

Colonial Landscape & Rock Origin (#1)

Grade Level: 3

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*These activities are designed to help students develop appreciation and ownership for the natural world around them with the hope of increasing their interest in exploring and questioning the processes that created land forms.

National Content Standard Alignment

Science (NSTA):

- Content Standards D, E & F
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- English Language Arts (NCTE):
- Standards 3, 7 & 12

Learner Background

- For this lesson to be worth executing, it is ideal that students be familiar with stone walls, whether they have seen them in pictures, seen them firsthand, or have one in their backyard. Some background knowledge concerning New England Colonists is also favorable.

Student Learning Objective(s)

- SWBAT understand how human endeavors affect the landscape

Assessment

- Informal: Teacher observation and in the closure section the teacher will assess student progress and understanding by asking students a host of questions.

Materials/Resources

Rectangular plastic containers filled halfway with sand and 5 small rocks of various shape, color & texture

Wooden cotton swabs (to serve as student's "shovels")

Learning Activities

Initiation

- Teacher will engage students through questioning their prior knowledge regarding stone walls, which will help students with little relevant knowledge the opportunity to become familiarized with stone walls. Questions/comments may include:

Who has a stone wall in his/her yard?

Where else do we see stone walls?

When I was a kid, my favorite hiding place during hide-and-go-seek was behind a stone wall.

- Nature Walk: Students are led through a nature path with the purpose of finding their own rock. Teacher directs students to point to all the stone walls they can see along the way. Then, students are asked to find a rock that is no larger than their fist to bring inside. While on the walk, teacher asks critical thinking questions such as (but not limited to):

Who do you think built this stone wall?

How long ago do you think it was built? (Last week? Last year? Etc.)

We see lots and lots of rocks here; why do you think someone put them here?

Why isn't this large boulder part of the stone wall?

Oh look, why do you think there is a big chunk missing from that stone wall?

Lesson Development

- Once inside, teacher directs students to study the cover and first couple of pictures in *Stone Wall Secrets*, while asking questions such as, “what do you think the boy on the cover is thinking?” Then, teacher asks students about the setting of the book. The teacher begins by reading page three aloud (starting “The autumn weather” and ending, “back through time”) while students follow along in their own book. Teacher asks questions throughout the reading and directs student’s attention to the time, setting, interests & feelings of the character(s).

- Books are set aside and teacher disperses one sand-filled plastic container to each group of students while questioning what the environment may have looked like before stone walls were built. Teacher follows discussion by probing students to think about where the stones might have originated.
- Students are to pretend they are colonists. First they are to create a landscape with the sand using their hands. Then, using their “shovels” (wooden cotton swabs) they are to dig-up all five stones (of which have previously been buried under sand by teacher) and redesign their landscape. Now, students are directed to make a stone wall using the rocks that they dug-up as well as their own rock, which they found on the nature walk.

Closure

- Place containers to side for later lessons.
- Teacher asks students what they noticed about the differences in the rocks (shape, color, texture, and size).
- Teacher asks students to think about how difficult it was for colonists to dig-up all those rocks that we see in stone walls. Teacher directs conversation back to the book, *Stone Wall Secrets*, by asking students about Grandpa’s experiences with stone walls. (i.e. – do you think Grandpa helped dig-up any rocks that are in his stone wall?).