



DALLAS ARBORETUM
Education

Garden STEM at Home
Stovetop Sandstone



WE GROW MINDS, TOO.

STOVETOP SANDSTONE



OBJECTIVE:

WITH ADULT SUPERVISION, KIDS WILL CREATE A MODEL OF SANDSTONE USING HOUSEHOLD INGREDIENTS.

SOURCE

Adapted from Vulcan Park and Museum, 2009.

BACKGROUND

Sandstone is a common form of sedimentary rock, made from compacted sand. Sandstone is resistant to weathering, and is a common building and landscape material. One of the most common forms of sedimentary rock, sandstone is found throughout the world in sedimentary basins (i.e. locations of previous sedimentation by air or water).

This activity provides a model of sandstone for kids. It allows an opportunity to discuss the structure of actual sandstone and how it is formed. In addition, students can discuss the strengths and weaknesses of the model.

Safety notice: this activity must be completed with an adult, as the slurry mixture will be quite hot from the stove top. Once cooled sufficiently, students will be able to shape their own “sandstone” rock or carving.

INSTRUCTIONS

1. Observe samples or photos of actual sandstone.
2. Combine two cups of sand, one cup of water, and one cup of corn starch in an old saucepan.
3. An adult should then heat the mixture on a stovetop until all ingredients are mixed and the mixture thickens.
4. Allow to cool until mixture can safely be handled but is still pliable.
5. Provide each participant with enough of the pliable mix to create their own sandstone model in a shape of their choice.
6. Questions for discussion: What can you infer about the environmental conditions in which sandstone is formed? How do weathering, erosion and deposition play a role in the formation of sandstone? What else is needed for it to form? What are the strengths and weaknesses of this sandstone model?

ADDITIONAL RESOURCES

Geology.com Sandstone background information:
<https://geology.com/rocks/sandstone.shtml>

Science Kids Sedimentary Rock Facts:
<https://www.sciencekids.co.nz/sciencefacts/earth/sedimentaryrocks.html>



SAND
2 CUPS



WATER
1 CUP

STOVETOP SANDSTONE



**CORN
STARCH**
1 CUP



HEAT
UNTIL THICK.
COOL TO
TOUCH &
SHAPE IT!



DALLAS ARBORETUM
AND BOTANICAL GARDEN