



Boulder Valley School District Essential Learnings /alignment with Colorado standards:

Standard 1: Students apply the processes of scientific investigation and design, safely conduct, communicate about, and evaluate such investigations

*PYS1: Creates and conducts plans for investigations that include: Asking questions, stating a testable hypothesis, identifying variables and constants, collecting data accurately, and identifying different methods for investigating scientific questions

- c. Uses the appropriate observation/measurement technique for data collection
- e. Follows the established procedure for an investigation/experiment
- f. Predicts a logical outcome for an investigation

PYS3: Communicates the design and results of scientific investigations in appropriate ways (written, oral, pictorial, digital)

- a. Communicates about a scientific investigation in a variety of ways- including writing in science notebooks

Standard 2: Students know and understand common properties, forms and changes in matter and energy

PYS9: Explains that matter is made up of atoms that are comprised of protons, neutrons and electrons and when a substance is made up of only one type of atom, it is an element

- b. Describes the relative location and charge of particles in an atom (protons, neutrons, electrons)
- d. Explains that the number of protons in an atom determines what element it is
- e. Identifies the basic parts of an entry in the Periodic Table and gets information from it (for example: from the atomic number, determine the number of protons and electrons in an atom)

Technology Integration Expectations: (Technology Integration and Information Literacy)

Students will use technology:

- responsibly for communication and transfer of ideas
- to gather, organize, analyze and communicate about data
- to collaborate with others to identify information problems and seek their solutions

***PYS stands for Physical Science**