Introduction: Kinetics & Equilibrium

Unit: Kinetics & Equilibrium

Topics covered in this chapter:

Standards addressed in this chapter:

Massachusetts Curriculum Frameworks & Science Practices (2016):

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-PS1-5 Construct an explanation based on kinetic molecular theory for why varying conditions influence the rate of a chemical reaction or a dissolving process. Design and test ways to slow down or accelerate rates of processes (chemical reactions or dissolving) by altering various conditions.

HS-PS1-6 Design ways to control the extent of a reaction at equilibrium (relative amount of products to reactants) by altering various conditions using Le Châtelier's principle. Make arguments based on kinetic molecular theory to account for how altering conditions would affect the forward and reverse rates of the reaction until a new equilibrium is established.

Use this space for summary and/or additional notes: