Definitions and Concepts for AQA Biology GCSE

Topic 2: Organisation

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*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.