Life Skills
Grade 6
Personal and Social Well-being

Term 4

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The three most important aims of basic first aid are to aid healing, to reduce the risk of infection and to provide assistance until professional help can be found.

Cuts and Abrasions

Cuts and abrasions are injuries that break or remove the skin. Most small cuts and abrasions can be treated successfully at home. Large wounds or severe bleeding must get medical attention because blood loss can lead to falling blood pressure, shock and even death.

Minor cuts and abrasions

- Hold the wound under running water to remove dirt.
- Wash the skin around the wound with soap and water.
- Pat the wound dry with sterile gauze and apply antiseptic ointment.
- Most minor cuts and abrasions stop bleeding on their own. However, if the bleeding continues, apply pressure to the wound with a clean bandage.
  - In the case of small cuts, close the wound with sterile plaster.
  - Don’t use cotton wool – the fibres will get stuck in the wound.
- Change the dressings at least once a day and watch for infection – remember that an infection will only be obvious after a day or two.

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1. Wound (Say: whoo nd) - an injury caused by a cut, blow or other impact.
2. Sterile (Say: stair eye l) – free from germs – totally clean
3. Gauze (Say: gore z) – a thin, almost see through material that has a loose weave
4. Antiseptic (Say: ant ee sep tick) – something that prevents the growth of germs
5. Ointment (Say: oynt mint) - a smooth oily substance that is rubbed on the skin
6. Dressing (Say: dress sings) – a piece of material that is used to cover or protect an injury
7. Infection (Say: in fek shin) – the presence of germs
Serious cuts

- For deeper cuts or severe\(^1\) bleeding, press on the wound with a clean towel or gauze and get professional help. Deeper cuts might need stitches to keep the wound closed.
  - Try to elevate\(^2\) the area that is bleeding.
  - If there is an object in the wound, don’t try to remove it.

Get help if

- The wound is large or deep and bleeding has not stopped after 10 minutes of applying pressure.
- The person has lost a lot of blood and is sleepy or pale\(^3\).
  - There is something stuck in the wound.
  - The person cannot move his fingers or toes.
    - Stitches are required.
    - The wound is on the face or neck.

Burns, Scalds and Sunburn

Burns and scalds are damage to the skin caused by heat. A burn is caused by dry heat, e.g. a hot iron, the sun or fire. A scald is caused by something wet, such as hot water or steam.

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1 Severe (Say: siv ear) – serious/something to worry about
2 Elevate (Say: eh live eight) – to lift up or lift higher
3 Pale (Say pay yil) – colourless/faded/almost white
Burns and scalds can be very painful and can cause blisters and charred\(^1\), black or red skin. Skin damage caused by heat is grouped according to the degree\(^2\) of damage to the skin. The groups are known as first, second and third degree burns.

It is possible to treat some 1\(^{st}\) degree burns at home. However, 2\(^{nd}\) and 3\(^{rd}\) degree burns as well as any burns that are bigger than hand sized should get professional medical attention after basic first aid has been carried out.

**Treating burns and scalds**

- Get the person away from the heat source to stop the burning.
- Cool the burn with cool or lukewarm water for 10 to 30 minutes – do not use ice, iced water or any creams or greasy substances such as butter.
  - If blisters have formed on the skin, DO NOT pop them.
- Special creams for sunburnt skin are available – ask a doctor or pharmacist for the correct lotion.
- Cover a serious burn by placing a layer of cling film over it.

\(^1\) Charred (Say: char d) – burnt in such a way that the object is blackened by heat

\(^2\) Degree (Say: dir gree) – a level or amount
A bruise is dark discolouration of skin caused by blood seeping under the skin after small blood vessels near the surface of the skin have been broken. As the bruise heals, the body breaks this blood down and reabsorbs it, turning the area a greenish-blue colour.

**Treating bruises**
- Most bruises are not very serious and will get better on their own over a period of about ten days.
- If the bruise is quite large and swollen, then you can apply ice packs to reduce the swelling. This will also relieve the pain.
- Elevate the area if the bruise is on a leg or an arm.

**Get help if**
- A bruise doesn't fade within 14 days.
- The person is in pain for more than 24 hours or if pain on the site of the bruise gets worse - this may be caused by a broken bone.

Choking occurs when a **foreign object** becomes stuck in the throat or windpipe, blocking the flow of air. In adults, a piece of food often is the **culprit**. Young children often swallow small objects. Because choking cuts off oxygen to the brain, first aid must be carried out as quickly as possible.

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1. **Foreign object** (Say: foh rin - ob jekt) – something that is not normally present or that doesn’t belong there
2. **Culprit** (Say: kull pritt) – the thing or person that is guilty
What to do if somebody is choking

**Infants** (Babies younger that one year)

1. Sit down. Hold the baby face down on your forearm and rest it on your leg.
2. Thump the infant gently but firmly five times on the middle of the back using the heel of your hand.
3. If this doesn't work, hold the infant face up on your forearm with the head lower than the body. Using two fingers placed at the centre of the infant's breastbone, give five quick chest compressions.
4. Repeat the back blows and chest thrusts five times if required.
5. If breathing doesn't resume, call for emergency medical help.

![Infant Choking Illustration]

**Adults and children over the age of one**

Perform abdominal thrusts (Heimlich manoeuvre):

- Stand behind the person. Wrap your arms around the waist. Tip the person forward slightly.
- Make a fist with one hand. Position it slightly above the person's belly button.
- Grasp the fist with the other hand. Press hard into the abdomen with a quick, upward thrust - as if trying to lift the person up.
- Perform a total of 5 abdominal thrusts, if needed. If the blockage still isn't dislodged, try another 5 thrusts.

