

Science – Chemistry
Hartley-Melvin-Sanborn CSD
Grade Level/Course Benchmarks

Students will:

1. Use technology to perform accurate scientific investigations and communications. (GENERAL)
2. Understand how scientific knowledge changes and accumulates over time. (GENERAL)
3. Know ways in which science and society interact with one another. (GENERAL)
4. Know the characteristics of matter and compare mixtures and pure substances (PHYSICAL)
5. Understand the structure of the atom based on the subatomic particle and three ways of describing electron configuration (PHYSICAL)
6. Understand the information which can be interpreted from the periodic table (PHYSICAL)
7. Understand why certain atoms react with each other, the general classes of chemical reactions, and what evidence shows that a chemical reaction is occurring (PHYSICAL)
8. Know how atoms bond together to form compounds through ionic, covalent, and metallic bonds. (PHYSICAL)
9. Know how chemists symbolically represents matter and its interactions (PHYSICAL)
10. Understand how gases behave physically and work stoichiometry problems involving gases (PHYSICAL)
11. Understand the characteristics and behavior of solutions (PHYSICAL)
12. Understand the characteristics and behavior of acids, bases, and salts and their reactions. (PHYSICAL)
13. Understand basic information about organic chemistry of the hydrocarbons. (PHYSICAL)
14. Know the difference between types and forms of energy and the conversion of energy from one form to another (PHYSICAL)
15. Understand the four states of matter, the forces that determine that state and how matter changes from one form to another. (PHYSICAL)