

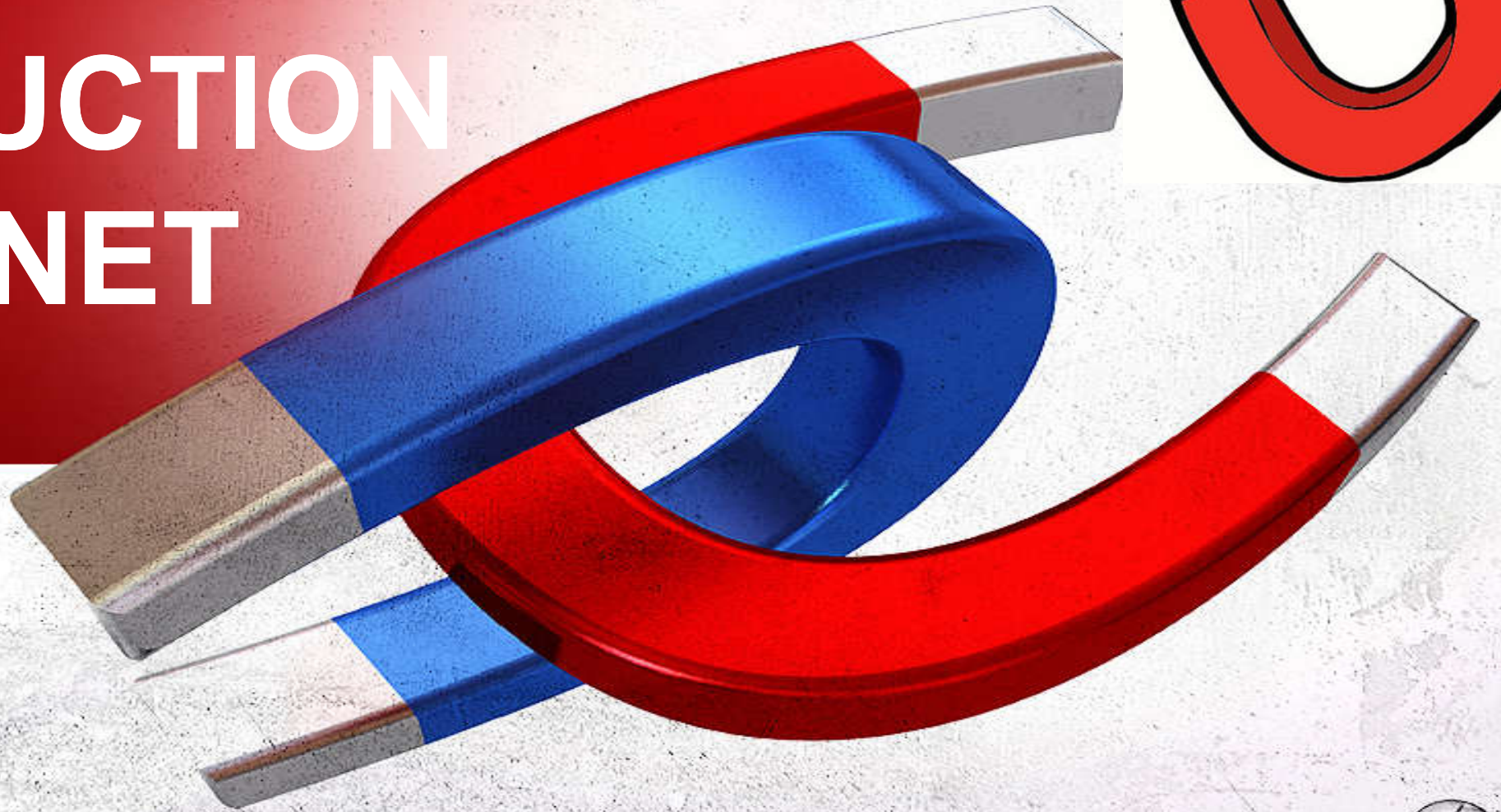
OGUN DIGICLASS

- **SUBJECT: SCIENCE**
- **TOPIC: INTRODUCTION TO MAGNET**



INTRODUCTION TO MAGNET

FOLAKE SONEYE





LEARNING OBJECTIVES



At the end of the lesson, pupils should be able to:

- Explain the meaning of a magnet.
- State two (2) characteristics of a magnet.
- Mention three (3) magnetic materials.





INTRODUCTION



- Magnets are solid objects of stone, metal or other material which have the property of attracting iron containing materials.
- This attracting property can be natural as in the case of **lodestone**.
- Lodestone is a black large naturally occurring rock. This rock attracts metallic objects to itself.
- This type of rock was later named magnetite.



MAGNET



A magnet is a solid material or substance which can attract iron or steel materials to itself.



Magnets have a force which help them to attract objects. This force is called **magnetic force**.



Magnets are made of iron or steel.



All magnets are metals, iron or steel but not all metals are magnet.



TYPES OF MAGNET



A magnet can have the following shapes:

Ring or doughnut magnet



Horse shoe magnet



TYPES OF MAGNET

Wand magnet



Bar magnet



TYPES OF MAGNET

Cylindrical magnet



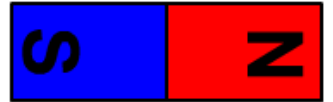
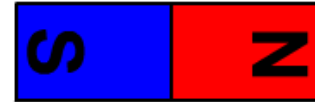
Ball magnet



What do all these new words actually mean?

- **Magnet:** A stone or a piece of metal that attracts some other metal.
- **Attract:** To pull towards each other.
- **Repel:** To push away from each other.
- **Poles:** The ends of a magnet.

