light microscope	a device based on lenses and/or mirrors that produces a magnified image of material prepared on a glass slide
lignin	a hard material usually found in the secondary cell wall layers, which strengthens plant tissue
lipid	a group of organic compounds, often called fats and oils, that feel greasy and do not dissolve in water
lysome	a cell organelle that contains digestive enzymes
magnification	the extent to which an image is made larger

mammal	a member of the class of vertebrates Mammalia, which have fur or hair and suckle their young
mechanism	the way something is done or the way it works
micrograph	a photograph or drawing of an object as seen through a microscope
mitochondria	cell organelles responsible for aerobic respiration and, therefore, the release of energy in eucaryotic cells
mitosis	the cellular division that results in two daughter nuclei that, after cytokinesis, form two identical cells

multicellular organism	an organism that consists of numerous cells that are specialised to carry out specific functions within the organism
nanotechnology	the technology associated with the development of materials and devices that are less than 100 nanometres in size
nectar feeders	organisms such as honey possums and lorikeets that feed mostly on nectar from flowers
nucleolus	a structure found in the nucleus of cells and contains nucleic acids responsible for protein manufacture
nucleus	the membrane-bound control centre of eucaryotic cells and contains chromosomes on which genetic material is

carried

nutrients	substances that provide energy and/or are required for the normal functioning of organisms
omasum	the third section of the stomach of ruminants into which the cud is swallowed and where it is further fermented
operculum	the covering of the gills that allows for the exchange of gases in fish
organ	a part of an organism that carries out a specific function and is usually made up of different tissues e.g. the kidney
organelle	a specialised structure within the cell that carries out a specific function

organic molecules	compounds found in or produced by living things and contain or are based on carbon
organ system	a set of organs that work in a coordinated manner to bring about a particular function within the organism e.g. the excretory system
osmoregulation	the processes that maintain the appropriate concentrations of fluids in the body and hence the movement of water by osmosis
osmosis	the tendency of a solvent (usually water) to pass through a selectively permeable membrane into a solution where its concentration is lower
oxic	containing oxygen