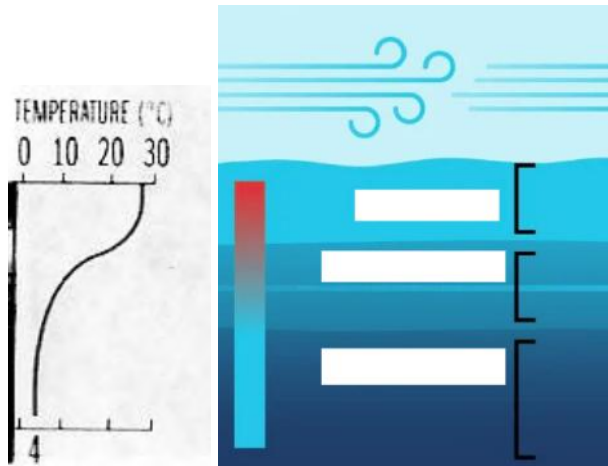


1. List 5 possible natural processes leading to lake formation:
2. What type of lake is likely to hold highly acidic water? Why?
3. Define the classes of lakes below (include characteristic qualities of each which may include nutrient levels, oxygen levels, and/or algae production):
 - a. Oligotrophic:
 - b. Mesotrophic:
 - c. Eutrophic:
4. Name an anthropogenic influence which may cause the trophic index of a lake to change from oligotrophic to eutrophic:
5. Identify and label the epilimnion, hypolimnion, and metalimnion:



6. Assuming it is a temperate lake, based on the stratification depicted above, what season is it most likely to be and why?
7. Define thermocline, and add it to the diagram above.
8. Identify the following features:





9. What is a terrain full of sinkholes and disappearing streams called?
- a) Dendritic drainage
 - b) Inverted valleys
 - c) Karst topography
 - d) patterned ground
 - e) potholes
10. What term refers to the total amount of material carried by the water of a stream or river?
- a) Capacity
 - b) Competence
 - c) Discharge
 - d) Load
 - e) Saltation
11. Where does the maximum water velocity occur in a straight river channel?
- a) on the bottom near the middle
 - b) on the bottom near the shore
 - c) on the surface near the middle
 - d) on the surface near the shore
 - e) velocity is uniform
12. Where does the maximum velocity occur in a meander bend?
- a) On the inside of the bend
 - b) On the outside of the bend
 - c) In the middle of the channel
 - d) Depends on how much water is flowing
13. What type of sediment load is deposited first when a river enters the ocean?
- a) Bed load
 - b) Dissolved load
 - c) Suspended load
 - d) Imposed load
 - e) Snow load

14. Which of the following organisms does not live in a freshwater ecosystem?
- a) Mayfly
 - b) Crayfish
 - c) Beaver
 - d) Sunfish mola
 - e) Turtle
15. Oxbow lakes are formed from:
- a) meanders
 - b) floodplains
 - c) ur mom
 - d) meander scars
16. Which factor influences the quality of drinking water the most?
- a) Temperature
 - b) Dissolved oxygen
 - c) pH
 - d) TDS
17. A pH of ___ or lower generally indicates low water quality.
- a) 8
 - b) 7.5
 - c) 7
 - d) 6.5
 - e) 6
18. Freshwater generally has a salinity of less than ___ ppm
- a) 600
 - b) 550
 - c) 500
 - d) 450
 - e) 400
19. What kind of load makes a stream look muddy?
- a) Dissolved Load
 - b) Bed Load
 - c) Suspended Load
20. What depositional feature is found at the coast?
- a) alluvial fan
 - b) delta
 - c) placer deposit
21. The largest drainage basin in the United States is the:
- a) Mississippi
 - b) Colorado
 - c) Amazon

22. The longest river in the United States by main stem is the:
- a) Mississippi
 - b) Colorado
 - c) Missouri
 - d) The Chocolate River
23. The river in the United States with the highest average discharge is the:
- a) Ohio River
 - b) Columbia River
 - c) Saint Lawrence River
 - d) Mississippi River
24. What features are common in youthful rivers?
- a) Rapids
 - b) Sandbars
 - c) Meanders
 - d) Floodplains
25. Old rivers are characterized by:
- a) Straight Channels
 - b) Sediment Deposition
 - c) High erosive energy
 - d) Tectonic Activity
26. For a rock layer to function as an aquifer, it must
- a) have a small zone of aeration
 - b) have pores that are connected
 - c) have a large soil content
 - d) be part of an artesian formation
27. The zone of aeration and the zone of saturation meet at a boundary called the:
- a) well
 - b) water table
 - c) recharge zone
 - d) artesian spring
28. An aquifer must be both:
- a) impermeable and porous
 - b) impermeable and nonporous
 - c) permeable and porous
 - d) permeable and nonporous
29. Water tables generally:
- a) follow the general shape of the surface topography
 - b) are pretty cool people to be around
 - c) are not impacted at all by seasons
 - d) are not impacted by precipitation

