Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date Due:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**The Rock Cycle Journey**

For this assignment you will use creative storytelling techniques to show your understanding of the rock cycle. You should use your passport from the activity in class to determine what type of geologic changes occur in your story. Next, think of a way to explain this in story form. You might give your rock a name and describe his/her adventures. You might write it as a mystery. There are

many frameworks you might choose to use. Be creative and **be sure you include the scientific**

**information necessary to explain what happens to your rock**. You have the option of writing this in a storybook format or as a graphic novel/comic book format.

Both story formats will be graded on the following components:

• Proper and liberal use of terminology (magma vs lava; intrusive/extrusive etc.)

• Accurate and thorough description of the processes and conditions that cause you to change

• Good physical description of what you would look like at each stage of your rock cycle, and the proper name that would be given at each phase.

* Illustrations provide a clear vision of the paths and travels through the rock cycle

• Creativity, Organization and Neatness

**Suggestions for the rock cycle aspect of your story.**

This outline is an example of the changes your rock might undergo. Of course your journey might not start or follow this exact order; the outline is more of a reference as to the type of information that you should be sure to include! Some information will come from your passport, some will need to come from your prior knowledge about the rock cycle. Feel free to refer to your notes or other resources.

I. Igneous Rocks

A. You start as magma. Do you stay deep within to cool, or do you come to the surface.

B. Cooling Rate

i. Fast or Slow

ii. Large or small crystals, or no crystals at all

iii. Are there any gases trapped within?

C. What is your overall appearance. What would you be called at this phase of your life.

II. Sedimentary Rocks

A. You are being broken into smaller pieces and carried away

i. What are these processes called?

ii. What is causing the breakdown? (winds, glaciers, rivers, waves?)

iii. What is carrying you away?

iv. Where are you going

v. Where did you end up

B. You are surrounded by other rock fragments

i. Are all of the same size, shape and composition?

ii. What happens next, are you reworked or buried immediately?

C. You become a sedimentary rock

i. What changed you into a sedimentary rock

ii. Describe your overall appearance and give yourself a name

iii. Explain how you have changed since your days as an ignous rock

III. Metamorphic Rocks

A. What occurs for you to change into metamorphic rock?

i. What factors are involved?

ii. Where will this change occur?

iii. How do you get there?

B. What do you look like now?

i. Foliated or non-foliated

ii. Crystalline or non-crystalline?

iii. What would your friends call you?

iv. How are you different from sedimentary and igneous rocks

**Grading Rubric:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Category** | **Description** | **Points Earned** | **Points Possible** |
| Rock Cycle Information | -Rock Cycles processes and terms used accurately  -Detailed description of pathways through rock groups  - Good physical description of what you would look like at each stage of your journey  -Journey clearly aligns with passport |  | 40 pts. |
| Writing | -Writing was well thought out and made sense  -Used correct grammar rules including:  \*spelling  \*punctuation |  | 25 pts |
| Illustrations | Color, Details, Effort and labels are included as needed |  | 15 pts. |
| Creativity | -Story was not just a copied directly from passport  -Characters, storylines were added  -Fun and interesting to read |  | 10 pts. |
| Neatness/  Organization | -Pages in book have neat handwriting  -There is organization to the page and consistency from page to page |  | 10 pts. |

Total Project Score:\_\_\_\_\_\_\_\_\_\_\_\_\_\_/\_\_\_\_100pts. \_\_\_