

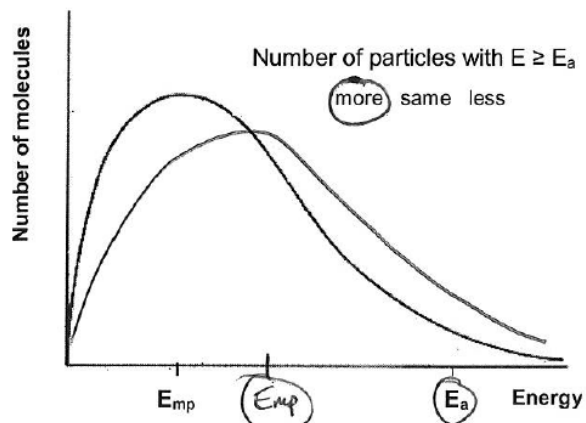


# MAXWELL-BOLTZMANN CURVES

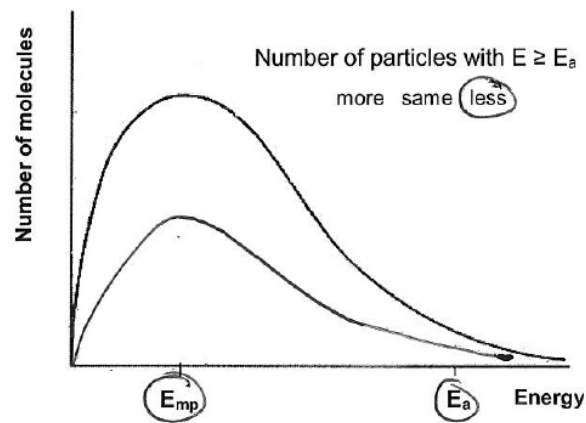
For each of the following

- Sketch the new shape of the distribution curve
- Indicate the new most probable energy ( $E_{mp}$ ) if it changes
- Indicate the new activation energy ( $E_a$ ) if it changes
- Indicate whether the number of particles with energy  $\geq$  activation energy increases, decreases or stays the same

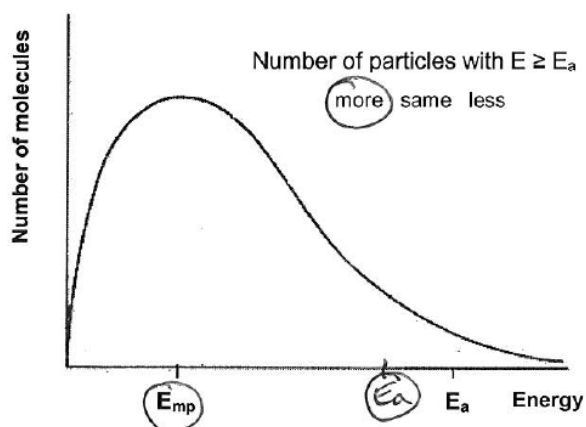
## 1) Increase the temperature



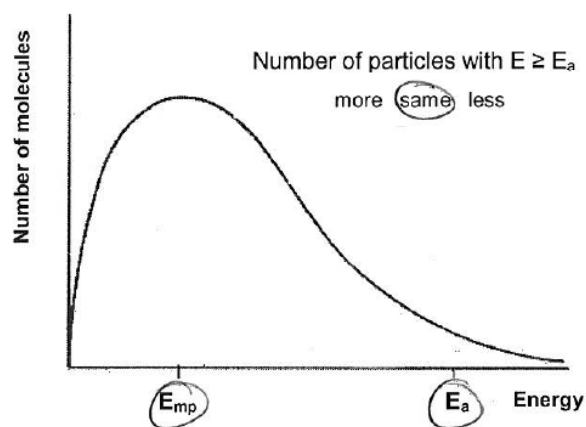
## 2) Remove half the molecules



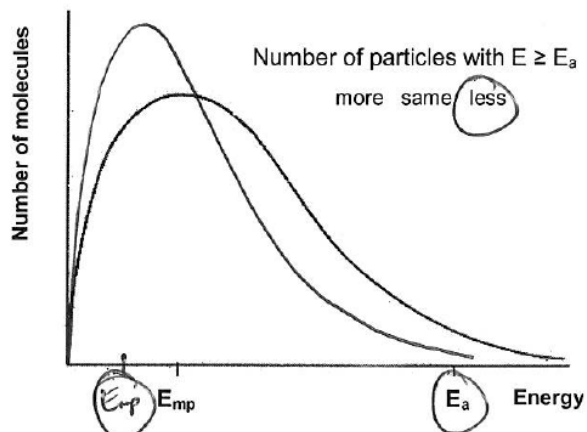
## 3) Add a catalyst



## 4) Reduce the volume of the container



## 5) Reduce the temperature



## 6) Add an inert gas