30. Alluvial fans and deltas have similar:

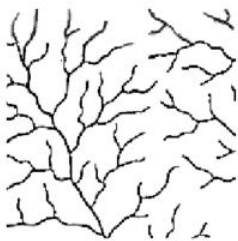
- a) locations of deposition
- b) sizes of sediment grains
- c) shapes of deposition
- d) angles of slope

31. Identify each of the following as an erosional feature (E) or a depositional feature (D)

- a) Cirque
- b) Alluvial Fan
- c) Meander
- d) Delta
- e) Stream Channel
- f) Stalactite
- g) Point Bar
- h) Oxbow Lake
- i) Fjord
- j) Solution Cave
- k) Moraine
- l) Cutoff

Identify the following drainage patterns:

32.



33.



34.



35.



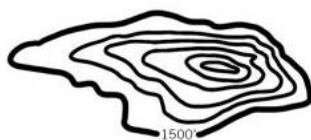
36. Imaginary lines connecting points having the same elevation on the surface of the land above or below a reference surface are called:

37. There are three types of the lines referenced above. They are:

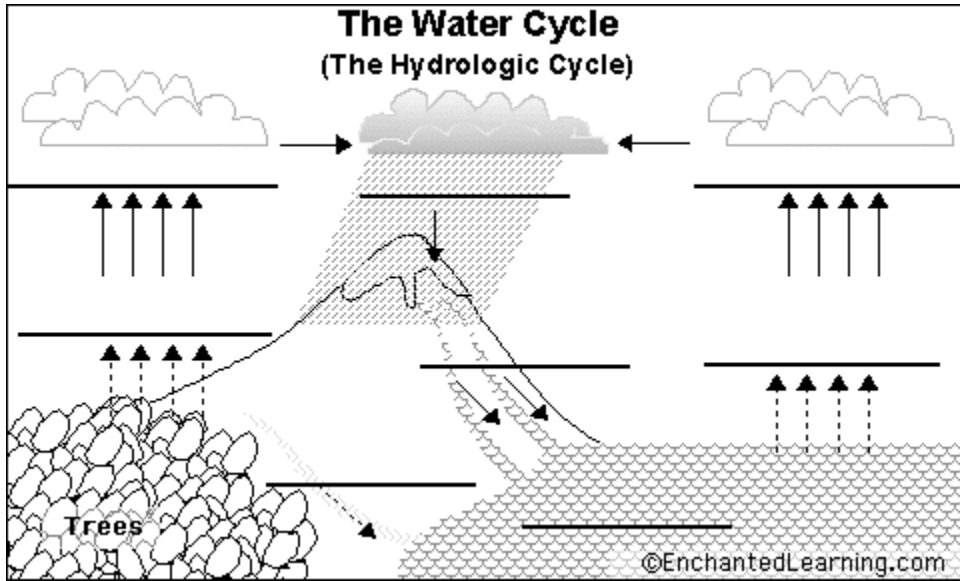
38. The thickest of these three types of lines is called:

39. The reference surface referenced in question 36 is usually:

40: which of these two topographic maps shows a steeper slope? (1 or 2)

