# AS 91156 Cells Glossary

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| Active site | A specific shaped part of an enzyme where the substrate fits |
| Active transport | The movement of molecules from an area of low concentration to an area of high which requires energy |
| Aerobic respiration | Respiration in the presence of oxygen |
| Anabolic enzyme | An enzyme that takes small molecules and joins them together |
| Anaerobic respiration | Respiration with limited oxygen |
| Catabolic enzyme | An enzyme which takes large molecules and breaks them up |
| Cell wall | Rigid layer of cells found only in plants |
| Chlorophyll | Pigment found in plants which gives the plant its green colour |
| Chloroplast | Site of photosynthesis |
| Cristae | Part of mitochondria (the folds) where the electron transfer chain occurs |
| Denature | The changing in the shape of the active site of an enzyme, so the substrate can no longer fit - caused by high temperatures and incorrect pH |
| Deoxyribose nucleic acid | Full name for DNA |
| Diffusion | The movement of materials from an area of high concentration to an area of low concentration |
| DNA replication | The copying of DNA before the cell divides |
| Enzymes | Biological catalysts which speed up biochemical reactions in an organism |
| Facilitated diffusion | A form of passive transport where molecules move across the cell membrane through the membrane proteins |
| Flaccid | A cell that is limp and floppy |
| G1 of cell cycle | The stage in the cell cycle where the cell grows and does its job |
| G2 of cell cycle | The stage in the cell cycle where the replicated chromosomes are checked for mistakes |
| Golgi body | Part of a cell where proteins are modified and packaged |
| Grana | Part of chloroplast where the light stage occurs |
| Hypertonic solution | A solution with a high concentration of solute, therefore a low concentration of water |

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| Hypotonic solution | A solution with a low concentration of solute, therefore a high concentration of water |
| Induced fit model | The enzyme model where the enzyme changes its shape after bonding with the substrate |
| Inhibitors | Poisons that bind to the active site of enzymes and stop them working |
| Isotonic solution | A solution which has the same osmolarity or solute concentration as another solution |
| Lock and key model | The model explaining how enzymes work where the enzyme is a rigid structure |
| Matrix | Part of the mitochondria where the citric acid cycle occurs |
| Mitochondria | Organelle in cell where respiration occurs |
| Mitosis | The stage of the cell cycle where the replicated chromosome is split into 2 cells |
| Osmosis | The net movement of water through a semi-permeable membrane from an area of high concentration to an area of low concentration |
| Palisade layer | Part of the leaf where most chloroplasts are found, so most photosynthesis occurs here |
| Passive transport | The movement of molecules from an area of high concentration to an area of low concentration which doesn't require energy |
| Phagocytosis | A form of active transport by which a cell uses its plasma membrane to engulf a large solid particle |
| Pinocytosis | A form of active transport where fluids and nutrients are ingested by cells |
| Ribosomes | Part of cell where protein synthesis occurs |
| S stage of cell cycle | The stage in the cell cycle where the DNA is replicated |
| Semi conservative replication | The name that describes the fact that the new DNA molecule being one strand new and one strand old |
| Semi permeable membrane | A membrane that allows some substances to pass through it but not others |
| Stroma | Part of chloroplast where the dark stage occurs |
| Turgid | A cell that is it is swollen, bloated, puffed up or inflated |