**How Scientists Use Lab Equipment**

**Objective(s)**:

* Illustrate proper use of lab equipment
* Identify pieces of lab equipment and their functions

**Question**: We have been learning about the equipment scientists use to collect data from their experiments. Using the space below, ask yourself the question “**What does it look like when scientists use equipment to gather data?**” and draw/color what you see in your head. Include the scientist, the equipment being used (beaker, graduated cylinder, balance, thermometer, triple-beam balance, microscope, etc.), and any other important details (like the experiment the scientist is conducting, the surroundings, etc.) Under your drawing, use complete sentences to explain what is happening in your drawing. Be sure to include lots of details!

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**Collect Information:** Share your drawing with other students at your table group. Listen to their descriptions and observe their drawings.

**Hypothesis**: Form a hypothesis as to what you think most students included in their lab equipment drawings. Be very specific as to 1. the gender of the scientist (male or female), 2. the setting (indoors or outside), 3. the number of scientists (one working alone or two or more working together), and 4. the specific equipment and how it is being used.

Ex: “Most students will draw a female scientist working outside with other scientists to measure the volume of liquids using a graduated cylinder.”

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**Observing Data**: Fill out the following data table by surveying your classmates and observing their lab equipment drawings.

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| Male | Female | Inside | Outdoors | Alone | Team | Graduated Cylinder / Beaker | Thermometer | Meter Stick / Ruler | Other |
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**Recording Data**: Use the grid to create a bar graph to represent your class’s data. Try to match the colors from the data table to the bars on your graph.

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**Analyze the Data**: What possible explanation do you think could explain the results of our experiment? Consider why the numbers turned out the way they did. What sources might have influenced our data? Did we begin this experiment with any form of bias?

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**Come to a Conclusion**: Was your hypothesis correct? Was any part of it correct? How do you know? Cite evidence from your results.

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