E-Module
Magnet

NATURAL SCIENCE

Theme : 5. Entrepreneur

Subtheme : 2. Business Around Me

CLASS

VI

Name :

Attendees number :

Magnet

What is the meaning of magnet?

Magnets are objects that can attract certain objects. The magnetic force that attracts certain objects is called the magnetic force. The attractive force on a magnet can attract certain objects, this means that not all objects can be attracted by a magnet.

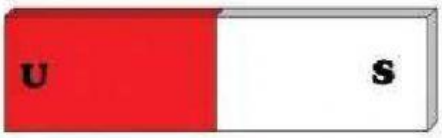
- Objects that are attracted by a magnet are called magnetic objects.
  Example: Objects made of iron and steel.
- Objects that are not attracted by a magnet are called nonmagnetic objects.
  Example: Objects made of wood, rubber, or plastic.

Magnetic Force Properties:

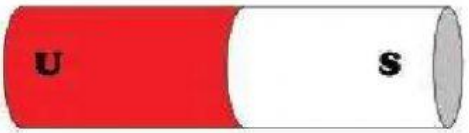
1. Has a Magnetic Field
2. Can Pierce Objects
3. Have Repulsion and Attractive Forces
4. Only Attracts Certain Objects Around It
5. Magnetic Properties Can Be Weakened

Magnet Shape

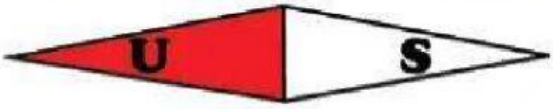
What are the forms of magnets?



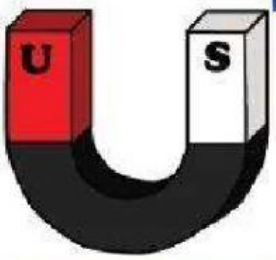
Bar magnet



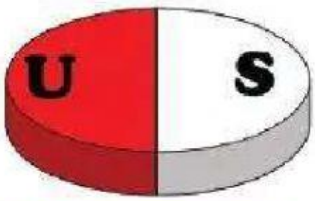
Cylinder magnet



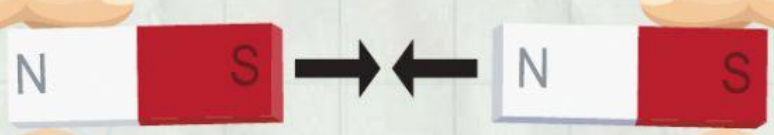
Needle magnet



Horseshoe magnet



Circle magnet



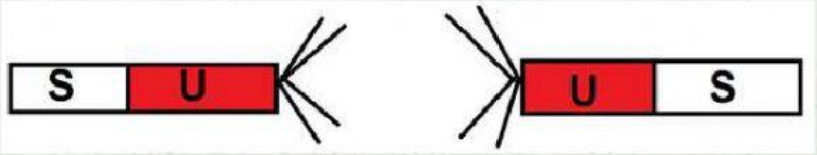
Magnetic pole

What are magnetic poles?

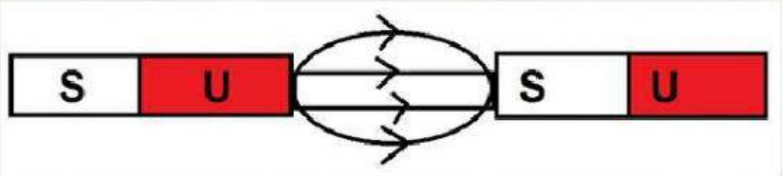
Did you know that every magnet has two places where the magnetic force is very strong, this area is called the magnetic pole. Each magnet has a north pole and a south pole so that attraction or repulsion can occur with certain objects.

Try to pay attention to the image of the magnet shape above, there is a blue part and one is red. The S mark indicates the South pole, while the N sign indicates the North pole.

Then, how can there be an attraction or repulsion between the magnetic poles?



The poles of similar magnets, if they are close together, will repel each other.

