Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period:\_\_\_\_\_\_\_\_\_\_

Weathering Investigation

<http://www.mrsciguy.com>

click Earth Science Box – then to Weathering in menu on left

Go to this website and use the information provided to answer the following questions.

1. Define:

Physical Weathering:

Chemical Weathering:

Frost Action:

Plant / Root Action:

2. What types of weathering can cause a car to age? Be as specific as possible.

3. Why are marble-faced buildings made with marble that has been polished?

4. Describe what you would expect a rock to look like after being recently weathered by frost action. (Use descriptive adjectives such as smooth, rough, jagged, rounded, etc.)

5. Explain the relationship between surface area and weathering using a sugar cube vs. granular sugar as your specific example.

6. Mineral composition plays a role in the rate of weathering.

Explain the relationship between composition and weathering

Use specific rock examples to explain the relationship (ie; granite vs. shale)

7. Draw the simple soil horizons – label and describe each horizon.

8. Describe the difference between residual and transported soils.

9. Explain the role of kinetic and potential energy as it relates to weathering and deposition.

10. If a cubic shaped rock was left in an energetic stream, how would you expect it to look after a few years?

11. What would you do to (or use on) a building to prevent it from weathering too quickly?

12. How does velocity relate to sorting?

13. Describe how you could tell the difference between wind weathered particles and ice weathered particles. Infer WHY these differences are as such.

14. Using the drawing and explanation of the downhill creep of soil, determine what would happen to the structures built on a slope such as:

Fence:

House:

Is there a *permanent* way to prevent this movement?