

Implementing Common Core Standards

Chm.2.1.4 Infer simple calorimetric calculations based on the concepts of heat lost equals heat gained and specific heat.

Once students understand that heat must be transferred and it cannot disappear, they can then understand the concept of calorimetry.

Chm.2.2.1 Explain the energy content of a chemical reaction.

Energy is the needed in order to make sure that everything is annotated correctly and that energy is neither created nor destroyed.

Chm.2.2.3 Analyze the law of conservation of matter and how it applies to various types of chemical equations (synthesis, decomposition, single replacement, double replacement, and combustion).

Chm.2.2.4 Analyze the stoichiometric relationships inherent in a chemical reaction.

These standards are demonstrated in the writing and balancing of reactions, and calculations used in the activities.

Chm.3.2.1 Classify substances using the hydronium and hydroxide concentrations.

This is touched briefly when looking at the base properties of the MgO made in activity 1.