

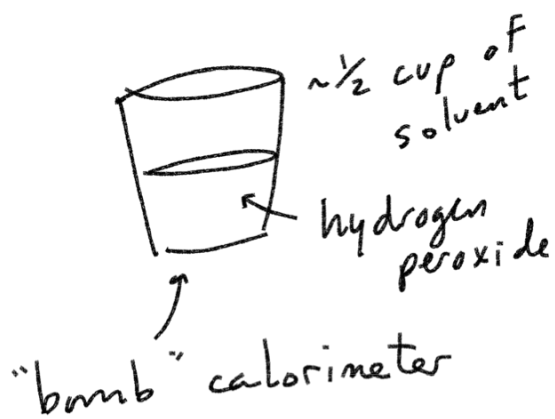
Experiment

Solvent - liquid medium for the experiment.
examples: water, hydrogen peroxide, acetone

Solute - powder substance - solid (generally)
that is added
examples: salts, yeast, styrofoam

Solution - combination of the solute and solvent.

Experiment



1.) Place solvent in container

2.) Take the temperature (initial temperature) of solvent

3.) Introduce a "spoonful" of solute (yeast) into solvent and observe.

4.) After a few minutes, take the final temperature



If the temperature increases,
it is an exothermic reaction

Exothermic Releases heat.
↑ ↓
out heat

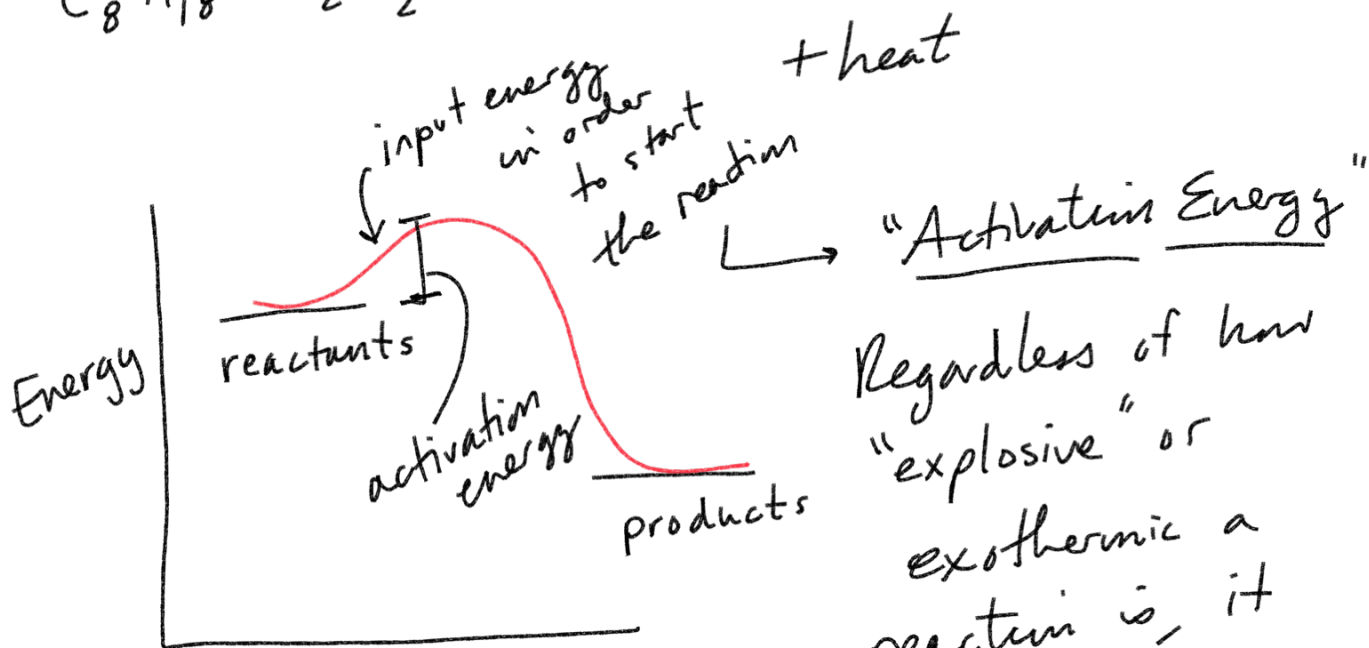
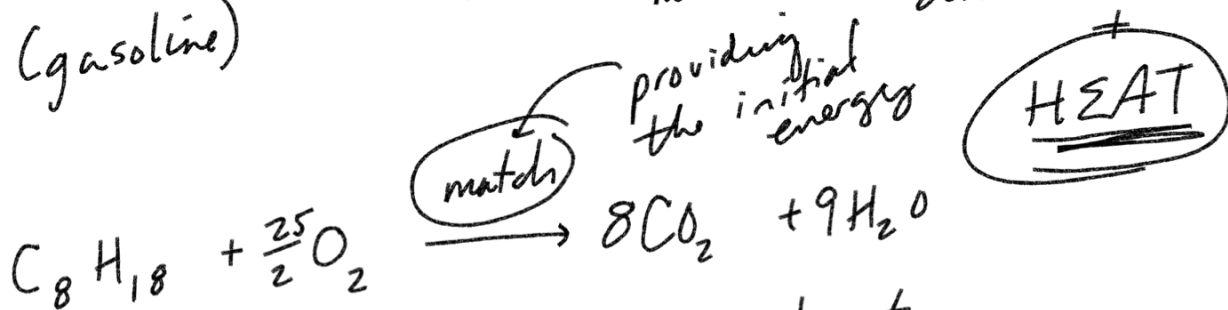
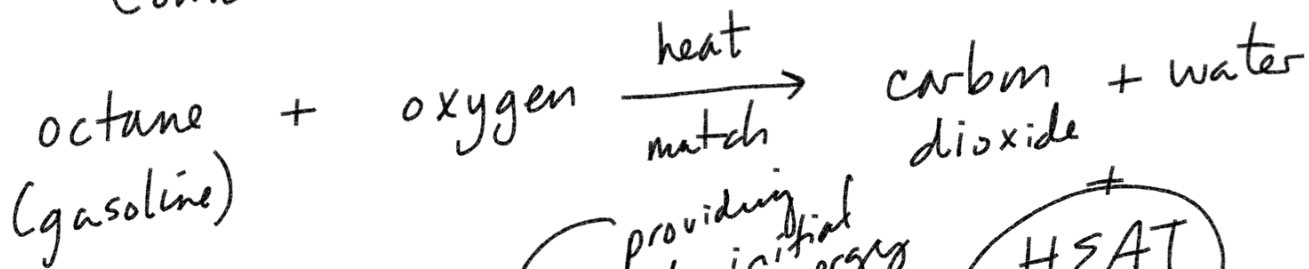
initial temp. final temp.
70°F 85°F
Solvent increased in temperature
by 15°F, and it exothermic.

If the temperature decreases,
it is an endothermic reaction

Endothermic Endothermic reaction
↑ ↓ absorbs heat
inside heat

Exothermic Reactions

Combustion Reaction

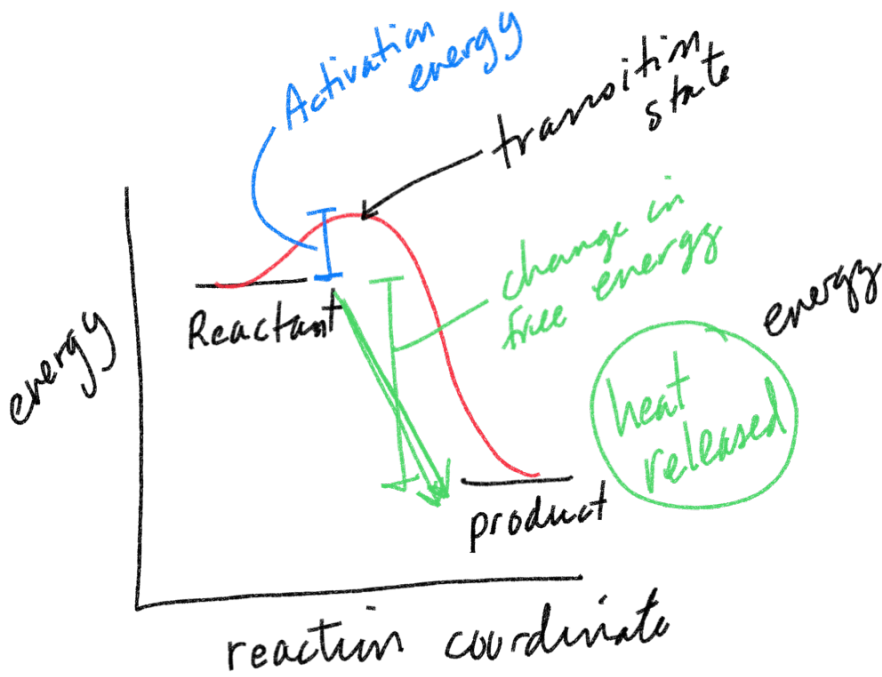


At the beginning of reactions, all reactions are endothermic and require energy to get over the energetic hurdle of the activation energy.

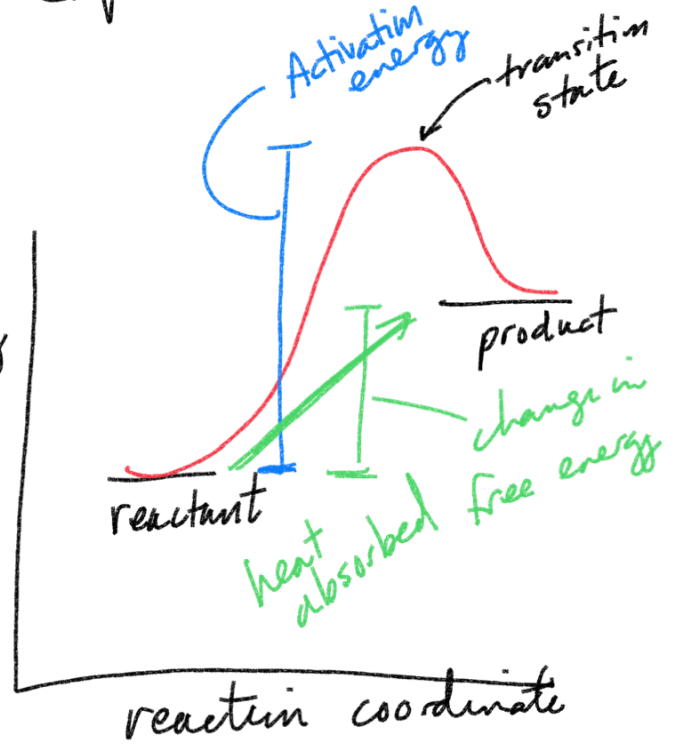
Experiment

Solvent	solute	initial temp	final temp	change in temp	exo or endo	observations
hydrogen peroxide	yeast	70°F	85°C	+15°F		

At least three different experiments



Heat Released →
Exothermic
 (Exergonic)



Heat absorbed →
Endothermic
 (endergonic)

HW

Experiment

at least 3 rounds

No online HW 21

No Quiz 21

HW/Quiz 19 Feb 26th

HW/Quiz 20 March 3rd