MiSP Weathering and Erosion Worksheet #3 – Assessment L2

Name _____   Date_____

L1-3

1-2 Define the words listed below:

1. Weathering – _____

_____

_____

2. Erosion - _____

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3a. Is it possible to have weathering without erosion? Explain you why you answered yes or no.

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3b. Is it possible to have erosion without weathering? Explain you why you answered yes or no.

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4. Think about the MASS WASTING - GLACIAL CREEPING experiment and worksheet. What happens to the speed of a glacier or other slow moving examples of mass wasting when it moves down a slope – do they slow down, speed up, or does the speed remain constant? Why?

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5-9 Base your answers on the data table and graph below. Samples of three different rock materials, A, B, and C were placed in three containers of water and shaken vigorously for 20 minutes. Every five minutes, the rocks were strained through a screen. The mass of the rock materials trapped by the screen were dried and their mass was measured. This is the data table:

ROCK MATERIALS' MASSES AFTER SHAKING WITH WATER

SHAKING TIME (minutes)	ROCK MATERIAL A (grams)	ROCK MATERIAL B (grams)	ROCK MATERIAL C (grams)
0	25.0	25.0	25.0
5	24.5	20.0	17.5
10	24.0	18.5	12.5
15	23.5	17.0	7.5
20	23.5	12.5	5.0

The data for Rock Material A and Rock Material B is graphed on the next page:

ROCK MATERIALS' MASSES AFTER SHAKING WITH WATER
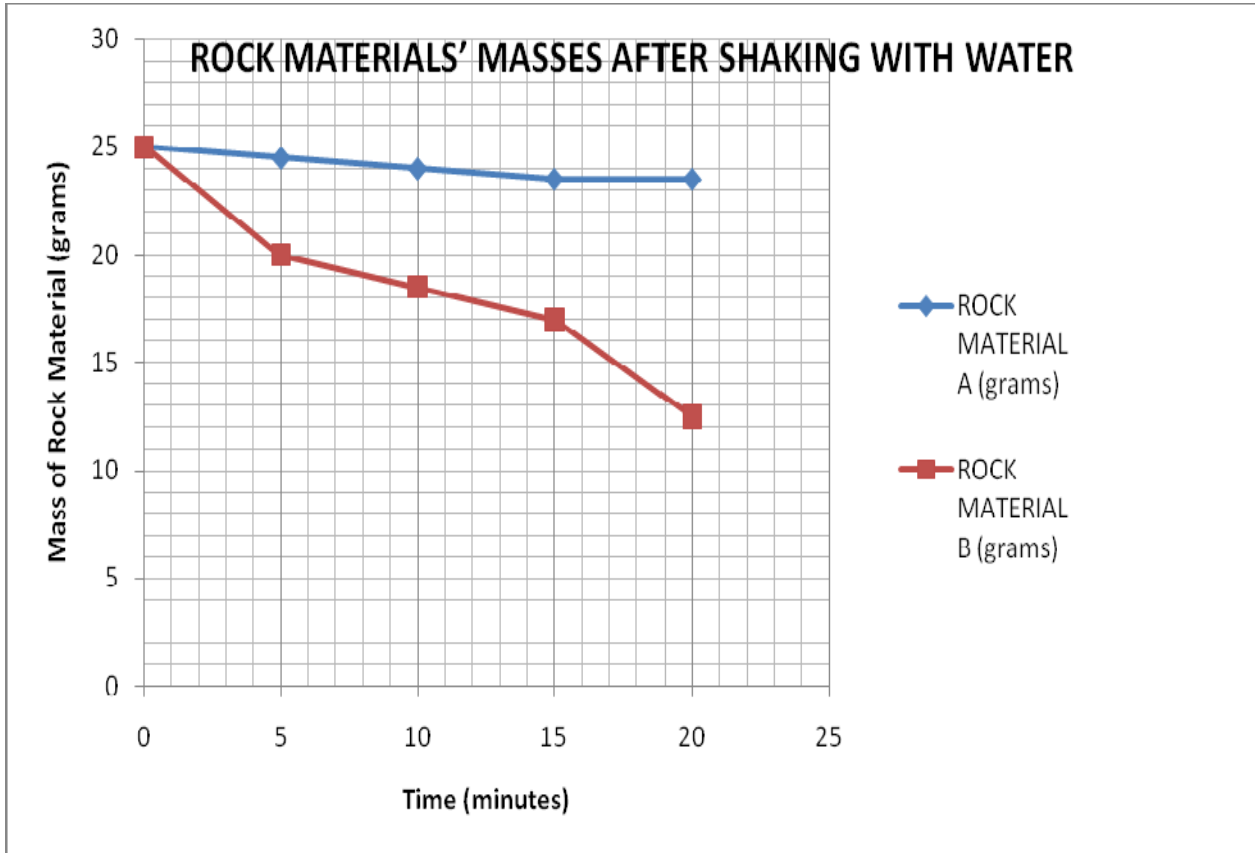
5. Graph the data for Rock Material C on the graph above. Use points and surround each point with a small circle. Connect the points:

⊙

6. Refer to the graph. Which sample (A, B, or C) lost the **most** mass in the **first** five minutes? Which sample lost the **most** mass in the **last** five minutes?

-most in the first five minutes: _____

-most in the last five minutes: _____

3

7. What are the most likely reasons for the differences in the rate (speed) that mass was lost in the three rock samples?

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L2-3

8. Calculate the unit rate of change (slope) for Rock Material A from 0 to 15 minutes. Show work.

Unit rate of change (slope) for Rock Material A = _____

9. How will the unit rate of change for Rock Material B from 5 to 10 minutes compare to the unit rate of change for Rock Material A from 0 to 15 minutes? Discuss numerical value and sign (positive/+ or negative/-).

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