

Metabolism and energy

1. The conversion of glucose to carbon dioxide and water is an example of:
 - an anabolic reaction
 - a condensation reaction
 - an esterification reaction
 - a catabolic reaction
2. Which of the following is not a feature of collision theory?
 - the rate of chemical reactions increases with increasing temperatures
 - the reaction is faster in dilute solute solutions than in concentrated
 - at high temperatures molecules have more energy than at low temperatures
 - the more molecules present, the faster the reaction
3. Catalysts:
 - slow down chemical reactions
 - provide an alternative reaction pathway
 - are used up in reactions
 - increase the activation energy
4. In an endergonic reaction:
 - energy is absorbed from the surroundings
 - bonds being formed are the same strength as bonds being broken
 - energy is released to the surroundings
 - bonds being formed are stronger than bonds being broken
5. In an exergonic reaction:
 - bonds being formed are the same strength as bonds being broken
 - energy is released to the surroundings
 - bonds being formed are stronger than bonds being broken
 - energy is absorbed from the surroundings
6. Examples of anabolic reactions include:
 - the breakdown of carbohydrates
 - hydrolysis reactions
 - the breakdown of lipids
 - the build up of proteins