

Project 1: Rocking Word Art & Riddles

Rocks • Igneous/Sedimentary/
Metamorphic • Compare & Contrast





Project Essential Questions

- What are rocks?
- How are the 3 types of rocks formed?
- How are the 3 types of rocks alike and different?

PROJECT DESCRIPTION

In this arts integrated project, students will use visual arts and theatre to apply their knowledge of rocks. Students will create a Word Art illustration focusing on one of the 3 types of rocks. Students will then create and perform a riddle and or monologue in which the class (audience) tries to guess which rock it represents. Students will compare and contrast the attributes/characteristics of igneous, sedimentary, and metamorphic rocks.

LEARNING TARGETS

"I Can..."

- Identify the 3 types of rocks
- Classify the 3 types of rocks
- Perform and create a monologue/ riddle describing the 3 types of rocks
- Compare and contrast the 3 types of rocks

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Units provide differentiated ideas and activities aligned to a sampling of standards. The units do not necessarily imply mastery of standards, but are intended to inspire and equip educators.

Produced through the U.S. Department of Education: Arts in Education—Model Development and Dissemination Grants Program Cherokee County (GA) School District and ArtsNow, Inc.

Duration: 1- 2 days

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ESSENTIAL QUESTIONS

- What are rocks?
- How are the 3 types of rocks formed?
- How are the 3 types of rocks alike and different?

STANDARDS

Curriculum Standards	Arts Standard
S3E1 Students will investigate the physical attributes of rocks and soils	VA3AR.1 Discusses his or her artwork and the artwork of others
S3CS8 Students will understand important features of the process of scientific inquiry	VA3C.2 Develops life skills through the study and production of art
ELAGSE3SL4 Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace	
ELAGSE3SL1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly	



KEY VOCABULARY

Content Vocabulary	Arts Vocabulary
 Rock Igneous Sedimentary Metamorphic Attributes/characteristics of rocks: Shape Color Texture Hardness 	 Illustration Monologue Character traits Performance Word Art

ASSESSMENT

Formative	Summative
 Students could be observed while performing their riddles to assess their knowledge of the 3 different types of rocks. 	 Students will write an informational essay demonstrating their knowledge of the following: the 3 different types of rocks, their attributes, as well as how each type of rock is created. (See Downloads for the Informational Writing Rubric.)

MATERIALS

Chart paper; samples of igneous, sedimentary, and metamorphic rocks; Blank 3-Column Chart and Word Arts Examples (see Downloads); magnifiers; colored construction paper; markers; document camera

Activating Strategy

- Each table/group will be given 3 samples/examples of rocks
- Using a Blank 3-Column Chart, the groups will discuss and fill in their chart writing down their observations

*Students should note the attributes in size, texture, color, hardness, softness, etc. They should be able to identify all 3 rocks: igneous, sedimentary, and metamorphic. The students are also to explain how each rock is created in a different manner than the others. (See Downloads for the Blank 3-Column Chart.)

Each group shares their observations with the rest of the class. The teacher could compile the group observations into one large 3 column chart paper.



Main Activity

Part 1

- Each small group is asked to create a riddle for an assigned rock (igneous, sedimentary, metamorphic).
- Teacher demonstrates and shares an example of a rock riddle: I am smooth to the touch. I am round in size and gray in color. Where you may find me is in the river. What type of rock am I?

Part 2

- Each small group is asked to go to the front of the class and perform their riddle.
- The class will then try to guess which type of rock is being demonstrated by the words given in the riddles along with any movement that may assist in better understanding.

Part 3

- Students will use a piece of colored construction paper or cardstock to write their riddles.
- They will fold the sheet in half, write the riddle on the front cover, then write the answer under the flap.
- Take the student-created riddles and showcase them somewhere specific in the classroom.
- Create an interactive display where the students can go to read the riddles and then flip display open to view the riddle's answer.

Part 4

- Students will be given a piece of thick art paper.
- Students select one of the 3 types of rocks: igneous, sedimentary, metamorphic.
- Direct students to use Word Art in order to express the type of rock they chose.
- The students are to consider the type of chemical/physical change that takes place in order
 for nature to create the rock. As part of their Word Art, they should illustrate this change in a
 way that demonstrates the type of new rock that forms. This activity takes some imagination.
 The students may need to visually see the Word Art Examples (see Downloads) in order to
 fully understand the expectations of the project.

REFLECTION

Reflective Strategies

- Students will write an informational piece demonstrating their knowledge of the following: the 3 different types of rocks, their attributes, as well as how each type of rock is created.
- The informational piece could be taken for a Summative writing or science grade.
- Informational writing rubric (see Downloads)



DIFFERENTIATION

Below Grade-Level/EL Students:

 Provide these students with photographs/pictures of the 3 types of rocks so they are able to refer back to the 3 different types of rocks and are using the correct terminology as much as possible while working on the project. These photographs/pictures could be of the 3 types of rocks in their natural settings so these learners are able to make better connections.

Above Grade-Level:

• Allow your higher-level learners as well as gifted students an extension research activity. Put these students in pairs. The small groups will be given a mineral. They are to identify the attributes of their mineral, where their mineral is found, and what the mineral is used for or it's purpose. They are to write a short informational essay using the above information. Then they are to create a "Who Am I" riddle for their assigned mineral. They can then teach this new information to the below level learners as well as the EL students.

(Example of a "Who Am I" mineral riddle: I am yellow and soft. I smell really bad. I leave a yellow stain. I am a mineral. Who am I? Answer = sulfur)

APPENDIX

- Informational Writing Rubric
- 3-Column Blank Chart
- Word Art Examples

CREDITS

U.S. Department of Education

Arts in Education--Model Development and Dissemination Grants Program

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