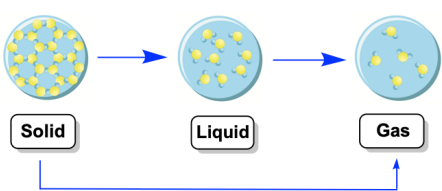
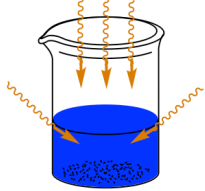
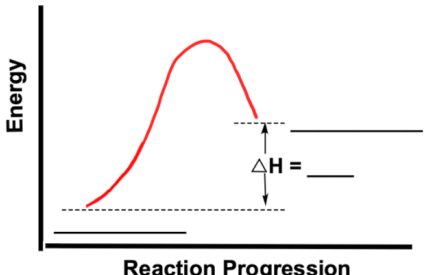


CONCEPT: ENDOTHERMIC & EXOTHERMIC REACTIONS

Endothermic Reactions

- Involve absorbing thermal energy by the _____ from the _____.
- As molecules absorb heat they speed up and with enough energy gained they _____ bonds.

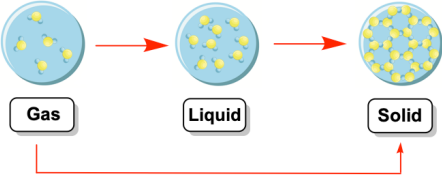
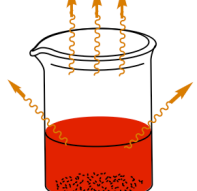
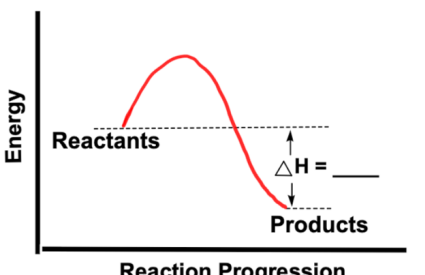
Endothermic Reactions		
Phase Changes □ Absorbing heat spreads molecules apart  Solid Liquid Gas	Real World Application □ Absorbing heat from the surroundings  Feels _____ to the touch.	Energy Diagram □ Relative energies of reactants and products  Energy Reaction Progression $\Delta H = ______$

EXAMPLE: Which of the following processes represents an endothermic reaction?

- a) Steam condensing b) Molten lava solidifying c) Water boiling d) Water freezing

Exothermic Reactions

- Involve releasing thermal energy by the _____ from the _____.
- As molecules release heat they slow down and with enough energy lost they _____ bonds.

Exothermic Reactions		
Phase Changes □ Releasing heat pulls molecules closer  Gas Liquid Solid	Real World Application □ Releasing heat to the surroundings.  Feels _____ to the touch.	Energy Diagram □ Relative energies of reactants and products  Energy Reaction Progression Reactants Products $\Delta H = ______$

EXAMPLE: Determine which of the following is an exothermic reaction.

- a) CO₂ burning b) Reaction in a cold pack c) Dry ice subliming d) Steam