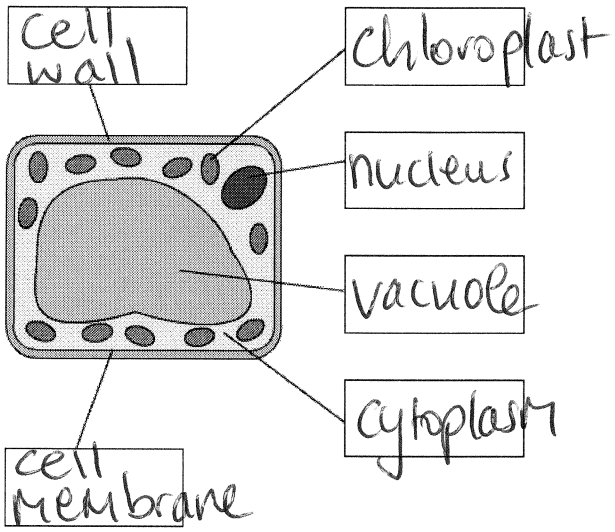
Label each of the structures in the cell shown.



nucleus
cell wall
membrane
vacuole
chloroplast
cytoplasm

Nucleus	Control centre of cell.
cell membrane	Controls what goes into and out of the cell
Chloroplast	Contains green pigment called chlorophyll
Vacuole	Storage organelle
cell wall	Provides cell with a support

What type of cell is shown above? Circle the correct response Plant Animal

On the diagram, draw in some mitochondria. What is the function of mitochondria?

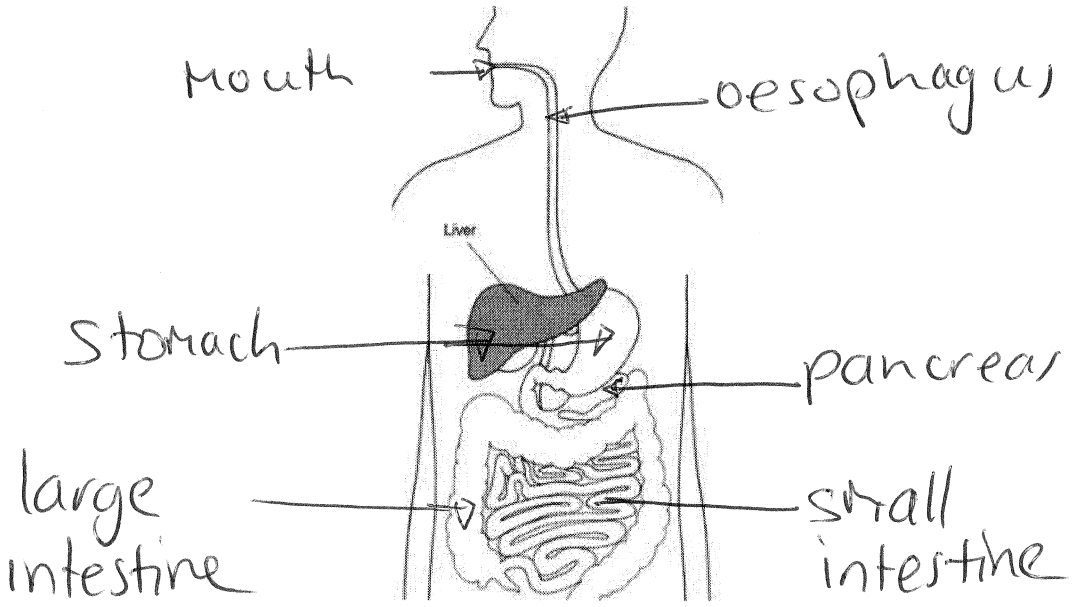
Mitochondria is the site of cellular respiration which provides energy for cell function.

List the following in order from simplest to most complex tissue, system, cell, organ

cell	tissue	organ	System

Label the **following structures on the digestive system diagram**.

mouth	oesophagus	stomach	pancreas	Small mintestine	Large intestine



Provide the function/s of each of the followin structures of the digestive system.

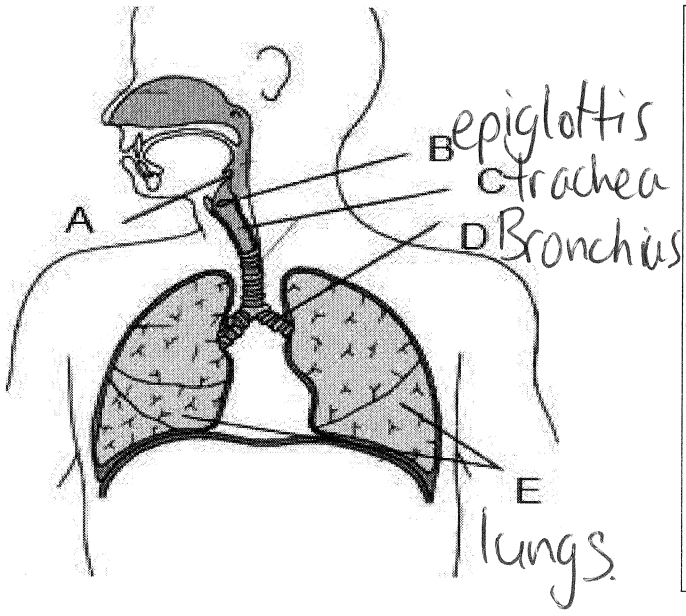
mouth	1. chemical digestion - saliva. 2. Teeth - mechanical digestion
oesophagus	Muscular tube that contracts to push food into stomach
stomach	1. Secretes enzymes for chemical digestion 2. Churns food to help break food down
panctreas	Secretes enzymes into small intestine for digestion of food
Small intestine	1. Secretes enzymes and carries out chemical digestion 2. Absorbs nutrients into blood stream
Large intestine	Absorbs water from undigested food.

Draw the following specialised cells

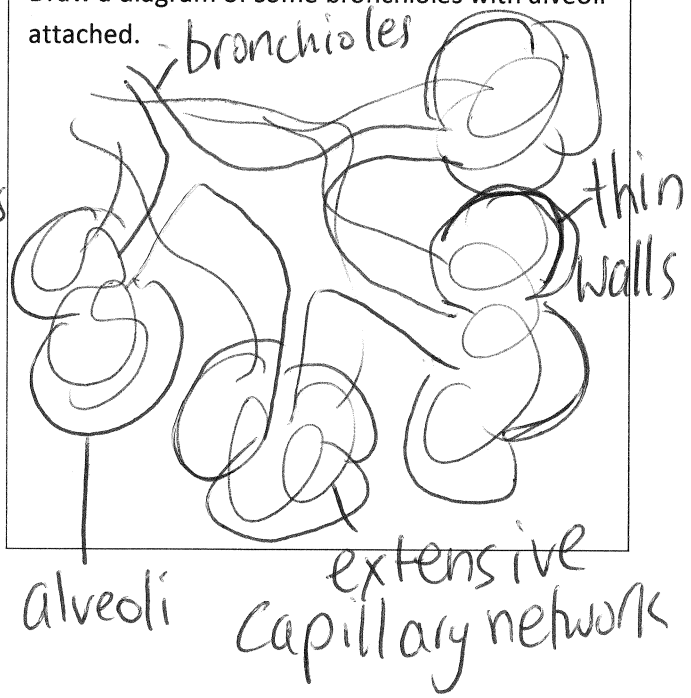
Nerve cell	Skeletal muscle	sperm	Root hair cell	Guard cell
long cytoplasmic extension	can contract	tail for swiming lots of mitochondria	long cytoplasmic extension to increase surface area.	

Label the following structures on the respiratory system

nose, pharynx, trachea, epiglottis, bronchus, lungs



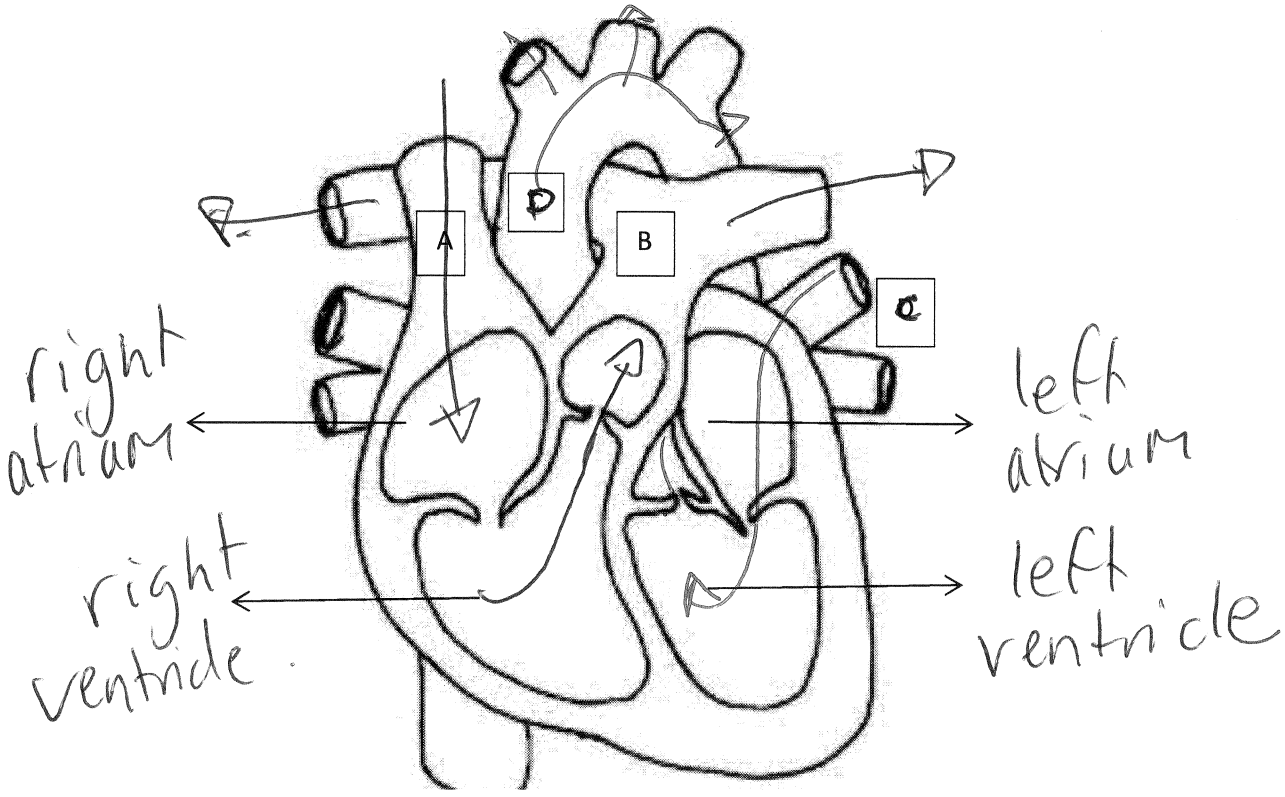
Draw a diagram of some bronchioles with alveoli attached.



Function	Respiratory System Structure
Is also known as the windpipe	trachea
Tiny blood vessels that surround the alveoli	capillary
Tiny air sacs where gas exchange takes place	alveoli
Air passage that branches of the trachea	bronchus.
Warms, moistens and humidifies the air before it enters the lungs	nose
The flap of tissue that covers the trachea when a person swallows	epiglottis
Small passageways for air that have alveoli at their end.	bronchioles

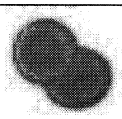
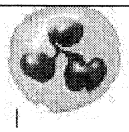
On the diagram below label the four chambers of the heart.

Draw in the flow of blood through the heart, use arrows to show direction. Use a blue pen for deoxygenated and red pen for oxygenated blood.



Letter	A	B	C	D
Name of vessel	Venacava	Pulmonary artery	Pulmonary vein	aorta.

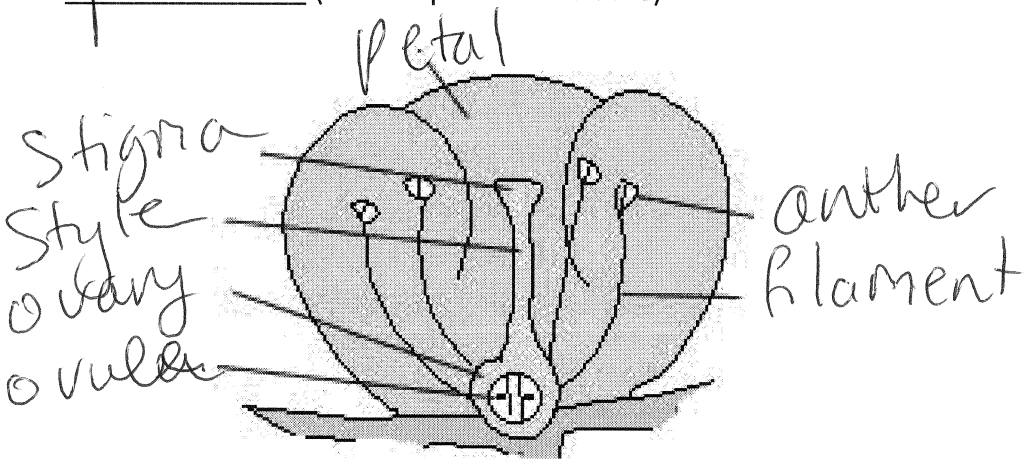
Name the following components of blood

Name of component	Red Blood Cell	Platelets	White blood cell	plasma
Diagram				Fluid component
Function	transports O_2	blood clotting	defence of body	transport of nutrients

Provide two advantages of sexual reproduction	Provide two disadvantages of sexual reproduction
pop. Produces variation	must find a partner
Can adapt to changing env.	energy cost. / Slow rate. / fewer offspring (usually).

Provide two advantages of asexual reproduction	Provide two disadvantages of asexual reproduction
usually fast rate of repro	little variation.
less energy/time courtship. / colonize environment quickly	pop. can't survive change in env.

The female pistil is made of the stigma, style, and ovary.
The stigma is the sticky knob at the top of the style. The style leads to the ovary that contains the female egg cells called ovule.
The male stamen is made up of the anther and filament. The anther produces pollen (male reproductive cells).



What is mitosis? Where does it take place? What does it produce?
cell division for growth + repair, takes place all over body, produces cells identical to parent cell

What is meiosis? Where does it take place? What does it produce?
cell division for gamete production, takes place in testes and ovary, produces cells with half the usual number of chromosomes.