

Q1: If you have two identical glasses that each have five ice cubes in them and you let the ice cubes in one glass melt, which of the following will be true?

- A The glass with the ice cubes in it will weigh more than the other glass.
- B The glass with the ice cubes in it will weigh the same as the other glass.
- C The glass that has the melted ice in it will weigh more than the other glass.
- D The glass that has the melted ice in it will weigh twice as much as the other glass.

Q2: Identify the following changes as physical or chemical: M & Ms melting in your hand ; cutting the neighbors grass ; spilling bleach on the carpet ; tearing a hole in your favorite jeans ; your bicycle rusting ; a hamburger digesting in your stomach

- | | | |
|---|---|---|
| a. <input type="radio"/> physical
<input type="radio"/> chemical | b. <input type="radio"/> physical
<input type="radio"/> chemical | c. <input type="radio"/> physical
<input type="radio"/> chemical |
| d. <input type="radio"/> physical
<input type="radio"/> chemical | e. <input type="radio"/> physical
<input type="radio"/> chemical | f. <input type="radio"/> physical
<input type="radio"/> chemical |

Q3: Imagine you have a chocolate cake that weighs two pounds. If you slice the cake into ten slices, what will be the weight of all the slices put together?

- A one pound
- B two pounds
- C five pounds
- D one-tenth of two pounds

Q4: Matter can be changed in many ways. Sometimes matter is changed and a new substance is created. This type of change is referred to as a chemical change. Which of the following are examples of chemical changes? Choose all that apply.

- A** dissolving salt
 - B** burning leaves
 - C** baking a cake
 - D** melting chocolate
 - E** fireworks shooting off
 - F** bubbles forming from mixing baking soda and vinegar
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Q5: Hailey measured the mass of 1 cup of water and found that it was 154g. She then measured the mass of $\frac{1}{4}$ of a cup of salt and found that it was 53g. She poured the salt into the water and stirred it until she could no longer see the salt. If Hailey measured the mass of the water again after, what should she find?

- A** the mass will be 101g
 - B** the mass will still be 154 g
 - C** the mass will be 207g
 - D** the mass will be 53g
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Q6:

Substance Sample	Observations
water	clear liquid, boils at at 100 degree C
Salt	solid, small granules, cube shaped, dissolves easily in water
paper	white, rectangular, smooth, flat
baking soda	white, solid, small, powdery
vinegar	clear liquid, strong odor, bitter taste

Experiment Number	Observations Before	Action	Observations during Action an/ or After
1	white, rectangular shape, smooth, and flat	paper is cut into four pieces	still white but in smaller, smooth, white pieces
2	clear liquid and tasteless + white, granular, cube-shaped, salty taste	combined two substances	clear, salty tasting, wet
3	white, powdery, and bitter tasting + clear, liquid, strong odor, bitter tasting	combined two substances	bubbled
4	clear liquid, no taste	heated to 100 degree C	boiled and produced steam
5	clear liquid, no taste	poured into a small tray and placed in 0 degree C storage	froze into a solid that was cloudy

Use the tables about to identify substance(s) in Experiment Number 3.

- A** water
- B** salt
- C** paper
- D** baking soda
- E** vinegar

Q7: Mattison, Jake, and Kole used bag of chocolate to make cookies. They massed the bag before they melted it, it had a mass of 53 grams. What happened to the mass of the bag of chocolates after they melted it in the microwave?

- A** the mass increased
- B** the mass decreased
- C** the mass remained the same

Q8: Complete the chart by checking off which of the following are properties of materials that can be used to identify or classify certain elements.

	Yes	No
Translucent		
Color		
Electrical conductivity		
Hardness		
Quantity		
Reflectivity		
Size		
Thermal conductivity		

Q9: Look at the picture that shows two balls of clay that are equal in weight.



Which of the following **best** describes them after you mash one ball of clay into a flat mass and then put both pieces of clay back on the scale?

- A** They will still both weigh the same
- B** They will no longer have the same chemical properties.
- C** The flat piece of clay will weigh less than the ball of clay.
- D** The flat piece of clay will weigh more than the ball of clay.

Q10: Match the characteristic of matter for each state of matter.

	tightly packed particles	particles glides & slides over each other	fastest moving particles	particles are far apart	particles barely vibrate	slowest moving particles
Solid						
Liquid						
Gas						

Q11: What happens to the particles in matter when it is heated up?

- A** particles remain in place
 - B** particles speed up
 - C** particles slow down
 - D** particles disappear
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Q12: Matter cannot be or

- | | |
|---|---|
| <p>a.</p> <ul style="list-style-type: none"><input type="radio"/> created<input type="radio"/> changed<input type="radio"/> substituted | <p>b.</p> <ul style="list-style-type: none"><input type="radio"/> destroyed<input type="radio"/> altered<input type="radio"/> misshaped |
|---|---|
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