

cytokinesis

the final stage of cell division involving the redistribution of the cytoplasm between daughter cells

cytoplasm

the contents within the cell membrane, excluding the nucleus

daughter cells

the products of cell division

dermis

a type of tissue that provides the external covering layer of plants

differentiation

the changes that occur in development and result in a cell becoming specialised in structure and function

diffusion

the movement of material (usually fluids) from places of high concentration to places of lower concentration until the solution is evenly mixed

digestive chemicals

substances (enzymes) that break complex molecules into simpler ones

diverticulum

a specialised branch off the stomach in nectar feeders that stores nectar

DNA

deoxyribonucleic acid, the large organic molecule responsible for storing hereditary information in living things; found on chromosomes

electron microscope

a microscope that produces a highly magnified and resolved image because it is based on firing electrons through a very thin film of material and collecting the image

endoplasmic
reticulum

a double membrane that forms a convoluted network of tubes that connects the cell membrane to the nucleus

epidermic cells

cells that provide the outermost protective layer on plant structures such as leaves

epithelial tissue

tissue that makes up the surface of the body and organs, serving the functions of protection and/or secretion, absorption and sensation

eucaryotic cells

cells that contain a nucleus, organelles and genetic material

exchange

to give up and receive or replace

excretory system

the system of organs with the function of removing wastes from the organism

freeze-fracture

a method of preparing specimens for the electron microscope; involves rapid freezing followed by splitting

glucose

a simple monosaccharide sugar, commonly produced as a result of digestion of more complex carbohydrates in animals and is a product of photosynthesis in plants

golgi bodies

flat, hollow discs that are stacked together in the cell and serve to store and process biochemicals before they are secreted

grazing

to feed on growing plants such as grasses

herbivore

an animal that feeds on plant material

heterotroph

an organism that relies on ingesting organic material as a source of food

Hooke, Robert

the scientist who observed cork under the microscope and called the units he observed 'cells'

hypothesis

a proposition that is intended to explain or link a group of ideas that can be scientifically tested

insect

a small animal with an exoskeleton, three main body parts and three pairs of legs

lenticel

a group of cells, usually on the stem of a plant, that acts like a pore through which gases are exchanged
