

Rock Cycle Project

To demonstrate that you understand how the rock cycle works, you will create a story that will follow a rock through the various parts of the rock cycle. This project can be in the form of:

- A Comic Strip
- A Prezi with audio and video components
- An Animated Slideshow
- A News Cast
- A Creative Story
- A Poem with an illustration
- A Song

Your project should describe how a rock travels through the rock cycle, changing from one type to another. You must describe - important **processes**, **where** these events occur, the **features** of each rock. Your project must include the following words and show that you **scientifically** understand how each process works.

Vocabulary

Sedimentary, Igneous, Metamorphic, Sediment, Magma, Lava, Weathering, Erosion, Deposition, Compaction, Cementation, Intrusive, Extrusive, Crystals, Cooling, Melting,

Make certain that you:

- Describe what natural processes cause weathering and erosion
- Describe how the sediments traveled.
- Describe what happens with magma and lava when they cool
- Describe where the rock might be located when it is formed.
- Provide examples of the various rocks and show an understanding of how they formed.

Prior to starting your final project, you must complete a **planning sheet**. Your planning sheet should include a pre-write and an outline of the ideas that will be presented in your story. The outline should include any vocabulary or main ideas that will be presented in your story.

The starters below might be useful for you.

1. Igneous rocks

You begin as magma. Are you near the surface or below? How does this affect the cooling rate? Is it fast or slow? What size crystals are you made of? What, then, is your appearance? What type of igneous rock are you?

2. Sedimentary rocks

You are broken down and carried away. What has caused this? What name applies to this process? What agent is carrying you away? Where do you end up? What size fragments make up your rock? What other fragments surround you? How do you form into a sedimentary rock? What is your appearance? What type of sedimentary rock are you?

3. Metamorphic rocks

What process must occur to change you into a metamorphic rock? Where is this occurring? How did you come to be in these conditions?

Criteria	Not Satisfactory	Satisfactory	Above Standard
Understanding of the Rock Cycle	Shows little or no understanding of how rocks change. Key processes are missing or inaccurate.	Shows a clear understanding of how rocks change through the cycle. Most processes are described correctly.	Shows a deep understanding of the cycle. All processes are explained accurately, with clear detail and strong scientific connections.
Scientific Accuracy and use of vocabulary	Information is mostly incorrect or vague. Examples are missing or irrelevant. Uses few or none of the required words.	Information is mostly correct with some examples of rocks and processes. Errors are minor. Uses most of the required vocabulary correctly and in context.	Information is scientifically accurate throughout. Multiple examples of rocks and processes are given with strong explanations. Uses all required vocabulary correctly, integrated smoothly into the project.
Processes of Weathering, Erosion & Deposition	Does not describe natural elements or processes clearly. Missing explanations.	Describes how natural elements cause weathering and erosion. Explains how sediments travel.	Provides clear, detailed, and scientifically accurate explanations of weathering, erosion, and deposition with specific examples.
Magma, Lava, and Rock Formation	Does not explain magma/lava or formation clearly.	Explains what happens with magma and lava and where rocks may form.	Provides thorough explanation of magma and lava, with detail on intrusive/extrusive processes and formation locations.
Creativity & Communication	Project is incomplete, unclear, or lacks effort in creativity or presentation.	The project communicates ideas clearly in chosen format (comic, story, poem, etc.). Shows effort and creativity.	Project is highly creative, engaging, and well-structured. Communication of ideas is clear, original, and compelling.
Planning Sheet	Not completed or shows little evidence of planning.	Completed with outline and vocabulary included. Shows planning before the final project.	Completed thoroughly, with detailed outline, clear sequence of ideas, and full integration of vocabulary and processes.