KLAHOM

In the previous lesson, students created a hypothesis and conducted research to use in their experiment. Based on their chosen career field, each student should design their own experiment. In this lesson, students will design and conduct their experiment based on their chosen career field.

Objectives:

- 1. Students will understand and effectively use the following terminology regarding their own experiment:
 - · Hypothesis: educated guess based on research/existing knowledge.
 - · Variable: an element, feature or factor subject to variation or change.
 - · Independent Variable: a variable that is controlled or purposefully added/changed during an experiment.
 - · Dependent Variable: the reaction or result when an independent variable is introduced.
- 2. Students will practice carrying out an experiment and documenting the process. This will include forming a hypothesis, testing their hypothesis and reporting results.

Student activity:

- 1. Record a hypothesis, what do you think will happen in your experiment?
- **2.** Create a formal list of supplies and collect all items.
- **3.** Identify and record the independent variable within your experiment.
- **4.** Identify and record the dependent variable within your experiment.
- **5.** Identify all forms of measurement and observations that need to be taken/made before, during and after the experiment.
- **6.** Create a video, or take photos of you conducting your experiment.
- **7.** Record all measurements/observations.
- **8.** Present the results of your experiment. Within your conclusion/results presentation, answer the following questions:
 - a. Was your hypothesis correct?
 - b. If you were to redesign this experiment, what changes would you make?

TEACHERS

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