

Name _____ Class _____ Date _____

The Scientific Method

EXPERIMENTAL DESIGN PRACTICE #3

Read the following description of this experiment and identify the elements of the experiment.

3. Sara and Michael tested electromagnets to see if the size of wire they used would make the magnets stronger. They selected 6 steel nails of the same size to make the magnets. Using 6 different sizes of insulated wire, they put 50 turns around each nail. Then each nail was hooked to 2 D cell batteries to make electromagnets. The strength of each magnet was tested by counting the number of paper clips which could be picked up by the electromagnet.

3a. Independent Variable _____

3b. Dependent Variable _____

3c. Experimental Group _____

3d. Control Group _____

3e. (Constants)
Controlled Variables _____

3f. Problem questions _____

3g. Hypothesis _____