![Abdominal Thrusts Illustration]

**Self**

- Place a fist slightly above your belly button.
- Grasp your fist with the other hand and bend over a hard surface - a countertop or chair will do.
- Shove your fist inward and upward.
South Africa has many insect species\(^1\) that can bite or sting human beings. Mosquito, bee, wasp, bedbug, tick and flea bites are the most common insect bites.

Most insect bites and stings, although itchy or slightly painful, cause very little harm to a person. However, some people are allergic to the venom\(^2\) that some insects inject when they sting or bite so it is useful to know what action to take when somebody has an allergic reaction.

### Treating minor bites and stings
- Relieve the itching with an ice cube or cloth dipped in cold water.
  - Special creams can also stop the itching or stinging.
- Remove a bee stinger by gently scraping the skin with the blunt edge of a knife or your fingernail. Do this as quickly as possible to avoid further injection of venom. Don't grasp the stinger or rub the skin.
- If a tick is found, remove it immediately: grip it with fine-tipped tweezers as close to the skin as possible and pull it out in a straight line - don't jerk or twist. Make sure the head is also removed. If the head remains behind, it could cause a small necrotic ulcer\(^3\) (‘veld sore’).
  - Wash the bite area with soap and water.

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\(^1\) Species (Say: Spee sees) – a scientific word for a group of animals that have something in common, e.g. feathers/scales

\(^2\) Venom (Say: veh nim) – a poisonous substance secreted by some animals and plants

\(^3\) Ulcer (Say: ull sir) – an open sore (without a scab) that can be on the skin or inside the body
Get help if

- Signs of a severe allergic reaction develop.
- There is a history of previous severe reaction to the insect's bite - don't wait for the reaction to occur.
- The face, neck or throat is stung. This may cause swelling which could obstruct¹ the airway.
- There are multiple stings.

Spider and Scorpion Stings and Bites

Spider bites can make a reddened wheal² and an ulcer. In serious cases there is severe pain around the bite. The venom that some spiders and scorpions inject when they bite causes sweating, muscle cramps and fever.

Only a few species of spiders are dangerous. In South Africa, the Button, Sac, Violin, Six-eyed crab, Black widow and Brown widow spiders cause the most harmful reactions.

1 Obstruct (Say: Ob strukt) – to be in the way of something or to stop something from going somewhere
2 Wheal (Say: wheel) – a red, swollen mark on the skin
All scorpions found in South Africa are venomous but only the stings from the Buthidae group (thick tails and thin pinchers) can be fatal\(^1\) to human beings.

Scorpion stings can cause burning pain, numbness and tingling across the body, nausea, vomiting, stomach pain, blurred vision, slurred speech, difficulty breathing or swelling and shock.

**Treating spider bites and scorpion stings**
- Call emergency services for any scorpion sting, and any bite from a dangerous spider.
- Keep the affected limb\(^2\) lower than the heart.
- Clean the wound and apply an ice pack to reduce swelling and stop the spread of venom.

There are between 130 and 160 different species of snakes in South Africa. Most of them are not dangerous to humans. However, unless you are an expert at snake identification, it is always better to treat any snake with caution\(^3\). Also remember that snakes to not eat human beings so they will only attack when they are startled or feel that they are in danger.

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1. **Fatal** (Say: fay till) – deadly/causing something to die
2. **Limb** (Say: lim) – an arm or a leg
3. **Caution** (Say: caw shin) – with a lot of care
A bite from a venomous snake can be deadly, and should always be treated as a medical emergency. Even a bite from a harmless snake can be serious, leading to an allergic reaction or an infection. Venomous snake bites can result in pain in the bite area, swelling, convulsions, nausea and even paralysis.

There are first aid steps you can take after a snake bite occurs, such as cleaning the wound, remaining calm, and immobilizing the affected area. However, it is essential to get the bite victim to a medical facility immediately for emergency treatment. If treated in time, the outlook for recovery is good.

Unit 13.2 – Read about First Aid for poisoning

More than 2 million poisonings are reported each year across the country. Poisoning is caused by swallowing, injecting, breathing in, or otherwise being exposed to a harmful substance. Most poisonings occur by accident. Immediate first aid is very important in a poisoning emergency. The first aid you give before getting medical help can save a person’s life.

**Signs and symptoms of poisoning**

Common signs and symptoms to look for include:

- Burns or redness around the mouth and lips, from drinking certain poisons.
- Breath that smells like chemicals, such as petrol or paint thinner.
- Burns, stains and smells on the person, on clothing, or objects in the surrounding area.
- Empty medication bottles or scattered pills.
- Vomiting, difficulty breathing, sleepiness or confusion.

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1. **Convulsion** (Say: kon vul shin) - a sudden, violent, irregular movement of the body, that is not done on purpose
2. **Nausea** (Say: naw zjee ahh) – a feeling as if you want to vomit
3. **Paralysis** (Say: pir al a sis) – not able to move
4. **Immobilizing** (Say: eem oh bill eye zing) – keeping still
**Who to call for help**

Call the local emergency services or Poison Control Centre. Provide information about the person's symptoms, age and weight, and any information you have about the poison, such as amount and how long since the person was exposed to it. It helps to have the pill bottle or poison container on hand when you call.

