active site	the part of an enzyme to which the substrate binds
anabolic	reactions that build complex molecules from simpler ones, requiring energy input
brown fat	fat present in many hibernating mammals with the purpose of generating body heat
catabolic	breaking down complex molecules into simpler ones, releasing energy
catalysts	substances that speed up reversible chemical reactions
central nervous system	parts of the nervous system that include the brain and spinal cord
chemoreceptors	sensory cells in an organism that detect chemical stimuli
cofactor	any non-protein molecule needed by an enzyme for its activity
control centre	process controller that detects incoming information and relays outgoing information to regulate functioning
denature	the change of shape of a protein, due to heat or changed pH, causing it to lose its ability to function

ectothermic	an animal that depends on an external source for heat energy
effector	the organ, gland or muscle that carries out a response when activated by nerve endings as a result of a stimulus
endothermic	an animal whose heat is generated through its own metabolic activities
enzymes	biological protein catalysts produced by cells, responsible for all chemical reactions in living organisms
heat-gain centre	part of the hypothalamus in the brain that triggers responses in the body to generate heat
heat-loss centre	part of the hypothalamus in the brain that triggers responses in the body to cool down
homeostasis	processes which maintain a stable internal environment in an organism, despite fluctuations in the external environment
hypothalamus	part of the brain involved in homeostatic mechanisms such as temperature regulation and water balance in mammals
induced-fit model	the view of enzyme functioning based on the idea that an enzyme is not rigid, but alters shape slightly when it binds with a substrate
interoreceptors	specialised sensory nerve receptors that receive and respond to stimuli originating from within the body

lock-and-key model	the view of enzyme functioning based on the idea that an enzyme is rigid and reciprocally shaped to fit a substrate like a key fits a lock
metabolism	the sum of the chemical processes occurring within a living cell or organism
negative feedback	a self-regulatory biological system where a response counteracts the stimulus, reducing its effect so that a balance is maintained
nerves	bundles of sensory or motor fibres of neurons which act as messengers, transmitting impulses
receptors	specialised cells or groups of nerve endings that detect sensory stimuli
response	any behaviour of a living organism that results from a stimulus
saturation point	the maximum level at which all available enzymes are being used to catalyse a chemical reaction
sense organs	a group of sensory receptors and associated non-sensory tissue specialised for detecting stimuli in the environment
set point	any one of a number of quantities (such as temperature and pH) which the body tries to keep steady at a particular value during homeostasis
stimuli	changes in the environment detected by the sensory organs

substrate	a molecule upon which an enzyme acts
substrate-specific	an enzyme that can work on only one particular substrate molecule, because the active site is reciprocally shaped to bind with that molecule
thermoreceptors	sensory cells or organs that detect heat or cold