

\*\*\*\*\*SCIENCE FAIR UPDATES!!\*\*\*\*\*

**We've made some exciting changes to the Science Fair! Students will have the chance to choose one of 3 different levels of participation:**

**Experiment:** a project that **includes a test to find out something using an independent variable** (something that is changed or varied ) **and a dependent variable** (something that is observed or measured). For example, does ice melt faster if it is broken into pieces? The dependent variable would be the amount of time it takes for ice to melt. The independent variable would be ice size (e.g. ice cubes left whole, broken in half, and broken into small pieces). Experiments test hypotheses and are repeated to verify results. Project board displaying the steps of the Scientific Method is used to demonstrate understanding of student's process and experiment.

**Demonstration:** a project that **demonstrates a scientific concept or principle**, but does not test a hypothesis. No data are collected. For example, the classic science fair volcano demonstrates the chemical reaction between vinegar and baking soda. Scientific concepts and principles are used to explain why this reaction occurs. Student provides models, photographs, or drawings along with written information in their display to demonstrate an understanding/ explanation of their chosen concept.

**Research:** a project that provides **detailed information on a scientific concept**. For example, "Why are dogs noses wet?" Sources are consulted and the student uses information gathered from one or more branches of science to educate others about a scientific phenomenon. No data are collected and the principles are not demonstrated (though it may be depicted through diagrams, models, photographs, etc.). Written information is included in a display that details what scientific concepts student learned throughout the research process.

**Below are some websites that contain lots of potential ideas in all three categories:**

<https://www.sciencebuddies.org/science-fair-projects/project-ideas>

<https://www.education.com/science-fair/>

<https://www.stevespanglerscience.com/science-fair-project-ideas/>

<https://www.scholastic.com/teachers/articles/teaching-content/40-cool-science-experiments-web>

**Below is the Science Fair sign-up link:**

<https://docs.google.com/forms/d/141nZjznIrxWktb7ykOyx79s8EizYSMISQDtILEiMYnQ/edit>

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