**Charleston Catholic High School**

**Teacher: Buscher                                   Subject: Science                                Total Time: ~ 4 weeks**

Essential Question: What are the properties of different types of matter?

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| **Standards** | **Lesson Title** | **Skills and Activities** | **Assessments** | **Resources** | **Time** |
| SC.O.6.1.1  SC.O.6.1.2  SC.O.6.1.3  SC.O.6.1.4  SC.O.6.1.11  SC.O.6.2.1  SC.O.6.2.14 | Physical Properties | Students will define lesson vocabulary and complete lesson outline worksheet as introduction to new information. Classify the different states of matter. Explain how to determine the volume of regular and irregular objects. Describe how the density of a given substance allows us to predict its location in a mixture. Demonstrate an understanding of the different properties of matter and how we can use them to identify different substances. | Density in Action Lab  Volume Lab  Daily discussion  Lesson Outline | Textbook  Lesson PowerPoint  Density Lab  Graduated Cylinders | 5 Days |
| SC.O.6.1.1  SC.O.6.1.2  SC.O.6.1.3  SC.O.6.1.4  SC.O.6.1.11  SC.O.6.2.1  SC.O.6.2.13  SC.O.6.3.2 | Elements and Compounds | Students will define lesson vocabulary and complete lesson outline worksheet as introduction to new information. Compare protons, neutrons and electrons. Compare atoms, molecules, elements and compounds. Identify what matter is made of. Observe new concepts in Bill Nye - Atoms. Demonstrate knowledge of assigned elements and why it has its location on the periodic table. Compare/Contrast metals, metalloids and nonmetals. | Daily discussion  Lesson Outline  Atom Timeline Graphic  Adopt an Element Worksheet | Lesson PowerPoint  Textbook  Bill Nye - Atoms  Computer Lab | 7 Days |
| SC.O.6.1.1  SC.O.6.1.2  SC.O.6.1.3  SC.O.6.1.4  SC.O.6.1.11  SC.O.6.2.1  SC.O.6.3.3 | Solids, Liquids and Gases | Students will define lesson vocabulary and complete lesson outline worksheet as introduction to new information. Explain how energy and pressure affect the properties of matter. Describe a phase change and list each type. Understand the relationship between temperature, pressure and volume. Compare chemical and physical changes. | Daily discussion  Lesson Outline | Lesson PowerPoint  Textbook | 5 Days |
| SC.O.6.1.1  SC.O.6.1.2  SC.O.6.1.3  SC.O.6.1.4  SC.O.6.1.11  SC.O.6.2.1 | Water and Mixtures | Students will define lesson vocabulary and complete lesson outline worksheet as introduction to new information. Explore how mixtures are formed and separated. Classify different types of mixtures. Explain solutions and solubility. Compare/Contrast solute and solvent. Describe the process of distillation and how it can be used to separate mixtures. | Daily discussion  Lesson Outline  Saturated Solution Lab | Lesson PowerPoint  Textbook | 5 Days |

Plus One:

Formative Assessments:

- Daily review of previous material through prompts and essential questions

  - Label and illustrate the elements of the periodic table

- Compare/Contrast the parts of an atom.

Summative Assessments:

  - Student created posters for an assigned element.

- Quiz on Lesson 1-2

- Chapter test Lessons 1-4

Nonfiction Selections:

  - Science: A Closer Look Textbook

Fiction Selections:

  -none

Essential Unit Vocabulary:

  mass, weight, volume, solid, liquid, gas, density, physical properties, element, compound, atom, nucleus, neutron, proton, atomic number, electron, periodic table, molecule, temperature, sublimation, melting point, freezing point, boiling point, vaporization, pressure, physical change, mixture, suspension, emulsion, colloid, solution, alloy, solubility, distillation.

Instructional Resources:

- Teacher created Lesson PowerPoint that outlines the information covered during the lecture portion of the class

Cross Curricular:

History: Explore the history of the development of atomic theory and how technology has made it change over time.

Math: Calculating the volume of an object.

Theology:

Technology: Use of the computer lab to research assigned elements.

Visual Arts: Design a post-it note for your element to add to the classroom created periodic table

English:

Geography: