

NATIVE AMERICAN EDUCATION FOR ALL RESOURCES

Partnership of IllumiNative and the National Indian Education Association



ILLUMINATIVE



Grade Level

6-8

Subject

Science

Lesson Title

Native Science: Making a Salt Stick

MATERIALS NEEDED

- WiFi access (optional) for [Kids Earth Science online directions](#)
- 1 or 2 shallow bowls (2-3 inches deep)
- Toothpicks or thin wooden sticks (2-4 inches)
- Table Salt (1/4 to 1/2 cup)
- Modeling clay (non hardening) or wax
- Liquid and dry measuring cups
- (optional) food coloring

STEPS

Gather all the materials and read through the directions before beginning. Follow these steps closely and carefully. Be sure to **ask permission** to use the materials. Be cautious while preparing and using hot water.

Activity Steps:

1. If WiFi is available, read the sample directions on [Kids Earth Science](#).
2. Pour 1 cup of hot water into a small mixing bowl. (Optional: Add a drop of your favorite food coloring).
3. Add 1/4 cup of table salt to the water and stir until it's dissolved.
4. Keep adding small amounts of salt until no more will dissolve. Set this saltwater mix to the side.
5. Add bits of clay or wax to the bottom of a shallow bowl. Make sure it is thick enough to hold toothpicks in an upright position.
6. Add your toothpicks in the clay/wax. Be sure they are at least 1-2 inches above the water.
7. Pour the saltwater solution **slowly** over the toothpicks in the bowl until the water covers the toothpicks by 1/5 of the height. Be sure that most of the toothpick is above the water.
8. Place the bowl in a sunny window and clean up any mess you made.

After the Activity:

1. Check the bowl each day.
2. If possible, take pictures each day to measure how the salt grows over time.

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HELPFUL TIPS

Parents and caregivers: This is an opportunity for your child to explore Native science knowledge and increase curiosity of the world around them. Please monitor your child while using these materials and share this information while helping with this experiment.

- Explain to your child that he or she is not only doing a science experiment but are also practicing a traditional indigenous method of collecting salt from the ocean.
- Salt was a very important element for ancient tribes, and it still is today. Tribes in North America used salt from oceans or salt flats to tan animal hides, stabilize dyes, preserve meat, and trade.
- This experiment connects to indigenous science practices as American Indians that lived on the Pacific coast would section off pools of ocean water and place sticks in these pools. Once the salt grew up the stick, tribes could easily travel with the salt for trading or cooking.

WANT TO LEARN MORE?

Families and Educators: As careers in science and technology are becoming more important, this experiment can create curiosity in young people to want to study more science. This also helps connect Native science knowledge and practices with modern science. For additional learning, visit the sites below:

- To learn how American Indian tribes gathered salt from natural basins in the West, watch the YouTube video [Ancient Native American Salt Basins, California.](#)
- To try more science experiments at home, check out the [Kids Earth Science website.](#)
- To learn more about the the history of the salt trade for ancient American Indian tribes read this [article "How Salt Built Civilization."](#)

Activity Adapted from:

- *Kids Earth Science* Water-Cycle Experiment <https://www.kids-earth-science.com/water-cycle-experiment.html>

Additional Links:

- *StoriesbyAlex* YouTube video <https://www.youtube.com/watch?v=4bh09ILsYRs&t=728s>
- *Kids Earth Science* website <https://www.kids-earth-science.com/>
- *Indian Country Today* article "How Salt Built Civilization" <https://indiancountrytoday.com/archive/how-salt-built-civilization-pIXjDiMmi0mWoi1CAXoiFQ>