SCIENCE

STD VI

MAGNETISM

Q1. How were natural magnets used in olden days? By what name was a magnet known because of this?

A1. Natural magnets were used to find ways in olden days.

*As it helped in finding ways, it was known as Lodestone.

*It was also known as magnetite(magnetic ore of iron) because it was found in Magnesia in Greece.

Q2. Name three elements that can be permanently magnetised.

A2. The three elements are-

*Aluminium

*Nickel

*Cobalt.

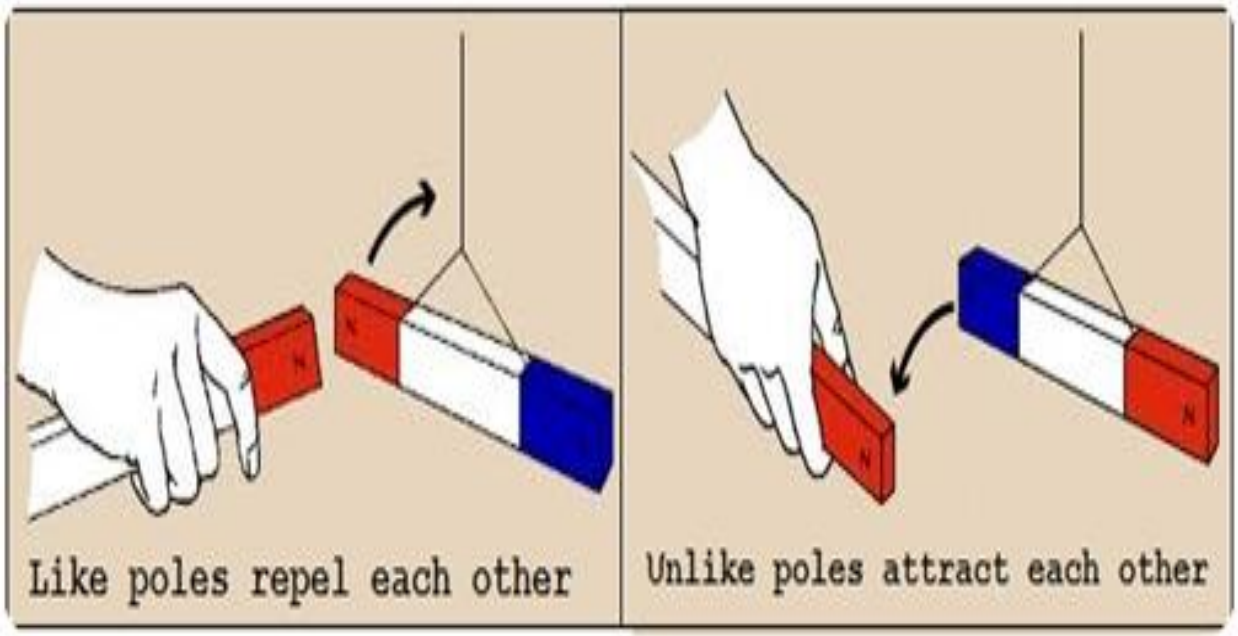
Q3. Where in a magnet is its strength the strongest?

A3. It is strongest at the poles.

Q4. How do the poles of the magnet behave when they are brought close to each other?

A4. When similar/like poles are brought close to each other, they repel.

*When unlike /opposite poles are brought close to each other, they attract each other.



Q5. How can you demagnetise a permanent magnet?

A5. A permanent magnet can be demagnetised if it is-

*Hammered

*Dropped from a height.

*Heated

*Not stored properly.

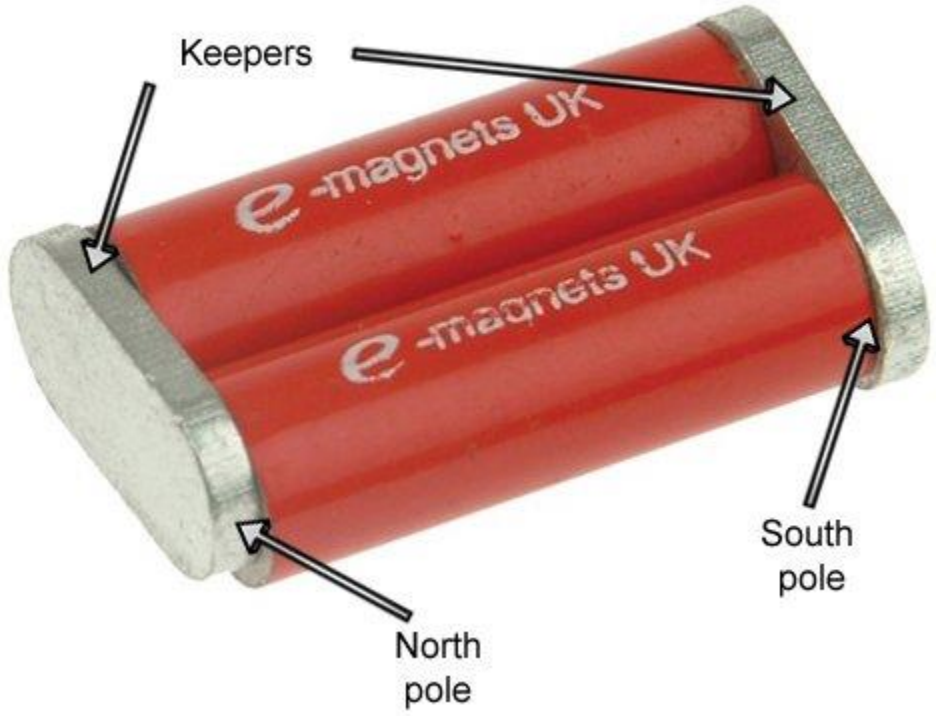
Q6. "The Earth's magnetic north pole is same as its geographical north pole". Is this statement correct?

