

Name: _____ Date: _____ Period: _____

Groundwater Webquest

In this webquest you will discover what groundwater is and why we need to know about it. You will also learn about wells and how water enters and leaves them.

Go to the following website: <http://tecalive.mtu.edu/meec/module06/title.htm>

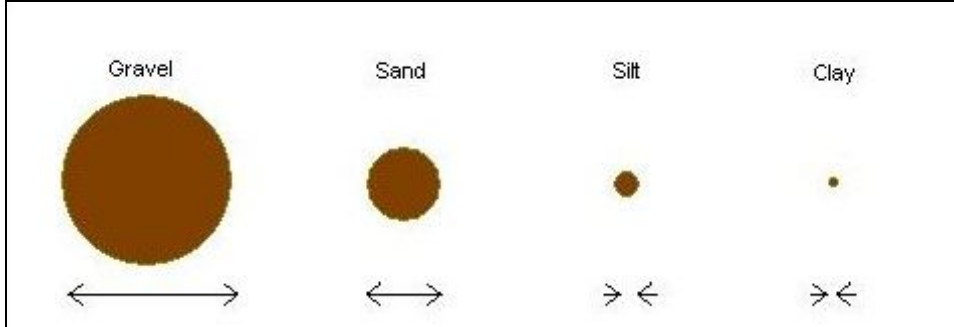
Please read each page and participate in any 'activities' that it directs you to do. Use the pages and activities to answer the following questions. NOTE: This page is from Michigan, so some statements do not apply to you, but the groundwater systems work the same way in Texas.

Importance of Groundwater

1. What percent of people in the U.S. use groundwater? _____
2. What percent of Americans use groundwater for drinking? _____
3. What is runoff? _____
4. Groundwater is part of the _____ Cycle. (More commonly known as the _____ Cycle.)

Porosity

5. List the size for each particle in the boxes below the diagrams



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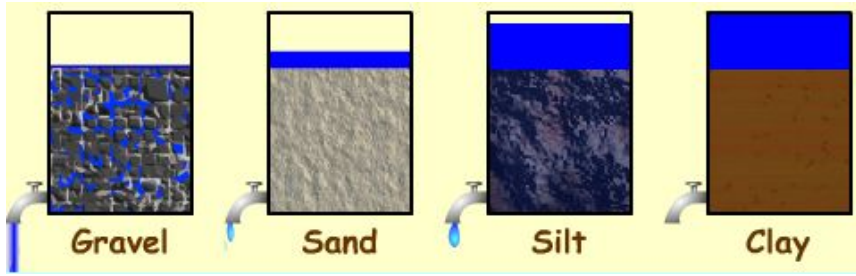
6. Generally, soil is a mixture of particles such as _____ or _____.

7. Define porosity in your own words.

8. Soils with a greater range of particle sizes have _____ porosity, because

9. Some _____ can also hold water. List two reasons they can hold water.

10. Using the boxes below the diagrams, label the time it takes water to move through each type of soil below.



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Water Table

11. The saturated zone is where _____

12. The top of the saturated zone is called the _____.

13. What combination of soil particle size and rainfall increases the level of the water table the most? _____

Aquifers

14. In the table below, describe two different types of aquifer.

Confined Aquifer	Unconfined Aquifer

15. Define impermeable _____

16. Which type of aquifer would be best for drilling a drinking water well -- why?

17. Precipitation that infiltrates the soil and rocks is known as _____?

18. When ground water moves to the surface to become part of rivers, streams and lakes it is called _____.

19. When the water table is high, groundwater flows _____ streams and lakes. These streams are called _____ streams.

20. When the water table is low, water flows from the _____ into the _____ streams. These streams and wetlands are known as _____ streams.

21. Unconfined aquifers may flow _____ the watershed above them.

22. Confined aquifers may be _____.

Wells

23. Artesian wells can _____ on their own because they are under _____. If a well is drilled too _____ in elevation, however, there won't be enough gravity to force the water above ground, and a pump will be necessary.

24. Pumps can be _____ the well, or _____ ground.

25. When water is pumped out of the ground, it can cause the water table to drop in the area of a well. This is known as _____.

Well Siting Game

26. What section has the greatest potential for a drinking well? _____

27. What qualities make this section the best? _____

28. How many trials did it take you to determine the best site? _____