FLINN SCIENTIFIC

Name_____

Magnetic "Hydrojet" Worksheet

Observations

Sketch a picture of the initial setup, including the location of the drop of food dye.

Sketch a picture of the final result, including the direction of the motion of the dye, and explain what occurred.

Additional Observations

Post-Demonstration Questions

1. Which of Newton's three laws of motion provides the basis for a rocket propulsion-type engine. Define the law(s) chosen.

2. Write the balanced chemical equation for the electrophoresis of water.

3. A negatively charged electron is traveling to the right, and a magnetic field is pointing towards the top of the page. Which direction does the particle rotate once it encounters the magnetic field?

4. Do you believe this magnetohydrodynamic system could be used to push a submarine? Why or why not?