LAB: INVESTIGATING BALANCE

Previously you looked at examples of questions for **investigation** and evaluated whether they were **testable**, the materials were available, and there was sufficient time to **conduct** the experiment. Now it is your team's turn to come up with an **investigation** about variables that affect balance. Your **initial** step is to come up with a question for **investigation**. Your team will work on your **investigation** for the rest of the week and will present results to the class at the end of the week during the conference.

Here is the process that your team will follow to prepare:

1. What is your investigable question about balance? Remember that it needs to be **testable**, and you need the right materials and enough time to **conduct** your **investigation**.

    Our question about balance is:

    _____

    _____

    _____

2. Write a scientific hypothesis about balance that addresses your question. Remember that a scientific hypothesis includes: a) a view based on what you know or think and b) a reason or a cause that you can test with a measurement.

    Our hypothesis about balance is:

    _____

    _____

    _____

3. Think about your procedure for your experiment. (You will write your procedure on the next page.)

    Remember, in science class, a good procedure includes:

    ☐ detailed directions for each step.

    ☐ the number of times you will repeat the procedure.

    ☐ information about labeling and recording the data.

    ☐ units of measurement that are precise, so you or someone else could repeat the procedure exactly (e.g., use 10 grams instead of "a little bit" or "some").

4. List the materials you will need for your experiment:

    _____   _____   _____

    _____   _____   _____

5. Estimate how much time it will take to do your experiment: _____

Now, write your procedure step by step:

_____   _____

_____   _____

_____   _____

_____   _____

_____   _____
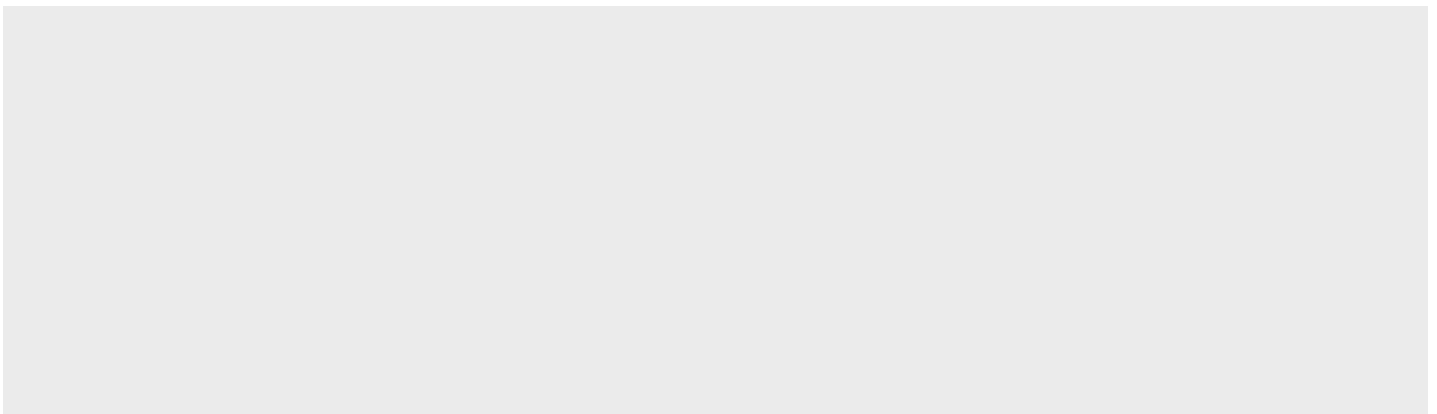
Next, **conduct** your experiment and record your data.

After your team has completed data collection, write a *claims, evidence, reasoning statement* based on the results of your experiment. Remember to look for patterns in your results to help you make your claim.

In writing your statement, be sure to answer the following questions:

- ☐ What can your team claim about the data?
- ☐ What is your evidence to support your claim?
- ☐ What reasons can you give to connect your evidence and your claim?

Our Statement:

_____

_____

_____

_____

_____

_____