

 M Magnetism and
 E Electromagnets



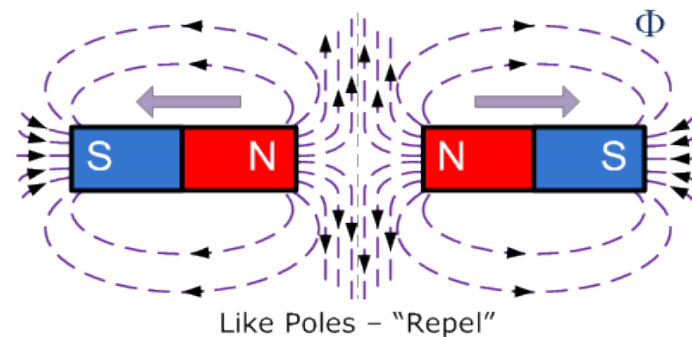
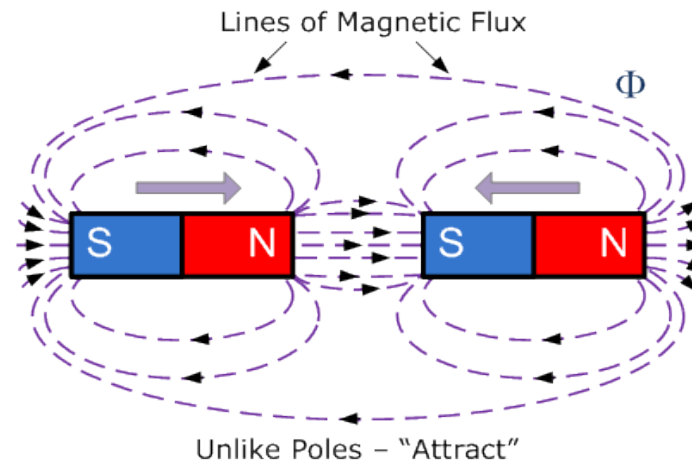
Vocabulary:

- **Electricity** is a form of energy sometimes created by the movement of charged particles.
- A material through which charges can easily flow is a **conductor**.
- **Electric current** is the continuous flow of electric charges through a material.
- A **magnet** is any material that attracts iron and materials that contain iron.
- The attraction or repulsion of magnetic material is called **magnetism**.

- Any magnet has two ends called magnetic poles.
- The area of magnetic force around a magnet is known as its magnetic field.
- A compass is a device that has a magnet on a needle that spins freely.
- Electromagnetism occurs because whenever there is electricity, there is magnetism.
- A coil of wire is called a solenoid.
- A solenoid around a strong magnetic material becomes an electromagnet.

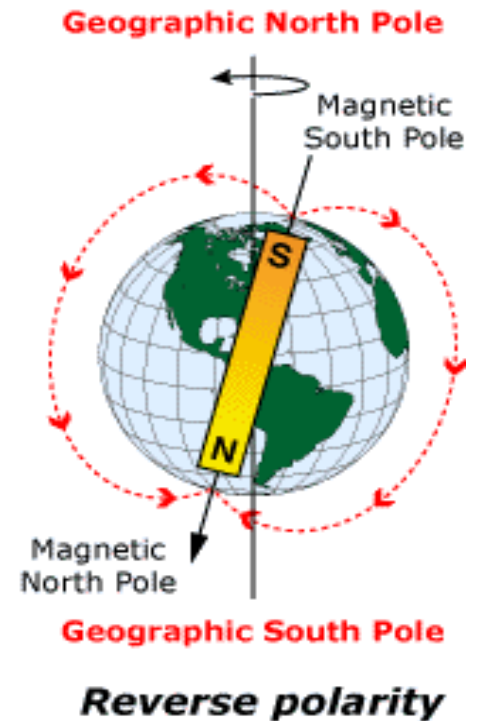
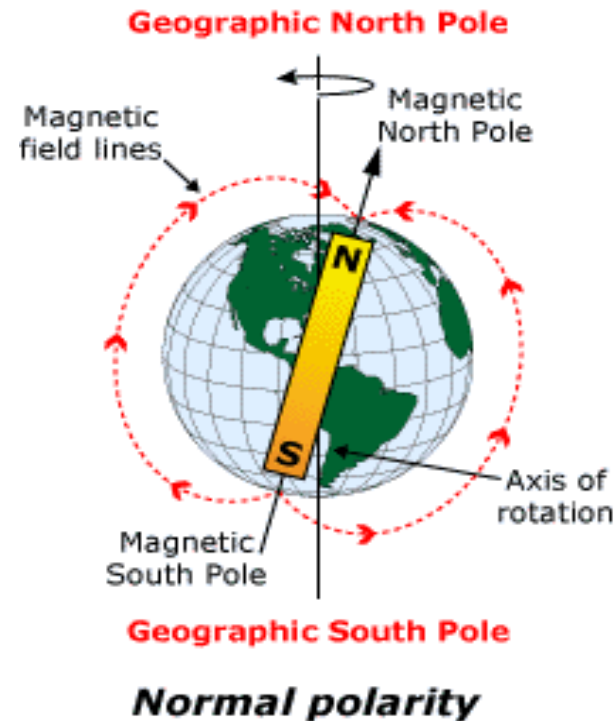
Magnetic Poles

