



## 3055 BA SANGAM COLLEGE

PH: 6674003/9264117 E-mail: basangam@connect.com.fj



### WORKSHEET 12

School: Ba Sangam College

Year/level: 10

Subject: Basic Science

NAME: \_\_\_\_\_

Strand 2	Matter
Sub Strand 2.2	Materials
Content Learning Outcome	Investigate the differences in the properties and uses of metals and non-metals and describe the change in properties of metals when heated or cooled or when doing work on them.

#### **Lesson Notes - Properties of metals and non-metals**

**Metals** – are on the left of a periodic table.

- Most are solid, except for mercury ( the only liquid metal used in thermometer)
  - Usually high melting and boiling point.
  - Very good conductors of heat and electricity
  - Shiny appearance (silvery except for copper and gold)
  - Quiet strong material
  - Malleable – easily beaten into thin sheet (e.g. foil)
  - Ductile – can be pulled to make wires (e.g. electrical wirings)
  - High density – feel heavy
  - Sonorous – they make ringing noise when you strike them
  - React with oxygen to form basic oxide
  - Metals get more reactive as you move to the left of the periodic table so Group 1 metals are the most reactive
- Non-metals – are on the right of the periodic table.

#### **Properties of non- metals are:**

- Gases, liquids or solids at room temperatures
- Usually have low melting and boiling points
- Have dull surfaces when solid
- Non- malleable when solid
- Brittle – breaks easily
- Poor conductors of heat and electricity
- Low density
- React with oxygen to form acidic oxide.

Exercise

1. List **three** properties of metals.

---

---

---

(3 marks)

2. List **three** properties of non- metals

---

---

---

(3 marks)

3. State **two** differences between metals and non-metals.

---

---

---

(2 marks)

4. Explain what the following terms mean.

a. Sonorous

---

(1 mark)

b. Brittle

---

(1 mark)

TOTAL:

