 Helpful Hypothesis Hints 

1. **THE HYPOTHESIS MUST BE WRITTEN AS AN “IF” “THEN” STATEMENT, RELATING TO THE PROBLEM:**

 Problem: How does the color of a crayon affect how fast it melts?

Unacceptable Hypothesis: If different colored crayons are put on a heater then the blue crayon will be the darkest\*.

\*This experiment isn’t measuring how dark or light a crayon is. It’s measuring how fast crayons melt.

***Acceptable Hypothesis: If different colored crayons are placed on a heater, then the blue crayon will melt the fastest.***

2. **THE VARIABLE (AND THE ACTION BEING DONE TO IT) ARE ALWAYS FOUND IN THE “IF” PART OF A HYPOTHESIS:**

 Problem: How does the design of a paper airplane affect how far it flies?

Unacceptable hypothesis: If there are different designed paper airplanes\*, then the fantastic flier will fly the farthest.

\*This doesn’t mention what action is being done to the different designed paper airplanes.

***Acceptable Hypothesis: If different designed paper airplanes are thrown, then the Fantastic Flier will fly the farthest.***

3. **A SPECIFIC PREDICTION MUST BE MADE IN THE “THEN” PART:**

Problem: How does the type of ball (basketball, baseball, handball) affect how far it will roll?

Unacceptable Hypothesis: If different types of balls are rolled down a ramp, then the medium sized one\* will roll the farthest.

\*This doesn’t name the specific ball that is expected to roll the farthest.

***Acceptable Hypothesis: If different types of balls are rolled down a ramp, then the baseball will roll the farthest.***

4. **DO NOT USE PRONOUNS (SUCH AS I, WE, OR YOU) OR PEOPLE’S NAMES**

 Problem: How does the type water (salt, chlorine, or tap) affect plant growth?

Unacceptable Hypothesis: If we\* give different types of water to identical plants, then the plant given tap water will grow the tallest.

\*The pronoun “we” was used.

***Acceptable Hypothesis: If identical plants are given different types of water, then the plant given tap water will grow the tallest.***

5. **DO NOT USE THE WORD “AFFECT” IN THE HYPOTHESIS.**

Problem: How does the type of fabric (cotton, nylon, or rayon) affect how fast it will burn?

Unacceptable Hypothesis: If the type of fabric affects\* how fast it will burn, then the rayon will burn the fastest.

\* It’s incorrect to say that the type of fabric will affect how fast it burns BEFORE running the experiment because it’s possible that you DON’T predict that it will.

***Acceptable Hypothesis: If different types of fabrics are lit on fire, then the rayon will burn the fastest.***