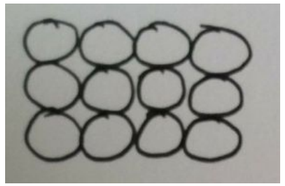
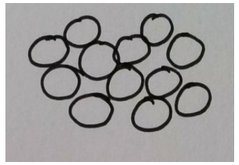
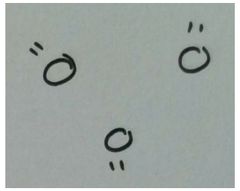
What is a chemical change and how can we identify them?
Worksheet

Science

Miss Couves

Properties of solids, liquids and gases

State of matter	Can be compressed	Can flow	Can change shape
Solid 			
Liquid 			
Gas 			

Complete the diagram in your notes:

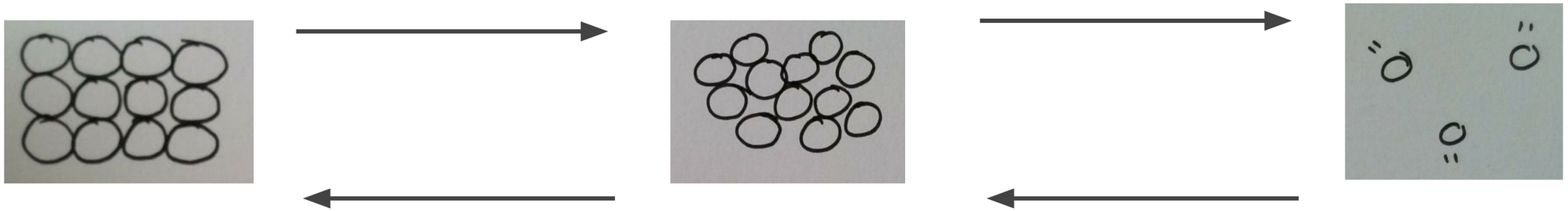
Solid	Liquid	Gas



_____ temperature - particles have _____ _____

Which state change does each arrow represent?

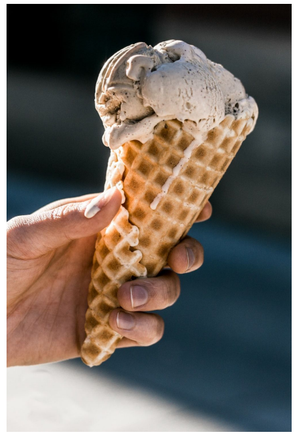
Solid	Liquid	Gas



What is a physical change?

A change in the _____ or _____ of a substance.

Ice cream melting



Paper tearing



Glass smashing



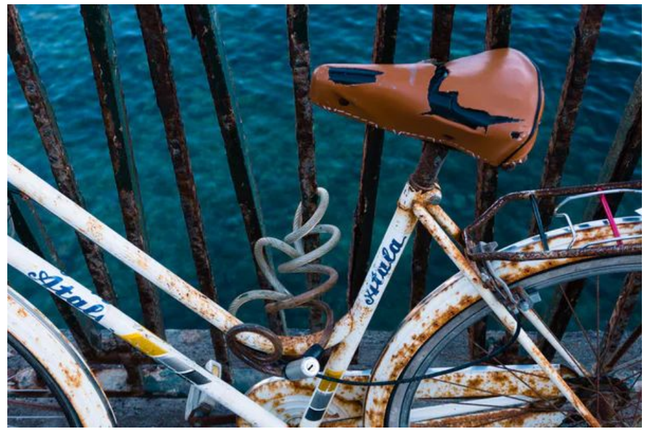
Credit: Images from unsplash

What is a chemical reaction?

A change that _____ .







Credit: Images from unsplash

Is this a chemical reaction?

Toasting bread.

- What particles are present at the start?
- What particles are present at the end?
- Has a new substance been formed?

Is this a chemical reaction?

A bonfire burning.

- What particles are present at the start?
- What particles are present at the end?
- Has a new substance been formed?

Is this a chemical reaction?

Mixing sand and iron filings.

- What particles are present at the start?
- What particles are present at the end?
- Has a new substance been formed?

Is this a chemical reaction?

Burning metals like lithium in fireworks.

- What particles are present at the start?
- What particles are present at the end?
- Has a new substance been formed?

What are these word equations describing?

1. Cake mixture → cooked cake
2. Bread → toast
3. Explosive powder → firework ash
4. Iron + oxygen → iron oxide (rust)

This word equation describes the chemical reaction that takes place when....

Write a word equation for the following:

1. Cookie dough reacts to produce cooked cookies.
2. A bike reacts in air to form rust.
3. A match reacts with oxygen to produce carbon dioxide and water.
4. Carbon and oxygen react to produce carbon dioxide.

Hint: Reactants → Products

Write a word equation for the following:

1. Cookie dough → cooked cookies
2. Bike + air → rust
3. Match + oxygen → carbon dioxide + water
4. Carbon + oxygen → carbon dioxide

Hint: Reactants → Products