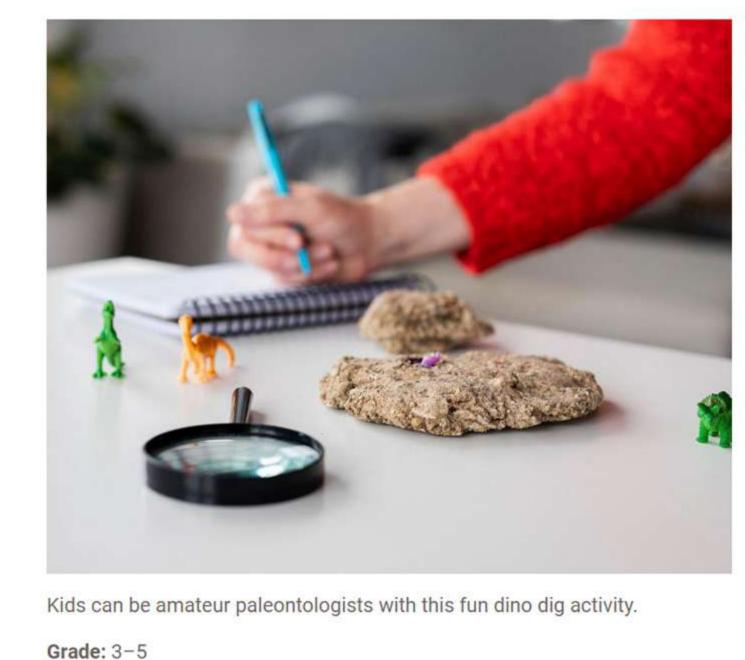


DIY Dino Dig



Activity Time: 30-45 minutes (plus, 24-48 hours of dry time)

STEAM Subject(s): Science (Paleontology), Art

Supplies:

 2 cups flour ¾ cup water

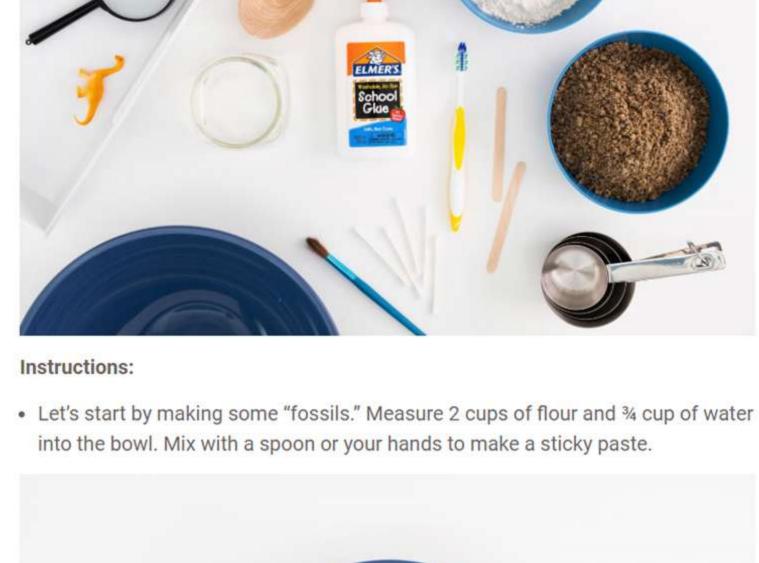
2 cups sand

- Elmer's White School Glue
- · Large bowl for mixing
- Mixing spoon · Tiny dinosaurs, small toys, animal figurines, seashells (or sticks and stones from
- your backyard!) · Amateur paleontology tools like:
- · An old toothbrush Cotton swabs

