



# Definitions and Concepts for AQA Biology GCSE

## Topic 2: Organisation

*Definitions in **bold** are for higher tier only*

*Definitions marked by '\*\*' are for separate sciences only*

**Amylase:** An enzyme produced in the salivary glands and pancreas that breaks carbohydrates down into simple sugars.

**Aorta:** The main artery that takes oxygenated blood away from the heart to the body.

**Artery:** A blood vessel that carries blood at high pressure away from the heart.

**Benign tumour:** An abnormal cell growth that is contained within one area and does not invade other areas of the body.

**Bile:** A substance made in the liver and stored in the gallbladder which is used to neutralise stomach acid in the intestine and emulsify fats.

**Blood:** A tissue containing red blood cells, white blood cells, platelets and plasma.

**Cancer:** A non-communicable disease caused by changes in the cell that lead to uncontrolled growth and division.

**Capillary:** A very thin blood vessel that is used for exchange of substances.

**Cell:** The basic building block of all living organisms.

**Communicable disease:** A disease that can be spread between individuals either directly or indirectly.

**Coronary heart disease:** A disease caused by the buildup of fatty deposits inside the coronary artery, narrowing it and reducing blood flow to the heart tissue.

**Enzymes:** Biological catalysts that increase the rate of reactions in living organisms.

**Health:** The state of physical and mental wellbeing.

**Heart:** An organ that pumps blood around the body in a double circulatory system.



**Lipase:** An enzyme that is produced in the pancreas that breaks lipids down into fatty acids and glycerol.

**Lock and key hypothesis:** A theory that describes how substrates must be the correct shape to fit the active site of an enzyme.

**Malignant tumour:** A cancerous cell growth that invades neighbouring tissues and can spread to different parts of the body in the blood.

**Meristem tissue:** Plant tissues containing undifferentiated stem cells.

**Metabolism:** All of the chemical reactions occurring in an organism.

**Non-communicable disease:** A disease which cannot be spread between individuals.

**Organs:** Aggregations of tissues performing specific functions.

**Organ systems:** Groups of organs that work together to form organisms

**Palisade mesophyll:** A tissue found in plant leaves that is specialised to carry out photosynthesis.

**Phloem:** A transport tissue found in plants which is specialised to transport sugars from source to sink.

**Protease:** An enzyme produced in the stomach and pancreas that breaks proteins down into amino acids.

**Pulmonary artery:** The main artery that takes deoxygenated blood away from the heart to the lungs.

**Pulmonary vein:** The main vein that takes oxygenated blood back to the heart from the lungs.

**Rate of reaction:** The speed at which reactants are converted into products.

**Risk factor:** Something that increases a person's risk of developing a disease.

**Spongy mesophyll:** A tissue found in plant leaves that is specialised for gas exchange.

**Statins:** A class of drugs that are used to reduce blood cholesterol levels which slows down the rate of fatty material deposit.

**Stent:** A tube that can be surgically implanted into blood vessels to keep them open.



**Tissue:** A group of cells with a similar structure and function.

**Translocation:** The movement of food molecules through the phloem tissue.

**Transpiration:** The process of water evaporating from a plant.

**Vein:** A blood vessel that carries blood at a low pressure back to the heart.

**Vena cava:** The main vein that takes deoxygenated blood back to the heart from the body.

**Xylem:** A transport tissue in plants which is specialised to transport water and dissolved minerals from the roots of the plant to the leaves.