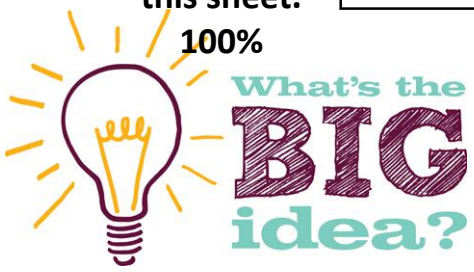
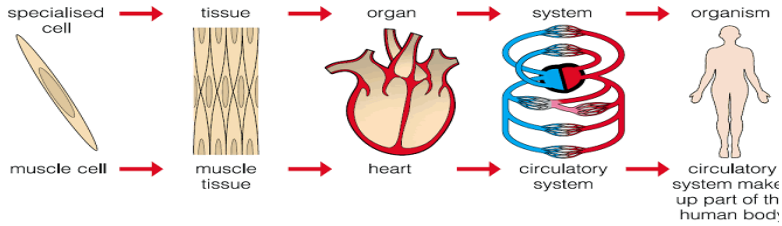
You need to know the content of this sheet. 100%

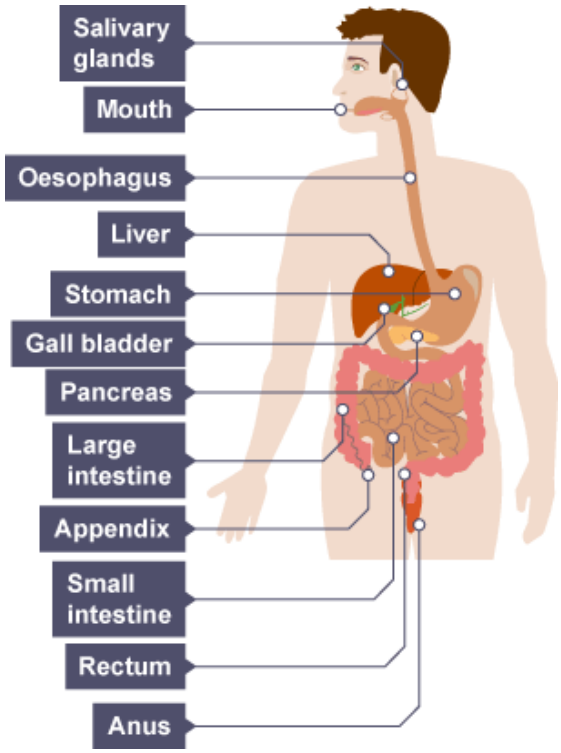
100% Sheet



Organisms

Organisms are organized on a cellular basis and require a supply of energy or materials.





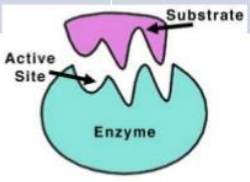
Tissue types in animals:
Epithelial: A covering tissue found on the outer layer of organs.
Glandular: Secretes chemicals in the body eg hormones, enzymes, mucus, acids
Muscular: contracts to bring about movement

The stomach contains all three tissue types, the pancreas is made mainly of glandular tissue

For each organ you must know the function and adaptations of it. You need irreversible chnge and the enzyme has

Enzymes and digestion

Enzyme	Where found	Substrate it acts on	Product
Amylase	Mouth	Insoluble starch	glucose
Protease	Stomach, small intestine	Proteins	Amino acids
Lipase	Small intestine	Lipids	Fatty acids/ glycerol



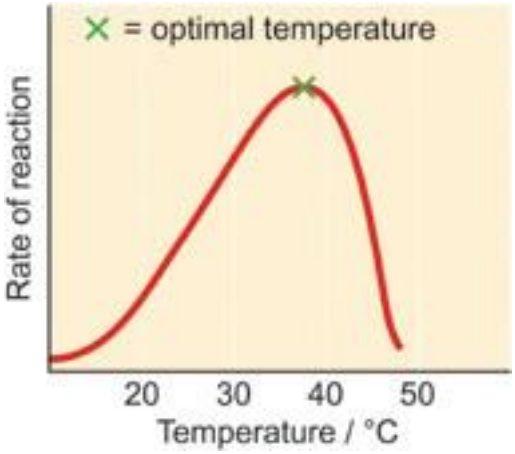
Enzymes are biological catalysts made of protein.
They speed up the rate of the reaction.
They have an active site, this is the place where the substrate binds.
Enzymes are specific, like a lock and a key, they have only one molecule they breakdown.
The active site can be damaged by high temperatures and high and low pH levels. These change the shape of the active site so the substrate no longer fits. This is an irreversible change and the enzyme has been DENATURED.

Describe the differences between cells, tissues and organs, giving examples of each.

Explain how protease secreted in the stomach is different from protease secreted from the pancreas.

Describe the 3 tissue types, stating examples of each in the body.

Describe and explain this graph:



Compare the action of the three enzymes in the graph: