Student Name _____ ***Date*** _____

Jump Rope Generator: Observations

Fill out the table with your measurements of greatest deflection on the galvanometer in each of the four cases. Then answer the questions below the table.

	Cord aligned east-west	Cord aligned north-south
Slow		
Fast		

1. What effect does the rotational speed of the cord have on the deflection of the galvanometer?

2. Describe the conditions in which you had the maximum voltage (or current) through the galvanometer.

3. Describe the conditions in which you had the minimum voltage (or current) through the galvanometer.

4. Explain why the galvanometer needle moves when you play jump-rope with the extension cord.

5. Explain why the the orientation of the jump rope to Earth's magnetic field effects the galvanometer reading.

Student Name _____ ***Date*** _____

Induction in an Aluminum Can

Please answer the following question related to this activity:

1. Does the aluminum can seem to be magnetic when the magnet is not rotating? Explain your answer.

2. How can you tell there is a changing magnetic field near the can?

3. Describe how the aluminum can moves when it is sitting on the water in the Petrie dish with a rotating magnet inside.

4. Use your own words and drawings to describe why the magnet causes the can to move.