**What to do while waiting for help**

There are some things you can do for the person until help arrives:

- If the person has been exposed to poisonous fumes, get him or her into fresh air immediately.
- If the person swallowed the poison, remove anything remaining in the mouth.
- If the suspected poison is a household cleaner or other chemical, read the label and follow instructions for accidental poisoning. If the product is toxic, the label will likely advise you to call the poison centre.
- Follow treatment directions that are given by the poison control centre.
- If the poison spilled on the person's clothing, skin or eyes, remove the clothing.
- Flush the skin or eyes with cool or lukewarm water, such as by using a shower for 20 minutes or until help arrives.
- Make sure the person is breathing. If not, start CPR and rescue breathing.
- Take the poison container or sample of the poison (or any pill bottles) with you to the hospital.

**What NOT to do**

- Do not give an unconscious person anything to eat or drink.
- Do not try to get the person to vomit unless you are told to do so by the Poison Control Centre or a doctor. A strong poison that burns on the way down the throat will also do damage on the way back up.
- Do not try to neutralize the poison with lemon juice or vinegar, or any other substance, unless you are told to do so by the Poison Control Centre or a doctor.

Adapted from: http://www.mayoclinic.org/first-aid/first-aid-poisoning/basics/art-20056657
Complete the following activities in your Life Skills book. Use the following heading: **First Aid in Different Situations**

### Cuts and Abrasions

Fill in the missing words for each of the following. Write the whole sentence out and underline the words that you have filled in:

1. Cuts and abrasions are injuries that _______________ or _______________ the skin.
2. When a cut results in severe bleeding you must get medical attention because blood loss can lead to falling __________________________.
3. An abrasion should be patted with sterile _______________ to dry it out before applying _______________ ointment.
4. Don’t use _______________ on an abrasion or a cut because they ____________ will get stuck in the wound.
5. If there is an _______________ in a cut, don’t try to _______________ it.

### Burns, Scalds and Sunburn

Select the answer that is most correct. Write only the letter of the answer you have selected.

1. A serious burn should be covered with cling film
   a. to reduce the risk of germs that could cause infection from entering the area of the burn.
   b. to keep the burn area cool.
   c. To stop any fibres from clothes touching the burn area.
2. Sunburn is usually an example of
   a. a 1st degree burn
   b. a 2nd degree burn
   c. a 3rd degree burn
3. What is the difference between a burn and a scald?
   a. There is no difference.
   b. A burn is caused by dry heat and a scald is caused by wet heat.
   c. A burn is caused by fire and a scald is caused by water.
**Bruises**

List two basic first aid steps that can be used to treat bruises.

**Choking**

Put the following steps, for treating an infant who is choking, into the correct order. Only write the number for each step, as shown below.

1. Hold the infant face up on your forearm with the head lower than the body. Using two fingers placed at the centre of the infant's breastbone, give five quick chest compressions.
2. Sit down.
3. Hold the baby face down on your forearm and rest it on your leg.
4. Repeat the back blows and chest thrusts five times if required.
5. Thump the infant gently but firmly five times on the middle of the back using the heel of your hand.
6. If breathing doesn't resume, call for emergency medical help.

<table>
<thead>
<tr>
<th>1st step</th>
<th>2nd step</th>
<th>3rd step</th>
<th>4th step</th>
<th>5th step</th>
<th>6th step</th>
</tr>
</thead>
</table>

**Stings and Bites**

Answer the following questions. Write only a yes or a no.

1. Are all scorpions venomous? __________
2. Is the sting of all scorpions fatal to human beings? __________
3. Can a spider bite cause a skin ulcer? __________
4. Is a common rain spider venomous? __________
5. Are Violin spiders found in South Africa? __________
6. Can a bee sting be fatal? __________
7. Can a tick head that is left in a person’s skin cause a necrotic ulcer? __________

**Snake Bites**

State whether the following sentences are true or false. If a sentence is false, then write the sentence out correctly.

1. A bite from a non-venomous snake is not serious. __________
2. Snakes stalk and attack human beings. __________
3. A Boom slang and a Cape Cobra are poisonous snakes that can be found in South Africa. __________
First Aid for Poisoning

Provide logical, well thought out answers to the following questions:

1. Poison can enter the human body by being swallowed, injected, breathed in or by being absorbed through the skin. Which one do you think is most common? Provide a reason for your answer.
2. Why do you think it is important to give the pill bottle or substance that caused the poisoning to the emergency room doctor?
3. Children between the ages of 2 and 8 are the most common victims of accidental poisoning in the home. Provide a reason for this.

Module 14
Food Hygiene

Unit 14.1 – Safe and harmful ingredients in food

Food and drink is usually at its tastiest and most nutritious when it is fresh. However, it is not always possible for everybody to get fresh food on demand. Some foods are seasonal, some start going rotten after a short time and other foods can only be found in places that are far away. This means that humans have had to try and find ways of preserving food so that it can be stored and used at a later time without losing its taste or its nutritive value.

The preservation of food is often called ‘processing’. Long ago, there were not many ways to preserve food and drink. Processes such as drying, smoking, pickling and jamming were popular ways of preserving food. Many of these processes are still used today. More recent ways of preserving food include refrigeration, freezing, canning, vacuum packing, irradiation and pasteurisation.

1 Nutritious (Say: new tree shus) – filled with good minerals and vitamins
2 Preserve (Say: pree zirv) – to make something last for longer
Work on your own. Provide a suitable label for each method of preserving food. Write the answers in your Life Skills book. Use the heading: **Ways of preserving food.**

In order to process food and preserve it, something is usually added or taken out of the food. Most of the processed food that we eat today consists of the following added ingredients: salt or sugar; preservatives; colourants; flavourants; artificial sweeteners; vitamins and minerals. Some of the ingredients that are added are **beneficial**¹ but others may be harmful to a person’s health. Some researchers think that the use of preservative chemicals causes weight gain, asthma, heart disease and even cancer.

