

Excavate your own Archaeology Site Activity

Archaeology is tons of dirt-digging, story-telling, mystery-solving fun. Archaeology is learning about ancient people, how they lived, what they looked like, what tools they used, and more. Archaeologists are the scientists who study the remains of past groups of people. They do that by looking at the things people from long ago left behind. Over time, things and places get covered and buried. When something lays on the ground day after day, year after year, leaves fall on it, dust blows, and little by little it slowly gets covered up. Archaeologists dig under the ground in specific ways to find what people of the past have left behind. This is called excavation.

You can become an archaeologist in this fun activity! See what you can find!

Excavation Activity:

- Use the side of a trowel to scrape away the dirt. If you find an object, brush the dirt off with a paintbrush so you can see it better and find the best way to remove it carefully.
- Put the dirt you take off into the screen.
- After there's a bit of dirt in the screen, shake or push the dirt through. When you find items that are too big to go through the screen, set them aside.
- Keep going until there's no more dirt in the excavation site!

Excavation is only one part of an archaeologist's job. Next they have to look at what they found. They need to figure out what objects were made by people, and what those objects say about the people that made them.

- Look at the items that didn't go through the screen. Can you tell which ones are natural and which ones people made?
- Look at the items you think people made. They are called artifacts. What are they made of? How did the people make them? What do you think the people used them for? Can you think of anything we use today that's like each object?



Archaeologists found these shell necklaces at Mesa Verde National Park in southwest CO.



Archaeologists excavate the Dillard site near Mesa Verde.

Excavate your own Archaeology Site Supply List & Adaptations

- Plaster of paris
- Vermiculite (a lightweight gardening substance—easily available at gardening and hardware stores and nurseries, and pretty cheap--\$4.95 at Ace Hardware for an 8-quart bag)
- Sand
- Soil (either potting soil or local soil straight from the ground!)
- Shoe boxes, large paper cups, or large muffin cups
- Paintbrushes
- Cheap trowels without really sharp points or edges, for safety
- Metal sieves, such as metal kitchen strainers
- Protective eyewear
- Boxes or buckets to catch the dirt that kids push through the sieve
- Artifacts to bury: broken pottery, old coins or keys, stone tools, beads, and other items; include natural materials too like leaves, twigs, acorns, and stones (it gives kids more to find and makes it more realistic)

To prepare the excavation site:

- Prepare dig sites **one day in advance**; they need time to dry and set.
- Make your sites any size—big enough for one, two or a group of kids to work on.
- Line a shoebox or similar box well with foil.
- In equal parts, add dry ingredients—plaster of paris powder, vermiculite, sand, and soil—to the box and mix. Stir in enough water until all ingredients are damp (the exact consistency doesn't matter too much; the mixture will set and firm up).
- Bury artifacts and natural materials in the mixture. Or, for larger dig sites, pour in half of the soil mixture, then add artifacts, and cover with the other half of the mixture.
- Allow mixture to dry overnight. When ready to excavate, depending on the container, you may want to peel away the sides (of, say, a large paper cup or box) so the kids can dig in it more easily. In that case, set the site on newspapers for easier cleanup.

Adapted from the Denver Museum of Nature and Science activity:
<http://www.dmns.org/media/2839/DetectivesofthePast.pdf>.

Extension possibilities:

- Break a ceramic pot and bury the pieces. When the children have found the pieces, have them figure out how the pieces fit together, then have them glue the pieces together—something archaeologists have to do. It's more realistic to leave a piece or two of the pot out!
- Combine this activity with the Make Your Own Fossil activity: have the children make their own fossils, then bury them in the excavation site to find!
- Offer this activity as part of the 6-week Archaeologist Club program in the manual starting on page 129.

This activity is easy and fun to adapt for paleontology:

- Instead of stone tools, pottery and other artifacts, use fossils (real, replica, or those you made yourself), toy dinosaur skeletons, clean animal bones, dinosaur footprints you've made yourself, etc. Include some items that aren't related to bones or fossils as well.
- If you use replica bones that make up a dinosaur skeleton, have the kids figure out how the bones fit together—one task of a paleontologist—and have them glue them together.
- Offer this activity as part of the 6-week Dinosaur Club program in the manual starting on page 125.

This activity is easy to adapt for preschoolers:

- Fill a large container with sand.
- Bury items in the sand, such as plastic dinosaur skeletons and footprints, broken pieces of pottery (no sharp edges!), clean or plastic animal bones, fossils, etc.
- Have kids dig through the sand with plastic shovels to discover the items buried underneath.
- Talk with them about artifacts, fossils, dinosaurs, or whatever objects you buried. Explain what archaeologists and paleontologists do and why.