

Name: Answer key Date: \_\_\_\_\_ Period: \_\_\_\_\_

### Properties of Common Minerals (revised 2010 version)

Based on your knowledge of earth science and page 16 of your ESRT, please answer the following questions.

1. What are the two different types of luster?

metallic / non-metallic

2. What is the range of hardness found on the chart? How does this compare with Moh's hardness scale?

1 - 7.5 stops at 7.5 when Moh's goes up to 10

3. What type of breakage is more common: cleavage or fracture?

Cleavage

4. What is the most common element found in the composition of minerals?

Oxygen

5. For the mineral **quartz**, identify the following:

Luster: Non Hardness: 7 Breakage: F Color: <sup>colorless</sup>~~variable~~ Composition: SiO<sub>2</sub>

6. For the mineral **galena**, identify the following:

Luster: met Hardness: 2.5 Breakage: C Color: <sup>metallic</sup>silver Composition: PbS

7. For the mineral **olivine**, identify the following:

Luster: non Hardness: 6.5 Breakage: F Color: green - grey brown Composition: Fe(Mg)<sub>2</sub>SiO<sub>4</sub>

8. For the mineral **fluorite**, identify the following:

Luster: non Hardness: 4 Breakage: C Color: <sup>colorless</sup>~~variable~~ Composition: CaF<sub>2</sub>

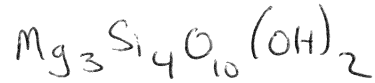
9. Which mineral can scratch glass, has a non-metallic luster, has fracture and is a dark red color?

key

10. Which mineral can be easily scratched by a finger nail, has cleavage, a metallic luster and has a black streak?

Graphite

11. What is the chemical composition of talc?



12. What is the dominant form of breakage for sulfur?

Fracture

13. What is the dominant type of breakage for muscovite mica?

cleavage

14. Which mineral tastes salty?

halite

15. What is selenite gypsum used for?

Plaster of Paris Drywall

16. Which mineral has a gray streak, a highly metallic luster and shows cleavage?

Galena

17. Which mineral is found in your pencil?

graphite

18. Which mineral might be found in your car battery?

Galena

19. Which mineral helps keeps schools open during snowy and icy weather by melting ice?

Halite

20. Does the ESRT chart give characteristics for every mineral found on earth?

NO