

# Properties of Matter Unit Test 2018

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Student Name:

Date:

## **Question 1**

Which term refers to the amount of matter in an object?

- A. temperature
  - B. mass
  - C. solution
  - D. volume
- 

## **Question 2**

Which term means “a combination of two or more substances that keep their identities”?

- A. matter
  - B. mixture
  - C. element
  - D. compound
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## **Question 3**

Which term refers to the amount of space taken up by an object?

- A. temperature
  - B. mass
  - C. solution
  - D. volume
- 

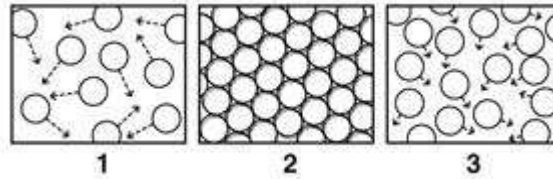
## **Question 4**

Which term or phrase best describes what happens when sugar burns?

- A. physical change
  - B. chemical change
  - C. conservation of mass
  - D. formation of a compound
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### Question 5

The states of matter differ in many ways, including shape and volume. The following three figures show

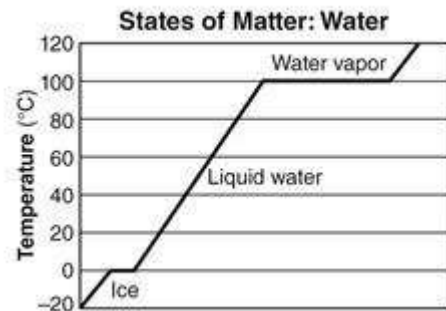


the particles in a solid, a liquid, and a gas. Which of the following correctly identifies the state of matter?

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

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### Question 6



The graph shows the changes in state of water at sea level. Based on the graph, which of the following is true?

- A. Liquid water boils at temperatures between 0 °C and 100 °C.
- B. Solid water melts, forming liquid water, at temperatures below 0 °C.
- C. Liquid water freezes, forming solid water, at temperatures greater than 0 °C.
- D. Water vapor condenses into liquid water when temperatures drop below 100 °C.

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### Question 7

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.
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**Question 8**

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
- 

**Question 9**

How does water change as it evaporates?

- A. Its mass and volume decrease.
  - B. Its mass and volume increase.
  - C. Its mass remains unchanged. Its volume increases.
  - D. Its mass increases. Its volume remains unchanged.
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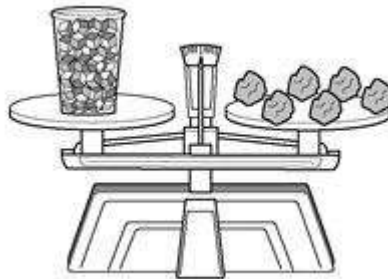
**Question 10**

Riley and Jill are studying what happens to matter when it changes state. They found this list of statements. Which of these statements is true?

- A. When matter changes state, its mass changes.
  - B. When matter changes state, its mass remains the same.
  - C. When matter changes state, its boiling point might also change.
  - D. When matter changes state, the space between particles in the matter stays the same.
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**Question 11**

Peter places six balls of modeling clay on one side of a balance. He places a plastic cup on the other side. It takes 41 plastic cubes to balance the modeling clay. He then removes the clay, shapes it into a



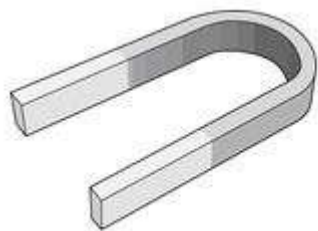
dinosaur, and puts it back on the balance. likely need to put into the cup to balance the dinosaur?

How many cubes will he most

- A. 35 cubes
  - B. 38 cubes
  - C. 41 cubes
  - D. 47 cubes
-

**Question 12**

The following illustration shows a tool that can be used to separate elements of certain mixtures.



This tool can separate what type of mixture?

- A. a solution of two solids
  - B. a mixture of particles with different densities
  - C. a mixture of particles of different sizes
  - D. a mixture of magnetic and nonmagnetic items
- 

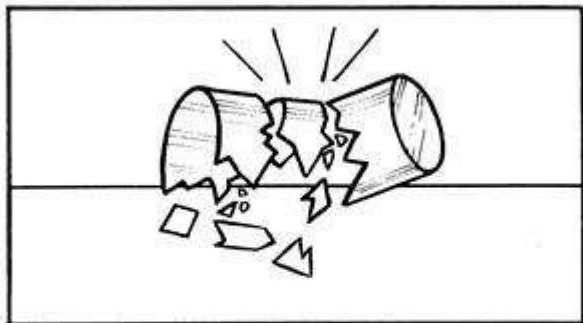
**Question 13**

At what temperature is water a solid?

