

**a**  
Describe what the following parts of a microscope do:

lens \_\_\_\_\_  
stage \_\_\_\_\_

**b**  
Match the organelle with its function.

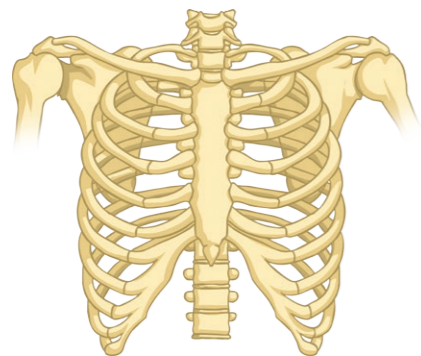
nucleus	Allows substances in and out of the cell.
cell wall	Where respiration occurs.
cell membrane	Controls the cells.
mitochondria	Strengthens the cell.

**c**  
Put the following in order, starting with the smallest:  
tissue, organism, organs, organ systems, cells.

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

**d**  
Name three functions of the skeleton.

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_



**e**  
Label the diagrams of a plant and animal cell.

**f**  
The changes a body goes through during adolescence is known as...  
\_\_\_\_\_

State three changes that occur in boys during adolescence.

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

**g**  
Draw a circle around the female reproductive parts and underline the male reproductive parts.

uterus, penis, cervix, oviducts, urethra, testes, scrotum, vagina

Name the female reproductive parts of a plant.  
\_\_\_\_\_  
\_\_\_\_\_

Explain the difference between pollination and fertilisation.  
\_\_\_\_\_  
\_\_\_\_\_

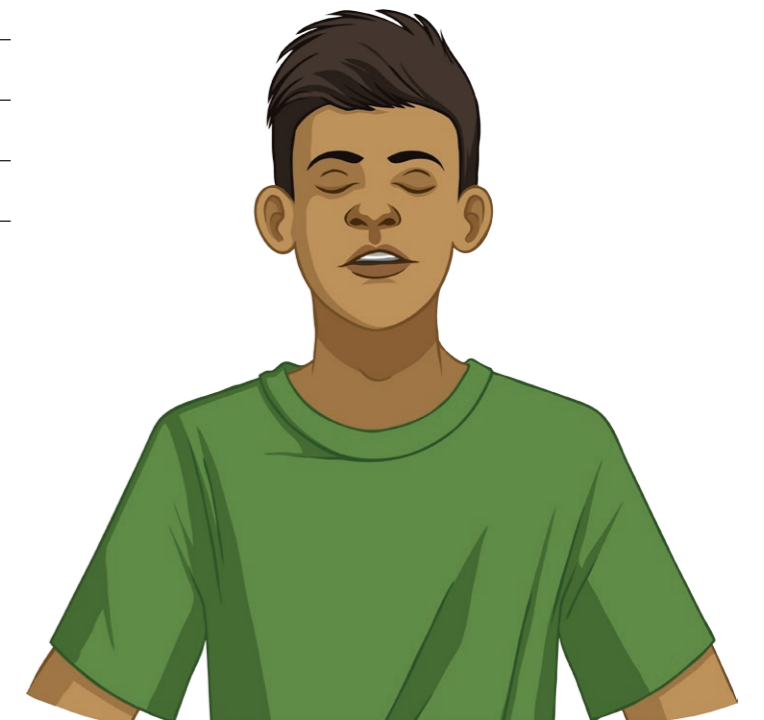
What is the function of the following?

placenta \_\_\_\_\_  
umbilical cord \_\_\_\_\_  
amniotic fluid \_\_\_\_\_

**h**  
Explain what happens in the body when we breathe in.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Using the words increase, decrease or same, complete the table below to show the differences between inhaled and exhaled air.

% Gas	Inhaled	Exhaled
oxygen	21	
carbon dioxide	0.04	
nitrogen	79	



**Name the seven types of nutrients the human body needs.** a

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_

**Describe how you would test food for the following:**

- a) sugar \_\_\_\_\_  
 \_\_\_\_\_
- b) protein \_\_\_\_\_  
 \_\_\_\_\_

**Describe some of the problems associated with being underweight.**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**What is photosynthesis?** b

