Physical and Chemical Changes

A Write On Activity
Matter

- Matter is everywhere.
- Matter is anything that takes up space and has mass.
- Matter is constantly experiencing both chemical and physical changes.
Physical Change

- **Physical changes** occur when matter changes its property but not its chemical nature.

- Physical property changes could include a change in:
  - Texture
  - Shape and Size
  - Color
  - Odor
  - Volume, mass, weight, or density
Physical Change
Chemical Change

- **Chemical changes** are changes matter undergoes when it becomes new or different matter.

- **Evidence of a chemical change:**
  - Color change
  - Bubbling and fizzing
  - Light production
  - Smoke
  - Release of heat
Chemical Change

- A chemical change occurs when fireworks are used. Fireworks are made of metals such as magnesium and copper. These change chemically as they light up the sky.
Is it a chemical or physical change?

- Sugar dissolving in tea

- Chemical Change

- Physical Change
OOPS!
Did it change size, color, shape (Physical Change)?
or
Did it become different matter (Chemical Change)?
Correct!
Is it a chemical or physical change?

- Logs burning

• **Chemical Change**

• **Physical Change**
OOPS!

Did it change size, color, shape (Physical Change)?

or

Did it become different matter (Chemical Change)?
Correct!
Is it a chemical or physical change?

- Breaking water up by separating it into hydrogen and oxygen

  - Chemical Change

  - Physical Change
OOPS!

Did it change size, color, shape (Physical Change)?

or

Did it become different matter (Chemical Change)?
Correct!
Is it a chemical or physical change?

- Cutting paper

- Chemical Change

- Physical Change
OOPS!

Did it change size, color, shape (Physical Change)?

or

Did it become different matter (Chemical Change)?
Correct!
Is it a chemical or physical change?

- Crushing an aspirin
  - Chemical Change
  - Physical Change
OOPS!
Did it change size, color, shape (Physical Change)?
or
Did it become different matter (Chemical Change)?
Correct!
Is it a chemical or physical change?

- Metal rusting

• **Chemical Change**

• **Physical Change**
OOPS!

Did it change size, color, shape (Physical Change)?

or

Did it become different matter (Chemical Change)?
Correct!
Is it a chemical or physical change?

- Lighter fluid burning
  - Chemical Change
  - Physical Change
OOPS!

Did it change size, color, shape (Physical Change)?

or

Did it become different matter (Chemical Change)?
Correct!
Is it a chemical or physical change?

- An egg rotting
  - Chemical Change
  - Physical Change
OOPS!
Did it change size, color, shape (Physical Change)?

or

Did it become different matter (Chemical Change)?
Correct!
Is it a chemical or physical change?

- An egg breaking

- Chemical Change

- Physical Change
OOPS!

Did it change size, color, shape (Physical Change)?

or

Did it become different matter (Chemical Change)?
Correct!
Write a paragraph about the difference between a chemical and physical change. Give examples of each.