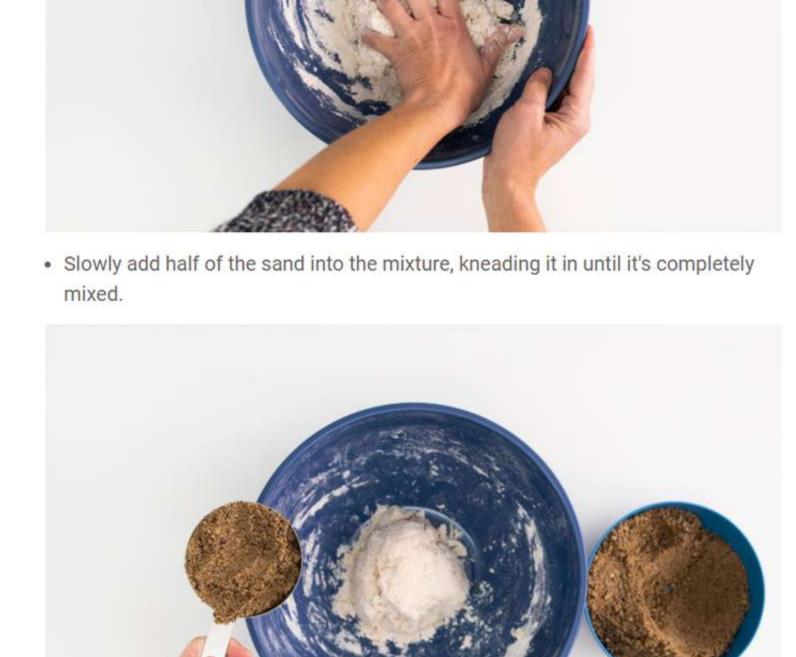
· A magnifying glass

· Craft sticks Parchment paper

Paintbrushes



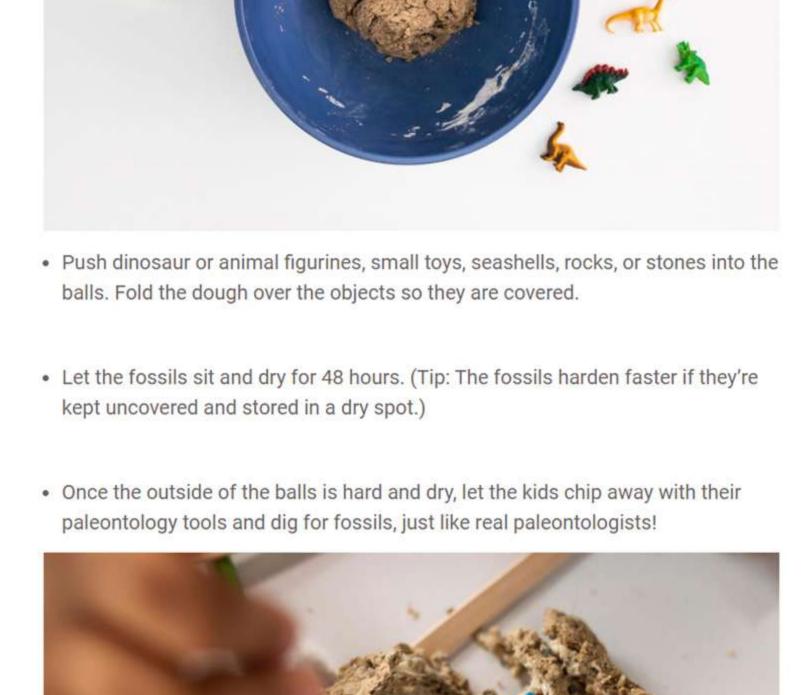




 Add 2-3 large squirts of Elmer's White School Glue to the sand-flour-water dough. You don't have to use exact measurements, but your blob of glue should be about the size of a quarter! Knead the glue into the mixture. This will make your fossils harden.



Once you're ready, form the dough into "fossils" about the size of an orange.



· What are fossils? Fossils are traces of ancient organisms, like bones, teeth,

shells, footprints, and impressions of skin or feathers, that have been preserved,

which we can see and study today. The "fossils" you made aren't real fossils, but

they are a fun way to get a taste of the way that real paleontologists study the

What is a paleontologist? Paleontologists study fossils to learn about the past,

but also to help us in the future. Paleontologists often spend time excavating

Learn More - STEAM Extensions:

and interesting look at ancient history.

Level Up – Options for Older Kids:

ancient world.

 Go on a fossil hunt! Fossils are found all over the world! In fact, no matter where you live, you could probably find traces of fossils out in your environment. Ask a trusted adult to take you to a wooded area, a creek or creek bed, or an area near you where there are lots of rocks. Use your paleontology skills to see if you can find some fossils. Pick up and observe rocks to see if you see patterns that look like shells, animals, or leaves. Study rock ledges or cliffs to see if you can see a

fossilized layer in the rocks. Fossils are all around us, and they give us a unique

fossils out of rock, cliffs, and creek beds ... just like you did today!

your tools to really chip away at the sand and glue mixture! Paleontologists face the challenge of having to excavate their fossils from all sorts of places, and so we challenge you to do the same. Using the same formula that you used before, see what happens if you replace the sand with kinetic sand, corn starch, large pebbles, or even dirt from your backyard. Do the different substances make it harder or easier to excavate the dinosaurs?

3-LS4-1: Analyze and interpret data from fossils to provide evidence of the

The Challenges of Paleontology. Most fossils aren't just lying on the ground

waiting for a paleontologist to find and study it. Instead, paleontologists have to

slowly chip away at thousands of years of rock, dirt, mud, and grime to find the

fossils they need to study. This is called excavation! When you excavated your

dinosaurs from your fossilized rock today, it wasn't easy, was it? You had to use

organisms and the environments in which they lived long ago. 4-ESS1-1: Identify evidence from patterns in rock formations and fossils in rock layers to support an explanation for changes in a landscape over time.

Next Generation Science Standards

Standards Alignment:

- 1. Visit a local plant store or garden center. Ask about the different kinds of
- plants they have and the different ways they take care of the plants. Do flowers need different care than vegetable plants? Do different types of plants need different kinds of soil? 1. Grow your own plants from seeds! Certain flowers and herbs sprout faster than others. Marigolds, nasturtiums, basil, radishes, and some types of lettuce grow

quickly. Make a plant journal to write down observations of the plant's growth

and development each day. Look at the color of the plant, length of the stem, size and shape of the leaves, and the appearance of any flowers. Another important part of the plant's structure is the roots, but they are difficult to observe because they are underneath in the soil, helping the plant take in water

and nutrients.

chiefly from air and water.

Standards Alignment:

- Next Generation Science Standards 2-LS2-1: Plan and conduct an investigation to determine if plants need sunlight
- and water to grow. 5-LS1-1: Support an argument that plants get the materials they need for growth