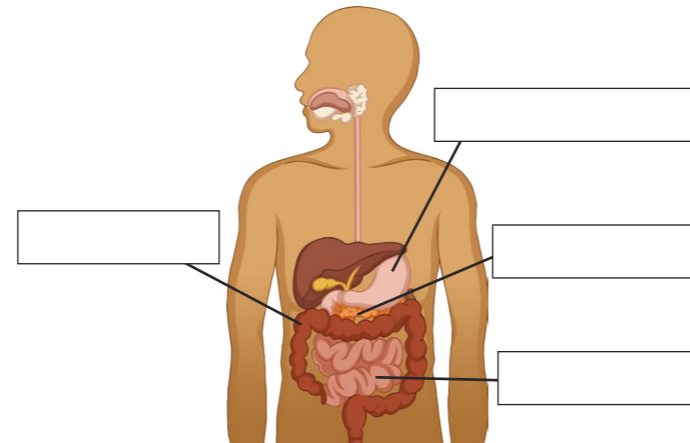
\_\_\_\_\_

**Write the word equation for photosynthesis.**

\_\_\_\_\_



**Label the following parts of the digestive system:** c  
 stomach, small intestine, large intestine, pancreas.



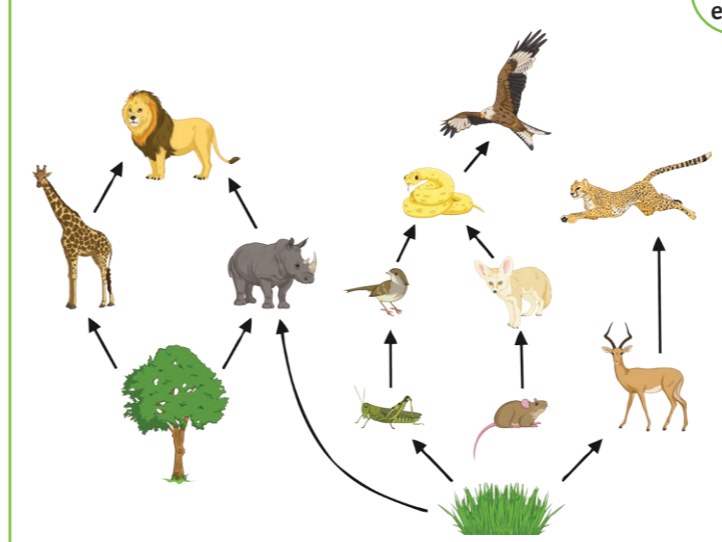
**Define the following terms:**

enzymes \_\_\_\_\_  
 \_\_\_\_\_

peristalsis \_\_\_\_\_  
 \_\_\_\_\_

**Match the leaf adaptations with the function.** d

green	To absorb lots of light.
thin	Contains chlorophyll.
large surface area	Allows gases to flow in and out.



**Using the food web shown above, name an example of the following:**

- i) producer \_\_\_\_\_
- ii) primary consumer \_\_\_\_\_
- iii) predator \_\_\_\_\_

**What is bioaccumulation?**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**State four causes of extinction.** f

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

**Name four things animals compete for:** g

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

**Sketch a graph to show the predator-prey relationship.**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Give three examples of discontinuous variation.** h

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

**State the number of chromosomes found in...**

a body cell: \_\_\_\_\_

a gamete: \_\_\_\_\_

**Describe the process of natural selection using the following words:**

characteristics, survive, offspring.

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**a**  
Describe what the following parts of a microscope do:  
lens **This magnifies the image.**  
stage **Holds the slide securely in place.**

**b**  
Match the organelle with its function.

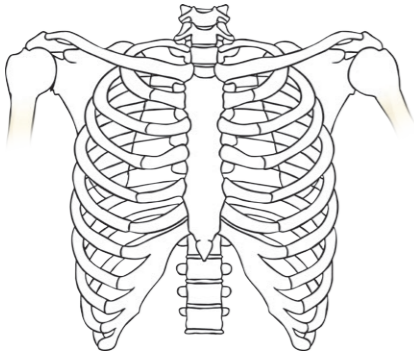
nucleus	Allows substances in and out of the cell.
cell wall	Where respiration occurs.
cell membrane	Controls the cells.
mitochondria	Strengthens the cell.

