Name_____
Date_____ Period_____

Hypothesis

Once you have a good experiment question, it is time to make predictions about how your experiment will turn out. As a scientist you want to think about all possible answers your experiment might give you. To do this we write several hypotheses.

Null Hypothesis
H_0: There is no _____ between your two groups (they are =)

Alternative Hypothesis 1
H_{a1}: One of the groups _____

Alternative Hypothesis 2
H_{a2}: The other group _____

Example:

Are there more arachnids (spiders) in my basement or are there more centipedes?

H_0: There are equal numbers of arachnids and centipedes in my basement

H_{a1}: There are more arachnids in my basement than centipedes

H_{a2}: There are more centipedes than arachnids in my basement

Take these experiment questions and make them into good hypotheses. Underline what is being compared and circle what is being measured.

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

H_0: _____

H_{a1}: _____

H_{a2}: _____

2. Which lunch will give me more energy, chicken patty or meatloaf?

H_0: _____

H_{a1}: _____

H_{a2}: _____

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

H_0: _____

H_{a1}: _____

H_{a2}: _____

4. Will a plant inside a closed plastic bag grow taller than a regular plant

H_0: _____

H_{a1}: _____

H_{a2}: _____

5. Which crayfish has the longer pinchers, male or female?

H_0: _____

H_{a1}: _____

H_{a2}: _____

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

H_0: _____

H_{a1}: _____

H_{a2}: _____