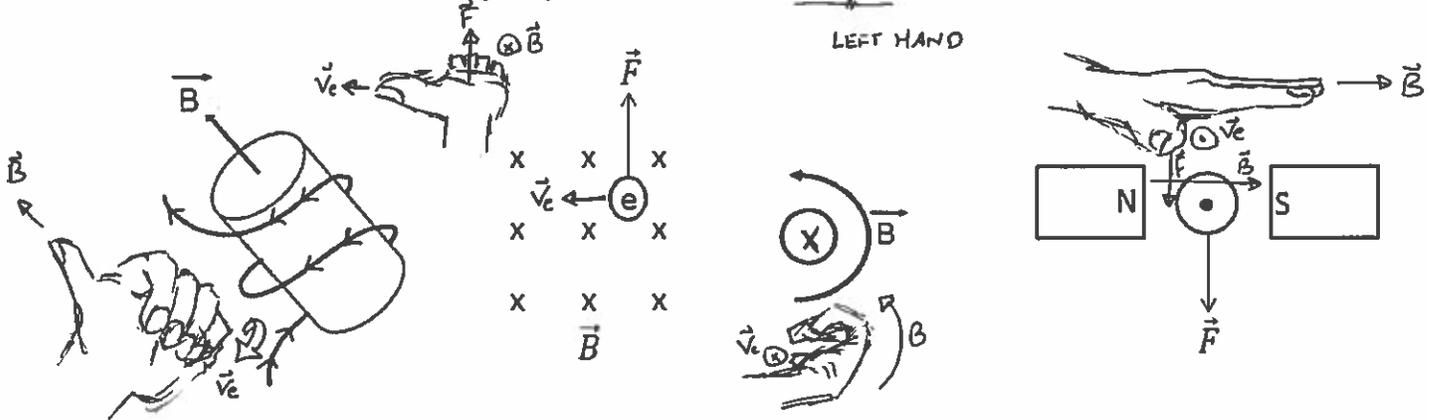


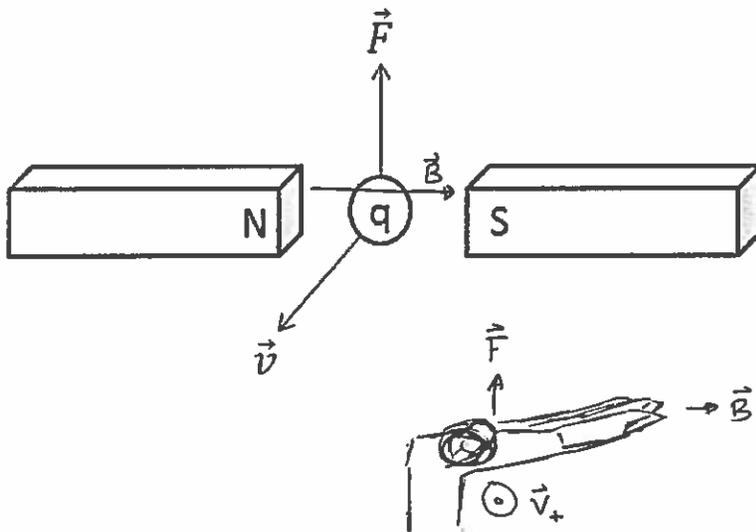
First Name: _____ Last Name: _____

L14 - Formative Quiz - Left Hand Rule

Q1: For each of the following, diagram the direction of electron flow. (2 marks)



Q2: In the diagram below, an unknown charge moving out of the page at 5.0×10^3 m/s experiences an upward magnetic force of 0.26 N when passing through a magnetic field of 2.0 T. What is the charge on the object? (2 marks)



$$|\vec{F}_m| = qv_{\perp}|\vec{B}|$$

$$0.26\text{N} = q(5.0 \times 10^3 \text{ m/s})(2.0\text{T})$$

$$|q| = 0.000,026\text{C}$$

$$= 2.6 \times 10^{-5}\text{C}$$

MARKING:

Beginning	0-1.5
Progressing	2-2.5
Competent	3-3.5
Exemplary	4

RIGHT-HAND RULE?
POSITIVE CHARGE!

$q = +2.6 \times 10^{-5}\text{C}$