

The Water Cycle

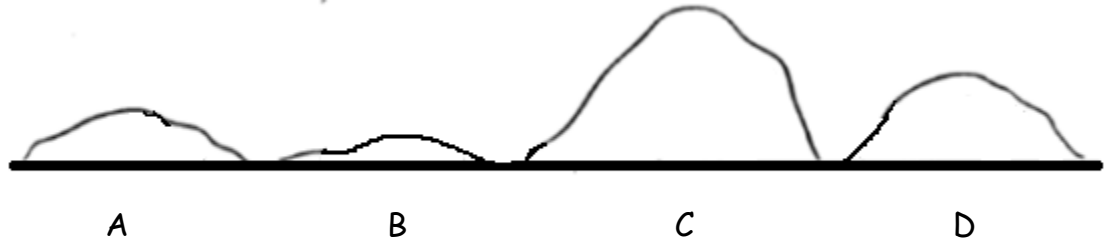


Water Assessment

Name: _____

Date: _____

1. Which hill would water flow down **fastest**? Circle your answer.



Scoring: A B C D
 1 point 0 point 3 points 2 points

2. a. How does water change the hill as it runs down?

Scoring:
 Causes soil to wear away and be put in different/new locations: 3 points
 Does not include either 'wear away' OR 'put in new locations': 2 points
 Indicates that water does not affect the Earth: 1 point
 No answer: 0 points

b. Why does water change the hill as it runs down?

Answer:
 The steeper slope makes it easier for gravity to work. Also, bigger water droplets have more area so there is less resistance and gravity can work easier.

3. Which raindrop would flow down a hill **slowest**? Circle your answer.



Scoring: A B C D
 0 points 1 point 2 points 3 points

4. What **force** causes water to move down a hill? Circle your answer.

Scoring:
 A. Gravity A = 3 points
 B. Air B = 2 points
 C. Temperature C = 1 point
 D. None D = 0 points

5. Place an **X** next to each change that is part of the water cycle.

- _____ Ice changes to water
- _____ Water changes to ice
- _____ Water vapor changes to liquid water
- _____ Liquid water changes to water vapor

Scoring:
 Mark all four choices: 3 points
 Mark two but not those that go in two directions: 2 points
 Mark only one (any one): 1 point
 Mark none: 0 points

6. As the **temperature increases** what happens to water? *Circle your answer.*

- a. Nothing
- b. Water vapor changes to liquid water
- c. Liquid water changes to water vapor
- d. Water changes to ice

Scoring:
 A = 0 points
 B = 2 points
 C = 3 points
 D = 1 point

7. In the picture below, label all the places where **evaporation** occurs with an **E** and all the places **condensation** occurs with a **C**.



Scoring:

Marking several areas on the drawing: 3 points

Marking only over the large body of water AND cloud: 2 points

Marking only the cloud OR large body of water: 1 point

No indication: 0 points

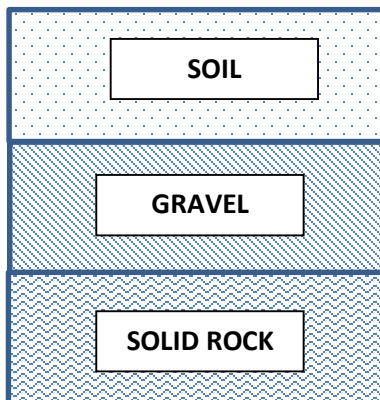
8. a. How does temperature change water in the water cycle?

Answer: Heat energy causes small parts of water to move to the air (water vapor).

b. Why does temperature change water in the water cycle?

Answer: Heat energy causes small parts of water to move to the air (water vapor). The more heat energy that is on the water, the faster this happens.

a. Place a **one** next to the Earth material where water would move through the fastest, place a **two** next to the Earth material where water would move more slowly and place a **three** next to the Earth material where water would not move through.



Answers:

2 = Water moves slowly through soil

1 = Water moves fastest through gravel

3 = Water would not move through solid rock

b. Why does water move differently through these three Earth materials?

Answer: Gravity pulls water down through Earth materials. But water moves at different speeds through Earth materials because soil is made of tiny particles and gravel is larger particles with spaces so water can move faster.

9. What **force** causes water to move down a hill? *Circle your answer.*

- A. Air – 2 points
- B. Temperature – 1 point
- C. Gravity – 3 points
- D. None – 0 points

10. a. **What** Earth material would Iowa farmers want to plant their corn?

Answer: Soil

b. **Why** would Iowa farmers want to plant corn in this Earth material?

Answer: Because it drains water slowly so water will remain in the soil between rain storms or watering.

11. Order the Earth materials from one to four. Give a **one** to the Earth material with the **MOST** space between the particles, a **two** with the material with a little less space, a **three** with even more less space and a four with the **LEAST** space between the particles.

___1___ Gravel

___2___ Sand

___3___ Soil

___4___ Solid Rock