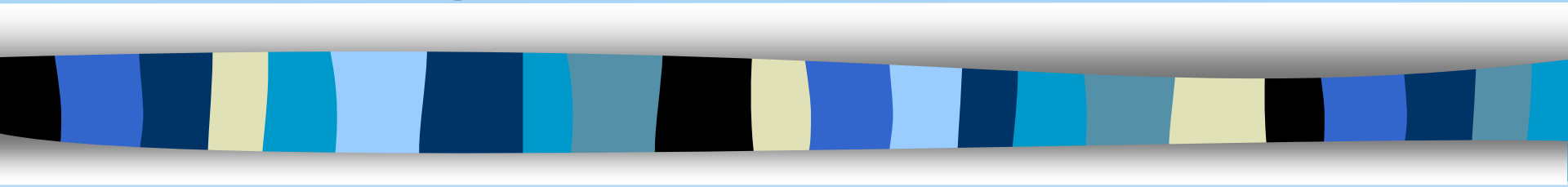


Magnetism



Natural Magnets

- Natural magnets like lodestone, are found in nature



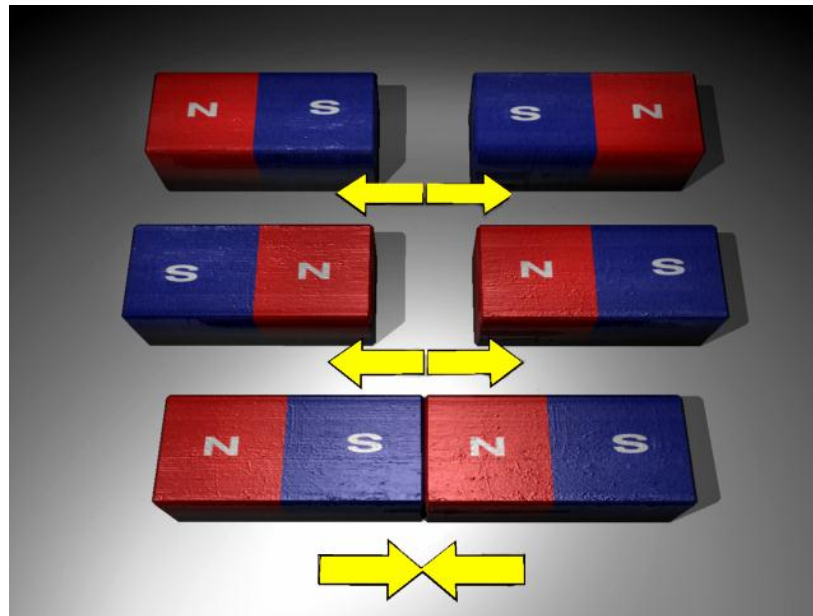
Artificial Magnets

- Artificial or man made magnets are made by magnetising:
 - » Iron
 - » Nickel
 - » Cobalt
 - » Alloys of the above



