Movement into and out of cells

IGCSE Biology · Vocabulary in context

Word	Example
diffusion /dɪ'fju:ʒn/	The smell of perfume spreads across a room by **diffusion**.
net movement /net 'mu:vmənt/	The **net movement** of oxygen is into the cell.
particles /'pɑ:tɪklz/	The **particles** in a gas move all the time.
concentration /ˌkɒnsən'treɪʃn/	The **concentration** of the acid is 2 mol/dm^3. 2 mol/dm^3
concentration gradient /ˌkɒnsən'treɪʃn 'greɪdɪənt/	Oxygen moves down a **concentration gradient**, from high to low.
random movement /'rændəm 'mu:vmənt/	Gas particles show **random movement** in all directions.
energy /'enədʒi/	Food gives your body the **energy** it needs to move.
kinetic energy /kɪ'netɪk 'enədʒi/	A fast car has a lot of **kinetic energy**.
molecules /'mɒlɪkju:lz/	Water is made of **molecules**.
ions /'aɪɒnz/	Water molecules surround the **ions** as they dissolve.
cell membrane /sel 'membreɪn/	The **cell membrane** controls what goes in and out of the cell.
gases /'gæsɪz/	Oxygen and carbon dioxide are **gases**.
solutes /'sɒlju:ts/	Salt and sugar are **solutes** when they dissolve in water.

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oxygen /'ɒksɪdʒn/	Your cells need **oxygen** to release energy.
carbon dioxide /'kɑ:bən daɪ'ɒksaɪd/	We breathe out **carbon dioxide**.
surface area /'sɜ:fɪs 'eərɪə/	Smaller solid pieces provide more **surface area** for reaction.
temperature /'temprɪtʃə/	The thermometer shows the water's **temperature**.
surface area to volume ratio /'sɜ:fɪs 'eərɪə tə 'vɒlju:m 'reɪʃɪəʊ/	A small cell has a large **surface area to volume ratio**.
solvent /'sɒlvənt/	Water is the **solvent** in salt water.
dissolve /dɪ'sɒlv/	Sugar will **dissolve** in water.
solution /sə'lu:ʃn/	Salt water is a **solution**.
digestion /daɪ'dʒestʃn/	**Digestion** breaks food into small molecules.
excretion /ek'skreʃn/	The kidneys carry out **excretion** of urea.
transport /'trænspɔ:t/	Blood is used for **transport** of oxygen.
osmosis /ɒz'məʊsɪs/	Water enters the root by **osmosis**.
partially permeable membrane /'pɑ:ʃəli 'pɜ:məbl 'membreɪn/	A **partially permeable membrane** lets water through but not sugar.
water potential /'wɔ:tə pə'tenʃl/	Water moves from high **water potential** to low water potential.

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turgid /ˈtɜːdʒɪd/	A **turgid** plant cell is firm and full of water.
turgor pressure /ˈtɜːgə ˈpreʃə/	**Turgor pressure** pushes the cell contents against the wall.
flaccid /ˈflæsɪd/	A **flaccid** cell is soft because it has lost water.
plasmolysis /plæzˈmɒləsɪs/	In salty water, **plasmolysis** pulls the membrane away from the cell wall.
dialysis tubing /daɪˈæləsɪs ˈtjuːbɪŋ/	**Dialysis tubing** lets small molecules through but not starch.
active transport /ˈæktɪv ˈtrænspɔːt/	**Active transport** uses energy to move ions into root cells.
respiration /ˌrespɪˈreɪʃn/	**Respiration** releases energy from glucose.
root hairs /ruːt heəz/	**Root hairs** give the root a large surface area.
protein carriers /ˈprəʊtiːn ˈkærɪəz/	**Protein carriers** move ions across the membrane.

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