Jan 28 Water Cycle Stations 5-8

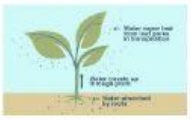
Station 5: Hydrologic Cycle Vocab

Directions: Choose the correct definitions and photos for each vocabulary word.

Term	Definition	Picture	Like	Not like
Water cycle				
sublimation				
evaporation				
condensation				
transpiration				
precipitation				





Station 6: Writing about Precipitation

Directions: Do your RACE strategy

R- restate the question

A- answer the question

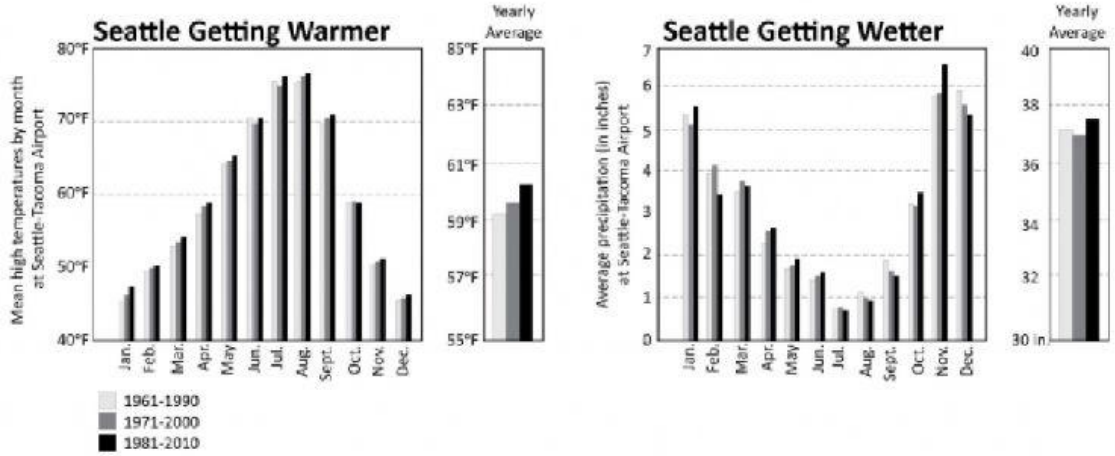
C- Cite your evidence

E-explain your reasoning

Scenario

The graphs below display the mean high temperatures and average precipitation over three different time periods in the city of Seattle.

External Data



Prompt: What is the relationship between the average yearly temperature and precipitation in Seattle?

R-

A-

C-

E-

Station 7: Water Cycle- Multiple Choice Questions

Directions: Choose the correct answer choices for the multiple-choice questions below.

1 Gravity plays a major role in the global movement of water in which of the following processes?

A Water vapor rising into the atmosphere

B Water flowing in rivers and streams

C The shifting of ocean currents as they strike land

D The expansion of water as it turns into ice

2 Which of the following processes contributes most to the movement of water from land to the atmosphere?

A Evaporation

B Precipitation

C Condensation

D Crystallization

3 When developing a model of the cycling of water between the land, the ocean, and the atmosphere, one must include the forces that propel the water. For the model, these forces would be–

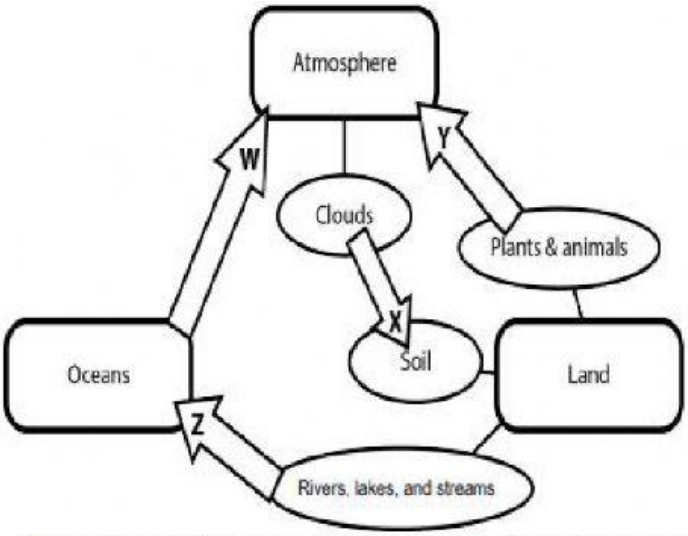
A rivers, streams, and tributaries.

B polar ice caps and oceans.

C plants, animals, and human activity.

D gravity and the Sun's radiation.

4 This is a partial concept map for the cycling of water in the Earth system.



Which of the following would be the correct labeling of one of the arrows in the concept map?

A W = Precipitation

B X = Crystallization

C Y = Transpiration

D Z = Evaporation

5 Humans affect the hydrologic cycle in many ways. Humans harm the water cycle by–

A creating more roads and highways, affecting the amount of groundwater that collects.

B reducing the amount of water wasted by long showers.

