

GLOSSARY

A

active transport the movement of a substance across a cell membrane against a concentration gradient; requires the cell to expend energy (101)

C

carrier protein a protein that transports specific substances across a biological membrane (99)

concentration gradient the difference in concentration of a substance across space (95)

contractile vacuole an organelle in protists that expels water (97)

cytolysis the bursting of a cell (99)

D

diffusion the process by which molecules move from an area of greater concentration to an area of lesser concentration (95)

E

endocytosis the process by which a cell surrounds and engulfs substances (103)

equilibrium a state that exists when the concentration of a substance is the same throughout a space (95)

exocytosis a process in which a vesicle inside a cell fuses with the cell membrane and releases its contents to the external environment (104)

F

facilitated diffusion a process in which substances move down their concentration gradient across the cell membrane with the assistance of carrier proteins (99)

H

hypertonic describing a solution whose solute concentration is higher than that inside a cell (96)

hypotonic describing a solution whose solute concentration is lower than that inside a cell (96)

GLOSSARY

I

ion channel a membrane protein that provides a passageway across the cell membrane through which an ion can diffuse (100)

isotonic describing a solution whose solute concentration equals that inside a cell (97)

O

osmosis the diffusion of water across a selectively permeable membrane (96)

P

passive transport the movement of substances across a cell membrane without the use of cell energy (95)

phagocyte a cell that engages in phagocytosis (104)

phagocytosis a type of endocytosis in which a cell engulfs large particles or whole cells (103)

pinocytosis a type of endocytosis in which a cell engulfs solutes or fluids (103)

plasmolysis the shrinking or wilting of a walled cell in a hypertonic environment (98)

S

sodium-potassium pump a carrier protein that actively transports K^+ ions into and Na^+ ions out of cells (101)

T

turgor pressure water pressure within a plant cell (98)

V

vesicle a membrane-bound sac in a eukaryotic cell that contains materials involved in endocytosis, exocytosis, or transport within the cell (103)