

Name _____

Step 1: State the Question (Part 1)

Imagine that you're enjoying a package of M&M's when your little sister spills a glass of water on the table, drenching your candies. As you scramble to save them, you notice the color starts to run off many of the M&M's. This makes you wonder why the candy is reacting in such a way. You decide to get scientific and experiment with your favorite candy!

All experiments begin with a testable research question. This question often stems from an experience you've had or observations you've made in the past. Your research question must be testable. This means you can design an investigation, make observations, and gather evidence to answer the question. Scientific questions CANNOT be based on opinions or personal judgments.

Testable Research Question: Will M&M color dissolve faster in water or in vinegar?

Non-Testable Question: Which color M&M tastes better?

1. List at least four other testable research questions you can think of to investigate M&M's.

As mentioned above, scientific questions don't just come to you from out of nowhere. Instead, questions come from experiences you've had or observations you've made in the past.

2. Think of times that you have observed something unusual or unexpected. Write those observations on the lines below. Then list a research question that could be used to investigate each observation. An example has been done for you.

Example:

Observation: I noticed the crickets were chirping very loudly outside my window last night.

Research Question: Do crickets chirp louder when the temperature is higher?



Observation: _____

Research Question: _____

Observation: _____

Research Question: _____
