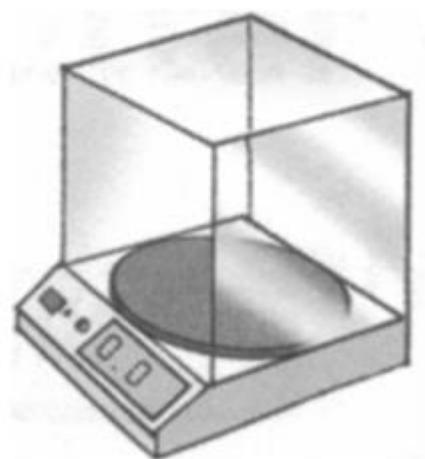


Science Practical Sheet

Grade (4)

First Term



Activity (1)

Determining the volume of irregular solid body:

The name of the tool in front of you is called graduated cylinder.

The volume of the stone = $V_2 - V_1$ (Cm^3)



Activity (2)

Determining the length of an object:

The name of the tool in front of you is graduated tape.

It is used in measuring large lengths (m).

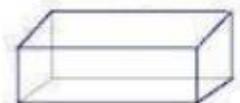


Activity (3)

Determining the length of an object:

The name of the tool in front of you is graduated ruler.

The volume of the box = Length X Width X Height (Cm^3)



Activity (4)

Determining the mass of object:

The name of the tool in front of you is sensitive balance.

It is used in measuring small masses (gm).

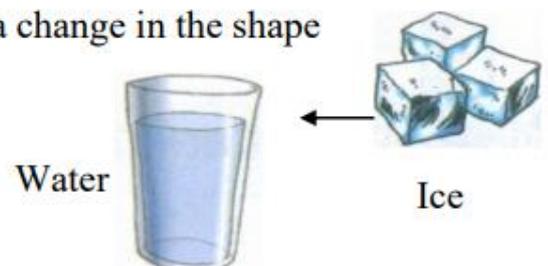


Activity (5)

Melting process:

Observation: Ice melts and changes into water by heating.

The type of this change is physical change, because it is a change in the shape of matter only without any change in the structure.



Activity (6)

Types of elements:

| Metals | Non-metals |
|---|--|
|  Copper wire – Iron nails – Aluminum foil |  Carbon – Sulphur |
|  - Steel spoon – Silver ring | |

Activity (7)

Physical changes:

- Melting of wax is physical change. Because it is change in the shape of matter only without any change in the structure.



- Grinding of sugar is physical change. Because it is change in the shape of matter only without any change in the structure.



- Cutting of paper into small pieces is physical change. Because it is change in the shape of matter only without any change in the structure.



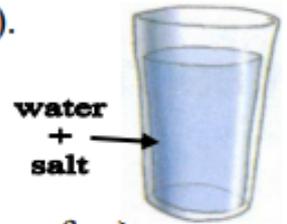
To prove that the dissolving of table salt in water is a physical change

- Observation:

Table salt dissolves in water and disappears (the shape changes).

- Conclusion:

Dissolving of table salt in water is a physical change as the shape of salt changes but its structure does not change.



Activity (8)

Chemical changes:

- Burning of paper is a chemical change, because it is change in both shape and structure of matter producing new substance with new properties.



- Iron rust when exposing it into water and air (oxygen).

- Rusting of iron is a chemical change, because it is change in both shape and structure of matter producing new substance with new properties.



- Adding sodium bicarbonate to vinegar is a chemical change:

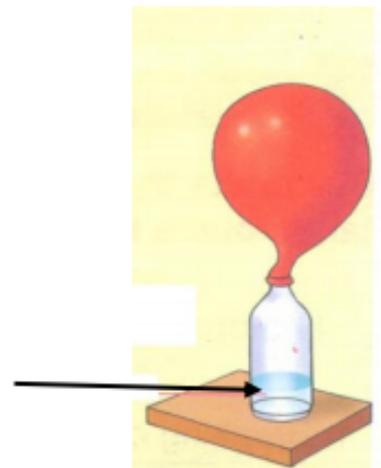
Observation:

The balloon is inflated due to production of carbon dioxide gas

Conclusion:

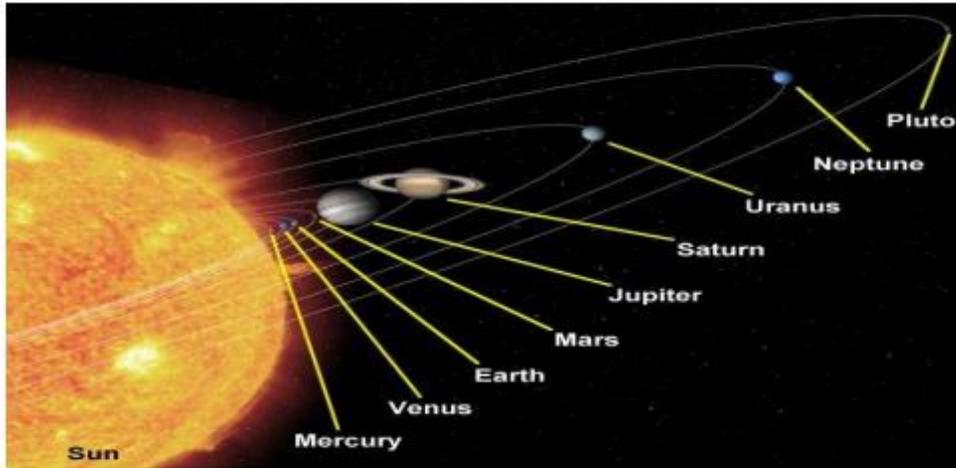
Adding sodium bicarbonate to vinegar is a chemical change as their shape and structure change producing new substance with new properties.

Vinegar + sodium bicarbonate



Activity (9)

Model of Solar system :



The solar system consists of sun, moon, eight planets and other celestial bodies.

The 8 planets are arranged from the nearest to the farthest from the sun as follows:

Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune.