

Carnival Game: Groundwater Flow

Directions: Answer the multiple choice questions.

Questions

1. Which statement is true about groundwater?

Groundwater is in constant motion.

Groundwater is buried too deep to be part of Earth's water cycle.

Groundwater is relatively young, especially very deep groundwater.

Groundwater is recharged by water from deep within the mantle.

2. Groundwater flows from areas of

high pressure to areas of low pressure

low pressure to areas of high pressure

a low-elevation water table to a high-elevation water table

low-elevation streams to high-elevation hills

3. The difference in elevation between parts of the water table is the

artesian well

confining bed

hydraulic head

zone of aeration

4. The water in a geyser is warmed by

molten rock

hot igneous rocks

solar energy

radiation from deep within Earth

5. Artesian wells require

tilted strata

a confined aquifer

sufficient precipitation

all of these

Hints

1. Hint: Remember that groundwater can move to the surface.

2. Hint: Groundwater moves upward under a low water table.

3. Hint: The word hydraulic refers to things associated with water.

4. Hint: Geysers are common in active volcanic areas.
5. Hint: Review the conditions necessary to have an artesian aquifer.

Answers

1. Groundwater is in constant motion.

Correct Feedback: Correct. Groundwater is in constant motion.

Incorrect Feedback: Incorrect. Remember that groundwater flows.

2. high pressure to areas of low pressure

Correct Feedback: Correct. Groundwater flows from high pressure to low pressure areas.

Incorrect Feedback: No. Groundwater flows by gravity and pressure differences.

3. hydraulic head

Correct Feedback: Correct. The hydraulic head is the elevation difference.

Incorrect Feedback: Incorrect. Choose the term that has to do with water.

4. hot igneous rocks

Correct Feedback: Correct. The water is warmed by passing through hot igneous rocks.

Incorrect Feedback: No. The water is warmed by passing through hot igneous rocks.

5. all of these

Correct Feedback: Correct. Artesian aquifers require all of these.

Incorrect Feedback: Review the conditions necessary to have an artesian aquifer.