- Magnetic poles that are unlike attract each other, and magnetic poles that are alike repel each other.

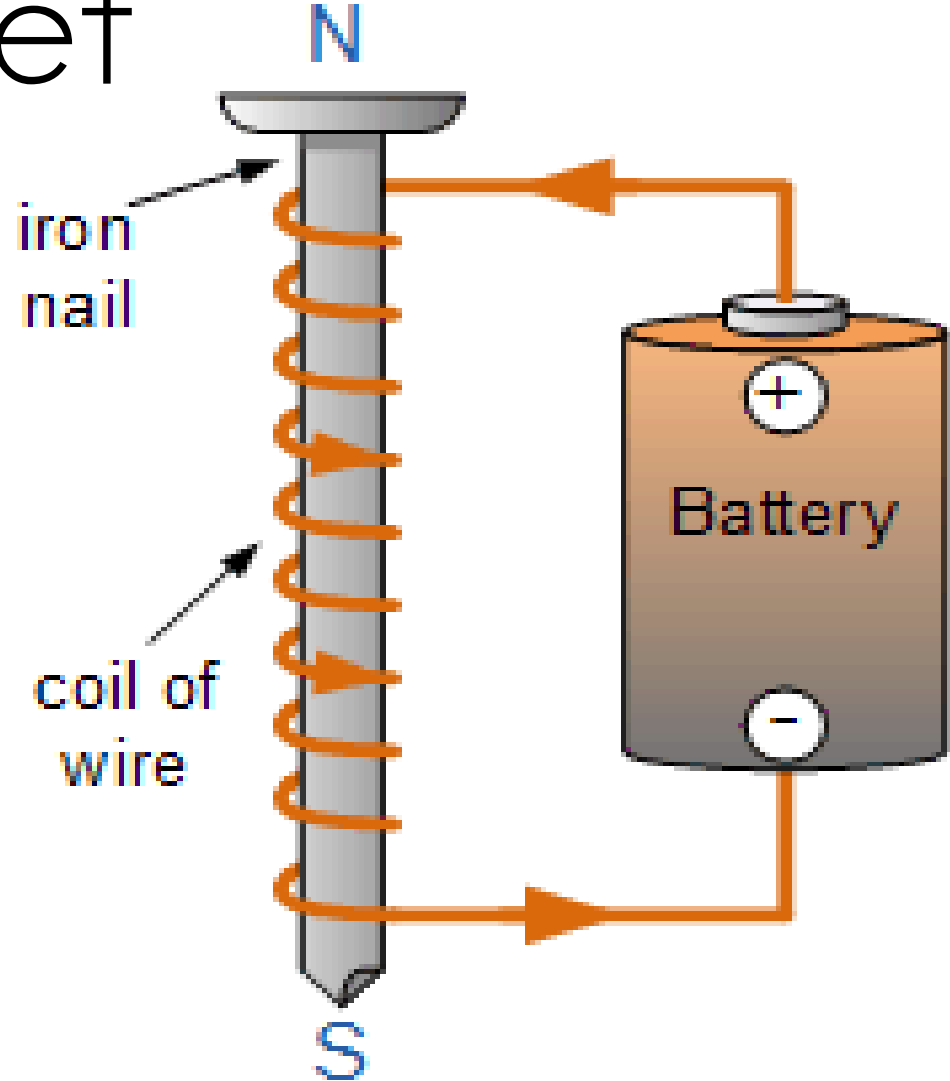


Earth's Core

- Earth's core is a large sphere of metal.
 - Outer core is made of hot swirling liquid iron



Electromagnet



The coil of wire around the iron nail is called a solenoid.