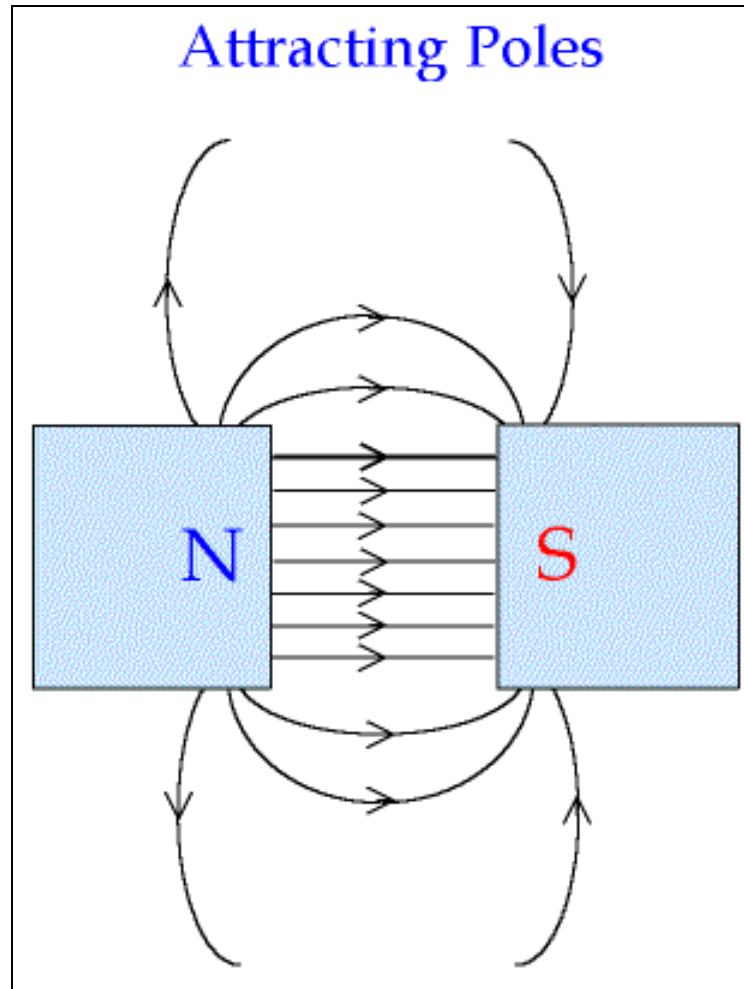
The Poles

- Magnets are strongest at their 2 ends called the “north pole” and the “south pole”.

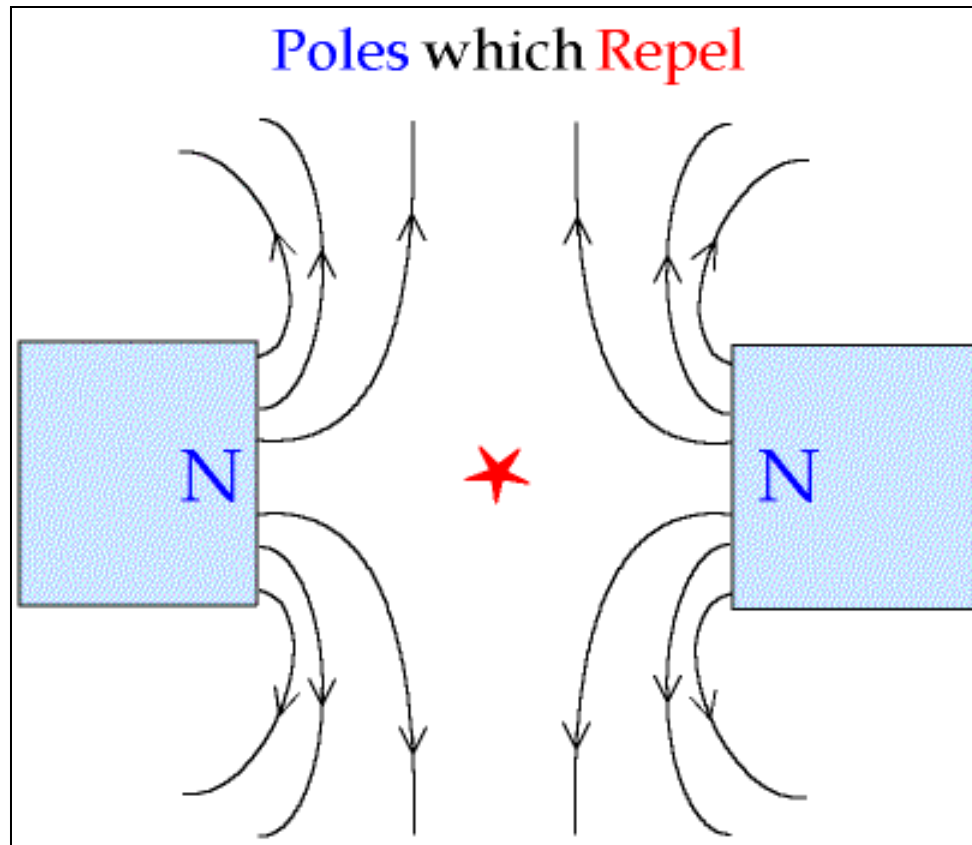


- Like Poles Repel and Unlike Poles Attract.

