Name _____ Date _____ Block _____

Hypothesis Practice

Hypothesis Writing Review
The format for writing a hypothesis is... I predict that...
If (then describe what you will do in the experiment) (manipulated variable)
then (predict the outcome of the experiment.) (responding variable)

For each problem or question write a hypothesis, underline the independent (manipulated)
variable <u>once</u>, and the dependent variable <u>twice</u>. (responding)

1. Chocolate may cause pimples.

   I predict that if I feed teenagers ½ pound of chocolate every day for a week then they will have increased acne.

2. Plant growth may be affected by the color of the light.

   I predict that if I change the color of light, then the plant growth will be stunted.

3. Are there more bacteria on the toilet handle or on my science desk?

   I predict that if I test a toilet handle and science desk for bacteria then I will find more on the toilet handle.

4. Which lunch will give me more energy, chicken sandwich or pizza?

5. Do birds with longer or shorter wings fly faster?

6. Do caterpillar feces weigh the same as the leaf they ate?

7. Hypothesis Bob predicted that giving detentions for missing homework would lower the amount of homework missed in his local middle school. He recorded the number of missed homework for 30 days, and then the school agreed to assign detentions for each missed homework assignment. He then compared the numbers to see if the policy had any effect.

8. Does T.V. time seem to affect the reading scores of fourth graders?

9. Does wing length affect the distance a plane flies?

10. Hypothesis Bob wants to see if different smells travel at the same speed. He sprays a can of hairspray, peppermint air freshener, and insect repellant at the same time. Six friends stand around him in a large circle, five feet from the center of the circle where Bob stood.

controlled experiment — determines how one variable affects an outcome

variable — one of the factors that can change in an experiment

controlled variables — stay the same

manipulated variable — one that you change (independent variable)

responding variable — one that responds to our changes (dependent variable