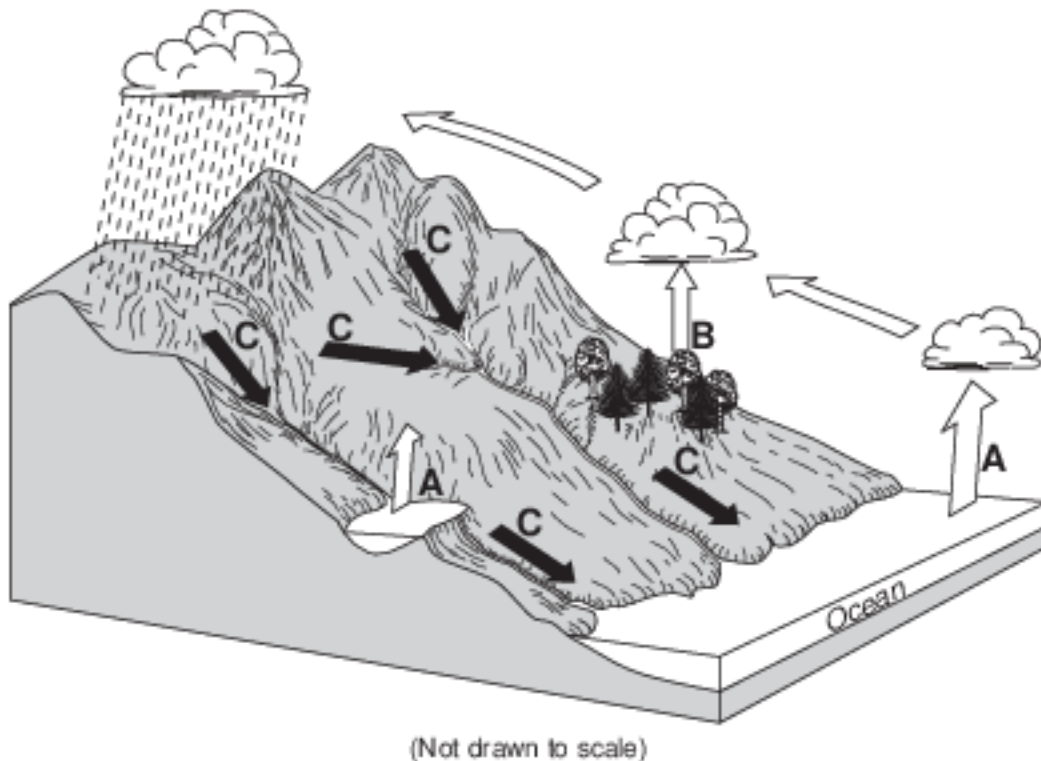


Properties Of Water

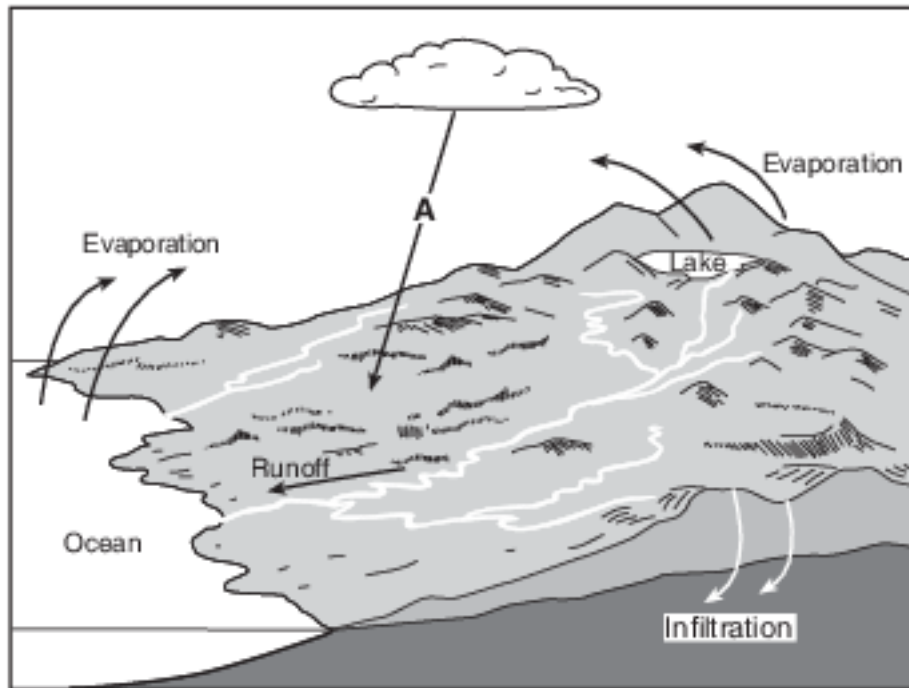
- | | |
|---|--|
| <p>1 During which phase change does water release the most heat energy?</p> <p>(1) freezing (3) condensation</p> <p>(2) melting (4) vaporization</p> | <p>3 During the process of condensation, water vapor</p> <p>(1) releases 334 J/g of heat energy</p> <p>(2) releases 2260 J/g of heat energy</p> <p>(3) gains 334 J/g of heat energy</p> <p>(4) gains 2260 J/g of heat energy</p> |
| <p>2 Which change in the heat energy content of water occurs when water changes phase from a liquid to a solid?</p> <p>(1) gain of 334 Joules of heat energy per gram</p> <p>(2) release of 334 Joules of heat energy per gram</p> <p>(3) gain of 2260 Joules of heat energy per gram</p> <p>(4) release of 2260 Joules of heat energy per gram</p> | <p>4 Which process releases 2260 joules of heat energy per gram of water into the environment?</p> <p>(1) melting (3) condensation</p> <p>(2) freezing (4) evaporation</p> |

Base your answers to questions 5 on the diagram below and on your knowledge of Earth science. The diagram represents the water cycle. Letters A through C represent different processes in the water cycle.



- 5 In order for process A to occur, liquid water must
- | | |
|-------------------------------|-------------------------------|
| (1) gain 334 Joules per gram | (3) lose 334 Joules per gram |
| (2) gain 2260 Joules per gram | (4) lose 2260 Joules per gram |

Base your answers to questions 6 on the model below and on your knowledge of Earth science. The model shows the movement of water in the water cycle. Arrow A represents a process within the water cycle.



- 6 How many joules of heat energy are required to evaporate 2 grams of water from the lake surface? [1]
J

Answer Keys

1 3

2 2

3 2

4 3

5 2

6 Allow 1 credit for 4520 J.