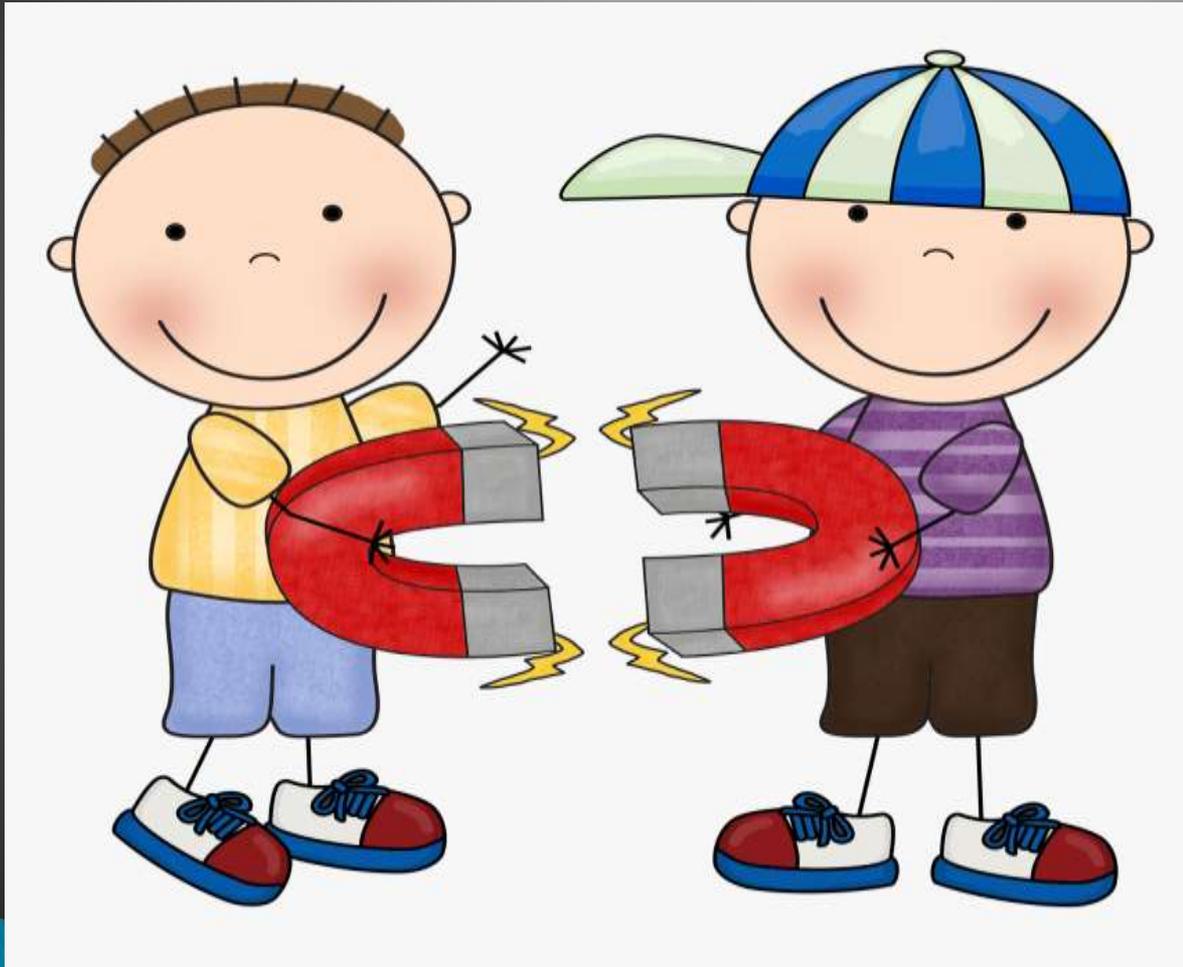


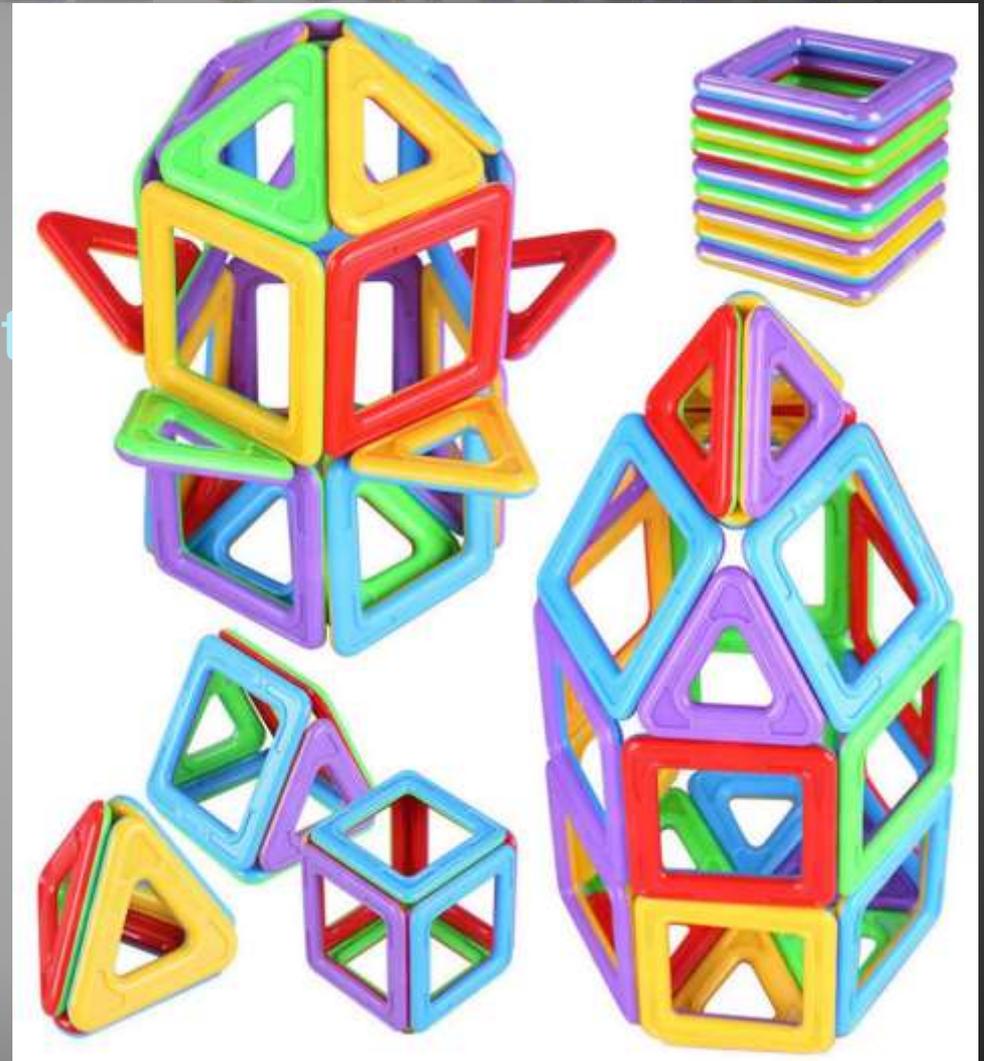
# 13. FUN WITH MAGNETS



MODULE-  
1/3

# THIS MODULE CONTAINS:-

- ▶ Magnets (an introduction)
- ▶ Discovery of magnetism
- ▶ **Types of magnets**
- ▶ Types of materials based on magnetic attraction.



