

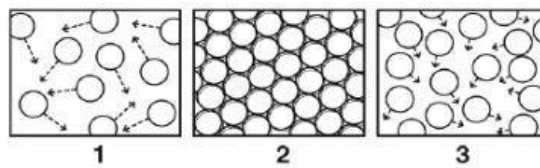
Unit 13 Lesson 1: Science Quiz

Read the questions carefully and circle the correct answer. (1 point each)

1. What is the term for the amount of space something takes up?

- (A) matter
- (B) density
- (C) volume
- (D) temperature

2. The states of matter differ in many ways, including shape and volume. The following three figures show the particles in a solid, a liquid, and a gas.



Which of the following **correctly** identifies the state of matter?

- (A) 3: gas
- (B) 2: solid
- (C) 1: liquid
- (D) 2: liquid

3. There are different characteristics for each of the states of matter. Which statement describes a **difference** between liquids and solids?

- (A) Temperature can change a solid to a liquid, but it cannot change a liquid to a solid.
- (B) Solids have a definite volume and liquids do not have a definite volume.
- (C) The particles in a solid are much closer together than the particles in a liquid.
- (D) Solids take on the shape of their containers and liquids maintain their own shapes.

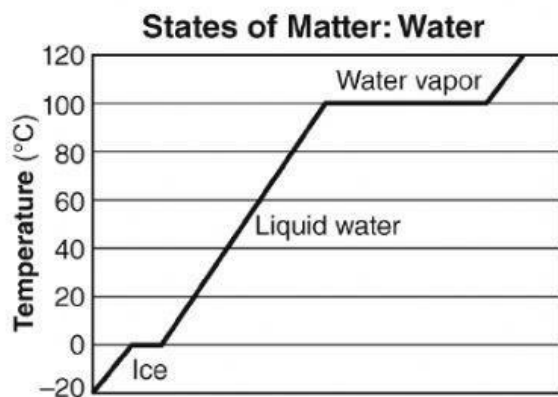
4. A cup holds 125 grams of liquid water and 100 grams of ice. What is a reasonable mass for the water in the cup **after** the ice melts?

- (A) 175 grams
- (B) 215 grams
- (C) 225 grams
- (D) 230 grams

5. A student pours a liter of water into a covered container. She first freezes the water and then allows it to melt. Which is a true statement about the **mass** of the water?
- (A) The mass increases during both freezing and melting.
 - (B) The mass decreases during freezing and is unchanged during melting.
 - (C) The mass is unchanged during freezing and decreases during melting.
 - (D) The mass is unchanged during both freezing and melting.
6. Which of these correctly describes how water changes state?
- (A) Liquid water melts to form ice.
 - (B) Liquid water boils to form water vapor.
 - (C) ice condenses to form liquid water.
 - (D) Water vapor evaporates to form liquid water

Answer the following questions.

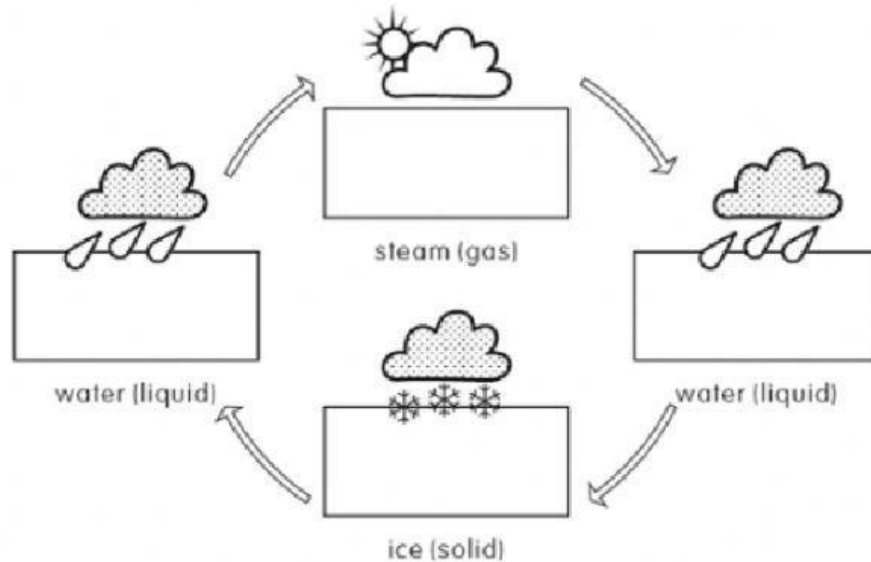
1. The following graph shows the relationship between temperature and state of water. (2 points)



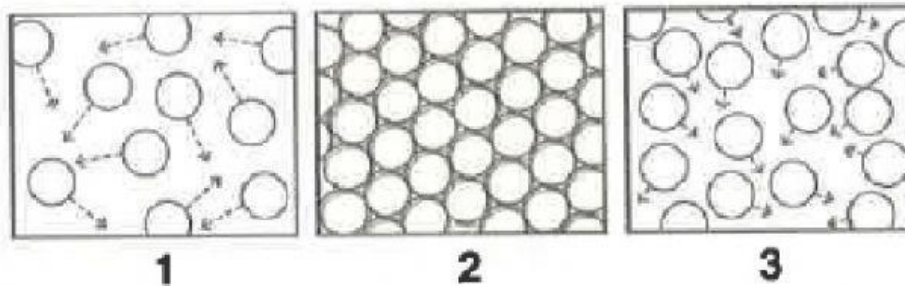
Describe what is happening in the graph. How is the line in the graph related to the state of water?

2. Fill in the name of the process that are represented. (4 points)

Evaporation – condensation – melting - freezing



3. Frank was learning about states of matter in science class. He made some drawings but forgot to label them. His drawings are shown below. (3 points)



Explain what each of Frank's drawing shows (talk about the particles and what state each represents).