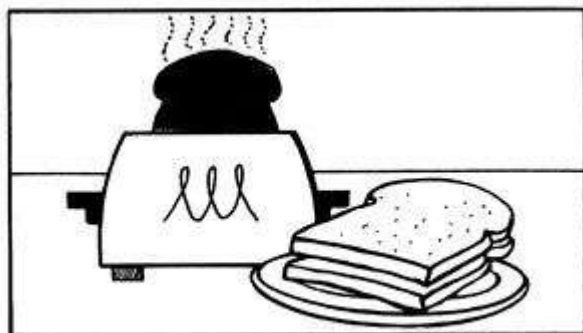
- A. above 100°C
  - B. below 0°C
  - C. between 1°C and 99°C
  - D. between 32°C and 212°C
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### Question 14

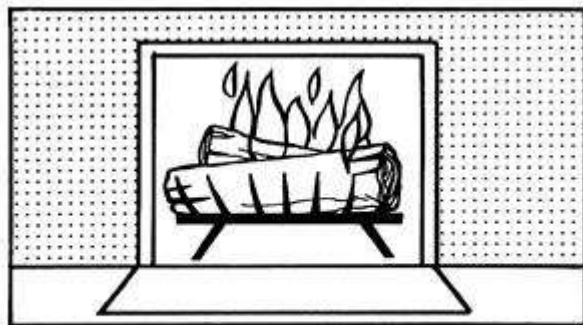
Look at the pictures below. Which is an example of a physical change?



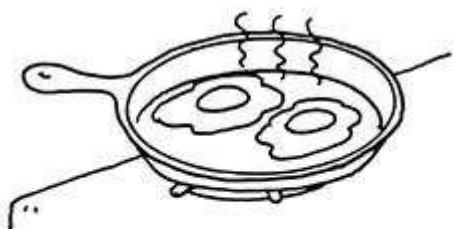
A.



B.



C.

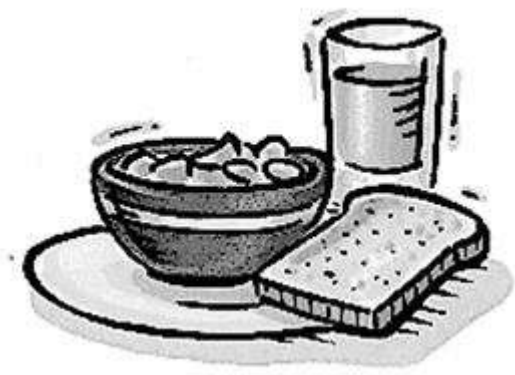


D.

**Question 15**

Marco made himself breakfast, which is shown in the picture below. Which of Marco's activities produced a chemical change?

- A. toasting the bread
- B. adding raisins to the cereal
- C. putting the hot toast onto the plate
- D. stirring cocoa powder into the milk



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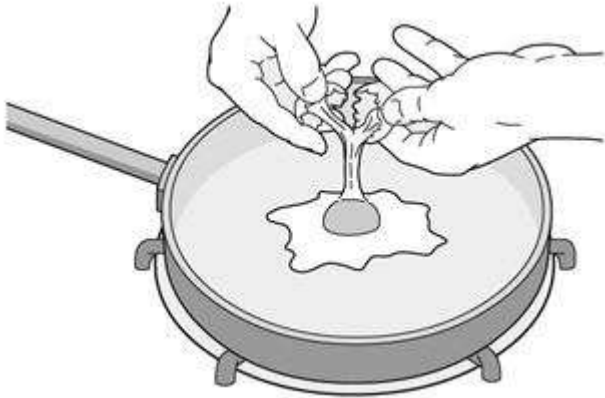
**Question 16**

There are three main states of matter: liquid, solid, and gas. Which statement describes the shape of a solid?

- A. It has its own shape.
  - B. It does not have shape.
  - C. It takes the shape of its container.
  - D. It changes shape with temperature.
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**Question 17**

The figure shows physical and chemical changes as someone prepares an egg.



Which is a correct statement about one step in this process?

- A. As the shell cracks, a new type of matter forms.
- B. As the egg cooks, a new type of matter forms.
- C. The total weight of the eggshell changes as it cracks into pieces.
- D. The total volume of the egg changes as the egg is poured from the shell into the pan.

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**Question 18**

What happens to the mass of a volume of water when it freezes?

- A. The mass stays the same.
  - B. The mass increases.
  - C. The mass decreases.
  - D. The mass depends on the temperature.
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### Question 19

The table shows the melting points and boiling points for different substances.

Melting Point and Boiling Point for Common Substances		
Substance	Melting point (°C)	Boiling point (°C)
aluminum	660	2519
chlorine	-101	-34
copper	1085	2562
gold	1064	2856
mercury	-39	357
oxygen	-219	-183
silver	962	2162
tungsten	3422	5555

Suppose these substances were placed in a freezer set to -45 °C. Which substance would become a liquid?

- A. chlorine
- B. mercury
- C. oxygen
- D. tungsten

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### Question 20

Which of these is matter?

- A. energy
- B. light
- C. paper
- D. sound