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| **Endothermic Process** |
| Converts heat energy into potential energy |
| HRXN = + |
| Potential energy of the products is higher than the potential energy of the reactants |
| Heat energy is required (or some other form – maybe electrical) |
| The surroundings get colder |
| Energy is written on reactant side of the reaction |
| Ice melting |

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| A piece of copper heating up from 25oC to 29oC |
| Water boiling |
| Mix 2 solutions that react and the temperature of the solutions gets colder |
| Energy is transferred from the surroundings to the system |
| Image result for image, heating curve |
| **Image result for endothermic energy diagram** |

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| **Exothermic Process** |
| Converts potential energy into heat energy |
| HRXN = - |
| Potential energy of the products is lower than the potential energy of the reactants |
| Heat energy is released |
| The surroundings get warmer |
| Energy is written on product side of the reaction |
| Bomb exploding |
| Water freezing |
| Water condensing |
| A piece of copper cooling down from 29oC to 25oC |
| Combustion |
| Mix 2 solutions that react and the temperature of the solutions gets warmer |
| Energy is transferred from the system to the surroundings |
| Image result for image, cooling curve |
| Image result for endothermic energy diagram |