

Sarah Sapp

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Conference 12:13 - 12:58

2017 - 2018 Chemistry Scope and Sequence

1st six weeks

Students will...

1. Be introduced to policies and procedures concerning classroom safety,
2. Discuss the importance of following safety procedures and the cause and effects of science laboratory accidents,
3. Define chemistry and how it relates to their daily lives,
4. Review atoms, elements, compounds, and parts of the atom,
5. Differentiate between chemical and physical changes, and
6. Explain parts, trends and history of the periodic table.

2nd six weeks

Students will...

1. Understand the electromagnetic spectrum and the mathematical relationships between energy, frequency, and wavelength of light,
2. Differentiate types of intermolecular and intramolecular forces, and
3. Construct Lewis dot structures,

3rd six weeks

Students will...

1. Name ionic and covalent compounds,
2. Use the international system of measurements, and
3. Write the chemical formulas of common polyatomic ions, acids, and bases.

4th six weeks

Students will...

1. Define and use the concept of the mole,
2. Use the mole concept to calculate the number of atoms, ions, or molecules in a sample of material,
3. Calculate percent composition and empirical and molecular formulas, and
4. Use the law of conservation of mass to write and balance chemical equations.

5th six weeks.

Students will...

1. Perform stoichiometric calculations,
2. Describe and calculate the relations between volume, pressure, and the different gas laws,
3. Describe the postulates of kinetic molecular theory.

6th six weeks

Students will...

1. Understand and can apply the factors that influence the behavior of solutions.
2. Understand the energy changes that occur in chemical reactions, and
3. Understand the basic processes of nuclear chemistry -alpha, beta, gamma radiation.