

ACTIVATION ENERGY

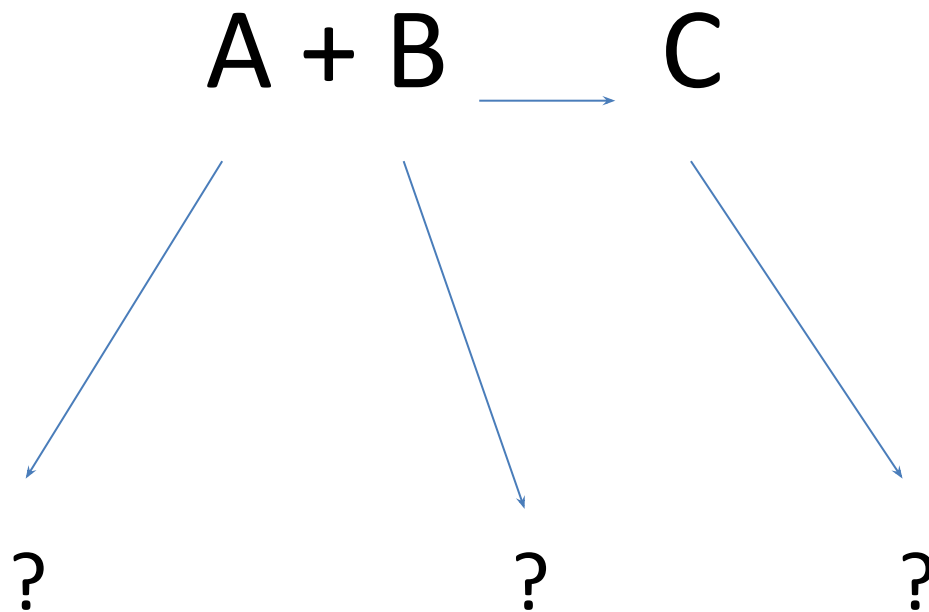
- E_a - what it actually is
- How is it related to temperature
- Catalysts and how they affect E_a

*Off the top of your head answer
the following question in the back
of your books:*

Q. Define what activation energy is.
(2marks)

LLO's for today:

- All should be able to *explain* how temperature affects the rate of a chemical reaction in terms of collision frequency and the impact on collision. Grade B
- All should be able to *define* what a catalyst is. Grade D
- Most should be able to *explain* how a catalyst works by lowering E_a . Grade A
- Some will *understand* that bonds must be broken before new bonds can be formed. Grade A/A*



- *A+B must break their existing bonds before they can form their new bonds in C (as the product).*
- If they have the minimum amount of energy required to do this, then they possess the? ANSWER
- If they have energies greater than E_a ? ANSWER
- If they have energies less than E_a ? ANSWER

Yesterday's Extension Question

Maxwell-Boltzmann Distribution

The affect of a catalyst on E_a and hence
a chemical reaction in general-