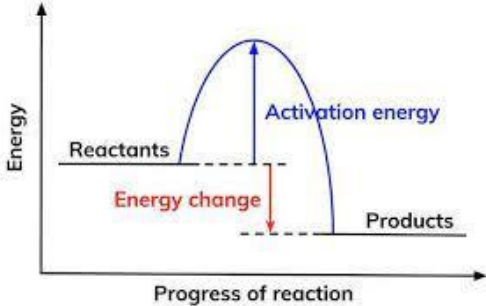
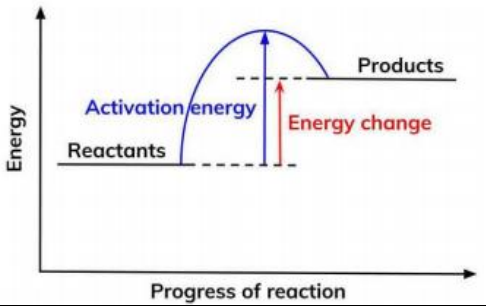


Exothermic and Endothermic		
1	Exothermic reaction	transfers energy to the surroundings so the temperature of the surroundings increases
2	Exothermic reaction examples	-combustion, oxidation and neutralisation -respiration
3	Exothermic reaction uses	hand-warmers and self-heating cans
4	Endothermic reaction	takes in energy from the surroundings so the temperature of the surroundings decreases
5	Exothermic reaction examples	-thermal decomposition reactions -sodium hydrogencarbonate + citric acid -photosynthesis
Required practical – temperature changes		
6	Thermometer	measures temperature
7	Balance	measures mass
8	Temperature change	difference between initial and final temperature
Reaction profiles		
9	Exothermic reaction profile	 <p>The diagram shows an exothermic reaction profile. The vertical axis is labeled 'Energy' and the horizontal axis is labeled 'Progress of reaction'. A curve starts at a horizontal dashed line labeled 'Reactants', rises to a peak, and then falls to a lower horizontal dashed line labeled 'Products'. A blue arrow points from the reactant level to the peak, labeled 'Activation energy'. A red arrow points from the reactant level down to the product level, labeled 'Energy change'.</p>
10	Endothermic reaction profile	 <p>The diagram shows an endothermic reaction profile. The vertical axis is labeled 'Energy' and the horizontal axis is labeled 'Progress of reaction'. A curve starts at a horizontal dashed line labeled 'Reactants', rises to a peak, and then falls to a higher horizontal dashed line labeled 'Products'. A blue arrow points from the reactant level to the peak, labeled 'Activation energy'. A red arrow points from the reactant level up to the product level, labeled 'Energy change'.</p>
11	Activation energy	the minimum amount of energy particles need to react
12	Energy change	the difference between the energy of reactants and products