tip: If you have food coloring, while it is still in a wet phase, separate your dough into five bowls and add five different colors, one to each dough. Then continue mixing to combine the ingredients and coloring. Use a spatula initially or your hands will be brightly colored!
- 2** Once the ingredients are loosely mixed together, knead the dough in your hands until it comes together and can form shapes. If you haven't already separated the dough into five sections, separate it now into five different pieces.
- 3** Take one of the separated sections of your homemade clay and press it into the bottom of a small bowl or cup.
- 4** Press an object into the clay such as a leaf, stick, or toy dinosaur foot - anything you want to use to represent your trace fossil. Remove the object after pressing it into the clay. You should see an imprint of the object. Add another layer on top, preferably a different color.
- 5** Take another layer of clay and place it over the top of the imprint to bury it. You can repeat this process as many times as you like, making sure to include ripple marks, a buried object, a thin and thicker section, and maybe even one that cuts into another. This is how layers stack up and bury a fossil.
- 6** Before the clay dries, cut down the middle using a butter knife. Observe the layers - This is called a cross section. We see this at *Brontosaurus* Bulges.

Questions for reflection:

How is a fossil created?

At the track site, we have evidence of dinosaurs interacting in groups. Describe this evidence and how this would benefit them.