

## Unit summary

- Fertilisation is the union of the male and female gametes to form a zygote.
- The zygote subdivides into many cells and develops to form an embryo.
- After eight weeks of life in the womb, the embryo is usually called a **foetus**.
- A flexible tube called the **umbilical cord** connects the embryo to the placenta.
- The **amniotic fluid** protects the embryo.
- At the end of the gestation period, the baby is ready to be born.
- The period between conception and birth is called the gestation period.
- The excretory system in the body is the system which helps us to get rid of waste products.
  - The skin excretes sweat.
  - The lungs excrete carbon dioxide and water.
  - The kidney excretes urine.

## Unit Summary

- Sexually transmitted infections (STIs) are infections which are passed from one person to another through sexual and intimate contact.
- Campaigns are useful in informing people about issues regarding the facts and existence of HIV and AIDS.
- Sexually transmitted diseases (STDs) can cause a person to contract HIV and AIDS.
- Pupils can play a big role in the fight against HIV and AIDS.

## Unit Summary

- Adaptations are those characteristics that enable a plant or animal to survive a particular environment or habitat.
- Plants have special features or characteristics that enable them to grow in their habitats.
- Plants have adaptations to:
  - Dry areas (xerophytes)
  - Enough water (mesophytes)
  - Wet areas (hydrophytes)
  - Salty water (halophytes)
- Crops become unhealthy when:
  - there is insufficient nutrients in the soil affecting plant growth.
  - they get infected and affected by crop pests and diseases.
- Diseases in crops usually lead to:
  - reduced yields.
  - reduced quality of produce.
  - Increase production costs.

## Unit Summary

- Animals are adapted to their habitats in the way they move and feed.
- Mammals are divided into three groups according to their feeding habits.
- The shape of birds beak determines the kind of food it feeds on.
  - Herbivores      – Carnivores      – Omnivores
- Adaptation of animals to movement will depend on their method of movement. For example flying, swimming, hopping or leaping.
- An unhealthy animal shows signs that indicate that its body system is not functioning properly.
- Livestock diseases increase the production cost to the farmer.

## Unit Summary

- Hard water wastes soap.
- Hard water leaves dirty marks on clothes.
- It forms fur in kettles and pans thus wasting fuel.
- It forms boiler scales in boilers and hot water pipes.
- It interferes with some industrial processes such as dyeing and tanning.

- Increases cost of treatment.
- Hard water can be softened by boiling, adding chemicals and through distillation.



### Unit Summary

- Soil pollution is the introduction of harmful substances into the soil making it unfit for plant and animal life.
- Pollutants make the soil impure and may reduce the productivity of the soil.
- Soil conservation is the maintenance of soil fertility.
- Air pollution is the introduction of impurities in the air.
- We should protect the ozone layer from wearing out.

## Unit Summary

- Special groups are people who require more of a particular nutrient in their bodies than other people.
- A balanced diet is a meal that consists of carbohydrates, proteins, vitamins and mineral salts in enough quantities for the body to function properly.
- Breast milk is a well balanced food or meal for an infant to help it grow and develop.
- Food poisoning is an illness that affects the digestive system after eating contaminated food.
- We can prevent food poisoning by handling food properly.



### Unit Summary

- Energy is the ability to do work.
- Energy exists in different forms.
- Energy can be changed from one form to another.
- We should conserve energy for future use.
- Renewable sources of energy can be replaced easily.
- Non-renewable sources of energy are limited therefore not easily replaced.
- Our main source of energy is the sun (solar).
- We need to plant more trees to conserve our environment.

## Unit Summary

- Inclined plane reduces the effort needed to raise an object therefore makes work easier.
- The steepness of a slope is known as the gradient of that slope.
- The single fixed pulley does not increase the force we apply but changes the direction of the force.