VOCABULARY

MATTER: everything around us which has mass and volume.

a) PROPERTIES

- **Mass:** the quantity of matter in an object.

  We measure it in grams or kilograms.

- **Volume:** the space that an object occupies.

  We measure it in litres.

b) TYPES OF MATTER

- **Pure substance:** matter that is made up of just one component. Example: water is a pure substance.

- **Mixture:** matter that contains two or more substances.

- **Homogeneous mixture:** matter that blends together when it is mixed and cannot be easily separated. Example: lemonade and sea water.

- **Heterogeneous mixture:** matter that can be easily separated after it is mixed.

  Example: salad and water with sand.

c) STATES OF MATTER

- **Solid:** matter that has a fixed shape and volume.

  Examples: an ice cube and a pencil are solids.

- **Liquid:** matter that has a fixed volume but changes shape to fit its container.
  Examples: water and lemonade are liquids.

- **Gas:** invisible matter that does not have a shape or volume. Examples: water vapour and oxygen are gases.

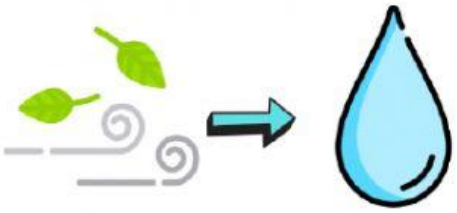
d) CHANGES IN MATTER

- **CHEMICAL CHANGE:** the transformation of a substance into another substance.
- **PHYSICAL CHANGE:** a transformation that does not change the composition of matter (the volume and mass doesn't change).

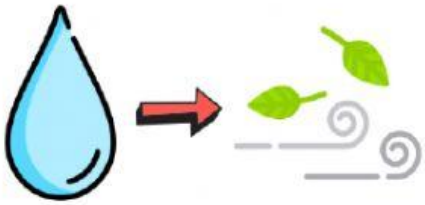
  Example: the changes of state* are physical changes.

  *** CHANGE OF STATE:** when matter varies from one state or form into another.

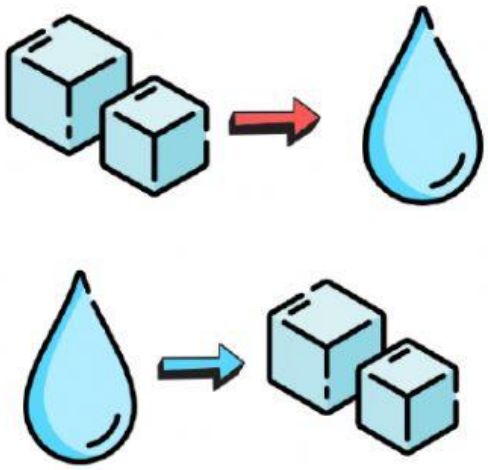
  - **Condensation:** when gas **cools** and changes into a liquid. Example: the water vapour that appear on the mirror when you have a shower with hot water.



  - **Evaporation:** when a liquid is **heated** and changes into a gas. Example: if you leave a glass with water it evaporates (it disappears because of evaporation).



- **Melting:** when a solid is **heated** and changes into a liquid. Example: when an ice cream stars melting in a hot summer day.
- **Solidification:** when liquid cools and changes into a solid. Example: when you pour some water in an ice bucket tray and leave it inside the freezer.



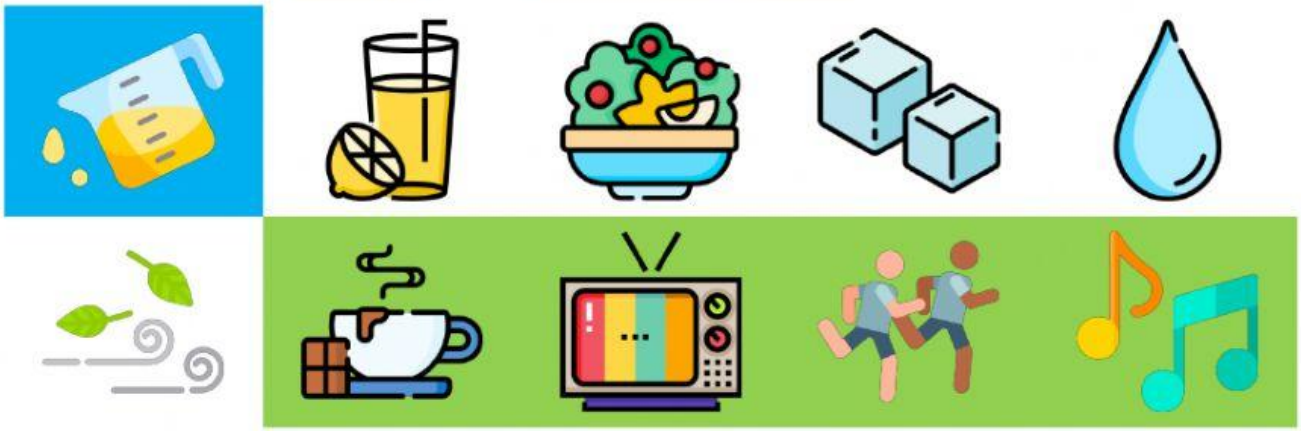
ENERGY: an invisible force that makes things change and move.

TYPES OF ENERGY

- **Chemical energy:** energy that is stored in food and living things.
  Example: food give us energy.
- **Heat energy:** energy that produces heat. It is also known as **thermal energy**.
  Example: we can feel it in a cup of hot chocolate.
- **Electrical energy:** energy that comes from the flow of electric charge.
  Example: TV uses this kind of energy.
- **Kinetic energy:** energy that an object possesses because of its motion.
  Example: when you run or walk.
- **Light energy:** energy that produces light.
  Example: the Sun give us light energy during the day.
- **Sound energy:** energy that produces sound.
  Example: when you play the recorder in Music class.

ICONS USED IN THIS GLOSSARY

Icons made by Freepik from www.flaticon.com



Icon made by Smashicons from www.flaticon.com

Icon made by Good Ware from www.flaticon.com

Icon made by Eucalyp from www.flaticon.com

Icon made by DinosoftLabs from www.flaticon.com