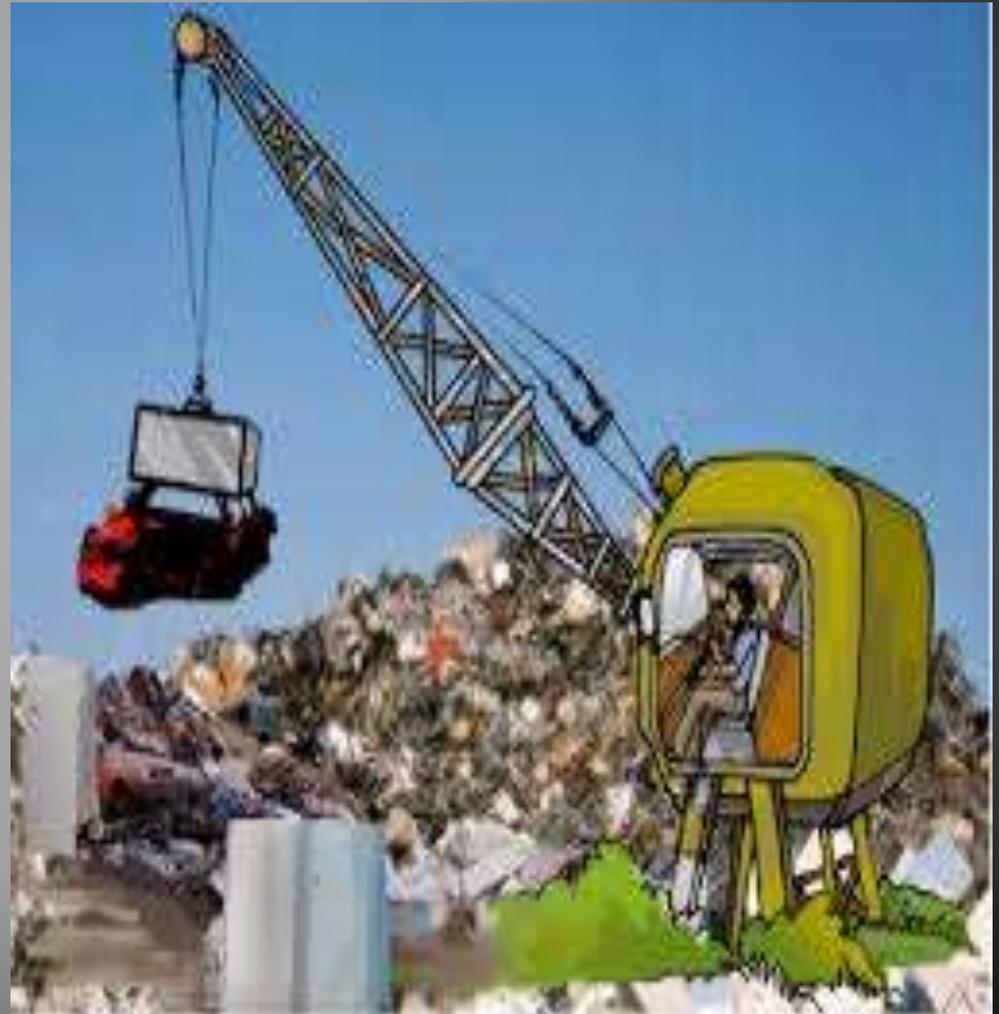
# 13.1 INTRODUCTION

Observe carefully  
and note down  
your  
observations  
as:-

1.....

2.....

3.....etc.



# MAGNET

- ▶ Those substances having the property of attracting materials like iron, cobalt and nickel are called magnets.



# USES OF MAGNETS



**CAN YOU  
FIND FEW  
MORE  
EXAMPLE  
S**

# DISCOVERY OF MAGNETS

- ▶ There was a shepherd named Magnes , who lived in ancient Greece.
- ▶ One day he was looking after his sheep in the hills.
- ▶ He would take a stick to control his herd.
- ▶ The stick had a small piece of iron attached to one end.



All of a sudden, he felt a mysterious force pulling his iron staff from his hand.



Even the iron nails on his sandals were being pulled out.

To his great surprise, he discovered that it was a huge, black rock next to him that was pulling his staff and the nails.





Soon, news spread across the country about the strange rock that had the power to pull things to it.

## Continuation.....

- ▶ Such rocks are given name as **magnetite**, perhaps after the name of that shepherd.
- ▶ It is said that this is how natural magnets were discovered.
- ▶ Some people believed that magnetite was first discovered at a place called Magnesia.

