

Becoming an Archaeologist!

Suggested Age: 6-8

Time: 15 minutes

Scale is often used within the scientific community, as well as in many other professions. It is very useful for showing locations of objects as well as depicting objects that are either too large or small to draw at their actual size. **Archaeologists** and **paleontologists** search for objects in the ground, including fossils and remnants from past civilizations. They keep logs of all of the objects that they find, but cannot draw each object at its true size. Therefore, they must scale their drawings according to the size of the dig site.



In the activity we will:

- Create your own archaeology site for your friends or siblings to dig in and discover and chart artifacts.

Materials

- Graph paper with a grid size of 1 inch by 1 inch – attached
- Marker, pen, or pencil
- Ruler
- Large shallow plastic container or sand box (approximately 3 feet long by 2 feet wide by 6 inches deep)
- Play sand or potting soil
- Objects to bury, such as marbles, pencils, etc.
- String
- Scissors
- Tape
- Sand shovels – if wanted
- Popsicle sticks
- Plastic sheet larger than the container

Safety

Be careful not to cut yourself when using the scissors. They can be very sharp. Sand and dirt are irritants and will scratch your eyes if you are not careful. Do not touch your face without washing your hands working with the sand.

Pre-Activity

Discuss with the children why archaeology is important in today's world. What findings and discoveries have been made that we otherwise would not know about? Are most of these objects large or small in size? How are archaeologists and paleontologists able to keep a record of their findings if the objects are either very large or very very small in size?

Activity

Many children have had sand boxes in which they play during the warm summer months. Often times, castles or other buildings are built and then demolished, or they will dig in the sand to find if there is anything that they don't know about in the box. In this activity, you will create an archaeology dig site based on a child's sand box and investigate how an archaeologist creates logs of what they have found.

- Place the large plastic sheet on the floor and the container on top. This will help contain the mess if any sand or dirt spills.
- Fill the large container with sand until it is approximately 2 ½ to 3 inches deep.



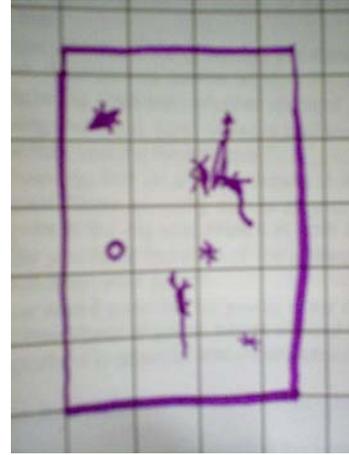
- Bury between 8 and 10 varied objects in the sand, leaving some of these sticking partway out of the sand if desired. Write down or describe the objects that you bury. If parents are working with the children on this activity instead of more than one group of children, the parent(s) should bury the objects in this step.
- Mark off a grid using the popsicle sticks by measuring every 3 inches along the edges of the container and placing a popsicle stick at this.



- Tape pieces of string across the container at the popsicle sticks to form a grid. See picture below.



- Trade dig sites with another archaeologist.
- On your graph paper, use a black marker or pen to block off the same number of blocks as are in your dig site. Note that some of these may not be full blocks. Be sure to draw them as they appear on your site.
- Using the small sand shovels or your hands, carefully dig in each small section, looking for artifacts. Do not remove the artifacts, only uncover them.



- When you find an artifact, draw it in the corresponding block on your graph paper. Be sure to look at the artifact from directly above and not from an angle. Draw as many details as you can. If an artifact lies within two blocks in the dig site, draw it in both on your paper.
- After you have found all of the artifacts, you should be able to define what each is on your paper.
- How was it possible for you to draw many of the larger objects on a normal sheet of graph paper without overlapping them? Why is scale so important in science and other subjects?

Extension Activity

1. Research methods of digging for artifacts in books, encyclopedias, and on the internet. Compare and contrast the methods used in this activity to those used by archaeologists and paleontologists.
2. With the permission of your parents, find a space in your backyard to dig in the dirt and see what you find.

References

<http://archaeology.about.com/>
<http://www.archaeology.org/>

