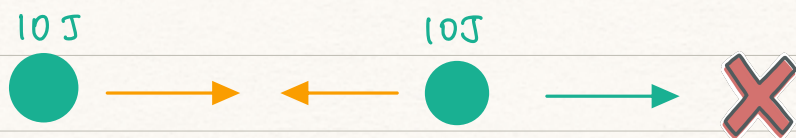




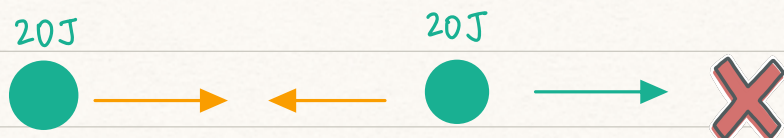
Activation Energy,  $E_A = 30 \text{ J}$

case 1



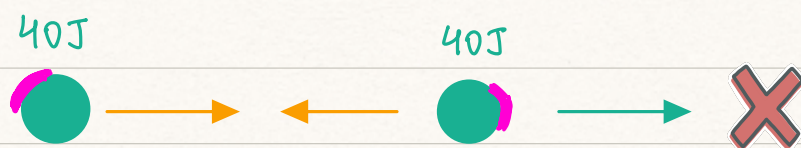
[Energy <  $E_A$ ]

case 2



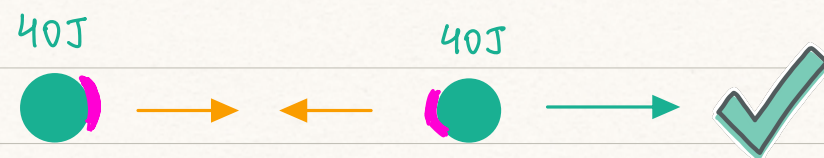
[Energy <  $E_A$ ]

case 3



Energy >  $E_A$  ✓  
But orientation ✗

case 4



Energy >  $E_A$  ✓  
Orientation ✓



case 4 : Only effective collision



case 1-3 : Ineffective collisions



Activation Energy :

Minimum energy required for a collision to be effective.