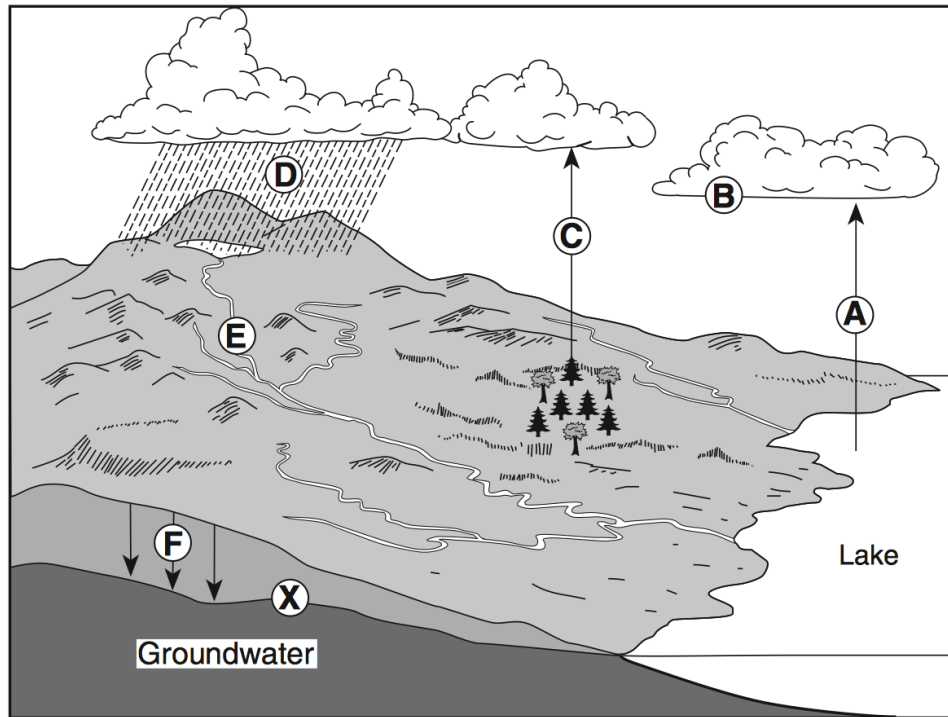


Name: \_\_\_\_\_

Date: \_\_\_\_\_ Period: \_\_\_\_\_

## Worksheet: The Water Cycle

Base your answers to questions 1 through 3 on the diagram below, which shows a model of the water vapor cycle. Letters A through F represent some processes of the water cycle. Letter X indicates the top of the underground zone that is saturated with water.



1. Which process is represented by letter F?
  - a. capillarity
  - b. infiltration
  - c. condensation
  - d. vaporization
2. What does letter X represent?
  - a. the water table
  - b. a flood plain
  - c. sea level
  - d. impermeable rock
3. If the surface soil is saturated and precipitation increases, there will be
  - a. a decrease in the amount of groundwater
  - b. a decrease in the surface elevation of the lake
  - c. an increase in the rate of capillarity
  - d. an increase in the amount of runoff

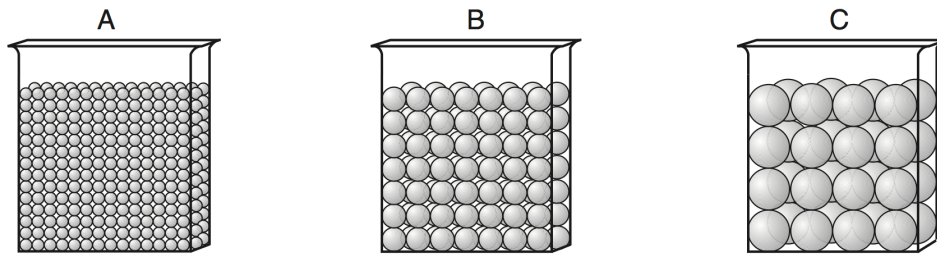
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# Worksheet: The Water Cycle

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4. During a rainstorm, when soil becomes saturated, the amount of infiltration
  - a. decreases and runoff decreases
  - b. decreases and runoff increases
  - c. increases and runoff decreases
  - d. increases and runoff increases
  
5. A paved blacktop parking lot was built on what was once a soil-covered field. This area will now experience increased runoff when rain occurs because the paved parking lot has
  - a. less capillarity
  - b. greater infiltration
  - c. less permeability
  - d. greater porosity
  
6. Compared to an area of Earth's surface with gentle slopes, an area with steeper slopes most likely has
  - a. less infiltration and more runoff
  - b. less infiltration and less runoff
  - c. more infiltration and more runoff
  - d. more infiltration and less runoff

Base your answers to questions 7 through 8 on the diagram below, which shows two identical containers filled with uniform particles that were sorted by size.



(Not drawn to scale)

7. Which characteristic is most likely the same for these particle-filled containers?
  - a. infiltration rate
  - b. water retention
  - c. capillarity
  - d. porosity
  
8. Water will be able to infiltrate each of these sediment samples if the sediment is?
  - a. saturated and impermeable
  - b. saturated and permeable
  - c. unsaturated and impermeable
  - d. unsaturated and permeable