

Building Stone Walls

Grade Level: 3

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National Content Standard Alignment

Science (NSTA):

- Content Standards D, E & F

Math (NCTM):

- Measurement standards such as length, area, size of angle are appropriate

English Language Arts (NCTE):

- Standards 11 & 12

Learner Background

- A prior knowledge of colonial America and what stone walls look like are beneficial.

Student Learning Objective(s)

SWBAT identify distinguishing characteristics of a stone wall through closely observing one and creating a drawing of a stone wall.

- SWBAT apply their knowledge of stone walls to a model of their own creation.
- SWBAT analyze the effects of social class on stone wall construction and use.

Assessment

- Informal - Teacher will gage students understanding of learning objectives in the class's closing discussion.

Materials/Resources

- Tongue depressors

- Coloring materials
- Sugar Cubes
- Clipboards
- Pencils
- Journals
- Model Magic
 - Home recipe
 - 10 cups flour
 - 2.5 cylinders of salt
 - 5 cups of water

Learning Activities

Initiation

The teacher passes out a sheet of paper to each student and directs each to sketch a stone wall. The students must use a pencil, and just draw what they remember a stone wall looking like.

Lesson Development

- The teacher now brings the class outside to view a real stonewall, bringing out materials for drawing and coloring. Students should have a new piece of paper and a clipboard to draw a new sketch of stone wall, exactly as they see it, noting colors as well. If a student finishes while others are still working, the teacher should ask the student to list and describe different characteristics of the stone wall that he or she saw, directing focus to what he or she thinks makes this stone wall unique.
- (15 minutes) The teacher distributes tongue depressors and model magic to each student, explaining that the tongue depressors represent the ground, while the model magic can be made into “stones” for their walls. Students are asked to attempt to create a stone wall with the model magic. Teacher monitors the student’s work and asks them to explain the manner in which they are organizing their model magic walls.
- (10 minutes) At the end of the class, students are to compare their stone wall models with one another, paying special attention to the differences that they observe among their models.

Closure

The teacher will now discuss with students whether they saw any difference in the types of stone walls that were built. The following questions can guide the discussion:

- What kinds of walls did we build?
- Who do you think would have built your wall?
- What kind of person in colonial and early America would build a stone wall that looked like that? What purpose would it serve?
- Are there any other purposes?
- What kind of people would use the stone wall in that way?
- Would the stone walls look different if they were built by a rich businessman or a poor farmer?

The teacher should use this discussion to reinforce background knowledge that the students have of colonial America, while allowing the students to explore their own realizations about stone wall structure, and the people who built them.