

## Appendix A. Implementing Common Core Standards

This unit covers Students are not required to do in-depth mathematics and formulas but they will need to be able to read data charts, do basic computations, and understand how to read chemical equations and formulas. The 8th grade Essential Standards that need to be covered in this unit include:

- 8.P.1 Understand the properties of matter and changes that occur when matter interacts in an open and closed container.
  - o 8.P.1.1 Classify matter as elements, compounds, or mixtures based on how the atoms are packed together in arrangements.
  - o 8.P.1.2 Explain how the physical properties of elements and their reactivity have been used to produce the current model of the Periodic Table of elements.
  - o 8.P.1.3 Compare physical changes such as size, shape and state to chemical changes that are the result of a chemical reaction to include changes in temperature, color, formation of a gas or precipitate.
  - o 8.P.1.4 Explain how the idea of atoms and a balanced chemical equation support the law of conservation of mass.
- 8.P.2 Explain the environmental implications associated with the various methods of obtaining, managing and using energy resources.
  - o 8.P.2.1 Explain the environmental consequences of the various methods of obtaining, transforming, and distributing energy.
  - o 8.P.2.2 Explain the implications of the depletion of renewable and nonrenewable energy resources and the importance of conservation.