

Unit 4 – Chemistry:

Day 2 – Physical and chemical changes of matter

Name: _____

Date: _____

Block: _____

Chemical Properties: _____

describe the ability of matter to react with another substance to form one or more new substances

Examples:

Combustibility: ability to catch fire or burn in air

Reactivity with Acids: some things react with acid EX: baking soda & vinegar

Reactivity with Oxygen: foods turning brown, copper turning green

Lack of Reactivity: (inert) substances that do not react.... Ex. Helium

Physical Change: _____

A change in appearance (shape) or smell only, chemical make (composition) up is still the same.

These are reversible

Examples of physical change:

1) Grinding or Crushing

peanuts -> peanut butter

3) Melting

ice cube -> water

2) Folding or Crumpling

paper -> paper airplane

4) Dissolving

salt dissolves in water

Phase change
is always a
physical
change!!!

Chemical Change:

one type of matter changes to produce one or more different types of matter

ex: a chemical reaction

These are not reversible

Indicators of chemical change:

1) Burning or Fire

house burns down

4) Change in Colour

toast

2) Temperature Change without Heating or Cooling

exothermic / endothermic reactions

5) Change in Odour

rotting meat

HAnd warmers

3) Explosion!

6) Bubbles or Fizzing

vinegar + baking soda

gas is created and leaves reaction

Description	Physical or Chemical Change?
<i>Condensation (water from gas to liquid)</i>	physical
<i>Combustion of gas in a car</i>	chemical
<i>Milk going bad</i>	chemical
<i>Turning copper into copper wire</i>	physical
Breaking Piggy Bank	physical
Fireworks	chemical
Coke and Mentos	chemical
Cutting Hair	physical
Sodium and Water	chemical
Ice Melting	physical
Mixing sugar into coffee	physical
Metal Work	physical