C collecting rainfall in barrels to use to water plants and the lawn.

D recycling and reusing products so that contaminates do not enter our rivers and streams.

Station 8: Energy Review Questions

Directions: Click on the correct answers for the questions below.

1. Which of the following situations describes an object's kinetic energy being converted into gravitational potential energy?
A. A ball rolls up an inclined ramp.
B. An apple is dropped from a second-story window.
C. A penny sits motionless on a shelf.
D. A water particle flows down a mountain stream

2. Which of the following objects has the most kinetic energy?
A. a car going 60 miles per hour
B. a spring that is compressed
C. a bicycle going 10 miles per hour
D. a rock sitting on the edge of a cliff

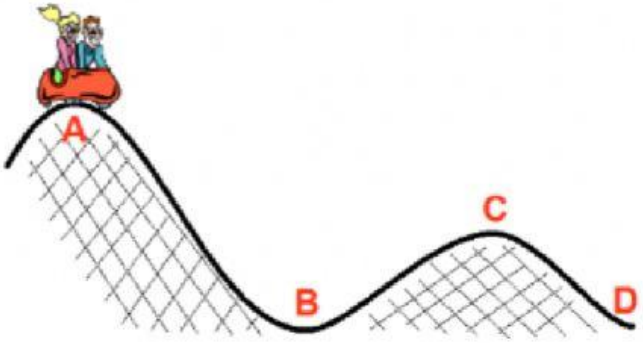
3. Two identical trains, Train A and Train B, are traveling along parallel rails. The speed of Train A is 88 km/hr, and the speed of Train B is 96 km/hr. Based on this information, which of the following statements is true?

A. Train B has more kinetic energy than Train A.
B. Neither train has any kinetic energy.
C. The trains have the same kinetic energy.
D. Train A has more kinetic energy than Train B.

4. A tank of water contains many billions of water molecules. These molecules move at random speeds and in random directions, often colliding with each other. What form of energy does the water have due to the random motion of its particles?

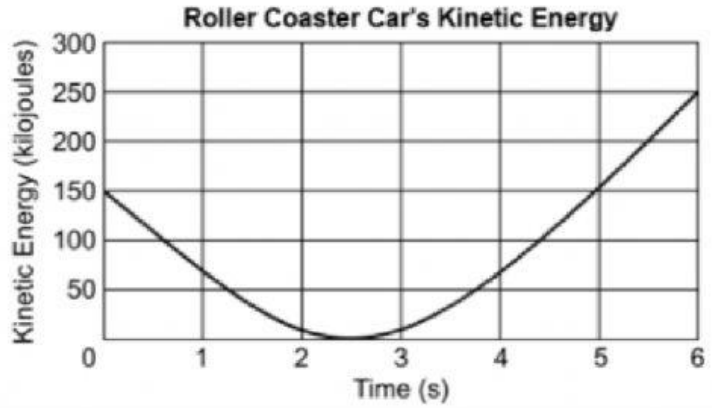
A. chemical energy
B. gravitational potential energy
C. thermal energy
D. electric potential energy

5. Clyde and Marilyn are riding a roller coaster. During which section(s) of the track is their potential energy converted to kinetic energy?



A. from point B to point C only
B. from point B to point D only
C. from point A to point B only
D. from point A to point B and from point C to point D

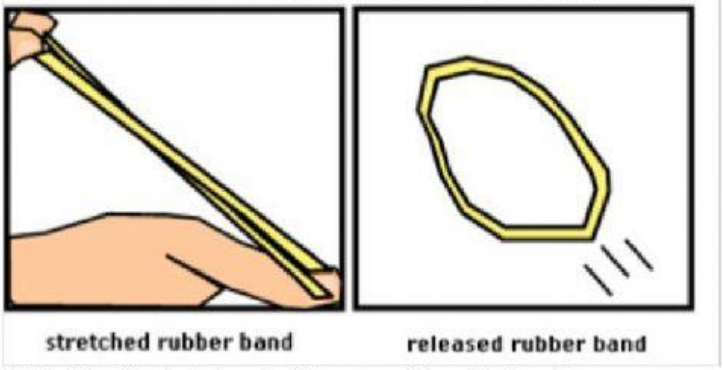
6. The following graph shows the kinetic energy of a roller coaster car as it passes through a loop.



What was the most likely cause for the rise in kinetic energy after 2.5 seconds?

A. The roller coaster began slowing down.
B. The roller coaster began speeding up.
C. The roller coaster started gaining elevation.
D. The roller coaster was pulled with decreasing gravitational force.

7. Danielle has a rubber band. She stretches the rubber band with her fingers. After she releases the rubber band, it flies through the air.



Which of the following is true about the energy of the rubber band?

A. Both the stretched rubber band and the released rubber band have only kinetic energy.
B. The stretched rubber band has more potential energy, and the released rubber band has more kinetic energy.
C. The stretched rubber band has more kinetic energy, and the released rubber band has more potential energy.
D. Both the stretched rubber band and the released rubber band have only potential energy