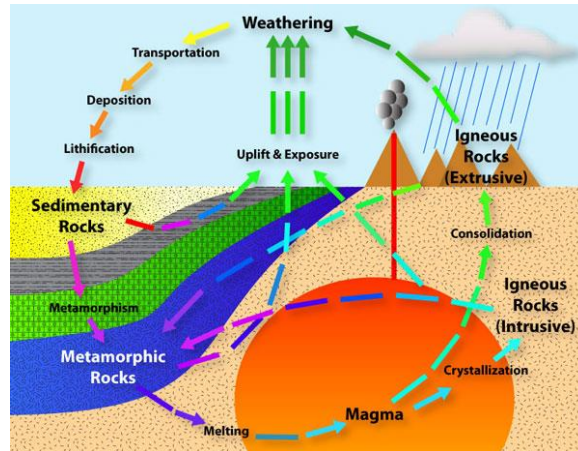# The Rock Cycle Project
(7.2.4, 7.2.5)

<u>Required Components and Requirements:</u>

☐ Detailed illustration of the rock cycle (NOT a diagram).

☐ The illustration needs to show the steps of rock formation and types of rocks formed.

☐ The illustration must also be labeled.

☐ Use the following words in your project:

- weathering
- erosion
- deposition
- compaction
- cementation
- heat
- pressure
- convergent plates

- melting
- cooling
- solidification (or crystallization)
- intrusive
- extrusive
- magma
- lava
- sediment

- sedimentary rock
- metamorphic rock
- igneous rock
- volcano
- mountain

☐ The project must be:
- neat
- colorful
- creative
- use proper grammar, spelling, punctuation, capitalization, etc.
- show your full knowledge of the rock cycle, the three main rock types (igneous, sedimentary, and metamorphic), and their relation to plate tectonics

PROJECT CHOICES:

Choice A:
Journey on the Rock Cycle – Game and Comic – The words you use will depend on the game's outcome.

Choice B1:
Journey on the Rock Cycle – Game and Comic – You MUST personify the rock and make it a character interacting with its environment. The word's you use will depend on the game's outcome.

Choice B2:
To illustrate and explain the rock cycle, the formation and properties of three main types of rock (igneous, sedimentary, and metamorphic) and how it is all related to plate tectonics.

Choice C:
Relate the following to the rock cycle.
- ☐ fossils
- ☐ convection currents , plate movement and the resulting geographical features
- ☐ principle of superposition
- ☐ principle of original horizontality
- ☐ principle of cross cutting relationships

IDEAS FOR PROJECTS FOR CHOICES:
- 3D poster
- 3D model
- shadowbox or diorama
- a children's book – could you tell about the "life cycle" of a rock" from the rock's perspective
- a comic book
- a board game
- a movie (dramatic or comedy) about a rock
- brochures for visiting different places around the world where people can see the rock cycle in action
- something with FOOD
- Talk to me if you have an even BETTER idea!

*Pick something that doesn't require a lot or ANY money at all. Spending the big bucks doesn't mean you understand. What kinds of materials do you already have that you can use?

*SEVERAL of the above ideas can be in **DIGITAL** format – use S'more, StoryMe, etc.

Other important stuff:
If you use pictures from the Internet, be sure to cite the EXACT website you found them at.
Citing a search engine, such as "Google" doesn't count.

Modified from:
http://www.hilldale.k12.ok.us/vimages/shared/vnews/stories/5081b42b271d4/Rock%20Cycle%20Project.pdf
http://www.mineralogy4kids.org/?q=rock-cycle

Rock Cycle Project Rubric

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- igneous rock
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- mountain

	7	**5**	**3**	**1**
Understanding Concepts	**MASTERY** – Shows how **concepts are related** to the major groups of rocks, how the form, and how they fit into the rock cycle and plate tectonics.	**GOOD** – Shows how **concepts are related** to the major groups of rocks, how the form, and how they fit into the rock cycle and plate tectonics.	**FAIR** - Shows how **concepts are related** to the major groups of rocks, how the form, and how they fit into the rock cycle and plate tectonics.	**LACKING**- Shows how **concepts are related** to the major groups of rocks, how the form, and how they fit into the rock cycle and plate tectonics.
	5	**3.5**	**2**	**1**
Including Concepts	At least 17 or more required words are used properly. All other requirements are also included properly.	At least 14 required words are used properly. All other requirements are also included properly.	At least 10 required words are used properly. At least three of the other requirements are included properly.	Less than 10 required words are used properly. And less than three of the other requirements are used properly.
Neatness	Project is very neat.	Project is moderately neat.	Project is slightly less than moderately neat.	Project is sloppy.
Language Conventions: ✓ word spelling ✓ capitalization ✓ grammar or word usage ✓ paragraphing ✓ full sentences (no run-on or sentence fragments) ✓ punctuation	**There are few or no errors.** None of the errors impact the flow of communication.	**Errors are occasional.** They do not impede the flow of communication	**Errors are frequent.** They may cause the reader to stop and reread part of the writing. Flow of communication is impaired.	**Errors are serious and numerous.** They cause the reader stop often to figure out writer's meaning.
Creativity	Project is excellent and very creative. Obvious, high quality effort is shown.	Project shows good effort and quality.	Project shows average effort and quality.	Project shows poor effort and obvious signs of rushing.
			TOTAL	