Because a lot of the food we purchase in shops today is not in its natural form, manufacturers are legally required to put nutritional information on food containers. This allows consumers to decide whether the ingredients in the food will be beneficial or harmful to them. Here are some of the nutrients and ingredients that you might see on a nutrition label:

**Carbohydrates**
The cells in your body produce glucose (pronounced 'gloo-kohws') from carbohydrates. Glucose gives you quick energy. Your body’s cells can't use a lot of glucose all at once so some glucose is stored in your liver and muscles, as glycogen (pronounced 'gly-koh-jin'). Once there is enough glycogen stored in your liver and muscles the rest turns into fat.

¹ **Beneficial** (Say: ben a fish ull) – something that has value
Sugar
Sugar is a type of carbohydrate found in a variety of foods, including fruit and vegetables. Too much sugar can lead to diabetes, and cancer.

Protein
Protein builds up your muscles, organs and glands. It helps repair and replace them too, so that your body can keep on working.

Fat
Fat is useful because it acts as the body’s reserve tank of energy. It protects our organs (like a cushion) and it helps our bodies stay warm in cold weather. Too much fat in a diet can lead to obesity¹ and can cause illness such as heart disease and high cholesterol².

Sodium
Sodium is a part of salt: table salt is 40% sodium and 60% chloride. Processed and preserved food items such as canned foods, fast foods and cheese usually have high sodium content. Sodium is needed by the body for maintaining proper blood pressure. Too much sodium can lead to high blood pressure, heart attack and strokes.

Fibre
Fibre is an important part of a healthy diet. Fibre can help prevent heart disease, diabetes, weight gain and some cancers. It can also improve digestion.

Vitamins
Vitamins are stored in the fatty tissues of your body and in the liver. Some are stored for a few days and others for months, until your body needs them. Here are a few examples of vitamins and what they do.

<table>
<thead>
<tr>
<th>Vitamin</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vitamin A</td>
<td>Helps you see at night and help your body fight infections.</td>
</tr>
<tr>
<td>Vitamin D</td>
<td>Helps to make strong bones.</td>
</tr>
<tr>
<td>Vitamin E</td>
<td>Helps to protect your skin.</td>
</tr>
<tr>
<td>Vitamin K</td>
<td>Helps to stop bleeding</td>
</tr>
<tr>
<td>Vitamin C</td>
<td>Helps to fight infections.</td>
</tr>
<tr>
<td>Vitamin B</td>
<td>Helps to make energy and protein and red blood cells.</td>
</tr>
</tbody>
</table>

¹ Obesity (Say: oh bee city) – extremely fat  
² Cholesterol (Say: koh less tah rol) – a fatty layer on the inside of veins and arteries that stops blood from flowing correctly
Minerals
There are many minerals in food and some of them are essential for a healthy body. **Zinc** is so powerful that you only need a bit to help you grow. It is found in meat, fish and poultry (chicken and other birds.) **Iron** helps create the red blood cells which carry oxygen through your body. It gives the body lots of energy. Iron is found in red meat, liver, and some cereals. **Calcium** builds strong bones and teeth. It is found in dairy foods like milk, yoghurt and cheeses.

Preservatives
Some forms of food processing remove the taste and natural colour of the food so artificial flavours and colours have to be added to make the food taste and look good. These flavourants and colourants don’t always have nutritional value and sometimes they are unhealthy. Natural preservatives, such as sugar and salt, and chemical preservatives, such as sulphur dioxide, are used to make food last for longer. While the natural and chemical preservatives are helpful because they stop bacteria from making the food decay, many of these preservatives can be harmful to our bodies.

Activity 14.1.2
Work in groups of 2-3. Look at the nutrition information on the food labels below. Discuss which foods are healthier to eat. Take care to look at the quantities and serving portions when you make your decisions.

<table>
<thead>
<tr>
<th>Nutrition Information</th>
<th>Unit</th>
<th>Per 100g serving</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calories</td>
<td>kJ</td>
<td>547</td>
</tr>
<tr>
<td>Carbohydrates</td>
<td>g</td>
<td>15</td>
</tr>
<tr>
<td>Protein</td>
<td>g</td>
<td>6</td>
</tr>
<tr>
<td>Fat</td>
<td>g</td>
<td>10</td>
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</tr>
<tr>
<td>Sugars</td>
<td>g</td>
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</tr>
<tr>
<td>Vitamin A</td>
<td>mg</td>
<td>0</td>
</tr>
<tr>
<td>Vitamin E</td>
<td>mg</td>
<td>0</td>
</tr>
<tr>
<td>Calcium</td>
<td>mg</td>
<td>0</td>
</tr>
<tr>
<td>Iron</td>
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<td>2</td>
</tr>
<tr>
<td>Potassium</td>
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</tr>
<tr>
<td>Sodium</td>
<td>mg</td>
<td>180</td>
</tr>
<tr>
<td>Artificial flavourant</td>
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<td>Yes</td>
</tr>
<tr>
<td>Artificial colourants</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Nutrition Information</th>
<th>Unit</th>
<th>Per 30g serving</th>
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</thead>
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<tr>
<td>Dietary Fibre</td>
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<td>0</td>
</tr>
<tr>
<td>Sugars</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Vitamin A</td>
<td>mg</td>
<td>6</td>
</tr>
<tr>
<td>Vitamin C</td>
<td>mg</td>
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</tr>
<tr>
<td>Calcium</td>
<td>mg</td>
<td>1</td>
</tr>
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<td>Yes</td>
</tr>
<tr>
<td>Artificial colourants</td>
<td></td>
<td>No</td>
</tr>
</tbody>
</table>
Micro-organisms including bacteria, viruses and moulds found in food can cause food poisoning and this leads to unpleasant symptoms such as stomach pains, diarrhoea and vomiting. Food poisoning can sometimes lead to gastroenteritis, which is inflammation of your stomach and bowel, or even more serious health problems, such as blood poisoning (septicaemia) and kidney failure.

