

PALEONTOLOGY

# Familiar Fossils

There are three different kinds of fossils that paleontologists look for: body fossils, trace fossils, and cast and mold fossils. Body fossils can be bones like a fossils skeleton or it can be a shell-like an ammonite fossil. Things like coprolite (fossilized poop!) and burrows are examples of trace fossils, they are evidence of life that was once there. Cast and mold fossils are exactly what they sound like, impressions left behind by organic material, these could be footprints or outlines of a leaf. You also do not have to bake this activity, you can leave them out to dry. This can take a few days to be completely dry, flipping to the other side periodically.



## Supplies

- Two (2) Cups of All-Purpose Flour
- One (1) Cup of Salt
- One (1) Cup of Cold Water
- One (1) Large Bowl
- One (1) Medium Baking Sheet

Assorted dinosaur or other animal toys, leaves, anything you can take an impression of  
Optional: ½ cup cocoa powder or coffee for coloring. Paint for decorating.



## Challenge

### What objects leave imprints?

1. Mix flour, salt, and optional other dry ingredients into a large bowl
2. Slowly add water until mixture is a wet dough consistency and easy to handle
3. Preheat oven to 250F (120C)
4. Knead the dough for 10 minutes and allow to rest for 20 minutes
5. Divide dough into 2-inch circles that are about .5 inches thick
6. Press item into dough firmly, but not so hard that it goes all the way through, and remove
7. Repeat with other items until you run out of dough, remember to have fun with it! You can make dino footprints or a collection of leaves from your yard.
8. Bake for ~2 hours or until firm
9. Allow to cool completely before handling, but it is at this time you can paint if you would like.



## Questions

1. Did some objects leave a more precise imprint?
2. Can you tell which object belongs to which fossil?
3. Does the object still fit into the imprint? Why do you think that is?