

Chemistry Power Standards

(revised 2017)

1. The student will be able to state and apply the scientific method to the content areas of chemistry.
2. The student will be able to cite specific examples of events and scientists pertinent to the development of theories and applications in the chemistry community.
3. The student will be able to record, evaluate and mathematically apply measurements in scientific investigations.
4. The student will be able to recognize patterns on the periodic table as they relate to chemical structure and properties of elements.
5. The student will be able to predict and recognize the different molecular interactions amongst atoms and molecules as they relate to chemical and physical properties.
6. The student will be able to name and write chemical formulas for all types of chemical structures and bonding.
7. The student will be able to calculate chemical quantities as they relate to mass, formulas, composition, and conversions.
8. The student will be able to predict solubility and recognize the conditions under which solubility is favorable in all states of matter.
9. The student will be able to write, balance, classify and predict products and favorability of chemical reactions using the law of conservation of mass and solubility rules.
10. The student will be able to calculate rates of reactions and factors that affect the rate of reaction for all chemical reactions.
11. The student will be able to use kinetic molecular theory to describe the motion and properties of particles in all states of matter.