

# Mapping Stone Walls & Text Engagement (#3)

Grade Level: 3

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## National Content Standard Alignment

- Science (NSTA):
- Content Standard D
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- Math (NCTM):
- Provides appropriate techniques, tools, and formulas to determine measurements
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- English Language Arts (NCTE):
- Standards 3, 11 & 12

## Student Learning Objective(s)

- SWBAT understand that local rocks are different and are used in various ways.

## Assessment

- Formal: Students will complete worksheet #1 and teacher will provide written feedback.
- Informal: A science talk will ensue after class activities.

## Materials/Resources

*Stone Wall Secrets* by Kristine and Robert Thorson

Rectangular plastic containers half filled with sand and specific rocks (These containers are the same used from previous lesson)

Worksheet #1

Students' individual "stone wall journals"

Crayons

Glue

## Learning Activities

### Initiation

- Teacher begins by asking students to recall the activities they have participated in thus far. Then teacher shows students a rock that has been sliced down the middle and polished (book ends) while asking questions such as “how would someone know what the inside of a rock looks like? I mean this rock looks pretty normal on the outside; do people just crack open rocks until they find one with crystals inside? That would take a long time I think.”
- After reviewing past activities and readings, students turn to the first page in *Stone Wall Secrets* starting “The old man.” Students read along while teacher reads aloud to the end of page ending in “deep blue sea” (page opposite illustration of ancient fish). Teacher should clarify the text throughout the read-aloud.

### Lesson Development

- Worksheet #1 is dispersed to each student. The teacher directs student’s attention to the picture on the worksheet. The class discusses how the pictured stone wall differs from the stone walls they see around their school, homes and forest.
- Teacher reads aloud each question in part A and students fill in answers. Teacher writes answers on black board. Students complete part B by themselves. Once the worksheet is completed, it may be glued into their stone wall journals.
- Teacher distributes sand and rock-filled buckets to each group and directs students to look into their bucket and search to find what they think is a sandstone. Students are to hold up their rock. Teacher asks students why they think they have found a sandstone.
- Students share their reasons for choosing their particular rock and the teacher informs students that there are actually no sandstones in the bucket. A conversation regarding what a sandstone might be composed of and look like follows.
- Using crayons, students are directed to complete part D on worksheet #1 and glue it onto the 2nd page of their “stonewall journals.” Students may finish coloring-in the stone wall sketches they made on the front cover from the previous class.

- Before going on the nature walk, teacher asks students to pay attention to where the stone walls are located in relationship to their school building. Teacher draws a map of the school property as one would view it from a helicopter looking down. Students help plot the school, driveway, greenhouse, etc.
- Nature Walk: Students are given the mission of finding a sandstone, or a rock that is composed of sand. Once students find one, a couple will be taken back and washed for closer observation.

## Closure

- Once students are seated, teacher asks, “who thinks they can draw our stone walls on the map here?” Teacher allows three students to plot where the stone walls are located in relation to their school on the blackboard.
- Teacher explains that the actual location of the stone walls on the school’s property will be revealed during the next class. Teacher explains that students will also learn more about the characters, Adam, Grandfather and explore their stone walls in *Stone Wall Secrets*.
- Time permitting, teacher may ask students what they hope to discover when they have a chance to read more of *Stone Wall Secrets*.