

Name: _____

Date: _____

HW: Intro to Scientific Method

Part A. Steps of the Scientific Method

Directions: Each sentence below describes a step of the scientific method. Match each sentence with a step of the scientific method listed below.

A. Problem

B. Hypothesis

C. Experiment

D. Conclusion

_____ 1. Stephen predicted if an electric current traveled through the soil in which seeds were planted then seeds would grow faster.

_____ 2. Susan said, "If I fertilize my plants, then they will blossom better."

_____ 3. Jonathon's data showed that household cockroaches moved away from raw cucumber slices.

_____ 4. Rene grew bacteria from the mouth on special plates in the laboratory. She placed drops of different mouthwashes on bacteria of each plate.

_____ 5. Dana questioned how synthetic fibers were different from natural fibers.

_____ 6. Angela's experiment proved that earthworms move away from light.

_____ 7. Michael fed different diets to three groups of guinea pigs. His experiment showed that guinea pigs need vitamin C and protein in their diets.

Part B. Writing a Hypothesis

Directions: For each of the following problem statements, write a hypothesis as an "If . . . then" statement.

8. Stephen performed an experiment to see how listening to music affects a student's test scores. He had Group A listen to music and Group B listen to no music while studying. At the end of the experiment, he had each group take a test and he recorded their scores.

9. Jennifer performed an experiment to see how temperature affects the rate of breathing. Group A will have their rate of breathing measured in 35° F and Group B will have their rate of breathing measured in 70° F.

Part C. Controlled Experiment

