

Name: _____

1. What physical phenomenon does the relationship $F = qvB \sin \theta$ describe? (15 pts)
2. What physical phenomenon does the relationship $F = ILB \sin \theta$ describe? (15 pts)
3. Magnetic force is dependent upon what four factors for this experiment? (15 pts)
4. In this experiment you will plot four sets of data (refer to *Part 19* of the procedure). Sketch a sample plot for each data set on the back of this sheet. You will not need numerical values. Label the axes. State the slope in algebraic terms. (35 pts)
5. Consider the apparatus below. It represents a magnet sitting on the mass pan of a balance. Refer to Fig. 18.1 and Fig. 18.3 (*Step 3* of the experiment). Given the following setup, does the balance read heavier or lighter? Explain using the right-hand rule and Newton's Third Law. (20 pts)

