

## Biology Paper 1 knowledge organiser

<b>B2: Organisation</b>	
<b>Bile</b>	Neutralises stomach acid to give a high pH for the enzymes from the pancreas and small intestine to work well. It is not an enzyme.
<b>Enzymes</b>	Biological catalysts, proteins that speed up a chemical reaction
<b>Amylase</b>	Digestive enzyme in mouth and pancreas that breaks starch (carbohydrate) in to glucose
<b>Protease</b>	Digestive enzyme in stomach and pancreas that breaks protein in to amino acids
<b>Lipase</b>	Digestive enzyme in pancreas and small intestine that breaks fats/lipids into glycerol and fatty acids
<b>Lock and key</b>	A model that describes how enzymes are specific to one substrate – only the complementary shaped substrate will fit into the active site
<b>Optimum</b>	The best conditions (temperature and pH) for an enzyme
<b>Food Tests</b>	Iodine tests for starch (blue/black), Biuret tests for protein (blue → lilac), Benedict's test for glucose (red)
<b>Blood vessels</b>	Arteries take blood away from the heart Capillaries supply cells with oxygen and glucose through diffusion Veins take blood back to the heart
<b>Components of blood</b>	Red blood cells – Carry oxygen, White blood cells – Form immune system, Platelets – Help blood to clot (e.g. forming a scab) Plasma – liquid part of the blood that transports hormones and CO <sub>2</sub>
<b>Types of Disease</b>	Communicable – Can spread from organism to organism Non-communicable – Diseases that can't spread, e.g. diabetes
<b>Xylem</b>	Vessel in a plant that transports water and minerals up from the roots
<b>Phloem</b>	Vessel that transports dissolved sugars up and down the plant