If you remember a few simple things about food preparation and storage, you can reduce the chances food poisoning.

**Cleaning**

One of the most important things you can do is to make sure that your hands are clean at all times – although it sounds simple enough, many of us are guilty of forgetting at some point. Cleaning your hands doesn’t mean just passing your hands under the tap – give them a proper scrub with soap. In particular, remember to wash your hands:

- after using the toilet
• before you handle any food
• after you handle raw meat

Before you start to prepare any food, make sure that the area you’re working in and the utensils you are using are clean. Clean worktops very well and wash utensils with washing-up liquid and hot water. Make sure you clean up any spilt food straight away.

Change all drying and washing cloths regularly because bacteria often multiply on these items, especially if they are damp.

**Storing**

Read the safe storage instructions on food. If you store food in the wrong place or at the wrong temperature, it can lead to the growth of bacteria. Proper storage of food reduces the risk of food poisoning. Follow these tips to ensure your food is safe to eat.

• Always check labels for guidance on where to store food.
• Store fresh and frozen food in the fridge or freezer as soon as possible after you buy it. This is especially important in hot weather.
• Keep raw meat and seafood separate from other foods.
• Store raw meat in an airtight container at the bottom of the fridge to prevent juices or blood dripping onto other food.
• Defrost frozen foods in the fridge. Place them on a plate or in a container as they defrost, so they don’t drip onto or contaminate other foods.
• Don’t store opened tins of food in the fridge – transfer the contents to a suitable airtight container instead.
• If you’re keeping cooked leftovers, allow them to cool to room temperature before you store them in the fridge. Make sure you use up any leftovers within two days.
• Throw away any food that has passed its use-by date.
• Store food such as bread or biscuits in an airtight container to slow down the growth of bacteria or mould.

**Preparing**

Here are a few points to remember when it comes to preparing food.

• Don’t handle food if you have stomach problems, such as diarrhoea or vomiting, or if you’re sneezing or coughing regularly.
• Check food labels before you decide what to use. Shop-bought foods may come with two dates: a use-by date and a best before date. Don’t use any foods that have passed their use-by date, even if you think they look fine, as they may not be safe to eat.
• Keep anything that should be refrigerated out of the fridge for as short a time as possible, especially if the temperature is high or the room is very warm.
Always use different chopping boards and utensils to prepare raw meat or chicken or fish. This is because they contain harmful bacteria that can spread to anything they touch, so it’s important to keep these away from other foods.

## Unit 14.3 – Food-borne Diseases

### What is a food-borne disease?
A food-borne disease is an infection or irritation of any part of the digestive tract that is caused by food or drinks that contain harmful bacteria, parasites, viruses, or chemicals.

Most food-borne diseases happen suddenly and last a short time. The medical word for this is an ‘acute’ illness. Most people recover from a food-borne disease on their own, with some basic first aid. Sometimes, though, food-borne disease can lead to more serious complications.

### Who can get a food-borne disease?
Anyone can get a food-borne disease. However, infants and children, pregnant women and their unborn children, older adults and people with low immune systems are at greater risk of developing severe symptoms or complications from food-borne diseases.

### What are the symptoms of food-borne disease?
Symptoms of food-borne disease depend on the type of microorganism that has caused the food poisoning. However, many food-borne diseases share common symptoms including:

- Vomiting
- Diarrhoea or bloody diarrhoea
- Abdominal pain
- Fever
- Chills

### How are food-borne diseases prevented?
Food-borne diseases can be prevented by properly storing, cooking, cleaning, and handling foods.
The Snugro family lives in Pretoria. In summer, the days can get very hot and today was one of those days. At about 2 o’clock, Mrs Snugro decided that the family should have a braai so that she did not have to stand in the kitchen and cook in such hot weather.

She checked the fridge to see what food she had for the braai. She found some tomatoes, cucumber and a lettuce that she had bought about two weeks before. One or two of the tomatoes had a bit of furry stuff around the top and the lettuce was a bit limp. Nothing smelt funny so she thought it would be okay to use the ingredients in a salad. She took out a chopping board and cut the ingredients. Then, she put them into a salad bowl and put the salad on the patio table.

She checked the freezer and found some steak and chicken for the braai. She removed both packets of meat and placed them in a dish on the sunny patio table so that they could defrost.

She opened a tin of baked beans and some sweet corn. She put half of each tin into some serving bowls and stored the tins in the fridge – the children could have the rest for lunch the following day.

Mrs Snugro then remembered that there was no charcoal for the braai. She hopped into her car and went to the shop. While she was there, she also bought some milk, eggs and bread.

When she got home, she took the bread and charcoal inside with her but decided to fetch the milk and eggs later. She called Mr Snugro, who had been working in the garden, to help her with preparing for the braai. When he came in, he wiped his hands on his pants and started to slice the bread and butter it. He put the bread onto a plate and put it on the patio table along with the other food.