A6. No, it is not true. The Earth's magnetic north pole is opposite of it's geographical north pole.

Q7.A permanent magnet becomes weak with time. What can be done to prevent this?

A7. A permanent magnet can be prevented from becoming weak with time by the following ways-

*It should be kept with keepers(strips of magnetic materials, usually soft iron).



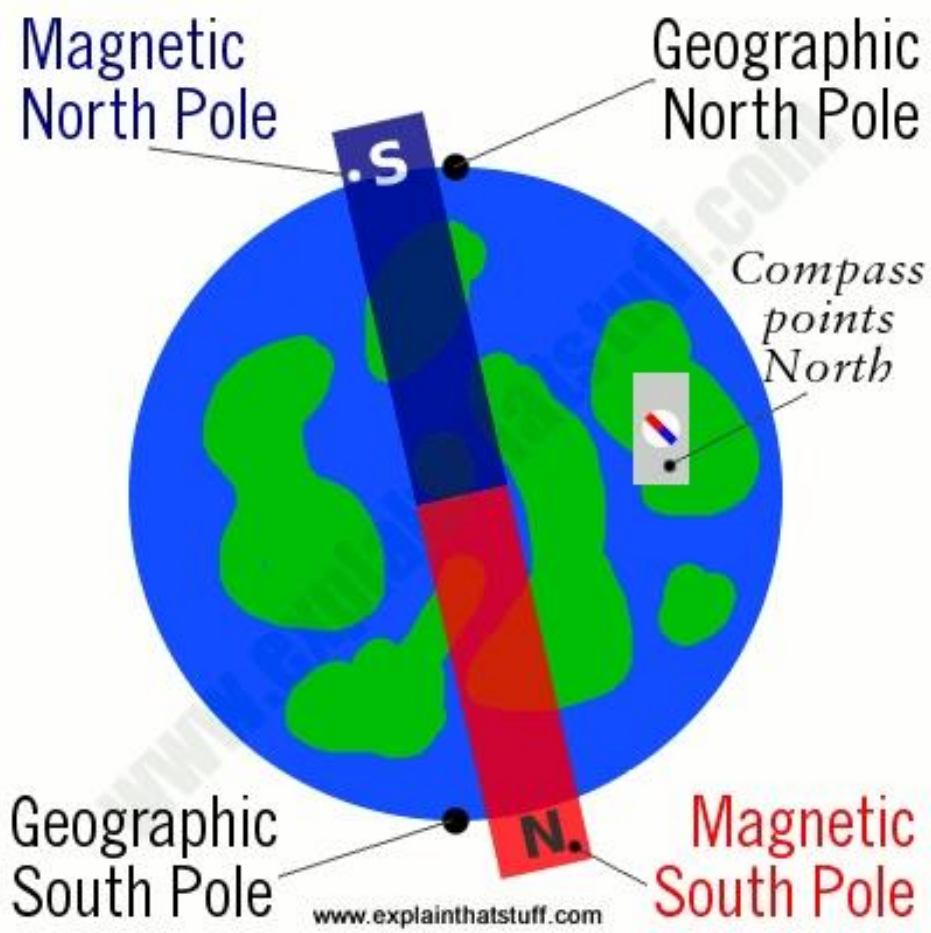
*It should not be heated.

*It should be stored and handled properly and should not be dropped or hammered.

Q8. How do you know that earth behaves like a huge bar magnet?

A8.*It has been observed that when a magnet is suspended, one of its poles always points towards the geographical north and the other end towards the geographical south.

*This shows that the earth acts like a huge bar magnet.



Q9. Write about the uses of magnetism.

A9. Magnetism has many uses-

* A magnet's ability to stick to certain materials is put to use in doors, latches, clasps, stickers, refrigerators.

*Magnets are used to separate magnetic materials.

*They are used in computers, motors, loudspeakers, generators.

* Data , audio-visual signals can be stored by coating special surfaces with magnetic materials.

Q10. What happens if you dip a bar magnet in a pile of pins?

A10. When we dip a bar magnet in pile of pins, the pins stick to the magnet ,but most of the pins get stuck to the poles of the magnet.

*This is because the strength of a magnet is maximum at its poles.

* Its minimum at the magnetic equator.

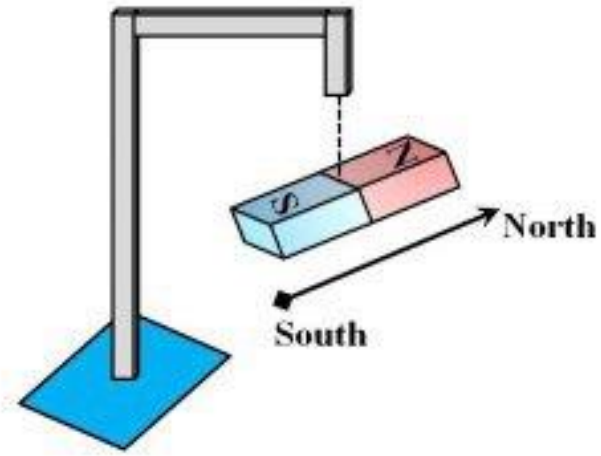
Q11. Write the construction and working of a magnetic compass.

A11. A magnetic compass can be constructed by-

*Take a needle , magnetise it and pass it through a small piece of rubber so that it can float.

*Place the needle in plastic or glass, containing water.

*When the needle comes to the rest, it will always point towards the North-South direction.



Q12. How can you say that repulsion is the sure test of magnetism?

A12. Repulsion is the sure test of magnetism because attraction can take place between a magnet and magnetic material as iron , but repulsion can take place only between the like/similar poles of the magnets.