

GLOSSARY AND CREDITS

Have you ever wondered why a fire is hot or why the food you eat produces energy? In both examples, a reorganization of molecules occurs. In the fire, fuel reacts with oxygen to produce heat plus different chemicals. In the case of food eaten, digestion breaks up the molecules so that they can react with oxygen to produce heat (energy) and waste products. The reorganization of molecules involves energy and energy changes.

You will explore how molecular reorganization produces energy, how and why reactions occur, and what controls the rate of a reaction. You may need to review previous units.

VOCABULARY

catalyst	A substance that is added to a chemical reaction, that changes the rate of the reaction, that is not consumed in the reaction, and that does not affect the equilibrium in any way.
endothermic	A reaction that absorbs energy.
enthalpy	The energy in atoms and molecules that holds the substances together; bonding energy.
enthalpy of reaction	The amount of heat released or absorbed by a reaction and is represented by ΔH .
equilibrium	A dynamic state where two opposing forces are in balance, where two opposite events are occurring at equal rates. The building process is equal in rate to the tearing-down process.
heat of reaction	The change in enthalpy (heat content) that occurs in the process of converting reactants to products in a chemical reaction.
precipitate	The solid formed as a result of chemicals reacting together from a solution.

solute	The substance dissolved in a solution.
solvent	That component of a solution which dissolves the solute.