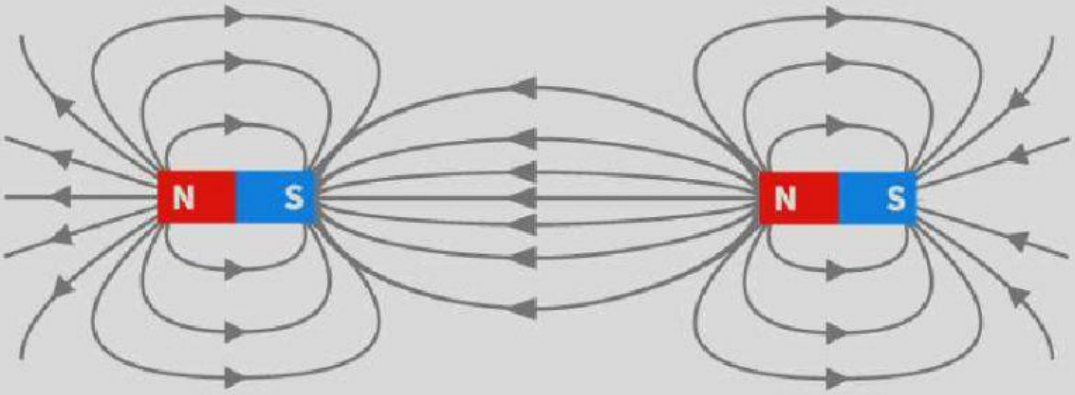


Magnetic poles that are not alike, if they are close together, will attract each other.

Magnetic field

What is the meaning of the magnetic field?

The magnetic field is the space/area around a magnet that is still affected by the magnetic force. Magnetic fields are represented by magnetic lines of force, and are indicated by arrows. The magnetic field is influenced by the direction of the magnetic lines of force, which is from north to south of the magnet.

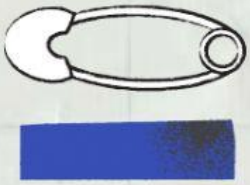


Things to note about magnetic lines of force are:

- Magnetic lines of force never intersect.
- Magnetic lines of force always leave the north pole of the magnet and enter the south pole of the magnet.
- A place where the magnetic lines of force are close together indicates a strong magnetic field, whereas a place where the magnetic lines are loose indicates a weak magnetic field.

Magnet Quiz!

1. Classify each object below if its a magnetic object or not!






2. Draw the line! What is the difference between magnetic and non-magnetic objects?

Cannot be attracted by magnets.

Objects that can be attracted by a magnet.

Example: Steel, iron, nickel, cobalt

Contains no metal.

Contains metal

Examples:marbles, plastic rulers, paper, and glass.

Magnetic

Non Magnetic

Magnet Quiz!

3. The word magnet comes from the word...

A. magnet B. magnetic C. magnesia D. magnesium

4. A magnetic object is an object which, when attracted by a magnet, will...

A. avoid B. approach C. quiet D. block

5. Strong magnets made of...

A. gold B. iron C. copper D. steel

6. How to bring out the magnetic properties...

Rubbing on iron rods	Correct	Wrong
Alternating electric current	Correct	Wrong
Beaten	Correct	Wrong
Heated	Correct	Wrong
Induced	Correct	Wrong

7. Install the magnetic poles correctly...

East South West North

Magnet Quiz!

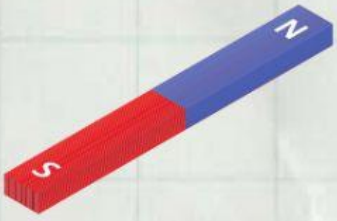
8. If the poles of two magnets are not the same name, they will be brought together....

When the poles of two magnets are brought close together, they will...

9. The benefits of magnetic force are...

Electric bell	Correct	Wrong
Attract other things	Correct	Wrong
Train	Correct	Wrong
Electric switch	Correct	Wrong
Compass	Correct	Wrong

10. Drag and match the appropriate magnetic shapes!



Horseshoe magnet

Bar Magnet