The steak and chicken were defrosted, so he took them to his wife in the kitchen. She poured the water lying in the bottom of the dish into the sink and then used the vegetable knife to chop the steak and chicken into smaller portions. She put the pieces back into the bowl and gave the meat to her husband to cook on the braai.
When the meat was ready, Mrs Snugro called the children, who had been playing with the dog, to the patio table to eat. The children wanted something to drink. Mrs Snugro sent her husband to fetch the milk from the car and she then poured a glass of milk for each of the children.

The Snugro family enjoyed a lovely braai.

Later on that evening, the children complained that they had stomach ache. Mrs Snugro didn’t feel too well either and her husband seemed to have diarrhoea. She couldn’t understand why everyone was feeling sick.

Activity 14.4.1

Work in groups of 2-3. Complete the following activity.

Draw up a table on an A4 sheet of paper. The left hand side of the table should list four ways in which the Snugro family did not follow the rules of safe food storage and preparation. The right hand side should list the rule they should have followed. Give your poster a suitable title and write your group members’ names at the bottom of the poster.

Ask your teacher to put your posters on display in the classroom.

Module 15
Communicable Diseases

Unit 15.1 – What is a communicable disease?

Any disease that can be passed on from an infected\(^1\) person (or animal) to a healthy person is called a communicable disease. When communicable diseases can spread very quickly from one person to another person, they are called contagious diseases.

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\(^1\) Infected (Say: een fek tid) – affected with a germ
When a person becomes sick with a communicable disease it means a germ has invaded their body. Germs are microbes. A microbe is a tiny living organism that can only be seen with a microscope. Microbes are the smallest form of life on Earth. Although some microbes can make you sick or may even kill you, most are harmless, and some are extremely helpful. Microbes can be found virtually anywhere - in air, water, plants, animals and humans.

Listed below are the four major types of microbes and the communicable diseases that they can cause:

**Bacteria:** Cholera, Whooping Cough, Pneumonia, Tuberculosis, Diphtheria

**Viruses:** Flu, Rabies, Measles, Mumps, Chicken Pox, Common cold

**Fungi:** Ringworm

**Protozoa:** Amoebiasis

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### Chicken Pox

<table>
<thead>
<tr>
<th>Cause</th>
<th>Symptoms</th>
<th>Prevention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chickenpox is caused by the varicella-zoster virus.</td>
<td>The infection has three stages. It starts out with the appearance of little, itchy bumps. Those bumps turn into blisters filled with fluid. The final stage is when scabs form over the bumps. In addition to the itchy bumps and scabs, Chickenpox can cause fever, headache, dry cough or loss of appetite.</td>
<td>Avoid people who are infected with the Chickenpox virus. Wash your hands regularly. Get immunized with a Chickenpox vaccine.</td>
</tr>
</tbody>
</table>

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### Mumps

<table>
<thead>
<tr>
<th>Cause</th>
<th>Symptoms</th>
<th>Prevention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mumps is a disease caused by a virus. It can infect many parts of the body but it usually infects the glands that produce saliva for the mouth. Mumps is spread by droplets of saliva or mucous from the mouth, nose, or throat of an infected person, usually when the person coughs, sneezes, or talks.</td>
<td>Swollen, painful salivary glands on one or both sides of your face, Fever, Headache, Weakness and fatigue, Loss of appetite, Pain while chewing or swallowing.</td>
<td>Avoid people who are infected with the Mumps virus. Wear a surgical mask if you are in the same area as an infected person. Get immunized with a Mumps vaccine.</td>
</tr>
</tbody>
</table>
### Whooping Cough (Pertussis)

<table>
<thead>
<tr>
<th>Cause</th>
<th>Symptoms</th>
<th>Prevention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whooping cough, also known as Pertussis, is caused by bacteria called bordetella pertussis.</td>
<td>Runny nose, Nasal congestion, Sneezing, Red, watery eyes, A mild fever, A dry cough that ends with a high-pitched &quot;whoop&quot; sound during the next breath of air.</td>
<td>Avoid people who are infected with the Pertussis.</td>
</tr>
<tr>
<td>Whooping cough is spread among people by direct contact with fluids from the nose or mouth of infected people. People contaminate their hands with respiratory secretions from an infected person and then touch their own mouth or nose.</td>
<td></td>
<td>Wash your hands regularly.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Get immunized with a Pertussis vaccine.</td>
</tr>
</tbody>
</table>

### Unit 15.3 – Where to find information

If you need to find out more about communicable diseases you can visit a library and request books about the topic. You can also visit your local clinic or ask your doctor for more information. You can also visit the Mayo Clinic website for useful information. Their website address is: [http://www.mayoclinic.org/diseases-conditions](http://www.mayoclinic.org/diseases-conditions)

### Unit 15.4 – Read, interpret and explain

Ebola is a communicable disease that was first discovered in 1976 in the Democratic Republic of Congo. The disease is caused by a virus that infects humans when they come into close contact with infected animals like chimpanzees, fruit bats and forest antelope. The virus then spreads between humans by direct contact with infected blood or bodily fluids, or indirectly through contact with contaminated environments.

At the moment there is no vaccine that can make people immune to the Ebola virus and doctors have not found a medicine that can cure all people who are infected. The Ebola virus kills between 50% and 60% of the people that it infects. Nobody has yet worked out why some people recover and others do not.
The Ebola virus does not die when its host\(^1\) dies. This means that funerals of Ebola victims can be risky if people at the funeral have direct contact with the body of the deceased\(^2\).

