
UNIT 1: SCIENTIFIC INQUIRY

TODAY: WRITING A HYPOTHESIS

HW: Science Extra Credit Due Friday (Step 7)
&

Pop quiz at some point this week

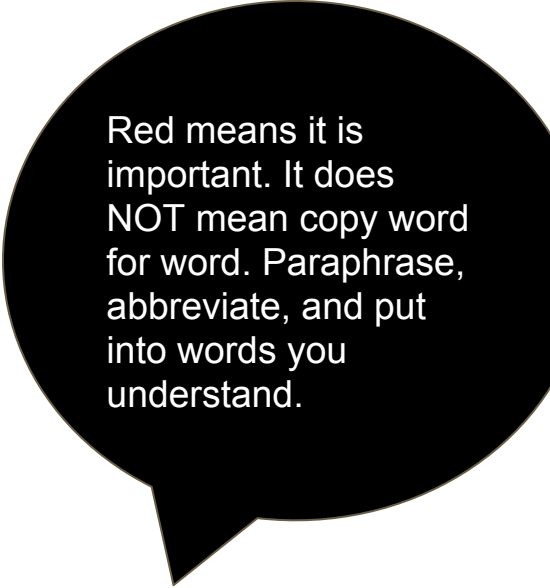
Time: 2 min

Do Now: What do you think of when you hear the word hypothesis?

What is a hypothesis?

Hypothesis:

- A predicted outcome to a testable question
- A prediction of how an IV affects a DV
- Based on observations and existing scientific knowledge.
- “IF, THAN, BECAUSE” format



Red means it is important. It does NOT mean copy word for word. Paraphrase, abbreviate, and put into words you understand.

Copy for today's notes:

Independent Variable

Dependent Variable

Constants

Control Group

Testable question

The Experiment

Ms. Tilts wants to test how the amount of calories eaten in a day will effect Drakes weight. Drake eats a normal 1500 calorie diet for a week, the ideal diet for his body type. He measures his weight at the end of the week. The second week, Drake eats 2500 calories. At the end of the week he measures his weight. A third week, Drake eats 3500 calories. At the end of the week, he weighs himself.

When you get to school early in the morning
and everyone already yelling



Starting your hypothesis

Step 1: The IF

- Pick a level of the IV
- Ex) **IF** a plant receives more sunlight
- This is a prediction! It does NOT need to be correct.
- With your group, write your **IF** for the drake experiment.

Starting your hypothesis

Step 2: The THEN

- Answer how your IV level will affect your DV
- Ex) **THEN** it will grow taller
- This is a prediction! It does NOT need to be correct.
- With your group, write your **THEN** for the Drake experiment.

Starting your hypothesis

Step 3: The BECAUSE

- Give evidence as to why you chose that prediction
- Ex) **BECAUSE** a plant needs sunlight to perform photosynthesis which gives it food to grow.
- This is a prediction! It does NOT need to be correct.
- With your group, write your **BECAUSE** for the drake experiment.

Put it all together

IF a plant receives more sunlight **THEN** it will grow taller **BECAUSE** plants need sunlight in order to perform photosynthesis which is how they make food to grow.

Drake Hypothesis

IF Drake eats more calories **THEN** he will gain weight **BECAUSE** your body only needs a certain amount of calories to survive. Extra calories are not used and can turn into fat.