Paleontology/Archaeology

Cookie Excavation

Target Grade Level(s): 1st - 6th

Introduce kids to archaeology by excavating the chocolate chips or candies out of a cookie. Begin with a discussion on the importance of excavation and how archaeologists have to be very cautious and delicate while removing artifacts from the ground. Archaeologists have to be very careful not to damage artifacts they cannot see under the surface. Kids can try out different “tools” (toothpick, mini-spoons) and discuss how important it is to match the right tool for the job. For older kids: An extension can be sketching the cookie on graph paper and documenting where the chocolate/candy “artifacts” were located.

Supplies

- Chocolate chip cookie (or similar)
- Toothpick
- Plate
- Optional: Other tools to test (like mini-spoon or tweezers)

Challenge

Can you excavate your artifacts (the chocolate chips) from their archaeological site (the cookie) without breaking them?

1. Notice any chocolate chips you can see before excavating (digging).
2. Using a toothpick, attempt to remove each chocolate chip without breaking it.
3. Try using other tools to see if they work any better.

Extension: Use the graph on the next page to trace your cookie and record each chip you excavate on the grid. What might an archaeologist notice about the concentration of artifacts in certain areas?

Questions

1. What problems did you encounter excavating the chips?
2. Was it easy to determine where the chips were in the cookie?
3. Did you have to sacrifice a chip to get to another one?
4. How do you think archaeologists know what’s underground?