

Boulder Valley Essential Learnings /alignment with Colorado standards:



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

- a. Explains that all matter is made up of atoms
- c. Compares and contrasts atoms, elements and molecules
- 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 of the atom)

PYS10: Describes the similarities and differences among elements, molecules, compounds and mixtures

- a. Explains that two or more elements may combine to form a molecule
- b. Recognizes that a molecule can be represented by a chemical formula that shows the ratio of atoms of each element in the molecule (for example: H_2 and H_2O are molecules)

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