Groundwater Notes

What is groundwater? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

The underground layer is broken into 4 parts.

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Start from bottom layer:

Impermeable Rock:

Next Layer: Zone of Saturation:

Porosity: The percentage of space between individual rocks under the surface of the earth.

* If a rock layer is filled up with particles of different sizes, then it will have a low percentage of open space. This mean that it will have what kind of porosity? \_\_\_\_\_\_\_\_\_\_\_\_\_\_
* If a rock layer is filled up with evenly sized particles, then it will have a high percentage of open space. This mean that it will have what kind of porosity? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Zone of Aeration: This is the upper zone that allows water to pass easily through it

Permeability: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Water Table: This is the boundary between the Zone of Aeration and the Zone of Saturation!!!

* This means that where the zone of aeration and the zone of saturation meet, the water table is present!!!!

Copy the picture: Zone of Aeration/Zone of Saturation

A Look at Porosity: Draw the pictures and answer the question

Aquifers: A rock layer that stores ground water and allows the flow of ground water.

What is the recharge zone? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Recharge Zone: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Recharge Zone notes:

Springs and Wells:

Draw a picture:

Wells:

What is a well?

What are wells used for?

Underground Erosion and Deposition:

Picture of cave:

Sinkhole:

Review questions:

1) Which of the following describes an aquifer’s ability to allow the flow of water?

A. Porosity B. Permeability C. Geology D. Recharge Zone

2) What is the Water Table?

Explain how particles affect the porosity of an aquifer?

4) Name two features that are formed by underground deposition.

5)What feature does underground erosion create?

6)Explain the difference between a spring and a well.