Unit 2 Organisation

Cell	Basic building blocks of all living organisms
Tissue	A group of cells with a similar structure and function e.g. muscle tissue
Organ	A group of tissues performing specific functions e.g. stomach
Organ system	A group of organs which work together to form organisms e.g. digestive system
Enzyme	A molecule that speeds up reactions in the body. AKA a biological catalyst
Active site	The area of the enzyme with a specific shape where the reaction happens
Substrate	The chemical which fits into the active site on the enzyme.
Denatured	When an enzyme has been damaged by heat or pH we say it is denatured. It won't work because the active site has lost its shape.
Salivary Glands	Produce saliva with amylase enzymes to breakdown starch
Stomach	Organ which digests protein. It contains hydrochloric acid and protease
Liver	It makes bile
Gall bladder	It stores bile then releases it into the small intestine
Bile	A liquid with a pH of about 8.5. It neutralises stomach acid and turns fats into droplets (emulsifies) to make them easier to break down.
Small intestine	Contains all of the digestive enzymes. It's where digestion and absorption take place
Large intestine	Where water is absorbed
Pancreas	Makes digestive enzymes and releases them into the small intestine
carbohydrase (e.g. amylase)	An enzyme which breaks down carbohydrate (e.g. starch) into glucose.
Protease	An enzyme which breaks down protein into amino acids
Lipase	An enzyme which breaks down fat into fatty acids and glycerol
Alveoli	Air sacs in the lungs where gas exchange happens
Trachea	The windpipe
Bronchi	The two air tubes that lead to each lung
Diaphragm	The muscle below the lungs which flattens when we breath in
Arteries	The largest blood vessels which carry blood away from the heart. They have strong muscular walls.
Veins	These carry blood back to the heart. The blood is at low pressure so the veins have valves to stop blood flowing backwards
Capillaries	These blood vessels have walls that are just one cell thick. They carry one blood cell at a time. They are found everywhere in the body and are where oxygen is delivered to tissues.
Aorta	The largest artery, carries blood from the heart to the body
Pulmonary artery	Carries blood from the heart to the lungs
Pulmonary vein	Carries blood from lungs to the heart
Vena cava	The largest vein, it carries blood from the body back to the heart
Atria	The top chambers of the heart
Ventricles	The bottom chambers of the heart
Red blood cell	Carries oxygen
White blood cell	Fights infection
Platelets	For blood clotting
Plasma	Liquid that contain the other components and dissolved substances like urea and glucose
Coronary heart disease (CHD)	When fatty material builds up and stops the flow of blood to the heart muscle
Coronary arteries	The arteries that supply the heart muscle
Stent	A mesh tube used to keep the coronary arteries open
Statins	Drugs used to reduce blood cholesterol preventing (CHD)
Faulty valve	When the blood flows in the opposite direction through the heart. Will need replacing with biological or mechanical valve

Non-communicable disease	Diseases that aren't caused by a pathogen. E.g. cancer, heart disease, diabetes
Carcinogen	A factor that increases the risk of cancer e.g. cigarette smoke or alcohol
Benign tumour	A growth of abnormal cells that hasn't spread yet.
Malignant tumour cell	A growth of abnormal cells that has spread to other parts of the body, in other words cancer
Nicotine	The addictive drug found in cigarettes
Carbon monoxide	A gas found in cigarette smoke that reduces the amount of oxygen your blood can carry
Tar	The chemical in cigarette smoke that causes cancer
Ionising radiation	Types of electromagnetic waves that can cause cancer e.g. UV light or gamma rays from radioactive material.
Epidermis	Outer layer of cells of the leaf
Waxy cuticle	A barrier on the top of the leaf to prevent water loss
Palisade mesophyll	The layer of cells near the top of a leaf where most photosynthesis happens
Spongy mesophyll	The layer nearer the bottom of the leaf that has lots of air spaces to allow oxygen and carbon dioxide to diffuse around the lead
Stomata	A hole in the bottom of the leaf that lets carbon dioxide in
Guard cells	Cells which shut the stomata at times of water loss.
Xylem	Hollow tubes in the stem which carry water and minerals from roots to leaves
Phloem	Living cells in the stem which carry glucose all around the plant