

Bringing Rocks to Life
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Lesson Components	Description
Identification of the Class	Subject: Earth Science Grade: 9 Number of Students: 25
Virginia Standards of Learning & National Educational Technology Standards (Students)	Virginia SOL: <ul style="list-style-type: none"> • ES.5 The student will investigate and understand the rock cycle as it relates to the origin and transformation of rock types and how to identify common rock types based on mineral composition and textures. Key concepts include a) igneous rocks; b) sedimentary rocks; and c) metamorphic rocks NETS-S: <ul style="list-style-type: none"> • ISTE.1 Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology. b) create original works as a means of personal or group expression
Lesson Objectives	<ul style="list-style-type: none"> • The students will investigate the rock cycle in further detail. • The students will investigate one specific rock type from the rock cycle. • The students will investigate one rock example from their chosen rock type. • The students will practice teamwork to come to a final presentation. • The students will create a timeline using Capzles reviewing their chosen rock type and rock example.
Materials	<ul style="list-style-type: none"> • Computer • Projector • Speakers • Laptops • Example rocks
Procedures	<ol style="list-style-type: none"> 1. Have rock examples on tables in the front of the room in rock type categories and with names. 2. While students are coming into the classroom and finding their seats have the Song of the Rocks playing. 3. Pass out handout with fill-in-the-blank notes and instructions for the assignment while the song is playing.

	<ol style="list-style-type: none"> 4. Ask students what they already know about the three rock types. (They should know basics from previous lessons). 5. Explain that rock cycle has its own timeline and that using technology we can make the timeline come to life. 6. Show students the Rock Cycle timeline presentation made by Lane Martin on Capzles. Ask why it is important to give credit to the creator of the presentation. 7. Ask students if they have any questions about the rock cycle. 8. Explain to students that on the back of their handout there are instructions on how to make a Capzles timeline. Students will be put into pairs to make their own timeline on a rock type of their choosing. Once they have chosen a rock type, they will then also pick one rock example to further investigate and include in their timeline. They can find example rocks at the front of the room or online. 9. Show students the example for Igneous Rocks on Capzles. 10. Explain that at the end of the assignment, each individual will evaluate themselves and their partners. 11. Ask if the students have any questions on the assignment. 12. Break the students into pairs. Ask them to decide on a rock type together. Once they have chosen a rock type they can tell me their type and get a laptop.
Assessment & Evaluation	<p>The students will be evaluated on their:</p> <ul style="list-style-type: none"> • Partner and self evaluations • Timeline: well organized, accurate and visually appealing <ul style="list-style-type: none"> ○ Includes a rock type and a rock example