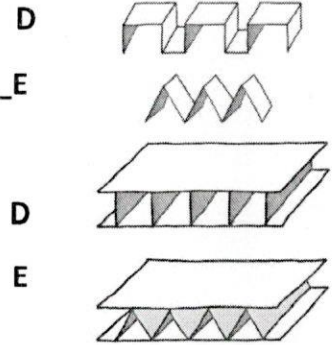


5. Which set of frames will be collapsed first, D or E?

\_\_\_\_\_



6. Explain why the other frame was firmer.

\_\_\_\_\_

**7. Use a Cell Phone for information the answer these questions.**

7.1. Write the name and make of the cell phone. \_\_\_\_\_

7.2. How do you think people make overseas phone calls? Explain.

\_\_\_\_\_

7.3. Which facility on the phone enables it to connect to a computer? \_\_\_\_\_

\_\_\_\_\_

7.4. Name four applications of the phone. Explain what these applications are used for.

\_\_\_\_\_

\_\_\_\_\_

7.5. How do we send and receive pictures and videos? \_\_\_\_\_

\_\_\_\_\_

7.6. Explain what it means if the cell phone has "Bluetooth". \_\_\_\_\_

\_\_\_\_\_

7.7. Why is it necessary for a cell phone to have the following features?

a) ringtones : \_\_\_\_\_

b) screen savers: \_\_\_\_\_

7.8. Choose one of the following and write one advantage and one disadvantage of social media, e.g. WhatsApp, Facebook, Chat On, Twitter, Instagram, Snapchat.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

7.9. Give reasons why an age restriction is important for the use of these sites.

\_\_\_\_\_

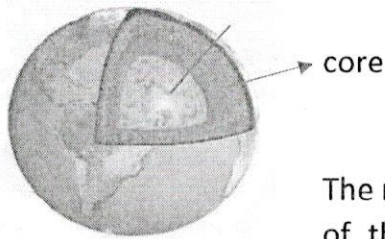
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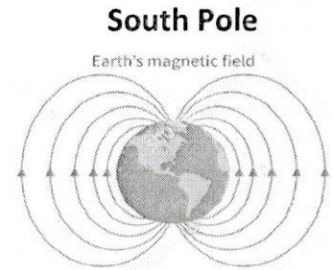
# Magnetism

- **Magnetism** : Ability of a material to exert a force on certain materials.
- **Magnetic Field**: The region around a magnet where a magnetic force can be experienced.  
 -The Magnetic Field protects us from harmful radiation from SPACE

## The Earths Magnetisms.

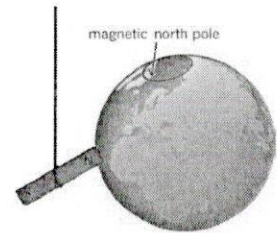


The molten iron core within the earth is always in motion. The movement of this core creates the earth's magnetic field. Magnets respond to the Earth's Magnetic Field.



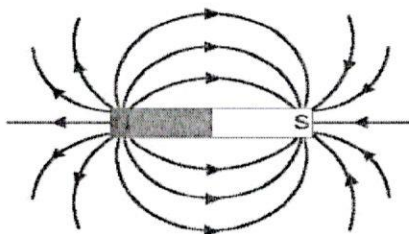
South Pole

- The north pole of a magnet points to the Earth's magnetic north pole if it is allowed to swing freely on a thread.
- The end of a magnet that points to the North Pole of the earth is the NORTH POLE of the magnet.
- The end of a magnet that points to the South Pole of the earth is the SOUTH POLE of the magnet.

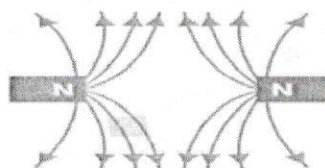
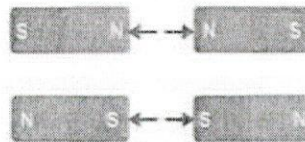


## Magnetic Field around a Bar Magnet

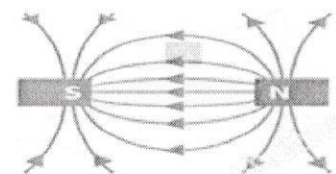
Magnetic Field of a Bar Magnet



Like Poles Repel

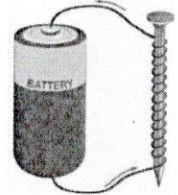
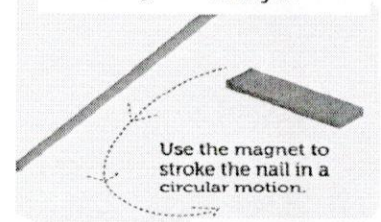
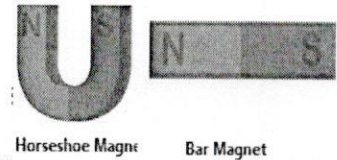


Unlike Poles attract



### THREE TYPES OF MAGNETS

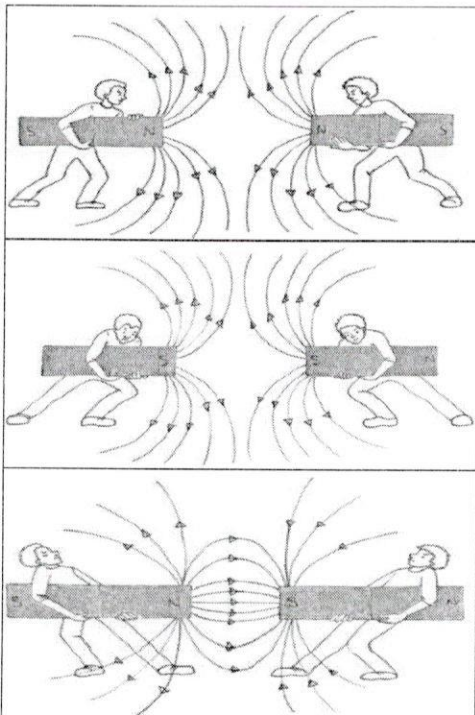
- **Permanent Magnet**  
Keeps magnetic property for a long time.  
*E.g. Horseshoe Magnet, Bar Magnet*
- **Temporary Magnet**  
Acts as a permanent Magnet in a strong Magnetic Field.  
*E.g. Magnetised iron nail.*
- **Electromagnet**  
When electric current passes through a coil of copper wire wound around a metal core it becomes a magnet.  
*E.g. Electromagnet in a motor.*



### MAGNETIC MATERIAL

- **Magnetic Material** : substances that CAN be attracted by a magnet. E.g. iron, steel, nickel
- **Non-magnetic Material** : substances that CANNOT be attracted by a magnet.
  - All Non-metals are non - magnetic e.g. Plastic, paper, wood
  - Certain Metals are non - magnetic e.g. Aluminium, Gold, Copper, brass, lead.
- **Magnetic Field**: region in space in which a magnetic material will experience a force

#### Investigating Magnetic Poles



1. Hold the North Poles of two Bar magnets close each other.

They will \_\_\_\_\_ each other.

2. Hold the South Poles of two Bar magnets close each other.

They will \_\_\_\_\_ each other.

3. Hold the North and South Poles of two Bar magnets close each other.

They will \_\_\_\_\_ each other.