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?

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

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

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

5. For the mineral quartz, identify the following:

   Luster: _____ Hardness: _____ Breakage: _____ Color: _____ Composition: _____

6. For the mineral galena, identify the following:

   Luster: _____ Hardness: _____ Breakage: _____ Color: _____ Composition: _____

7. For the mineral olivine, identify the following:

   Luster: _____ Hardness: _____ Breakage: _____ Color: _____ Composition: _____

8. For the mineral fluorite, identify the following:

   Luster: _____ Hardness: _____ Breakage: _____ Color: _____ Composition: _____

9. Which mineral can scratch glass, has a non-metallic luster, has fracture and is a dark red color?
10. Which mineral can be easily scratched by a finger nail, has cleavage, a metallic luster and has a black streak?

11. What is the chemical composition of talc?

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

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

14. Which mineral tastes salty?

15. What is selenite gypsum used for?

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

17. Which mineral is found in your pencil?

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

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

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