Unit Overview - Experimental Design

Essential Questions

1) What safety procedures need to be followed in my science class?
2) What is the process for investigating a problem in science class?

- ■ I totally get it
- ☒ I kinda get it
- ❑ I don't get it

Enduring understanding	Important to know and do	Worth being familiar with
❑ Scientific inquiry leads to scientific knowledge through experimentation and investigation in a controlled setting	❑ Identify/choose an independent variable ❑ Identify a dependent variable in an experiment ❑ Identify/maintain a control in an experiment ❑ Properly format a hypothesis (NO "because"!!) ❑ Importance of repeated trials ❑ Collect/record appropriate data (qualitative and quantitative) ❑ Provide titles for experiments/graphs/data tables ❑ Use graphs for representing data ❑ Make appropriate inferences BASED ON DATA ❑ Identify/apply safety procedures in a lab situation	❑ Design your own investigation

Vocabulary to master

❑ independent variable (IV)	❑ hypothesis	❑ trials	❑ qualitative	❑ graph
❑ bar graph	❑ control	❑ title	❑ quantitative	❑ line graph
❑ dependent variable (DV)	❑ constant	❑ observation	❑ inference	❑