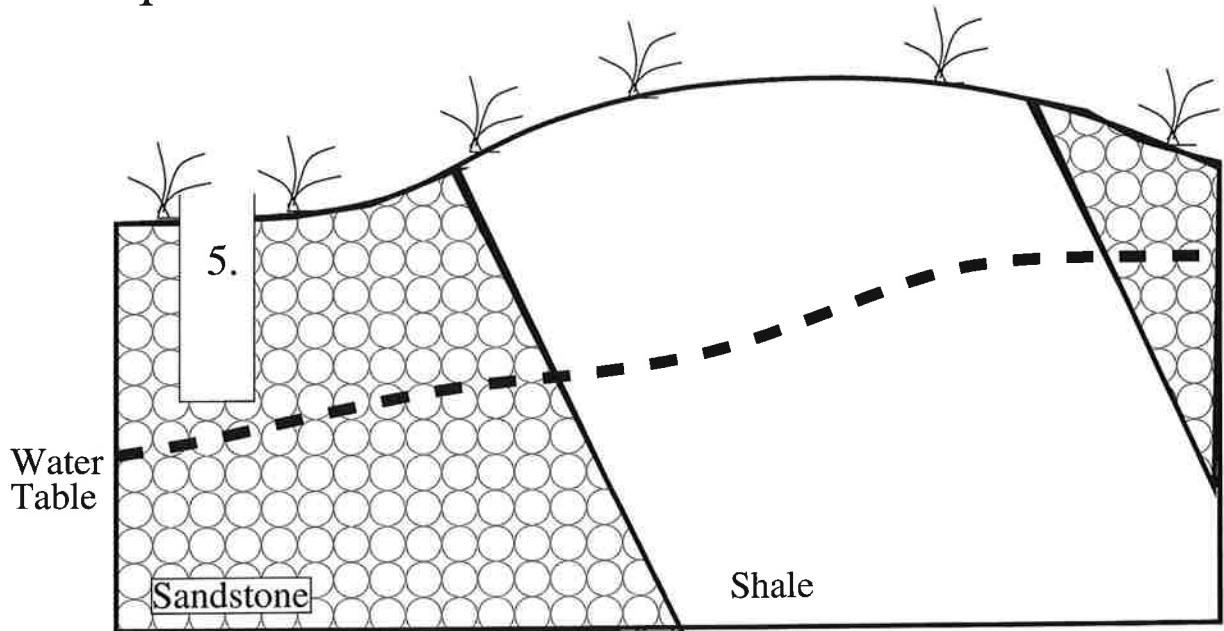


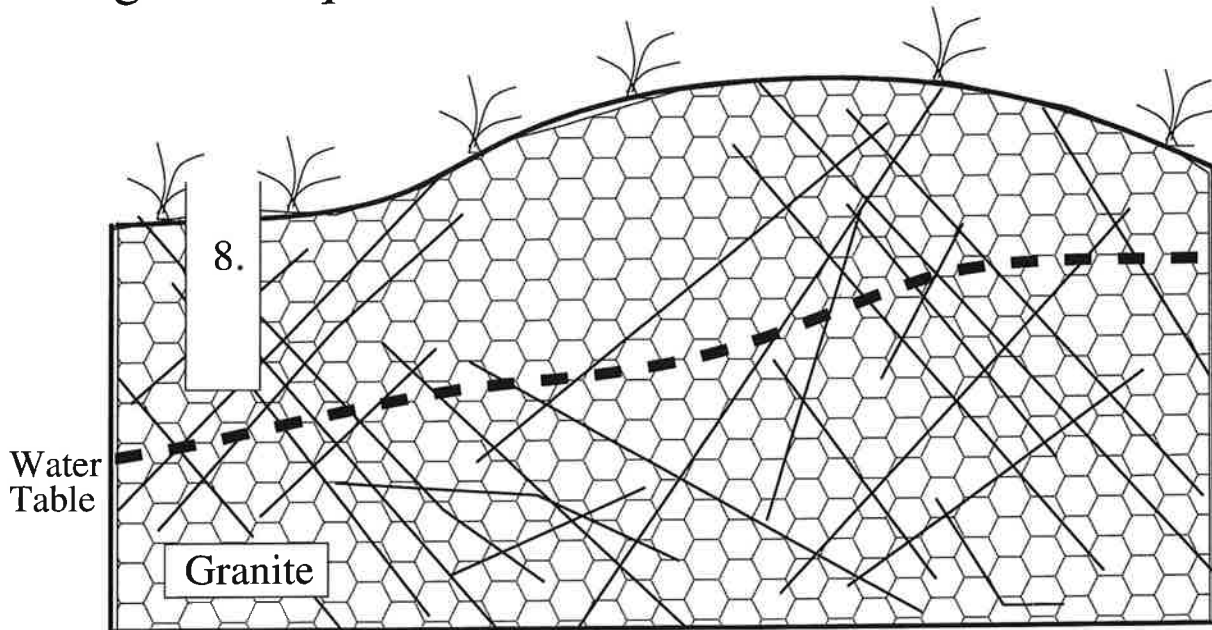
Name _____

Acquifers and Groundwater



1. What is the grain size of a typical shale ?
 - a.) coarse grained, well sorted
 - b.) very fine grained, clay like particles
 - c.) angular, poorly sorted
2. Which rock typically has higher permeability ?
 - a.) sandstone
 - b.) shale
 - c.) silt stone
 - d.) mud stone
3. Draw a well in the best place to create a productive water rich well.
(Label this #3.)
4. Draw a well in the worst place to find water.
(Label this #4.)
5. Look at well #5 drawn above. Is this a good place to drill a well ?
Why or why not ?

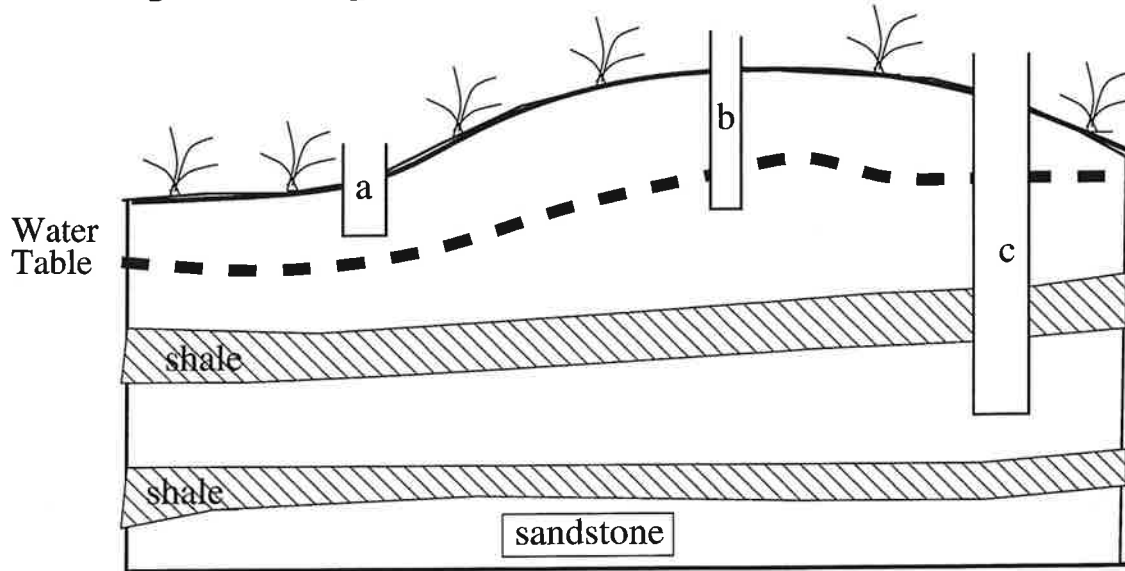
Page 2. Aquifers and Groundwater



Above is a granitic basement rock which is heavily fractured.

6. Show a good place to drill a well. (Label this #6)
