

Introduction: Thermochemistry (Heat)

Unit: Thermochemistry (Heat)

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Standards addressed in this chapter:

Massachusetts Curriculum Frameworks & Science Practices (2016):

HS-PS1-3 Cite evidence to relate physical properties of substances at the bulk scale to spatial arrangements, movement, and strength of electrostatic forces among ions, small molecules, or regions of large molecules in the substances. Make arguments to account for how compositional and structural differences in molecules result in different types of intermolecular or intramolecular interactions.

HS-PS1-4 Develop a model to illustrate the energy transferred during an exothermic or endothermic chemical reaction based on the bond energy difference between bonds broken (absorption of energy) and bonds formed (release of energy).

HS-PS3-4b Provide evidence from informational text or available data to illustrate that the transfer of energy during a chemical reaction in a closed system involves changes in energy dispersal (~~enthalpy~~ **entropy*** change) and heat content (~~entropy~~ **enthalpy** change) while assuming the overall energy in the system is conserved.

* The MA 2016 Curriculum Frameworks reversed the parenthetical references to entropy and enthalpy. I have corrected them in these notes.

Use this space for summary and/or additional notes: