Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Period\_\_\_\_Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Predicting Earthquakes and Volcanoes**

Holt pages 205-207 and pages 234-235

**Earthquake Hazard and Forecasting**

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_measures how prone an area is to experiencing earthquakes in the future. This level is determined by \_\_\_\_\_\_\_\_\_and \_\_\_\_\_\_\_\_\_\_\_\_\_seismic activity.

2. In Figure 1 below and on page 205--Oregon has a \_\_\_\_\_\_\_\_\_\_\_earthquake-hazard level.

 (high or low)

3. It is difficult to predict when and where earth-



quakes will \_\_\_\_\_\_\_\_\_\_ and how \_\_\_\_\_\_\_\_\_ they will be.

Figure 1

4. The strength of earthquakes is related to how

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Figure 2



 5. Generally, with each step down in earthquake magnitude, t the number of earthquakes per year is about \_\_\_\_times

 greater.

 6. Scientists use these statistics to make

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_about the \_\_\_\_\_\_\_\_\_\_\_\_\_\_,

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 of future earthquakes.

7. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_states that sections of active faults that have had relatively few earthquakes are likely to be the sites of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ earthquakes in the future.



8. Scientists use seismographs to

locate epicenters of earthquakes to

identify areas of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

earthquakes.

**Predicting Volcanic Eruptions** (pg 234-235)

9. Scientists classify volcanoes based on their \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_histories and how likely they will erupt again to help them \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_volcanic eruptions.

10. Define the following:

Extinct volcanoes: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Dormant volcanoes: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Active volcanoes: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

11. Scientists use different instruments to predict volcano eruptions.

 a. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_help determine when magma is moving beneath a volcano. When magma moves upward, it causes \_\_\_\_\_\_\_\_\_\_\_\_\_to shift and **rumblings inside the volcano increase.**

 b. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_helps detect small changes in the angle of the slope of the volcano. When magma pushes against the inside of the volcano, **it bulges and the angle becomes steeper.**

c. The outflow of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_help with the predictions too. A spectrometer measures gases coming from inside a volcano. When the gas emissions **increase—go up,** it is an indicator that an eruption is nearing.

 d. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_images allow scientists to measure changes in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_over time. If the temperature is getting hotter, it is an indication that magma is pushing closer to the surface.