

**Introductory Geology Inventory** Place letter answers in space provided at left of question number.

- \_\_\_1. Creep is an imperceptibly slow, movement of soil and/or regolith downhill. A. True B. False
- \_\_\_2. An oxbow lake forms from the cut-off of a bend on the inside of a river. A. True B. False
- \_\_\_3. A radiating drainage pattern is one that has the form like "veins on a leaf". A. True B. False
- \_\_\_4. Slump is a mass wasting process that involves rotational sliding of regolith. A. True B. False
- \_\_\_5. When viewing topographic maps, contour lines will always V downstream. A. True B. False
- \_\_\_6. Desert climates are classified as those with rainfall less than 25 inches / year. A. True B. False
  
- \_\_\_7. If you were to examine the longitudinal profile of a typical river, you would probably find that the gradient is:  
A. steepest near the mouth E. None of the above  
B. steepest near the head  
C. about the same at both the head and the mouth  
D. increases, decreases, then increases in a downstream direction
  
- \_\_\_8. At a bend in a river, the main erosion is:  
A. on the outside of the bend C. both outside and inside the bend E. along straight segments  
B. on the inside of the bend D. at an oxbow lake
  
- \_\_\_9. The suspended load of a stream:  
A. is deposited before the bed load  
B. consists primarily of highly soluble substances  
C. moves along the bottom of the channel by rolling, sliding, and saltation  
D. usually consists of fine sand-, silt-, and clay-sized particles  
E. none of the above
  
- \_\_\_10. Permeable rock strata or sediment that transmit groundwater freely are called:  
A. perched water tables D. aquifers  
B. aquicludes E. none of these  
C. springs
  
- \_\_\_11. The earth is thought to have originated:  
a) 1,360 years ago d) 300 million years ago  
b) 4.6 billion years ago e) none of the above  
c) 5.5 million years ago
  
- \_\_\_12. How many seconds are contained within 10° of angular measurement?  
a) 600 d) 36,000  
b) 3600 e) 6000  
c) 3250
  
- \_\_\_13. Which of the following statements can be most closely associated with volcanic igneous rocks?  
a) intrusive, magma, slow cooling  
b) extrusive, magma, slow cooling  
c) extrusive, lava, fast cooling  
d) intrusive, lava, fast cooling  
e) plutonic, rapid deposition, slow liquifaction
  
- \_\_\_14. The scale of 1 in = 4000 Ft map be converted which of the following:  
A. 1:24000 B. 1:48000 C. 1: 100000 D. 1:500000 E. 1:200
  
- \_\_\_15. If a map has a scale of 1:24000 then 5 inches on the map equals:  
A. 100 ft B. 100 Miles C. 24000 inches D. 10,000 Ft E. None of the Above

- \_\_\_16. What is your approximate elevation:  
A. 900 Ft      B. 1500 Ft      C. 2000 Ft      D. 5000 Ft      E. None of the Above
- \_\_\_17. What is the phreatic zone?  
A. zone where are pores are filled with water.  
B. zone where all fractures are filled with water.  
C. zone where spaces within sediments contain both water and air.  
D. zone where atmospheric pressure is greater than hydrostatic  
E. both A and B
- \_\_\_18. What occurs where the water table of an aquifer intersects the slope of a hill?  
A. The perched water table joins with the regional water table.      C. springs  
B. two perched water tables are formed      D. ground sapping and mass wasting  
E. cave openings
- \_\_\_19. What are the largest deserts in both the Northern and Southern hemispheres?  
A. rainshadow desert      C. fog deserts      E. polar deserts  
B. subtropical desert      D. isolation deserts
- \_\_\_20. What is the major agent of erosion (i.e. transports the bulk of sediment) in the desert?  
A. wind      B. standing water      C. mass wasting      D. running water      E. all are equal
- \_\_\_21. What type of desert landform is defined as a round, flat-topped erosional remnant?  
A. pediment      B. bolson      C. bajada      D. mesa      E. none of the above
- \_\_\_22. What type of features are formed as streams emerge from desert mountains rapidly depositing their stream load?  
A. pediment      B. bolson      C. bajada      D. alluvial fan      E. pediment slope
- \_\_\_24. You are floating in a raft on a river. At point A you are at 5373 feet elevation, at point B you are at 2457 feet elevation. The two points are separated by 3.6 miles. What is the gradient of the river between the two points in ft/ft?      A. 810      B. 1023      C. 0.15      D. 0.789      E. None of the above
- \_\_\_25. What is the term applied to the mass of sediment deposited at the mouth of a river where the river enters a standing body of water?      A. alluvial fan      B. barrier island      C. delta      D. submarine fan      E. tombolo
- \_\_\_26. Damming of a river by beavers (those dam beavers!) will cause the river to:  
A. erode and form terraces  
B. deposit and back fill  
C. neither erode nor deposit  
D. create marshy areas with slow moving water      E. B and D above
- \_\_\_27. What can be interpreted by the presence of angular particles in a sedimentary deposit?  
A. the source rock contained angular fragments  
B. the weathering process produced angular fragments  
C. the fragments were not quickly buried in a sedimentary basin  
D. the fragments were transported a long distance  
E. the fragments were transported only a short distance away from the point of origin
- \_\_\_28. This fundamental principle of geology is commonly summarized as the "present is the key to the past"  
A. uniformitarianism      D. superposition  
B. catastrophism      E. relative dating  
C. radiometric dating