**c**  
Put the following in order, starting with the smallest:  
tissue, organism, organs, organ systems, cells.

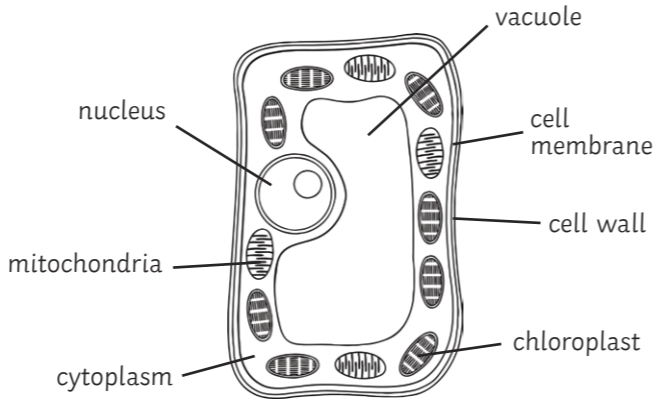
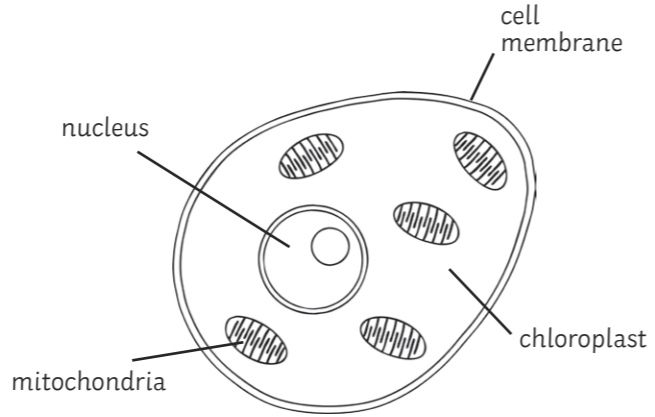
1. **cells**
2. **tissues**
3. **organ**
4. **organ systems**
5. **organism**

**d**  
Name 3 functions of the skeleton.

1. **support**
2. **protection**
3. **movement**




**e**  
Label the diagrams of a plant and animal cell.

**f**  
The changes a body goes through during adolescence is known as...  
**puberty**

State 3 changes that occur in boys during adolescence.

1. **Facial and body hair growth.**
2. **Testes and penis grow and production of sperm begins.**
3. **Voice breaks and shoulders widen.**



**g**  
Draw a circle around the female reproductive parts and underline the male reproductive parts.

uterus, penis, cervix, oviducts, urethra, testes, scrotum, vagina

Name the female reproductive parts of a plant.  
**The carpel consists of the stigma, style and an ovary.**


Explain the difference between pollination and fertilisation.  
**Pollination involves transfer of pollen to the stigma.**  
**Fertilisation is the fusion of pollen grains with the ovule.**

What is the function of the following?  
placenta **Substances can pass from the mother's blood to the foetus.**  
umbilical cord **Connects the foetus to the placenta.**  
amniotic fluid **Protects the foetus from bumps and bangs.**

**h**  
Explain what happens in the body when we breathe in.  
**The muscles surrounding the ribs contract. The ribs move up and out. The diaphragm moves downwards. The volume inside the chest increases and the pressure decreases. Air is therefore pulled into the lungs.**

Using the words increase, decrease or same, complete the table below to show the differences between inhaled and exhaled air.

% Gas	Inhaled	Exhaled
oxygen	21	<b>decrease</b>
carbon dioxide	0.04	<b>increase</b>
nitrogen	79	<b>same</b>



Name the 7 types of nutrients the human body needs.

1. **carbohydrates**
2. **protein**
3. **lipids**
4. **vitamins**
5. **minerals**
6. **water**
7. **fibre**

Describe how you would test food for the following:

- a) sugar **Add Benedict's solution and heat. It will turn orange/red if sugar is present.**
- b) protein **Add copper sulfate solution and a few drops of sodium hydroxide solution. If it turns purple, protein present**

Describe some of the problems associated with being underweight.

**poor immune system, lack of energy, nutritional deficiencies, fertility problems**

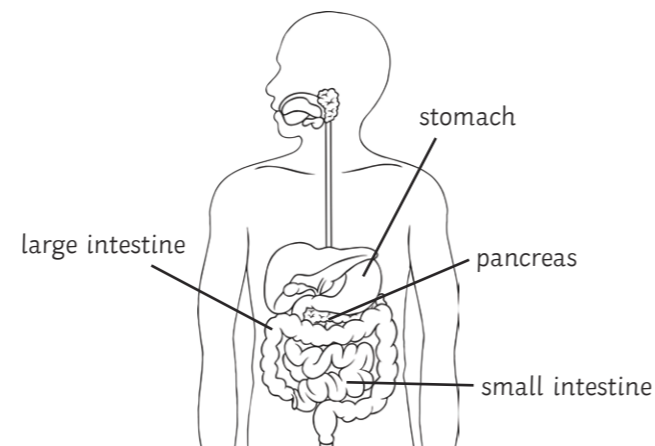
What is photosynthesis?