Since 1976, there have been many times when Ebola outbreaks caused people to die. Most of these outbreaks occurred in areas where the spread of the disease could be easily contained and controlled. In 2014, however, the disease started becoming an international problem.

The following article was published by the BBC (British Broadcasting Community) to help inform and educate people about this highly contagious and often fatal disease. Work in groups of 3-4. Take turns to read aloud until each person has had a turn.

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**The Ebola outbreak in West Africa is the world's deadliest to date and the World Health Organization has declared an international health emergency as more than 3,850 people have died of the virus in Guinea, Liberia, Sierra Leone and Nigeria this year.**

**What is Ebola?**

Ebola is a viral illness of which the first symptoms can include a sudden fever, intense weakness, muscle pain and a sore throat. And that is just the beginning: subsequent\(^3\) stages are vomiting, diarrhoea and - in some cases - both internal and external bleeding. The current outbreak is the deadliest since Ebola was discovered in 1976.

The incubation period\(^4\) can last from two days to three weeks, so symptoms often only begin long after the person has been infected. This means that people are spreading the virus to other people before they realise they are infected. The Ebola disease has, until recently, been mostly limited to Central Africa and only a few cases have been reported in other parts of Africa. However, because the virus is so contagious, people who have visited Africa and come into contact with infected people, have begun to spread the disease to other parts of Africa, Europe, Asia and America.

**Can cultural practices spread Ebola?**

Ebola is spread through close physical contact with infected people. This is a problem for many in the West African countries currently affected by the outbreak, as practices around religion and death involve close physical contact.

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\(^1\) *Host* (Say: ho wst) – the animal or plant that a germ/parasite lives in or on

\(^2\) *Deceased* (Say: dee see st) - dead

\(^3\) *Subsequent* (Say: sub suh kwint) - after

\(^4\) *Incubation period* (Say: een cube aye shin) – the time between the infection and the time symptoms can be felt or seen
Hugging is a normal part of religious worship in Liberia and Sierra Leone, and across the region the preparation of bodies for burial involves washing, touching and kissing. Those with the highest status in society are often given the job of washing and preparing the body.

If a person has died from Ebola, their body will have a lot of the virus in it. Bleeding is a usual symptom of the disease just before death. Those who handle the body and come into contact with the blood or other body fluids are at greatest risk of catching the disease.

The World Health Organisation (WHO) has been trying to make people aware of how their treatment of dead relatives might pose a risk to themselves. It is a very difficult message to get across.

**What precautions should people take?**
Avoid contact with Ebola patients and their bodily fluids. Do not touch anything - such as shared towels - which could have become contaminated in a public place. Washing hands and improving hygiene is one of the best ways to fight the virus. The WHO also warns against consuming bush meat and having any contact with infected bats or monkeys and apes. Fruit bats, in particular, are considered a delicacy in the area of Guinea where the outbreak started.

Activity 15.4.1

Work on your own. Complete the following activities using the information in Module 15. Use the heading: **Communicable Diseases**

**Question 1**

Fill in the missing words for each of the following. Write the entire sentence out and underline the words that you filled in:

1. When communicable diseases can spread very quickly from one person to another person, they are called _________________ diseases.

2. When a person becomes sick with a communicable disease it means a _________________ has invaded their body.

3. Germs are microbes. A microbe is a tiny _________________ that can only be seen with a microscope.

4. Whooping cough, also known as _________________, is caused by _________________ called bordetella pertussis.

5. Ebola is a communicable disease that was first discovered in _________________ in the _________________.

**Question 2**

List the symptoms for each stage of Chickenpox.

**Question 3**

Answer the following questions with a yes or a no.

1. Does the Ebola virus die when its host dies?
2. Is Whooping cough is spread among people by direct contact with fluids from the nose or mouth of infected people?
3. Can Mumps be fatal?
4. Is ringworm caused by a virus?

**Question 4**

Answer the following question with two or three well-constructed sentences: **Why is it so difficult to stop the Ebola virus from spreading?**
Module 16
HIV and AIDS Education

Unit 16.1 – Myths and Facts

**Myth**
I can get HIV by being around people who are HIV-positive.

**Fact**
HIV is not spread through touch, tears, sweat, or saliva. You cannot catch HIV by:
- Breathing the same air as someone who is HIV-positive
- Touching a toilet seat or doorknob handle after an HIV-positive person
- Hugging, kissing, or shaking hands with someone who is HIV-positive
- Sharing eating utensils or exercise equipment with an HIV-positive person
HIV is transmitted through contact with an HIV-positive person's infected body fluids. HIV can also be transmitted through needles contaminated with HIV-infected blood, including needles used for injecting drugs, tattooing or body piercing.

**Myth**
HIV or AIDS can be cured.

**Fact**
At the moment, there is no cure for HIV or AIDS and there are no vaccines to prevent HIV infection.

**Myth**
Condoms don’t prevent the spread of HIV.

**Fact**
If people use condoms correctly then they are almost 100% effective in preventing transmission of the HIV.
**Myth**
HIV/AIDS is a homosexual disease.

**Fact**
Anyone can be infected with HIV/AIDS. Sex is not the only way that the disease can be transmitted. In fact, studies show that HIV is spread most often through heterosexual contact.

**Myth**
I would know if I, or my loved one, had HIV.

**Fact**
A person with HIV might not show any symptoms for up to 10 years. Since HIV affects each person differently, many people with HIV can look and feel healthy for years. The only sure way to know is to get tested.

