

Name: _____

Period: _____



Chemistry

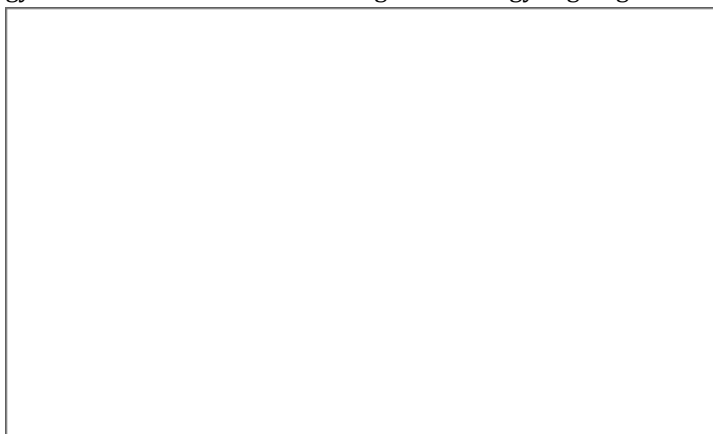
Homework: Modelling Exothermic and Endothermic Processes

Directions: For each scenario below, draw a macroscopic and particle model to illustrate what is happening with the particles and energy. You must include a key.

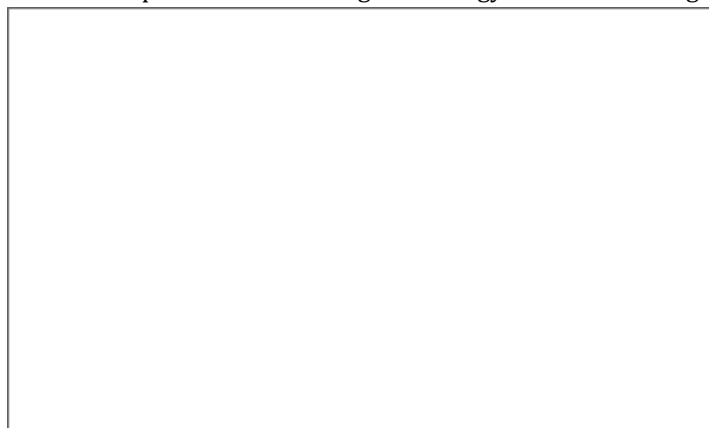
1. A firework explodes and releases a barrage of colors and energy into the surroundings. Show the direction of energy transfer.



2. Water in an ocean heats up and evaporates to form a cloud above. Show the microscopic zoom process of (1) the water heating up, (2) water becoming a gas and evaporating, and (3) the water condensing and forming a cloud. Include energy arrows for each zoom showing if the energy is going into the water or leaving the water.



3. An iron pipe rusts, causing energy to be released when mixing with oxygen gas, over a long period of time. Show the microscopic zoom of the particles interacting and energy arrow indicating direction of energy transfer.



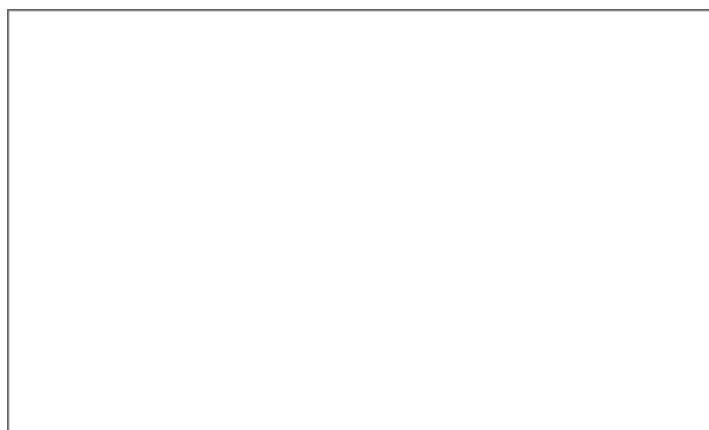
Name: _____

Period: _____

4. A cold pack contains salts in the outer bag and water in the inner bag. The cold pack is then pressed against the injured location. Show the microscopic zoom of the particles interacting and energy arrow indicating direction of energy transfer.



5. Bacon slices get tossed into a hot frying pan. Show the microscopic zoom of the particles interacting and energy arrow indicating direction of energy transfer.



6. Water is added to Calcium Oxide (also known as quicklime) to prepare for a whitewash process. The resulting solution gets very hot. Show the microscopic zoom of the particles interacting and energy arrow indicating direction of energy transfer.

