Magnetic Pole :

*The area of a magnet where the magnetic effect is strongest.

~All magnets have 2 poles

~North and South

Lodestone

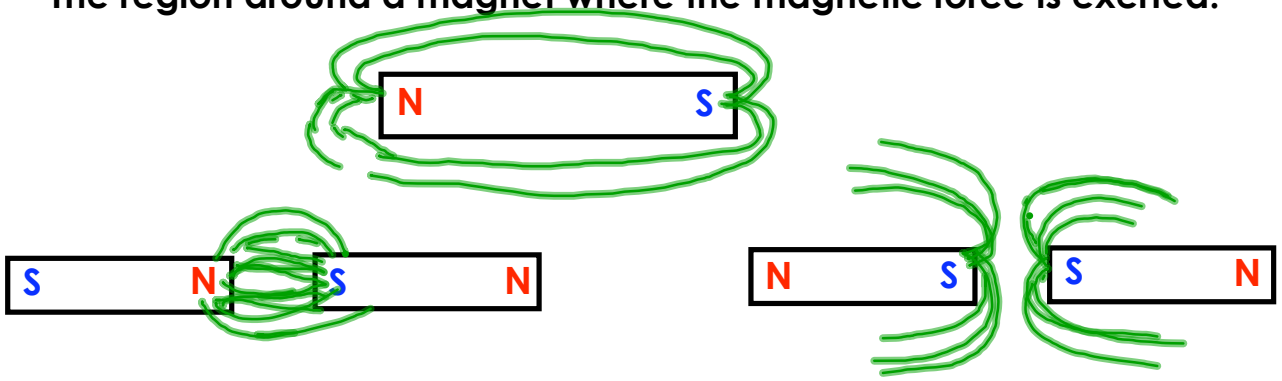
~naturally occurring magnetic rock

~contains magnetite

~magnetized by earth's magnetic field

Magnetic Field

~The region around a magnet where the magnetic force is exerted.

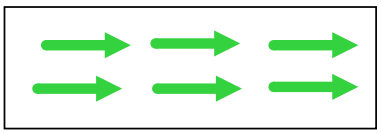


Opposite Poles Attract

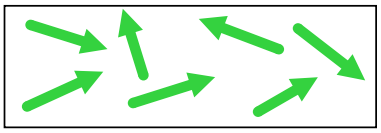
Like Poles Repel

Magnetic Domains:

~Tiny magnetic regions that will all line up the same way at the molecular level



Magnetized



Unmagnetized

Ferromagnetic Material

~Material that shows strong magnetic effects.

Fe : Iron Co : Cobalt Ni : Nickel

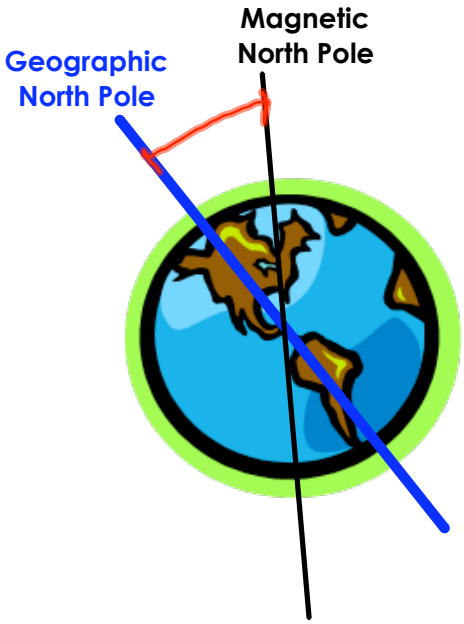
ALNICO: Alloy of Al, Ni, and Co. Makes good permanent magnets

Induced Magnetism

~When an unmagnetized object is brought near a strong magnetic field, its domains will all line up and it will become a magnet

Magnetic Declination:

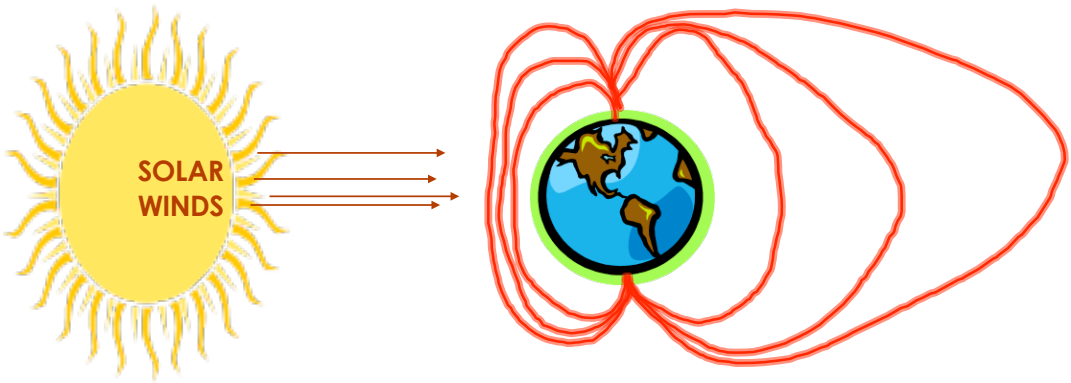
~The angle between geographic north and magnetic north.



THE MAGNETOSPHERE:

~Earth's magnetic field as shaped by the solar winds.

~Protects the earth from harmful radiation



AURORA: A glowing region caused by charged particles from the sun.

~Solar wind particles funneled into the North and South Poles.
~When the particles from the solar wind react with Earth's atmosphere the different gases glow different colors

Northern Lights:
Aurora Borealis
Southern Lights:
Aurora Australis