

Physical and Chemical Changes

Read p. 16-17 in your textbook and fill in the blanks.

Physical Change:

In a **physical change**, the substance involved remains the same.
It may change state or size, however.

All changes of state are physical changes. When a candle burns, which changes of state occur? melting, vaporization, freezing

Some other examples of physical change are ripping paper etc.

Chemical Change

In a **chemical change**, the original substance is changed into one or more diff. substances

The new substances have diff. properties from the original substance.

When candle wax burns, it reacts with oxygen in the air to produce CO₂, H₂O, heat, light

The wax changed into new substances in a chemical combustion reaction. The wax is combustible.

Most chemical changes are difficult to reverse which means the new substances formed are unlikely to combine again to form the original substances.

Some other examples of chemical change include rusting, baking

When you observe a chemical change, often you cannot "see" the chemical change. Instead, you only observe the evidence of the chemical change. heat and light are clues that a chemical change has happened.

List **4 clues** that suggest a **new substance** has formed (see Table 1):

- colour
- heat/light
- bubbles
- precipitate
- odour

Answer questions 1-3 on p. 17.