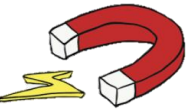


# FORCES AND MAGNETS

## Key Vocabulary

magnetic, forces, surface, push, pull, attract, repel, magnetic pole, north, south.

## KNOWLEDGE ORGANISER



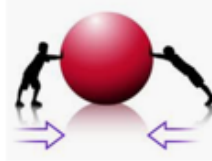
Assessment question: How do magnets work?

## Forces

What are forces?

-A force is the push or pull in a particular direction.

-Forces are shown by arrows in diagrams. The bigger the arrow, the bigger the force. The direction of the arrow shows the direction of the force.



Pushes and Pulls




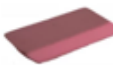

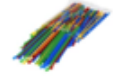
-A push is the force that moves an object away from something.



-A pull is the force that brings an object towards something.

-A push and a pull are opposite forces.

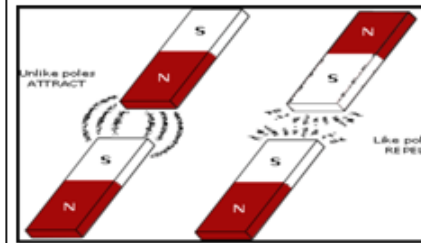
## Magnets

magnetic	non-magnetic
 washer	 eraser
 iron filings	 drinking straw

-A magnet is made of materials that create a magnetic field.

-Magnets create a 'magnetic force' that causes objects to **attract** (pull closer together) or **repel** (push further apart).

-Magnets can act at a distance.



-Magnets have a north pole and a south pole.

-Like poles repel.

-Unlike poles attract.

### Magnetic Materials

Iron

Steel

Nickel

Cobalt

Gadolinium

### Non-Magnetic

Copper

Gold

Rubber

Wood

Leather