Opposite Poles Attract

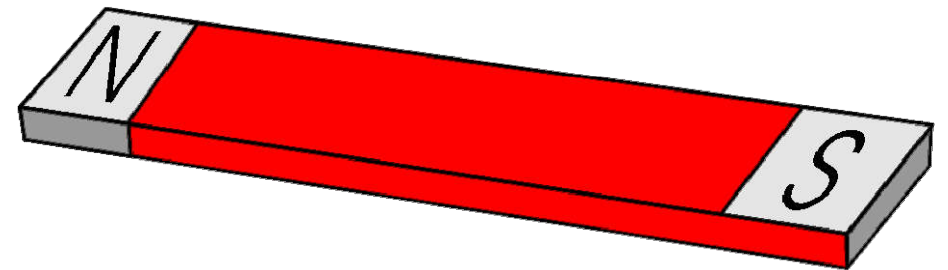


Same Poles Repel



CHARACTERISTIC OF MAGNET

- They can attract some materials such as: nails, pin, coin etc.
- They are usually made of iron or steel.
- They have two ends called magnetic poles.
- They can also repel other magnets.

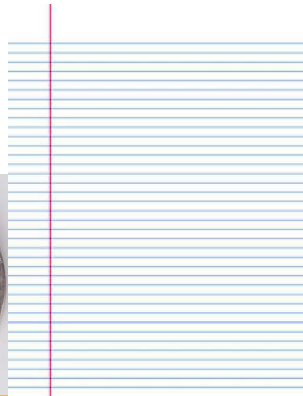


MAGNETIC AND NON-MAGNETIC MATERIALS

Activity

Use a magnet to test which of the listed items can be attracted.

Items: Nails, piece of paper, biro, office pin, coin, pencil, iron fillings, plastic spoon, piece of wood and steel spoon.



Name of Item	Attracted	Not Attracted
Nails	✓	
Piece of paper		✓
Biro		✓
Office pin	✓	
Coin	✓	
Pencil		✓
Iron fillings	✓	
Plastic spoon		✓
Piece of wood		✓
Steel spoon	✓	

Magnetic Materials

These are materials that can be attracted by a magnet.

Examples are: iron, steel.



- Which materials are attracted to a magnet?

- Objects made of metals like iron and steel are attracted to a magnet.
- These are known as **magnetic materials**.



Non-Magnetic Materials

These are materials that cannot be attracted by a magnet. Examples are: plastics, rubber, wood.

What characteristics do magnets have?

- Which materials are attracted to a magnet?
 - All non-metals such as plastic, wood, paper, glass and clay cannot be attracted to a magnet.
 - These materials are called **non-magnetic materials**.



Examples of non-magnetic materials:



paper



glass



plastic



rubber

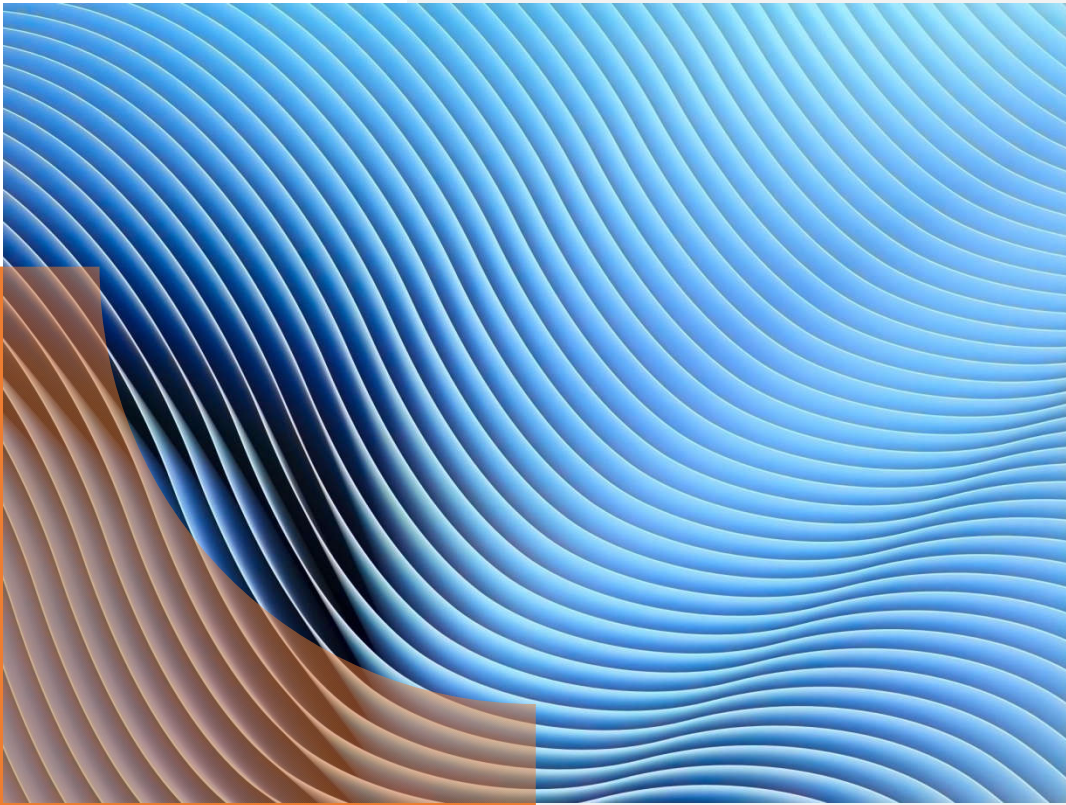


wood

EVALUATION

What is a magnet?

List three (3) magnetic materials.



ASSIGNMENT

List two (2) characteristics of magnet.

List three (3) electrical gadgets.