

Matter Cycles and Energy Flows

Essay Rubric

Typed, Google Doc essay is DUE by end of class WEDNESDAY, 12/13/2017

LATE ESSAYS CANNOT BE ACCEPTED.

Your essay must include 3 paragraphs:

1. What is the rock cycle?
2. Describe each matter change as a physical or chemical change.
 - a. Describe what forms of energy and sources of energy drive these changes.
3. Apply the Law of Conservation of Mass to the rock cycle.
 - a. Cite evidence from your rock cycle lab or rock cycle cartoon.

	1	2	3	4
What is the rock cycle?	<ul style="list-style-type: none"> - Does not describe all 3 rock types, OR - Descriptions are not accurate. 	<ul style="list-style-type: none"> - Describes all 3 rock types - Lacks appropriate academic language, OR - Descriptions are partially correct. 	<ul style="list-style-type: none"> - Describes all 3 rock types, using academic language. 	<ul style="list-style-type: none"> - All of 3, AND - Describes both in-between categories of rock.
Describe matter changes and energy changes.	<ul style="list-style-type: none"> - <i>Accurately</i> describes less than 2 of the categories in Level 3. 	<ul style="list-style-type: none"> - <i>Accurately</i> describes 2 of the categories in Level 3 	<ul style="list-style-type: none"> - Describes physical changes to rock, AND - Describes chemical changes to rock, AND - Accurately identifies the source of energy for these changes. 	<ul style="list-style-type: none"> - All of 3, AND - Gives evidence to support their answers (evidence can be from personal experiences)
Apply the Law of Conservation of Mass.	<ul style="list-style-type: none"> - Only 1 or less parts of a Level 3 	<ul style="list-style-type: none"> - 2 correct parts of a Level 3 	<ul style="list-style-type: none"> - Correctly states the Law of Cons. of Mass, AND - Clear reasoning for why the rock cycle is an example of this law, AND - Uses evidence from the lab to support 	<ul style="list-style-type: none"> - All of 3, AND - Proposes <i>another</i> way to prove the connection (through a lab, an observation, or other)
Writing Mechanics	<ul style="list-style-type: none"> - Multiple spelling or grammar mistakes, OR - Writing is very difficult to read and understand. 	<ul style="list-style-type: none"> - Some large spelling or grammar mistakes make the essay awkward or unclear. 	<ul style="list-style-type: none"> - Few, if any, spelling and grammar mistakes. 	<ul style="list-style-type: none"> - All of 3, AND - Essay is persuasive and highly academic.

Your score is out of 15 possible points.

A: 13-15 points

C: 6-9 points

B: 10-12 points

NP: Less than 6 points

Matter Cycles and Energy Flows Essay Outline

Paragraph 1: What is the rock cycle? *Use language from rock cycle cartoon and your "map".*

The rock cycle is a process that...

It is called a cycle because...

_____ rock is formed when...

When _____ rock is _____, it will form _____.

Paragraph:

Peer Feedback: Positive Things

Peer Feedback: Things to change

Reflection: When I type my final draft, something I will change is...

Something I want to review or get help on is...

Name: _____ S.N. _____

Paragraph 2: Describe the matter changes, and the sources of energy that cause these changes.

(Hint: Energy can either come from the Sun or from Earth.)

When ___ changes to ___, this is a (chemical or physical) change. I know this because... OR this means that...

In order for _____ to happen, the rock needs energy from the _____.

_____ energy causes... which affects the rock cycle because...

Paragraph:

Peer Feedback: Positive Things

Peer Feedback: Things to change

Reflection: When I type my final draft, something I will change is...

Something I want to review or get help on is...

Paragraph 3: Apply the Law of Conservation of Mass to the rock cycle.

The Law of Conservation of Mass states that...

This means...

For example...

In the crayon rock lab, ... This proves the Law of Conservation of Mass because...

Another way to prove this would be to...

Paragraph:

Peer Feedback: Positive Things

Peer Feedback: Things to change

Reflection: When I type my final draft, something I will change is...

Something I want to review or get help on is...