Unike Poles Attract

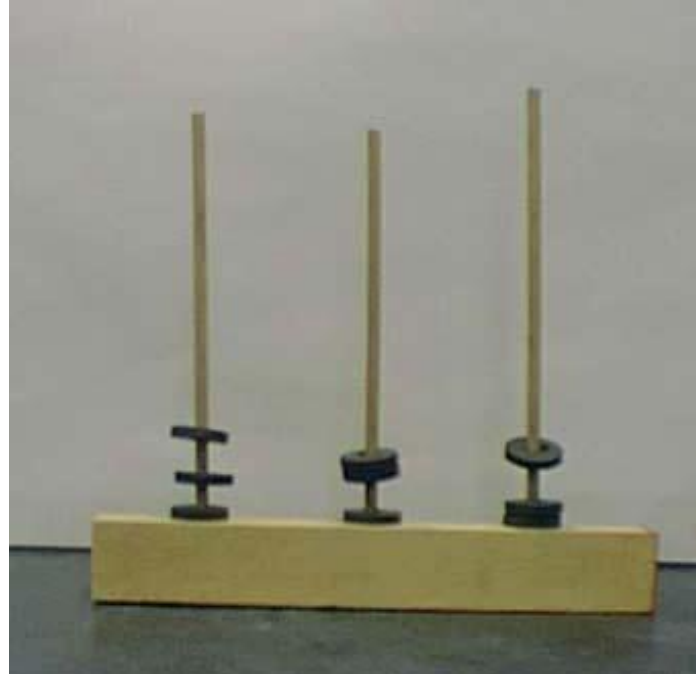


Like Poles Repel

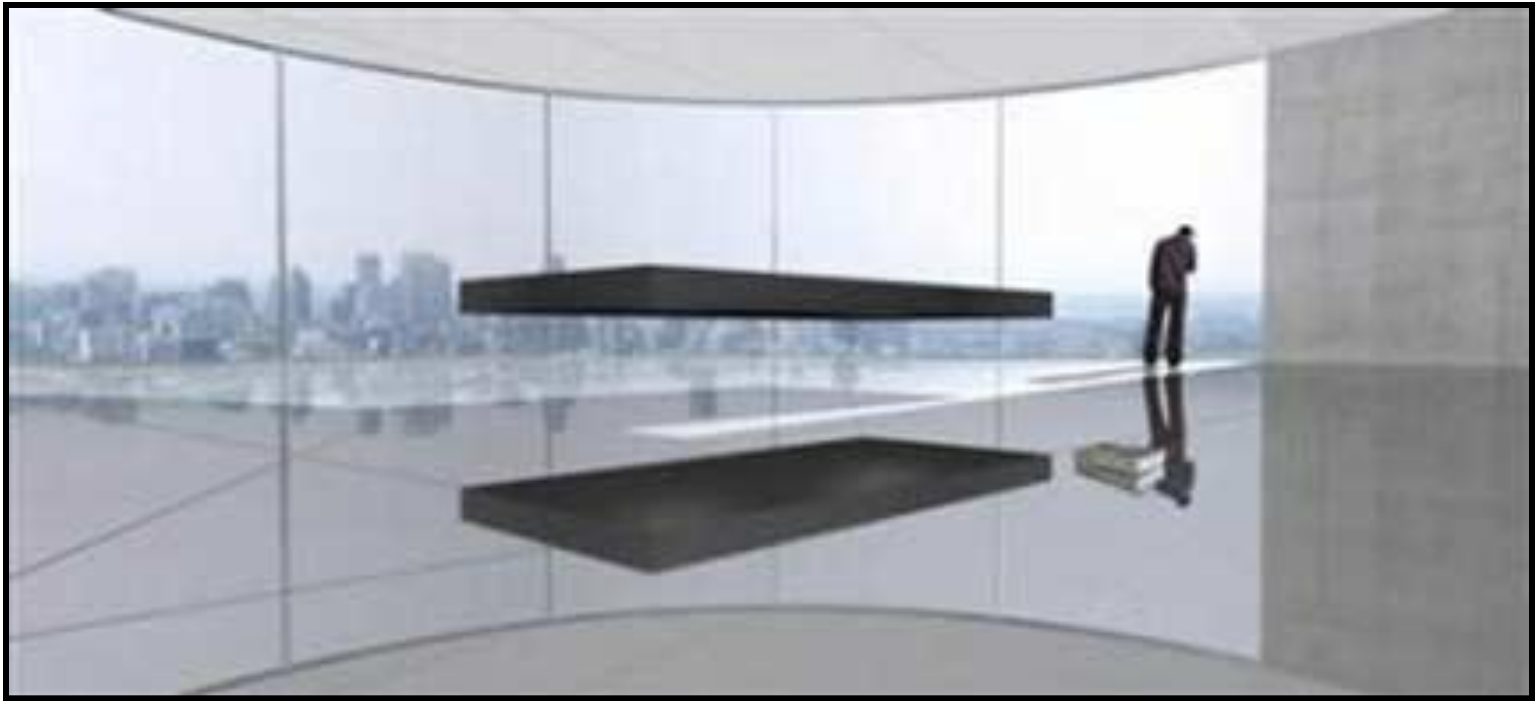


How to Test if Something is a Magnet?

