Endothermic and Exothermic Reactions

During a chemical reaction, reactants are converted into products by the making and breaking of chemical bonds. When two or more substances react, chemical bonds are formed among atoms, creating a new chemical compound. All chemical reactions are accompanied by a change in energy and can be classified into two types: endothermic and exothermic reactions.

Chemical reactions are classified as either two types: endothermic and/or exothermic reactions. In addition, activation energy activation results in the bonding of the two reactants to form a new product. All chemical reactions are accompanied by a change in energy.

There are many chemical exothermic reactions that involve the release of energy in the form of heat, light, or sound. Such chemical reactions are called exothermic reactions. The heat energy that is released comes from the bonds that join several atoms together in the molecules participating in the reaction. A combustion is a common example of exothermic reactions. The release of energy that is released comes from the bonds that join several atoms together in the molecules participating in the reaction. A combustion is a common example of exothermic reactions. Complete combustion process occurs when a compound reacts with an oxidizing agent, yielding compounds of each element in the fuel with the oxidizing element. There are mostly as products. Most exothermic reactions are spontaneous exothermic processes. On the other hand, many chemical

Conversely, endothermic reactions involve absorption of energy in the form of heat, light, or sound forms. Such chemical reactions are called endothermic reactions. These reactions cannot progress with no or proceed without the addition of heat or supplying energy. The resulting product of the reaction has less stability because the higher the stability of a molecule decreases as the energy bond, the less strength of its molecules possess. A constituent bond...
increases. Photosynthesis is a common example of endothermic reactions, which involves the phenomena of photosynthesis. Here, plants use the energy from the sun to convert carbon dioxide and water into glucose and oxygen. Most endothermic reactions are not spontaneous.

To understand the difference between the two types of reactions, we need to explore several concepts such as the behavior of kinetic energy and potential energy behavior in the molecules of the reactants of the chemical reaction.