

## Unit 5: Thermodynamics and Kinetics

Day 1: May 18/19	Day 2: May 20/23	Day 3: May 24/25	Day 4: May 27/28 ***Summative Quiz***
<p><u>Objectives:</u> SWBAT (HS4.3.3.G) predict the sign of <math>\Delta H</math> for chemical changes (HS4.3.3.H) use Hess's law to calculate the energy for a reaction</p> <p><u>Agenda:</u> Notes: Enthalpy and Hess's Law Hess's Law</p> <p><u>Homework:</u> Finish Hess's Law</p>	<p><u>Objective:</u> SWBAT (HS4.3.3.D) explain that all systems tend toward disorder and lower energy</p> <p><u>Agenda:</u> Order or Disorder Notes: Entropy, Enthalpy, and Gibb's Free Energy Entropy, Enthalpy, and Gibb's Free Energy</p> <p><u>Homework:</u> HW1: Analyzing Free Energy</p>	<p><u>Objective:</u> SWBAT (HS4.3.3.B) define specific heat (HS4.3.3.C) use the law of conservation of energy to solve calorimetry problems</p> <p><u>Agenda:</u> Notes: Specific Heat Specific Heat Problems</p> <p><u>Homework:</u> HW2: Enthalpy, Entropy, Free Energy Concept Map</p>	<p><u>Objective:</u> SWBAT (HS4.3.3.B) define specific heat (HS4.3.3.C) use the law of conservation of energy to solve calorimetry problems</p> <p><u>Agenda:</u> Summative Quiz Specific Heat Lab</p> <p><u>Homework:</u> HW3: Specific Heat in the Lab</p>
Day 5: May 31/ June 1	Day 6: June 2/3	Day 7: June 6/7 End of Unit Assessment	Final Exam Review Day June 8/9
<p><u>Objectives:</u> SWBAT (HS4.3.3.E) define activation energy (HS4.3.3.F) analyze energy graphs for chemical reactions (HS4.5.4.2) describe the effects of surface area, temperature, and concentration on the frequency of molecular collisions.</p> <p><u>Agenda:</u> Notes: Activation Energy Factors that Affect Reaction Rates lab Notes: Reaction Rates Reaction Rates</p> <p><u>Homework:</u> HW4: Analyzing Energy Diagrams</p>	<p><u>Objectives:</u> SWBAT...see all previous indicators</p> <p><u>Agenda:</u> Thermodynamics and Kinetics Study Guide Work on Final Exam Study Guide</p> <p><u>Homework:</u> Thermodynamics and Kinetics Study Guide</p>	<p><u>Objectives:</u> SWBAT...see all previous indicators</p> <p><u>Agenda:</u> <b>DEADLINE FOR ALL WORK</b> Thermodynamics and Kinetics Assessment Work on Final Exam Study Guide/Final Exam BCRs</p> <p><u>Homework:</u> Final Exam BCRs Due Next Class for a 20 point homework assignment (5 points each)</p>	<p><b><u>Final Exams:</u></b></p> <p>1A/1B- Monday, June 13</p> <p>2A/2B- Tuesday, June 14</p> <p>3A/3B- Wednesday, June 15</p> <p>4A/4B- Thursday, June 16</p>