- The true test for determining if something is a magnet is repulsion.

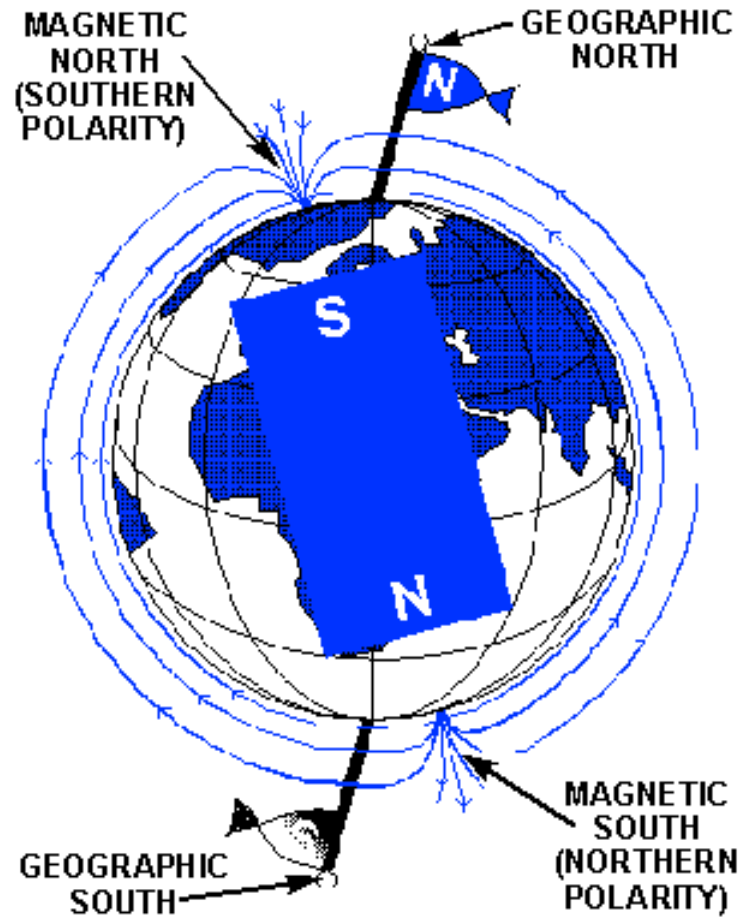


A Designer Floating Bed



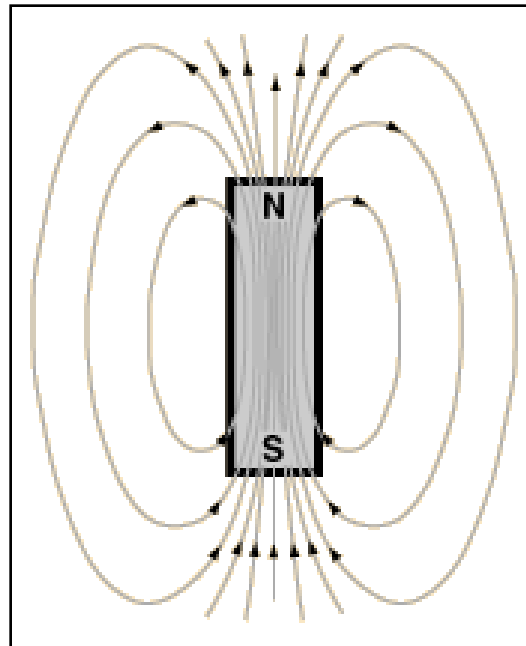
The Earth's Magnetic Field

- The Earth behaves as if there is a huge bar magnet in its centre giving it a magnetic field.



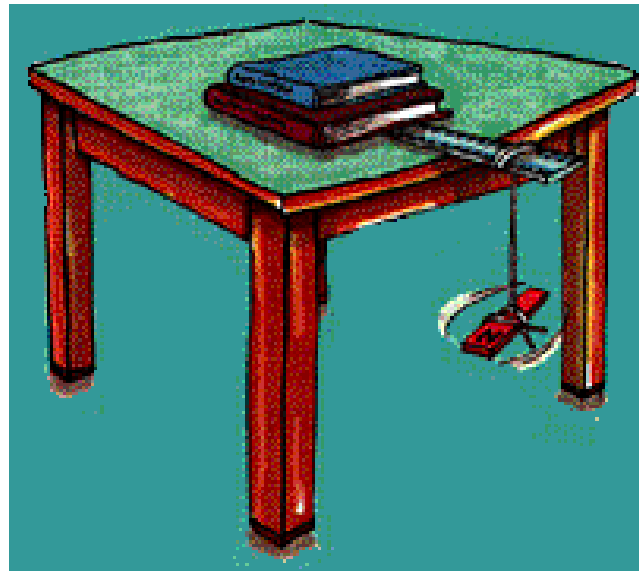
What is a Magnetic Field?

