PHYSICAL GEOLOGY 101 Name:_____
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Chapter 11. Groundwater

Groundwater

1. Draw the hydrologic cycle and label the main processes and types of water (sea, salt water, groundwater, streams, water vapor, ice).

Evaporation =

Condensation =

Precipitation =

Transpiration =

Percolation or Infiltration =

Runoff =

Evapotranspiration =

2. Define the terms:
permeable,

impermeable,

porosity,

aquifer,

confined aquifer,

water table,

recharge area,

artesian water,

drawdown,

cone of depression.

3. What are the hazards of groundwater withdrawal (groundwater mining)?

4. Define the following, noting their differences.

   saturated zone =

   unsaturated zone =

5. How do confined and unconfined aquifers differ?

6. What is the importance of porosity compared to permeability with respect to water supplies?

7. What is the origin of artesian wells?

8. What is a perched water table?

   How does it form?

9. How and where does recharge of groundwater occur?

   How and where does discharge of ground water occur?

10. How and where do springs form?

11. What happens to the water table when wells are pumped?

12. What is the origin of geysers and thermal springs?

13. What are the chemical reactions that cause the dissolution of carbonate rocks?

14. What features are characteristic of karst topography?

15. What are speleothems? Know which is on the ceiling and floor. How do they form?

16. How does petrified wood form?

17. What are geodes and how do they form?

18. Define the water table.

19. Describe the process of geysers erupting.

20. Discuss the factors that contribute to groundwater contamination.

21. Describe how caves are formed.