

Magnetic Field Activity

- 1) Draw iron filings around a magnet on the overhead.
- 2) Which side of a compass points north?
- 3) Which side of a compass points to the north pole of the magnet?
- 4) Which side of a compass points to the south pole of the magnet?
- 5) Draw the earth with a bar magnet in it the way it must appear to a compass.

Convention B points out of the North pole of a magnet and into a south pole. North pole is like a positive charge when it comes to drawing field.

B is a vector. Compass gives you the sum of B fields in region.

- 6) B around wire through plastic plate.
- 7) Current in a wire supplied by a battery. Compass above the wire. Compass below the wire. 1 cell / 2 cell / 3 cell. How do we determine the direction of B?
- 8) Current in wire from power supply. Try compass below the wire.

Wrap up RHR and Direction of B

Minute Physics Magnets