- A magnetic field is the space around a magnet over which it has a magnetic effect.



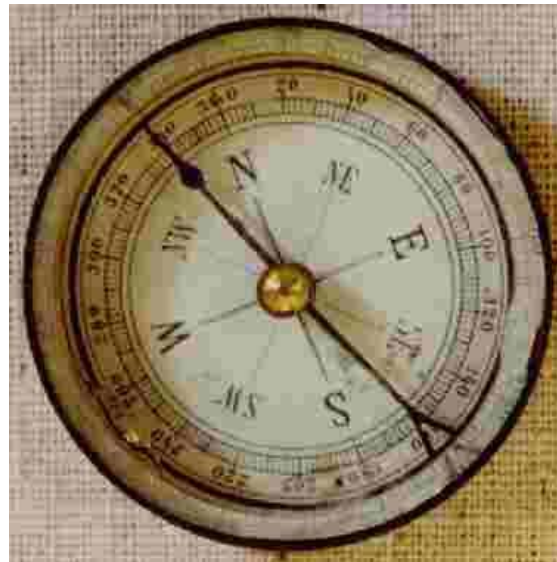
How a Compass works?

- A freely suspended magnet always comes to rest with one end pointing in a northerly direction.



A Compass

- A compass contains a freely suspended magnet which reacts to the magnetic field of the Earth.

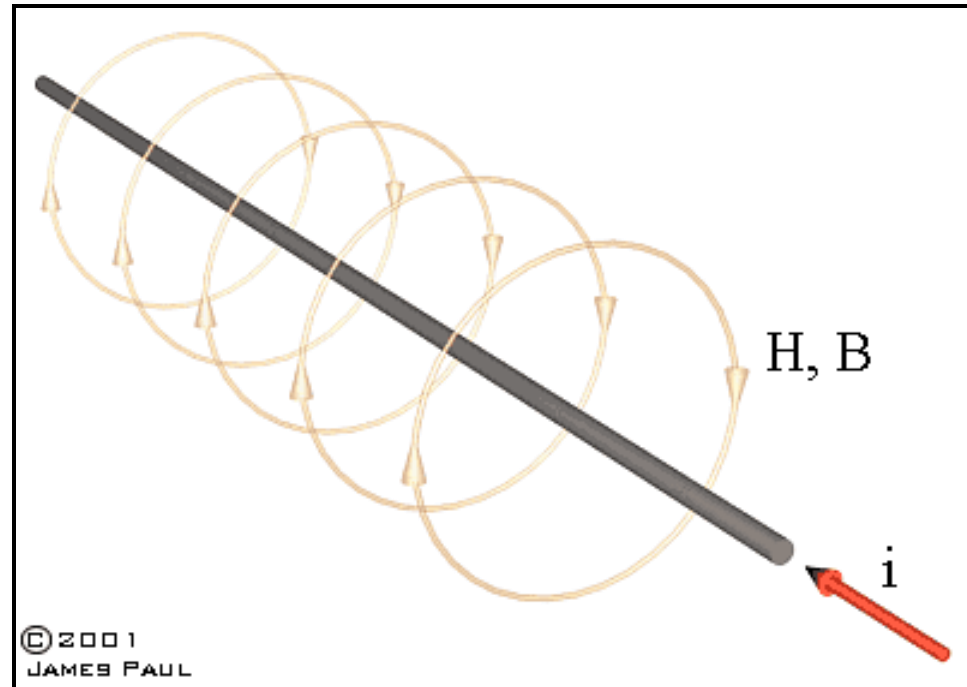


Electricity and Magnetism

- Electricity can make a magnet and a magnet can be used to create electricity.



A wire with a current flowing through it has a magnetic field around it.



An Electromagnet

- An electromagnet only is a magnet when current flows through its coil.



Uses of Magnets

- Electric Motors
- Electric Bells
- Bicycle Dynamo
- Transformers
- Loudspeakers
- CTRs
- Computers
- Phones