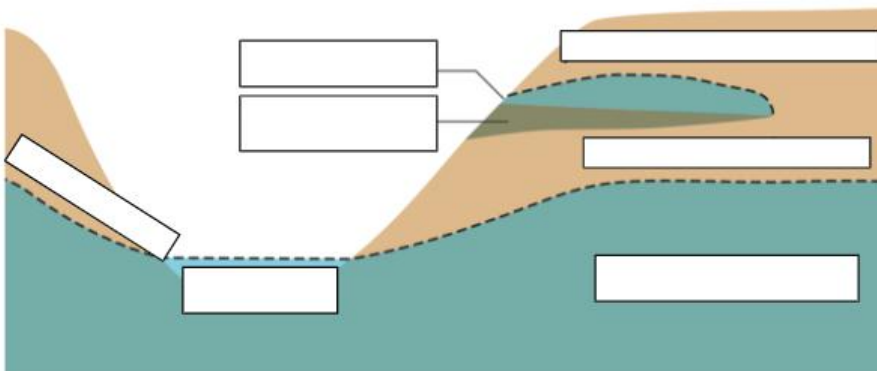


41. Label this diagram of the hydrologic cycle:

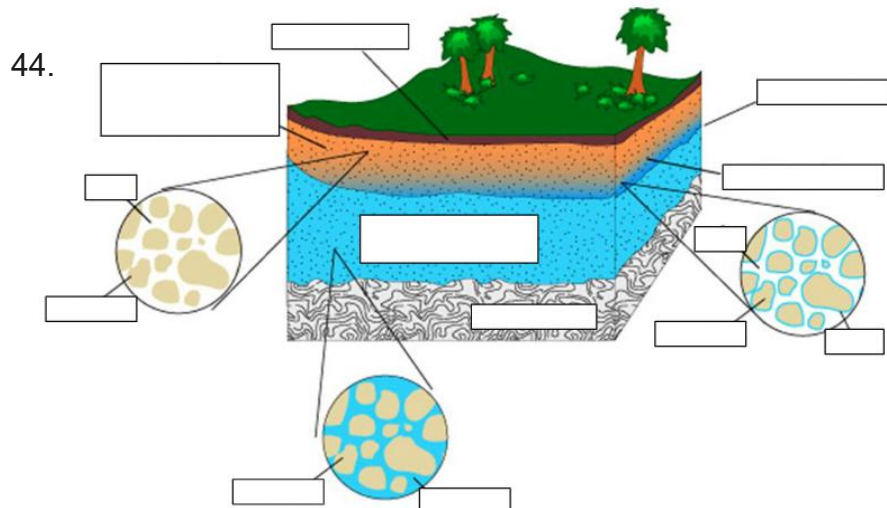


42. What is acid rain? Explain how 2 processes in the water cycle are associated with acid rain.

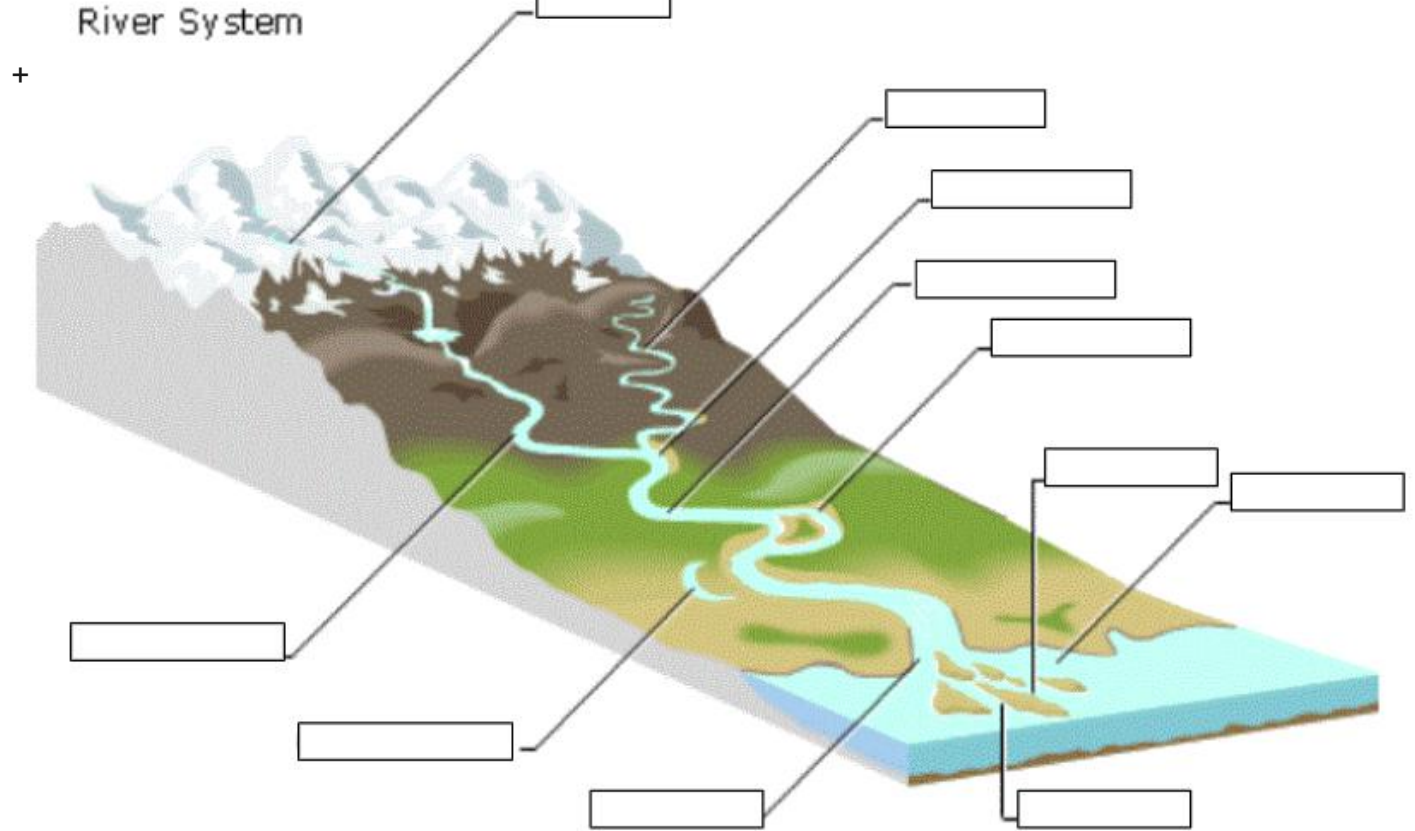
43. Label the following diagrams of groundwater zones and the water table:



The Water Table



45.



46.

Meandering Stream Diagram

