

Science- Chapter 10
Characteristics of Matter

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Vocabulary	More Vocabulary	Quick Questions	Explanations	More Quick Questions
100	<u>100</u>	100	100	<u>100</u>
200	200	200	200	200
300	300	300	300	300
<u>400</u>	<u>400</u>	<u>400</u>	<u>400</u>	<u>400</u>
<u>500</u>	<u>500</u>	<u>500</u>	<u>500</u>	<u>500</u>

#### Vocabulary- 100

## A form of matter that has a definite shape and volume

solid



#### Vocabulary- 200

# A form of matter that has a definite volume, but no definite shape

### liquid



#### Vocabulary- 300

## A state of matter that has no definite shape or volume

gas



#### Vocabulary- 400

## The process when a solid changes directly into a gas

#### Sublimation



#### Vocabulary- 500

## The change of state from a liquid to a gas

### Vaporization



#### More Vocabulary- 100

Slow, or gradual, vaporization

### evaporation



#### More Vocabulary- 200

## A substance that results from a chemical change

### product



#### More Vocabulary- 300

# A substance that enters into and is altered through a chemical change

#### reactant



#### More Vocabulary- 400

## The change of state from a gas to a liquid

#### condensation



#### More Vocabulary- 500

# A mixture made of two or more evenly distributed substances

#### solution



#### Quick Questions- 100

What is determined by the motion and distance between particles of matter?

#### State of Matter



#### Quick Questions- 200

## What is true about the parts that make up a mixture

The parts keep their physical properties. They can be easily separated.



#### Quick Questions- 300

# How does a chemical change and a physical change differ?

Physical
Shape
Size
State of Matter

Chemical Color **Temperature** Creates a new product



#### Quick Questions- 400

How can I find out if energy has been absorbed or released in a chemical change?

Check for change in temperature: use a thermometer or feel the outside of the jar



#### Quick Questions- 500

## The amount of space an object takes up

#### volume



#### Explanations- 100

I mixed 2 clear liquids together and observed that their color did not change. I concluded that no chemical reaction took place.

Do you agree/disagree? Why?

# Disagree Color is not the only indicator of a chemical change



#### Explanations- 200

How might the properties of an alloy (made of gold and copper) differ from the properties of pure gold?

The alloy has the properties of both metals- the gold and copper.



#### Explanations- 300

Hydrogen is a gas at room temperature. Under pressure, it changes into a liquid.

What type of change is this?

#### Physical change



#### Explanations- 400

When certain chemical react, oxygen gas is released as a product.

Would these chemicals be used in a fire extinguisher?

### NO! Oxygen is needed for fuel to burn



#### Explanations- 500

## What is a physical property of glass?

#### Answers will vary



### Process of liquid water changing into a gas?

#### vaporization



What is chocolate milk?

#### A mixture



Hydrogen combines with oxygen to make water. What does a scientist call the hydrogen and oxygen?

#### reactants



### What do solids, liquids, and gases have in common?

### They are made up of particles



# What is a difference between a physical and chemical change?

#### Answers will vary