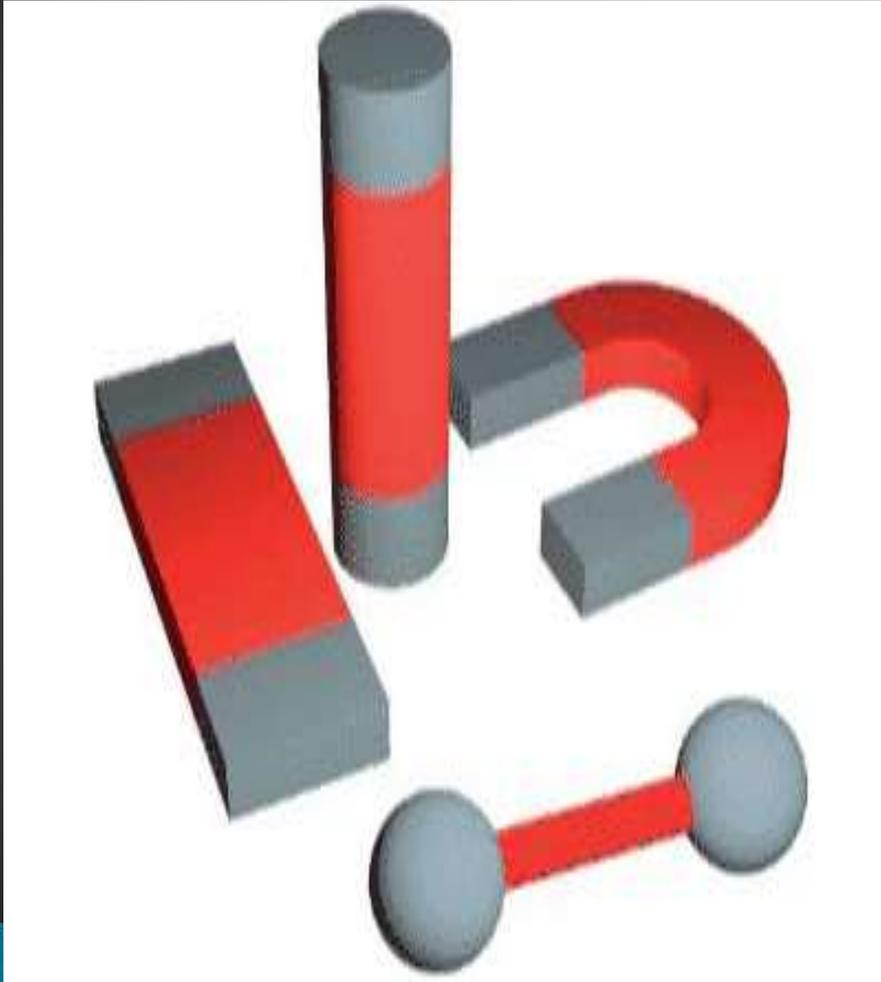
# TYPES OF MAGNETS

<b>Artificial Magnets</b>	<b>Natural Magnets</b>
Artificial magnets are made by man by using different techniques.	Natural magnets are found in nature.
They are stronger as compared to natural magnets.	They are weaker as compared to artificial magnets.
They can be temporary or permanent magnets	Natural magnets are always permanent magnets
They are available in different shapes and sizes.	They are available in the shapes and sizes as they occur in nature.
Example - Horse shoe magnet, bar magnet.	Example - Magnetite (Lodestone)

# A NATURAL MAGNETS

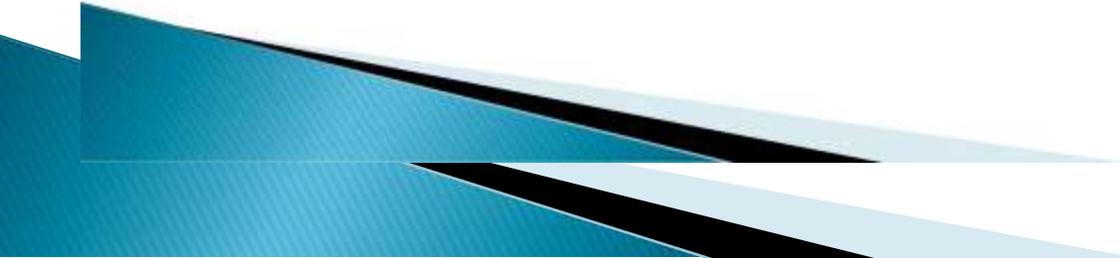


# SOME ARTIFICIAL MAGNETS



- ▶ Try to find out the names of these magnets shown in figure.

# MAGNETIC AND NON-MAGNETIC MATERIALS

- ▶ Magnetic material – All materials that are attracted by magnets are called magnetic materials.
  - ▶ Eg—Iron, Nickel and cobalt.
  - ▶ Non magnetic materials – All materials that are not attracted by the magnet are called non magnetic materials.
  - ▶ Eg—Wood, paper, stainless steel, silver and gold.
- 



FROM,  
PIU ROY

AECS-1, KALPAKKAM