BEFORE 1: Everybody Needs a Rock

Before your visit to introduce students to the process of making close observations of rocks and to the vocabulary of rock identification.

VA Standards Addressed: English/Language Arts 5.1, 5.5, 5.6, 5.7, 5.8 Science (2018) 5.8

Materials

- *Everybody Needs a Rock* by Byrd Baylor (Available from bookshop.org or on <u>Amazon</u> Kindle) **OR**
- *A Rock is Lively* by Dianna Hutts Aston, illustrated by Sylvia Long (available in from bookshop.org <u>ebook, hardback, and paperback online</u>, or in hardback through <u>Handley</u> <u>Regional Library System</u>)
- One egg carton per student
- Label materials
- Optional: tools to measure a rock (scale, ruler, caliper, etc.)

Lesson Preparation

- 1. Obtain as many copies of your chosen text as necessary (one per student for independent reading one if reading as a class). We recommend having both books on hand for student choice.
- 2. At least a week in advance, send home a note to guardians asking for egg carton donations and informing them that students will be collecting a dozen special rocks over the course of a week. Encourage guardians to help student select carefully and in a variety of locations.

Instructional Strategy

- 1. Do a first read of your chosen text with the class:
 - a. *Everybody Needs a Rock* (ENR) is a narrative non-rhyming poem describing the "ten rules" to use when selecting a rock and fits a variety of English/language arts units and reading methods. The focus is on using senses and emotion to carefully choose a rock.
 - b. *A Rock is Lively* (ARL) is a beautiful non-fiction alternative, however the text may be inaccessible to some students. The focus is on geologic processes, rock composition and use.
- 2. Instruct students to find a dozen "great rocks" to fill their egg carton. We recommend allowing a full week (including a weekend) for students to find the dozen special rocks.
 - a. If using ENR, students should use the ten rules described in the poem.
 - b. If using ARL, students should simple think about what makes the rocks they chose special.

- 3. Conduct a second reading of ENR or ARL, this time focusing on the *physical properties* described in the text. Ask students to list as many physical properties (color, texture, smell...) that they can remember from the text and compile in a class list. Ask if anyone can think of other physical properties not in the text and add it to the list. To learn more about the physical properties used to identify rocks and minerals, https://isgs.illinois.edu/outreach/geology-resources/using-characteristics-minerals-identify-them.
- 4. Have students select their "best rock" for their collection and describe it in written word. This can take the form of prose or poetry and can be subject to an editing process. Focus on physical characteristics/using all senses/measuring and quantitative/emotional/imaginative descriptions. Modeling this process may help students access deeper reflection and observation.
- 5. Display the completed description in the lid of the egg carton and challenge other students to identify the correct rock based on the description.
- 6. Conclusion: Discuss what kinds of descriptions helped the most in identifying a rock (physical properties and observable features) and which descriptions made the rock most interesting (possibly observable features or personal connections). What kinds of professions focus on observable features (science fields, construction, agriculture...) and which focus on personal connections (artists, writers, musicians)? Note that most professionals use both kinds of descriptions, even if they focus on one.

Specials Extension

Art collaboration: Students swap descriptions (keeping the original rock hidden) and create a visual representation of the rock described in writing using a medium of the art instructor's choice. They then compare the artistic rendering of the rock to the actual sample and use any discrepancies to help edit the descriptive writing.