

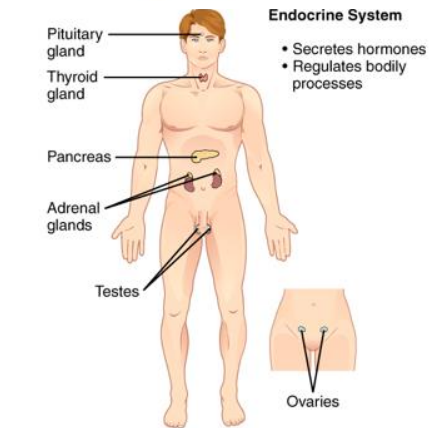
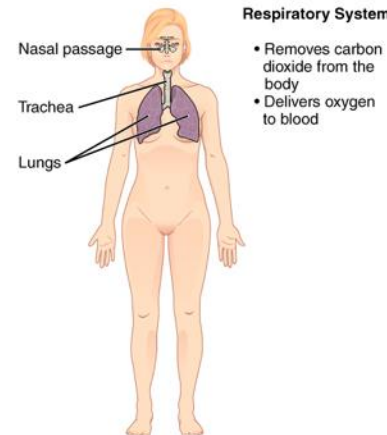
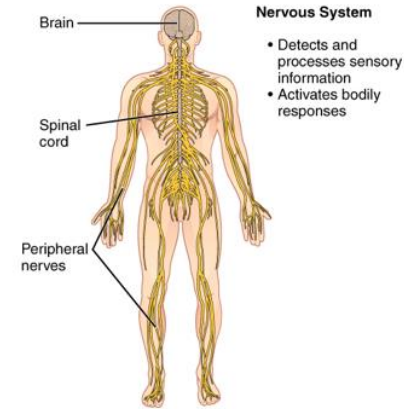
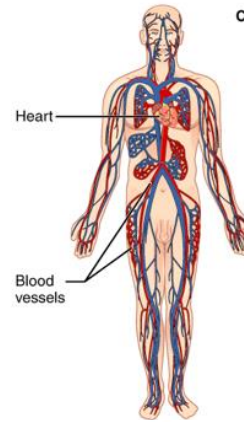
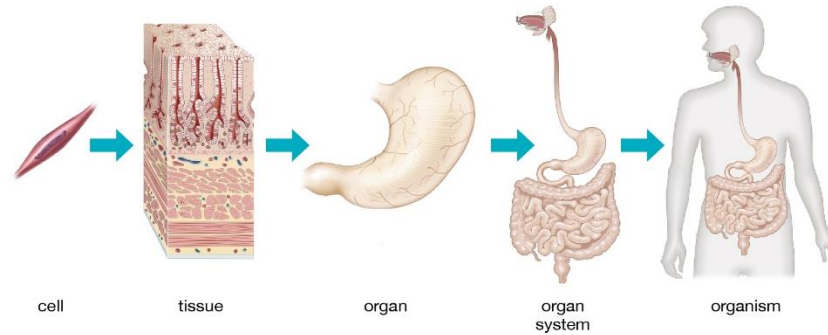
Biology: Human Body Hierarchy

Organs are organised into **organ systems**, which work together to form **organisms**.

There are several systems in the human body that are important to allow the organism to function.

Some organs have **exchange surfaces**. In the human body these will have a large surface area, 1 cell thick and good blood supply. Examples include the small intestine, alveoli in lungs and kidneys.

Key word	Definition
Cell	The basic building blocks of all living organisms.
Tissue	A group of cells with a similar structure and function.
Organ	Collections of tissues performing specific functions.
Organ system	A collection of organs with an overall function. E.g. Digestive system
Organism	A living being. E.g. a human.
Exchange surface	A surface which transfers molecules in and/or out of the body.



The digestive system is a collection of organs which digests and absorbs nutrients.

Part	Adaptation/substance produced	Function
salivary gland	produces saliva	moistens food; has enzymes to digest food
oesophagus	muscular walls	moves food to the stomach by peristalsis
stomach	strong muscles, produces hydrochloric acid and enzymes	Mix food, kills harmful microbes, provides optimum pH for protease enzymes to digest food.
liver	produces bile (alkaline)	neutralises stomach acid using bile stores carbohydrates (as glycogen)
gall bladder	small bag like structure	stores bile
pancreas	produces enzymes	digest proteins, carbohydrates and fats in the small intestine
small intestine	large surface area	digestion and absorption of soluble food
large intestine	special cells to absorb fluids	absorbs water, solidifies waste
anus	strong muscle	releases waste

