Coprolite Creation Teacher Guide

Materials:

- a) Three different colors of 2 oz. or 3 oz. containers of children's modeling clay or Play-Doh, enough for one per student. You'll need one color for the Two Medicine Formation, one for the Kaiparowits Formation, and one to represent fossilized dung beetle tunnels.
- b) One box of small shell noodles to represent snail shells.
- c) Small pieces of wood such as mulch or from a rotting tree nearby.
- d) One small container of oatmeal to represent remnants of invertebrates.
- e) One small box of tri-color rotini to represent remnants of crustaceans.

Coprolite Creation Directions

Step #1: Roll your clay coprolite in a cylinder style shape or any other shape of coprolite mentioned in <u>the video</u>. Be sure to pick one color of clay that will represent the Two Medicine Formation, a second color that will represent the Kaiparowits Formation, and third to represent dung beetle tunnels.

Step #2 Create a fossilized **dung beetle tunnel** by placing your finger into the coprolite you've created. Using a third color that you did not use for coprolites from either formation to represent your dung beetle tunnel. You can create multiple tunnels if you'd like in each coprolite.

Step #3 Use a plastic knife to cut the coprolite in half in any direction, then place materials inside of the coprolite. Use the recipes for each coprolite below to ensure you place the appropriate formation material in the corresponding coprolite.

Step #4 Choteau Montana's Two Medicine Formation Coprolites	Step #4 Utah's Kaiparowits Formation Coprolites
Add small shell noodles, small pieces of mulch and/or rotting wood, and oatmeal	Add small shell noodles, small pieces of tri-colored rotini noodles, oatmeal pieces,
pieces.	and small pieces of mulch and/or rotting wood.

Step #5 Gently place the coprolite halves back together and apply pressure so the halves don't separate from each other.