**Myth**
The HI Virus does not cause AIDS.

**Fact**
Antiretroviral drugs can control the virus for a while. In fact, some people don’t show signs of being ill for many years. But, the drugs are not a cure and eventually the virus destroys the body’s immune system and the infected person gets AIDS.

**Myth**
AIDS is a disease.

**Fact**
AIDS is not a disease – it is a condition. AIDS stand for Acquired Immune Deficiency Syndrome. In medical language, the word ‘syndrome’ describes a group of illnesses. So, it is actually not HIV or AIDS that causes an infected person to die – it is other diseases such as tuberculosis, pneumonia, measles, etc.
**Myth**
HIV is the same as AIDS.

**Fact**
HIV is a virus that destroys the white blood cells that help the body to fight off germs. When enough of these white blood cells are destroyed by the virus, the infected person begins to get various other diseases. This stage of the viral infection is called AIDS.

**Myth**
Sex with a virgin or a baby will cure AIDS.

**Fact**
You cannot cure AIDS by having sex with a virgin or a baby. Sadly, all that is likely to happen is that the virgin or baby will get hurt or become infected with HIV.

**Myth**
I can get HIV from mosquitoes.

**Fact**
Insects cannot get infected with HIV or AIDS and the HI Virus lives for only a short time inside an insect. When insects bite, they do not inject the blood of the person or animal they have last bitten.

Get Smart about HIV and AIDS
HIV/AIDS is a serious disease that affects millions of South Africans. People who are infected with HIV need care and support from their friends, families and the community, especially when they are ill.

Friends and family members sometimes worry that they might get infected when caring for a person with HIV. HIV cannot be passed on by touching, hugging, coughing, or sharing eating utensils.

It is possible for people who are infected with HIV to live long healthy lives. You can help those who are infected by:

- showing love, respect and support.
- knowing the facts about HIV/AIDS and talking openly about the disease.
- helping to reduce stress and stressful situations.
- helping to provide balanced and nutritious meals.
- encouraging them to get treatment if they are sick. Most infections are easily treated and cured, even if a person is HIV positive.

There may be situations where you need to clean up body fluids or blood from someone infected with HIV. It is important to use rubber or plastic gloves or other barriers such as plastic bags or a thick cloth to prevent direct contact. Make sure that you have these easily available at all times.

Work on your own. Interpret, explain and relate what you have read about in this module. Complete the following in your Life Skills Book. Use the heading: HIV AIDS and Aids Education

**Question 1**

Fill in the missing words for each of the following. Write the entire sentence out and underline the words that you have filled in.

1. The acronym AIDS stand for ________________________.
2. The V in HIV stand for ________________________.
3. You ______________ get infected with HIV through a mosquito bite.
4. It is important to use ____________ or ____________ gloves to prevent direct contact with the blood of a person who is HIV positive.

**Question 2**

Decide whether each statement is a Myth or a Fact. Write Myth or Fact.

1. AIDS is not one disease – it is a condition where a person can get many diseases. ________________
2. Antiretroviral drugs can cure HIV and AIDS. ________________
3. A person can be HIV positive for 10 years without anybody realising that the person is infected. ________________

**Question 3**

Provide logical, well thought out answers to the following questions:

1. If one of your family members got infected with HIV and developed AIDS, what part of caring for them would you find the most difficult? Give a reason for your answer.

2. Part of the reason that HIV is able to spread from person to person is that many people who are infected don’t know that they are HIV positive and so they don’t take precautions to prevent transmission. Do you think the law should make it compulsory for people to be tested for HIV? Give a reason for your answer.

   **Work in pairs.**
   
   Consider the following statements in preparation for a class discussion.

   **People who are HIV positive should be required, by law, to tell people that they have the HI Virus.**

   **People who are HIV positive should all be sent to a specific area/place/town so that they can’t infect anyone else.**

   **People who are HIV positive have obviously been careless or they are drug users – they got what they deserved.**
Formal Assessment Task

Your assessment task for this term is a Formal Examination. The exam will be set on all of the work that you have covered during the year. However, your teacher will give you some guidelines on which information you should pay special attention to. Your teacher will also revise and consolidate some of the more complicated topics that you have dealt with this year. If there is anything specific that you would like him/her to explain or revise then all you need to do is ask. Your teacher should be available to help you prepare for the exam.

Most of you will have written at least one exam during this year but here are some tips for preparing for exams and for revision of your work.

Study Tip: Move Before You Study
Exercising your body may help your brain. Moving before you do homework can help get your brain ready to study.

Study Tip: Pick Your Study Spot
The important thing is to find a place where you'll pay attention.

Study Tip: Don't Cram for Tests
When you have to remember information, it's best to go over it a many times over a few days. That way, you have a chance to really learn it. Don't wait and try to cram everything into your head the night before.

Study Tip: Listen to Music While You Study
Some people study better with music because it helps them ignore other sounds around them. Other people get so into the music that they forget about what they're supposed to be doing. Try it and see how you do. Just be sure to pick music that won't have you singing instead of paying attention to your homework. Instrumental music from the Baroque period is excellent music to study by. Bach, Handel and Vivaldi are examples of Baroque composers.

Study Tip: Take Breaks While You Study
Taking a short break might help you concentrate. When you work on something for a long time, you may start thinking about other things. So, get up, do some jumping jacks or take a 10-minute walk. Then, come back to your studying. You should be ready to focus again. Be disciplined - you can't work for 10 minutes and take a 20 minute break!