Lithosphere Test 2 Review: Natural Hazards

*Answer all questions completely on your own sheet of paper. Use drawings and diagrams where appropriate and remember that some of these questions may require thinking back to the last lithosphere unit for completion. Attach the Cambridge practice question to your handwritten or typed responses to this review.*

This is due Friday, November 21. **The Cambridge question is due Thursday, November 20.**

**Volcanoes**

1. Describe using specifics what causes volcanoes. At what plate boundaries can volcanoes
 form? Are there any boundaries that generally do not form volcanic activity? Why?
2. Differentiate between felsic and mafic lava by comparing and contrasting chemical
 composition, flow rate, and eruption type (Hint: Low viscosity = flows quickly, “thinner”, high
 viscosity = flows more slowly, “thicker”).
3. Using your notes, describe at least three different types of volcano. Be sure to include
 general information about that volcano, a description of volcano shape, and a brief
 description of eruption type (it might be helpful to draw pictures or organize this info into a
 table).
4. Describe the general sequence of a volcanic eruption.
5. How might scientists mitigate damage and death caused by volcanoes?

**Earthquakes**

6. What causes earthquakes and at what types of plate boundaries might earthquakes be
 found? Why is this?
7. Differentiate between focus and epicenter.
8. Compare AND contrast P waves and S waves. How are these waves different from surface L
 waves? (A table might be helpful here as well!)
9. What do different types of waves tell us about the internal composition of the Earth and
 why?
10. Compare and contrast the Richter Scale, Moment Magnitude Scale, and Modified Mercali
 scale. Which scale do scientists “like” the best?
11. Compare and contrast the three main different types of faults.
12. What are the differences between shallow, medium, and deep focus earthquakes? At what
 depths do each occur?
13. What is a tsunami and how is it caused?
14. Other than tsunamis, describe at least two other effects caused by earthquakes.
15. How do volcanoes and earthquakes interact and why?