

Unit 3 - Magnetism

A) Magnetism is a _____ that exists between _____
 _____ always create _____

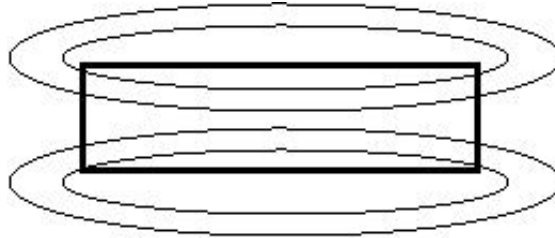
- **Natural Magnetism** comes from - spinning _____ in atoms
- Electric current - Where there is _____ there is always _____

B) Magnetic Fields - regions in _____ where a magnetic _____ may be detected

We will focus on fields around:

- 1) current carrying _____
- 2) permanent and _____

Example 1) Magnetic _____ around a Bar Magnet - (Note: Actual Magnetic Fields contain many more lines of magnetism)



1. **Magnetic flux lines** - _____ in a magnetic field.

A magnetic field is not _____.

Between each line of magnetism their exist _____

- a) The _____ of a _____ line up perfectly with the flux lines

- b) The _____ on a flux line show where the _____ Pole of a compass would point in that field.

REMEMBER THIS: Flux arrows point _____ and back over again to North

- c) Magnetic force strongest at the _____ where flux lines are _____

- d) Measuring the strength of a magnetic field

QUESTION: How do you measure the **strength of a magnetic field**?

ANSWER: Put a _____ with a known current into the field and measure the _____
_____ on the _____