**The way plants make food.**

Write the word equation for photosynthesis.



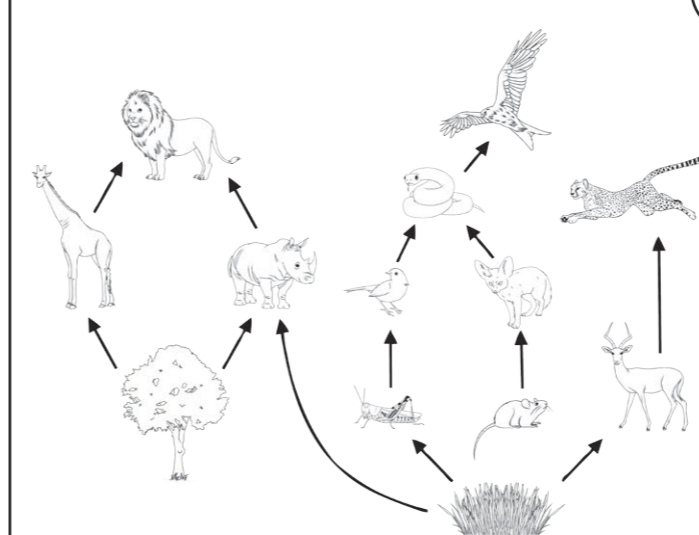
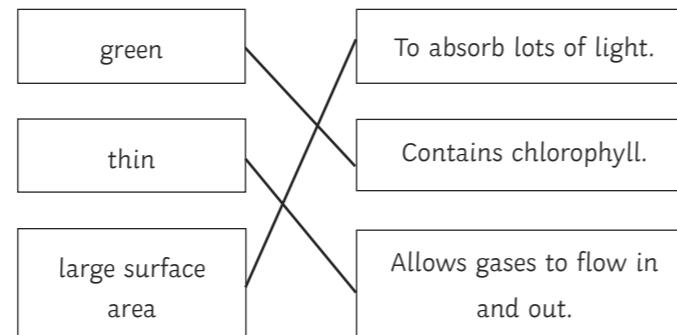
Label the following parts of the digestive system: stomach, small intestine, large intestine, pancreas.



Define the following terms:

- enzymes **biological catalysts**
- peristalsis **The contracting and relaxing of muscles to push food along the digestive system.**

Match the leaf adaptations with the function.



Using the food web shown above, name an example of the following:

- i) producer **grass/trees**
- ii) primary consumer **Any animal feeding on the grass/trees.**
- iii) predator **Any animal feeding on another animal.**

What is bioaccumulation?

**The build up of a toxin in a food chain. The animals that are at the top suffer the most.**

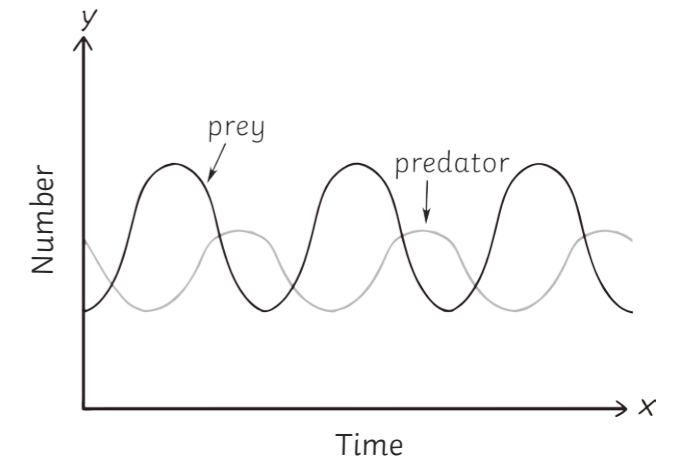
State 4 causes of extinction.

1. **destruction of habitat**
2. **disease**
3. **new predators**
4. **environmental changes**

Name four things animals compete for:

1. **food**
2. **water**
3. **shelter**
4. **mates**

Sketch a graph to show the predator-prey relationship.



Give 3 examples of discontinuous variation.

1. **tongue rolling**
2. **blood group**
3. **eye colour - or any other acceptable answer.**

State the number of chromosomes found in...

- a body cell: **46**
- a gamete: **23**

Describe the process of natural selection using the following words:

characteristics, survive, offspring.

**An organism shows desired characteristics that enable it to survive and reproduce. They pass on the desired characteristic to their offspring.**