Explain how water travels through this granite.
7. Show a poor location to drill a well.
(Label this #7).
8. Is the well #8 a good place to drill a well ?
Why or why not ?

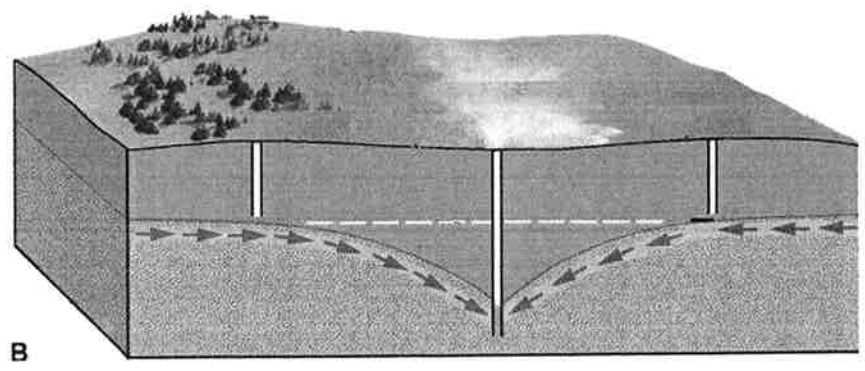
Page 3. Aquifers and Groundwater



9. Give the definition of an "unconfined" aquifer.
 Label the location where you might find an unconfined aquifer above.

10. Give the definition of a "confined" aquifer.
 Label the location where you would find a confined aquifer above.

11. Where would be the best place to drill for an artesian well (see above) ?
 a.) b.) c.)



12. In the diagram shown to the right, indicate the location of
 a. dry well b. pumping well c. cone of depression
 d. water table before pumping e. water table after pumping

13. Define a "cone of depression" in your own words.