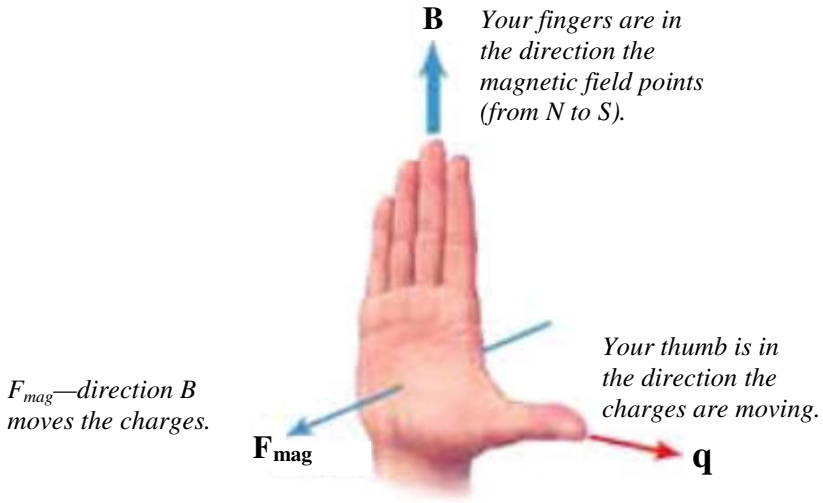
Name: _____

Period: _____

The Right Hand Rule

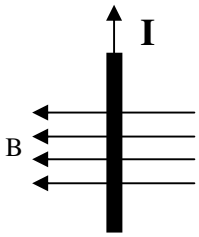
Right Hand Rule

The right hand rule relates the directions of an external magnetic field (B), a moving positive charge (q, v, or I), and the magnetic force on the positive charge. *Use your left hand for negative charges.*

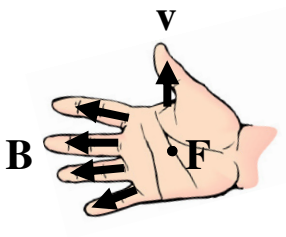


Q can be current or a charge that's

Example: A uniform magnetic field is traveling to the left. Current is moving upward in a wire. Find the direction of the force on the wire.



Solution: Point your finger tips of your right hand toward the left. With your fingers still to the left, turn your hand until your thumb is point up (the direction the charges are moving). Your palm will be pointing towards you or out-of-the page.



Other notes:

1) Use left hand for negative charges (electrons)

2) Charges must be moving to experience a force.

3) Force is always perpendicular to q (V) and B.

4) If B and q are parallel—no force.

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