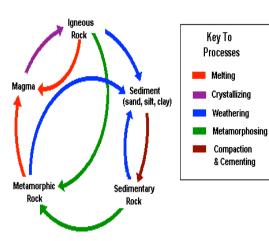
Name:			Date: _		_ Pd:
<u>Unit 3 Fo</u>	rmative As	sessmen	t – Rocks, I	Minerals, &	
Chapter 2: Minerals					
1. What do all types of re	ock have in comm	on?			
2. Mineral properties de	pend on composi	tion and	·		
a. structure	b. luster	c. cleavage	d. streak		
3. What are the <i>five (5)</i> c	haracteristics of a	mineral?			
4. What is the most com	mon mineral in Ea	rth's crust?			
a. Silicate	b. halite	c. oxide	d. sulfate		
5. Minerals are classified					
a. Color	b. composition	c. size	d. density		
Chapter 3: Rocks & Rock Cy	<u>icle</u>				
6. Where is the energy sou	rce found that dr	ives the proces	ses that form ign	eous and metamor	phic rocks?
a. the sun	b. the wind	c. earth	n's interior	d. moving water	

- 7. Where is the energy source found that drives the processes that form sedimentary rocks? a. the sun b. the wind c. earth's interior d. moving water
- 8. *Describe* the *three (3)* types of rock (include how they form and their distinguishing unique characteristics):
 - A)
 - B)
 - C)



9. In the following diagram, <u>LABEL</u> each arrow describing the process from one point in the rock cycle to

- 10. The three groups of rocks are classified by _____
 - a. color b. grain size c. chemical composition d. how they formed
- 11. As the rate of cooling of igneous rocks increases, the size of the crystals that form ______.
 - a. decreases b. increases c. is not affected d. cannot be determined
- 12. What is the difference between *contact* and *regional* metamorphism?
- 13. Contrast weathering, erosion, and deposition.
- 14. What are foliated rocks and how do they form?
- 15. What is the correct order of the processes involved in sedimentary rock formation? *Use the words:* compaction, cementation, deposition, weathering, and erosion

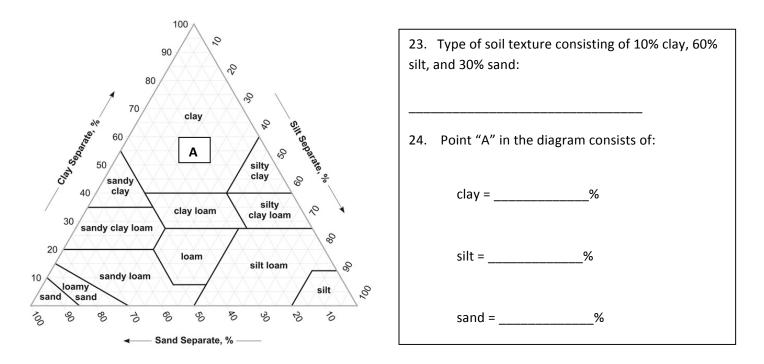
Chapter 5: Soil

- 16. Which of these factors affects the rate of weathering?
 - a. climate c. chemical composition of the exposed rock
 - b. surface are of the exposed rock d. all of the above
- 17. Compare and contrast mechanical (physical) and chemical weathering.

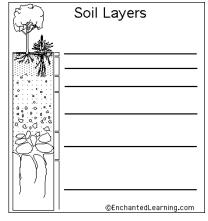
18. What are three (3) types of mechanical weathering?

- 19. What is the most important agent of chemical weathering? a. carbonic acid b. sulfuric acid c. water d. minerals 20. Which of the following is NOT a major component of soil? a. mineral matter b. air c. humus d. earthworms 21. The factor that has the greatest effect on soil formation is _____ a. climate b. parent material d. slope of orientation c. time 22. In which area will soil formation be the greatest? a. A steep slope in a warm, wet climate c. A flat area in a warm, wet climate
 - b. A flat area in a cold, wet climate d. A north-facing area on a steep slope

** Use the soil texture diagram below to answer the following questions:



25. Label the soil horizons shown in the diagram below using some of the following words: partially weathered parent material, clay, topsoil, subsoil, loose and partly decayed organic matter, unweathered parent material, mineral matter mixed with organic material, bedrock



- 26. Compared to the past, rates of soil erosion are _ a. about the same d. more unpredictable b. faster c. slower
- 27. Which of the following human activities has caused an increase in soil erosion?
 - a. clear-cut logging c. plowing land for farming
 - b. clearing land for construction d. all of the above
- 28. What is the force behind mass movements?
 - a. the sun's energy b. flowing water c. gravity d. moving ice
- 29. What factor commonly triggers mass movements?
 - a. saturation of surface materials with water
 - b. earthquakes

- c. removal of vegetation
- d. all of the above

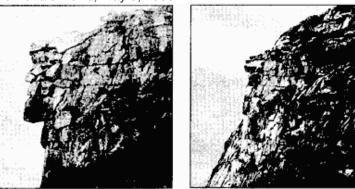
30. When a block of material moves downslope along a curved surface, this mass movement is called _____

- a. rockfall b. rockslide c. a slump d. creep
- 31. What is the slowest type of mass movement?
 - a. slump b. creep c. mudflow d. earthquake
- 32. What kind of soil is best for water holding capacity?

** Old Man's Loss Felt in New Hampshire

FRANCONIA, N.H. — Crowds of visitors were drawn to Franconia Notch on Sunday to mourn the loss of New Hampshire's well-known symbol — the Old Man of the Mountain granite profile. The 700-ton natural formation was just a pile of rocks after breaking loose from its 1,200-foot-high mountainside perch. It was unclear when the outcropping fell because clouds had obscured the area Thursday and Friday; a state park trail crew discovered the collapse Saturday morning. The famous mountain's history dates millions of years. Over time, nature carved out a 40-foot-tall profile resembling an old man's face, and it eventually became New Hampshire's most recognizable symbol.

The Buffalo News, May 5, 2003



33. Which agent of erosion is most likely responsible for the collapse of the granite profile?

- a. running water
- b. glacial ice
- c. wave action
- d. mass movement

Granite profile of the Old Man of the Mountain is shown before the collapse, and after

** The graph below shows how environmental temperatures affect the amount of organic material (humus) added to and removed from soils in humid regions:

