

SP: SOCIAL SCIENCE

GRADE 7: TERM 3

GEOGRAPHY: LEARNER BOOKLET

Learner Name: _____ Grade: 7A_____

POPULATION GROWTH AND CHANGE



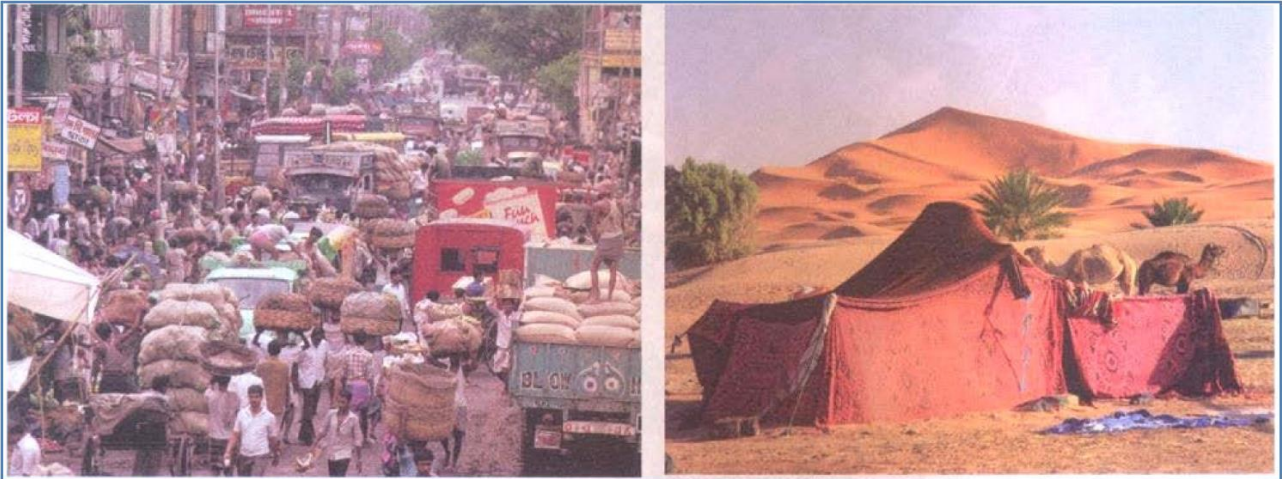
Word Bank

CONCEPT	DEFINITION
Population	All the organisms of the same species, who live in the same geographical area, and have the capability of interbreeding
Birth rate	The number of babies born in a year compared to every 1 000 people in a country
Death rate or Mortality rate	A measure of number of deaths in a country for every 1 000 people in one year
Population growth rate	The difference between the birth rate and death rate in a country (birth rate - death rate = population growth rate)
Infant	Is a baby younger than one-year-old
Mortality	Death, dying
Life expectancy	The expected number of years of life remaining at a given age. (average number of years a person in a specific place can expect to live, based on data collected from that country)
Natural increase	When the birth rate is higher than the death rate, more people are being born than are dying, so the population grows.
Natural decrease	When the death rate is higher than the birth rate
Factors	Things that influence what happens
Epidemic	A disease that spreads through a population very quick.
Parasite	An animal or plant that lives in or on another animal or plant
Gastroenteritis	An infection of the bowel
Pandemic	A disease that spreads across many countries/ all over the world.
Status	Rank or position compared with others
Income	Money received from wages
Population pyramid	A graph that shows the number of people in an area by their ages and gender
Ubuntu	An African word meaning 'being caring for other people'; Ubuntu also means 'I am what I am because of who we all are'
Populous	Full of people
Overpopulation	Too many people for the land to feed properly
Green Revolution	A planned effort to improve farming methods and produce better crops, to reduce hunger in developing countries
Eradicate	Get rid of, wipe out, destroy, remove.
Undernourished	Underfed, not getting enough of the right kinds of food

Population concepts

Birth rates, death rates and population growth rates

The world's population reached 7.6 billion people in May 2018. South Africa's population is fifty-four million (54 000 000). Every year, the number of people on Earth increases. In other words, the Earth's population is getting bigger and bigger. Some parts of the world are very crowded, while other places have fewer people.



Many parts of the world are very crowded. This is a normal street scene in Mumbai, India.

Some places have few people. What could the reason be for a low population in this area?

Vocabulary

Birth rate: the number of babies born in a year compared to every 1 000 people in a country.

Death rate: number of deaths in a country for every 1 000 people in one year.

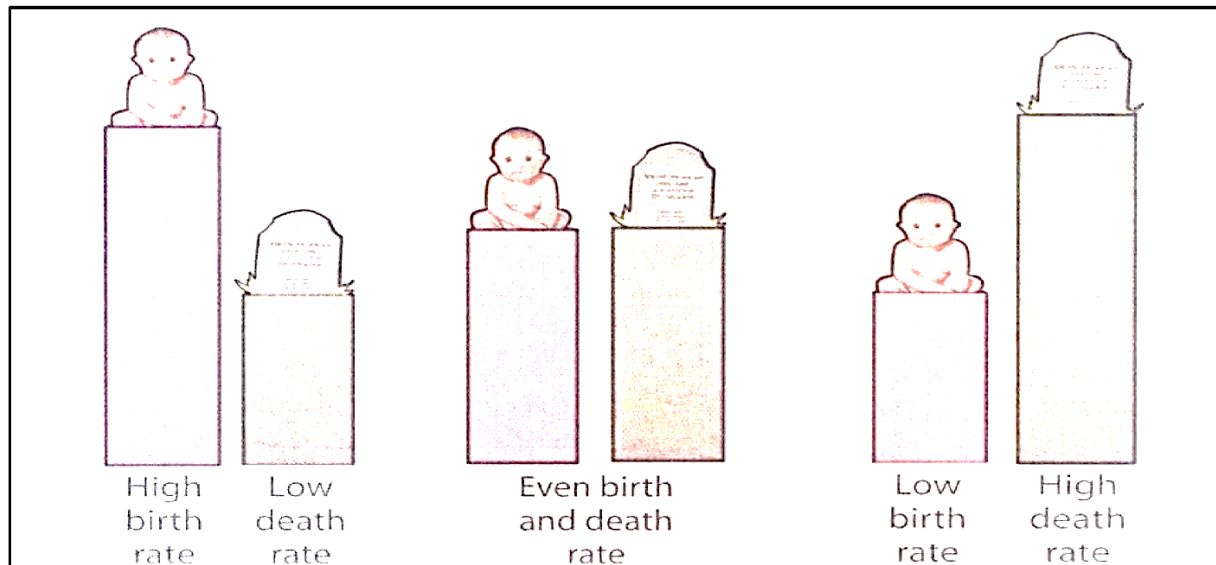
Population growth rate: the difference between the birth rate and death rate in a country

(birth rate - death rate = population growth rate)

Geofact

China has the largest population in the world, with India second.

Activity 1: Informal Assessment



1. This population will This population will This population will
a. _____ b. _____ c. _____ (3)

2. Examine the table below. Name the country with the:
a. highest birth rate b. highest death rate (2)

3. Calculate the population growth rates for:
a. Mozambique
b. France
c. Japan. (3)

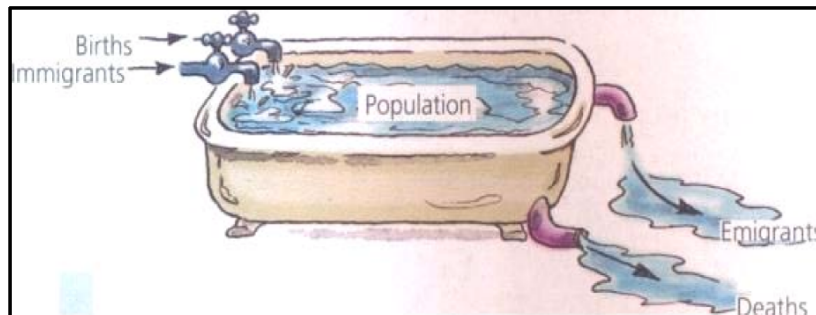
Country	Birth rate	Death rate	Population growth rate
Ghana	28	9	19
Mozambique	40	13	
South Africa	19	17	2
Brazil	18	6	12
France	12	9	
Japan	7	9	

Birth rate, death rate, and population growth rate for six countries

4. What problems do you think a growth rate like Mozambique's could cause? (2)

Total: 10

The population growth rate of a country also depends on the rate at which people move into it or leave it. The number of people in a country can be compared to the amount of water in a bath. There are two inputs and two outputs.



Infant mortality rates

Vocabulary

Infant: baby younger than one-year old

Mortality: death, dying

In 2011, over 5.5 million infants died. The infant mortality rate is the number of deaths of children under 12 months of age per 1 000 live births.

Country	Mortality rates in 2012 (per thousand)	
	Infants	Under 5
Japan	2	3
China	16	19
South Africa	43	64
Niger	110	173

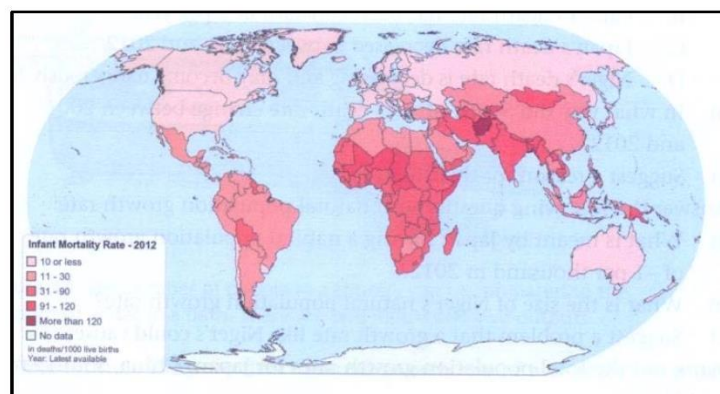
Death rates for infants and young children for four countries

Activity 2

1. How old is a person known as an infant?(1)
2. If 5 379 000 of the world's infants died in 2012, work out: the average number that died per day (assume 365 days in a year). (1)

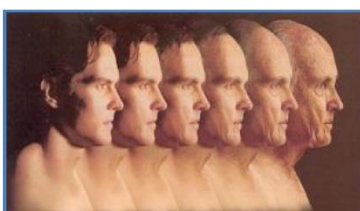
3. Use the map showing infant mortality in 2012 to answer the questions below.
- Which continent had the lowest infant mortality rate?
 - Which continent generally had the highest death rates for infants?
 - Name two countries on that continent where more than 90 infants out of every 1 000 die.
 - What country in Asia has the highest infant death rate? (5)
4. High infant mortality rates:
- Suggest two causes for some countries having so many babies dying. (2)
 - What can be done to improve the chances of babies living to reach their first birthday? (2)

Total: 12



Infant mortality in 2012 – every country is affected in some way

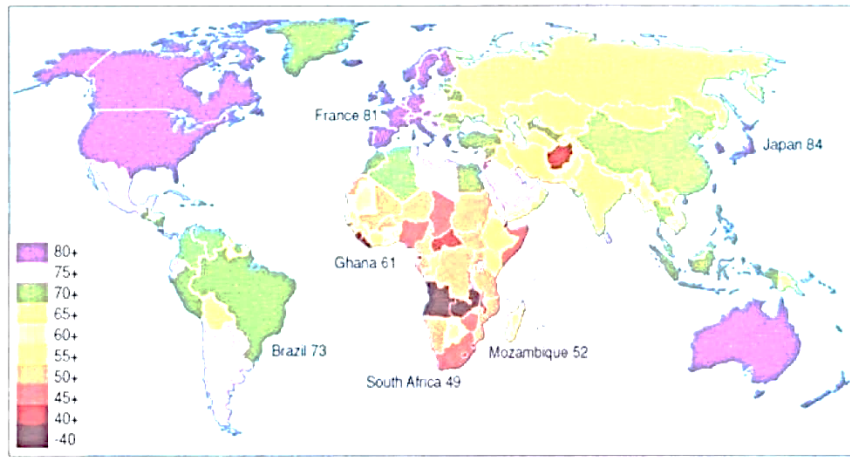
Life expectancy



Life expectancy is the average number of years a person in a specific place can expect to live, based on data collected from that country. Figures for life expectancy can be given for whole countries or parts of a country.

People tend to live much longer in some countries than in others, for various reasons. Read through the factors below that affect life expectancy.

Nutrition	Education	Housing	Pollution
Health	Occupation		Disease



A map showing life expectancy for different countries

Country	Life expectancy
Ghana	61
Mozambique	52
South Africa	49
Brazil	73
France	81
Japan	84

A table showing life expectancy rate for different countries

Activity 3

1. Write the following headings in your book: 'Countries with life expectancy over 50' and 'Countries with life expectancy under 50' Use the map of the world above and an atlas to list five countries under each heading. (10)
2. State whether the following statements are true or false:
 - a. Countries in the northern hemisphere have the longest life expectancy.
 - b. Countries with a high infant mortality rate have a long life expectancy rate.
 - c. Countries with a high birth rate and high death rate often have life expectancy above 60 years. (3)

Total: 13

Factors affecting birth rates and death rates

A number of different **factors** affect the birth rate and death rate in a country. We will examine how disease, economic status, family needs, attitudes and beliefs, conflict and wars and government policy affect the birth and death rates of a country.

Disease

Widespread illnesses such as HIV and AIDS, tuberculosis, malaria and diarrhoea.

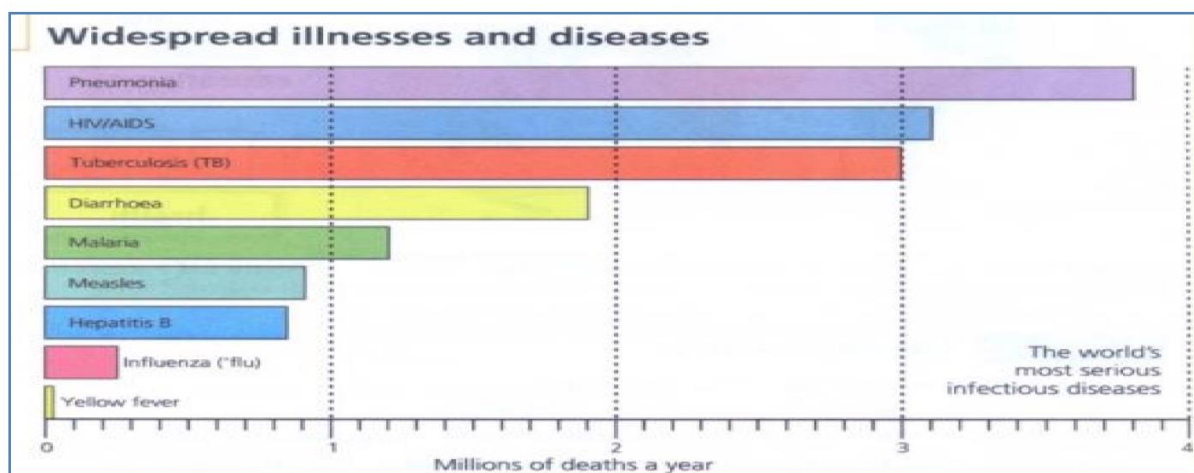
Vocabulary

Factors: things that influence what happens

Epidemic: a disease that spreads through a population very quickly

Diseases such as malaria, HIV (human immunodeficiency virus), tuberculosis (TB) and cholera kill millions of people every year. In some countries the infant mortality rate is high because babies die of diseases that cause **diarrhoea**. Diseases affect the life expectancy in a country.

Disease **epidemics** can cause the death rate in a country to rise. Epidemics happen on a local scale such as in a region or country. If the same disease spreads to other countries, we say there is a disease **pandemic**. HIV is an example of a modern pandemic. Africa's climate, poverty and lack of health care contribute to the spread of certain diseases across the continent.



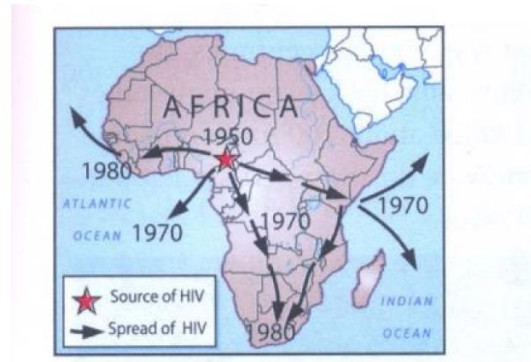
Hepatitis: Infection of the liver. It is passed on by unprotected sex and open sores. It can be fatal, however, people could live with Hepatitis for many years.

The world's most serious diseases

Many of these diseases are most serious in the poorer parts of the world.

HIV and AIDS

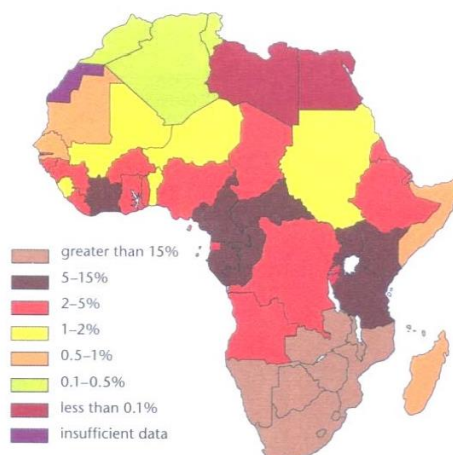
HIV spread from Cameroon in the 1950s to southern Africa and to most countries in the world.



HIV and AIDS spread from West Africa to the rest of the world

At least 25 million people have died from the HIV and AIDS pandemic. In 2010, about 36 million people across the world were infected with HIV and AIDS. Two thirds of the people infected with HIV live in Africa. Countries with a high percentage of people infected with HIV and AIDS often have a high death rate. Some scientists suggest the world's population would have been one billion people more if there was no HIV and AIDS.

The map below shows the percentage of the population who are infected with HIV and AIDS.



Percentage of the population infected with HIV

Tuberculosis (TB)

TB is a disease that affects a person's lungs. When someone with TB coughs or sneezes, the air is filled with tiny droplets that contain the TB bacteria. If another person breathes in those droplets, he or she will become infected with TB. After HIV and AIDS, tuberculosis kills more people in the world than any other disease.

Some facts about TB:

- In 2010, 1.4 million people died from TB.
- Without proper treatment, two out of every three people who have TB will die.
- Poverty and HIV are the two main reasons for the spread of TB.
- Poor people often live in overcrowded conditions without access to good health care. Diseases spread more easily in these conditions.
- People with HIV often get TB because their bodies are very weak.
- About 900 people out of every 100000 people in South Africa are infected with TB.



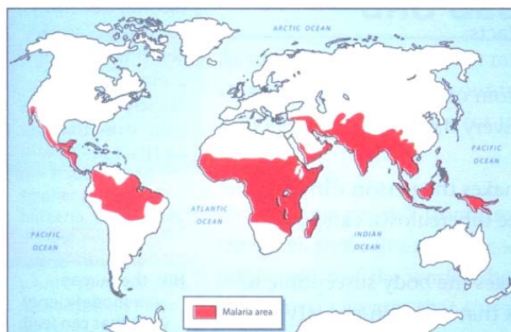
TB can be prevented and cured with medicines.

Malaria

Vocabulary

Parasite: *an animal or plant that lives in or on another animal or plant*

Malaria is caused by certain kinds of mosquitoes. When an infected mosquito bites a person, it puts the malaria **parasite** into that person's blood. The parasite grows inside the person's liver, causing the disease known as malaria. The number of deaths (around a million a year) is thought to be decreasing. Approximately 90 % of malaria-related deaths are in Africa, and 70% of the victims are children. People can help prevent malaria by sleeping under mosquito nets and using insect repellent.



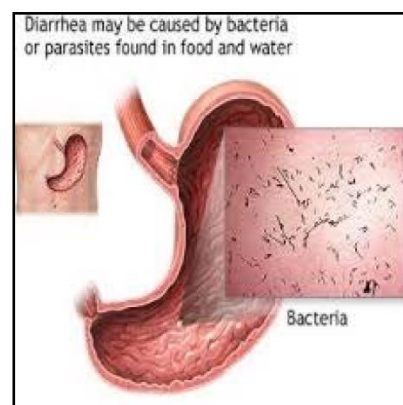
Malaria is a high risk in these areas

Diarrhoea

Vocabulary

Gastroenteritis: *an infection of the bowel*

About 2000 children in Africa die every day from diarrhoea. Diarrhoea is a symptom of **gastroenteritis**, which can be caused by a viral or bacterial infection. Gastroenteritis causes the body to lose important liquids and minerals. If these liquids and minerals are not replaced, children can die. Diarrhoea epidemics occur more often in poor areas where the water is not safe to drink and there are no proper toilets.



Diarrhoea can be prevented by boiling all drinking water. It can be treated by giving the sick person a drink made from 1 litre of water, 6 level teaspoons of sugar and ½ level teaspoon of salt.

Sources, prevention and treatment of certain diseases

Disease	Source	Prevention	Treatment
Diarrhoea	Transmitted by unhygienic food and water	Better hygiene	Sugar and salt water
Cholera	Transmitted by unhygienic food and water and lack of personal hygiene	Boil water	Medical treatment
Malaria	Mosquitoes	Mosquito nets Insect repellent Short-term drugs	Medical treatment and possibly hospitalization
TB	Close contact with people who are infected	Vaccinations for TB	Strong medicines can cure TB
HIV and AIDS	Blood and body fluids	Avoid unprotected sexual contact and contact with other people's blood and body fluids	HIV can be managed with medicines but there is no cure

Activity 4

1. Name the four countries which have the highest percentage of people with HIV and AIDS. (4)
2. Explain how the following diseases are spread: (3)
 - a) Malaria
 - b) Diarrhoea
 - c) HIV and AIDS
3. Name one way to prevent the spread of malaria. (1)
4. What is the simplest way to treat a person with diarrhoea? (1)
5. Which of the diseases has no cure? (1)
6. Why do people with HIV often get TB? (1)

Total: 11

Pandemics of the past: Black Death and smallpox

Pandemics are diseases that have spread throughout the world, infecting many people everywhere.

Case study: The Black Death (Europe)

The Black Death (Bubonic Plague) of the 14th century started near the Black Sea. It spread westward all through Europe and to parts of Asia. The bubonic plague virus was carried by rats hiding among grain on wagons and in ships. Fleas from the rats carried the virus and infected people by biting them. The symptoms of the Bubonic Plague included:

- a high fever
- swollen glands
- bleeding internally which caused parts of the body to turn black.

Between 1347 and 1351, two-thirds of all the people in Europe died from the Black Death. Approximately 20 million people died. The Black Death virus entered Britain in 1348 and killed 30% to 50% of all the people in that country.

Over the next few centuries, the plague came back again many times and killed about 100 million people worldwide during a period of about 200 years.



We are not sure how the Black Death was stopped – it could have been due to people moving away and practising better hygiene. The Black Death can be cured by taking antibiotics within 24 hours after contracting the disease.

Case study: Smallpox in the Cape

In 1713 a ship arrived in Cape Town containing sheets infected with the disease, smallpox. Nobody knew the sheets contained smallpox. Local workers took the sheets to their village to wash them. About twelve days later, the workers and their families began to fall ill. The infected people got blisters all over their bodies. They developed fevers and became weak.

The disease spread rapidly across the Cape. About 25% of the Dutch farmers died as well as 90% of the Khoi people who had no resistance or traditional treatments for this disease. This was the first smallpox epidemic in southern Africa.

Did you know?

Smallpox is a virus which can be spread by coughing, sneezing and spitting. The symptoms are a fever, headaches, tiredness and blisters.



Activity 5

1. Why was the Black Death called a pandemic and not an epidemic? (2)
2. Explain how smallpox arrived at and spread through the Cape. (2)
3. Write a short poem describing how you feel about the Black Death. (6)

Total: 10

Economic status

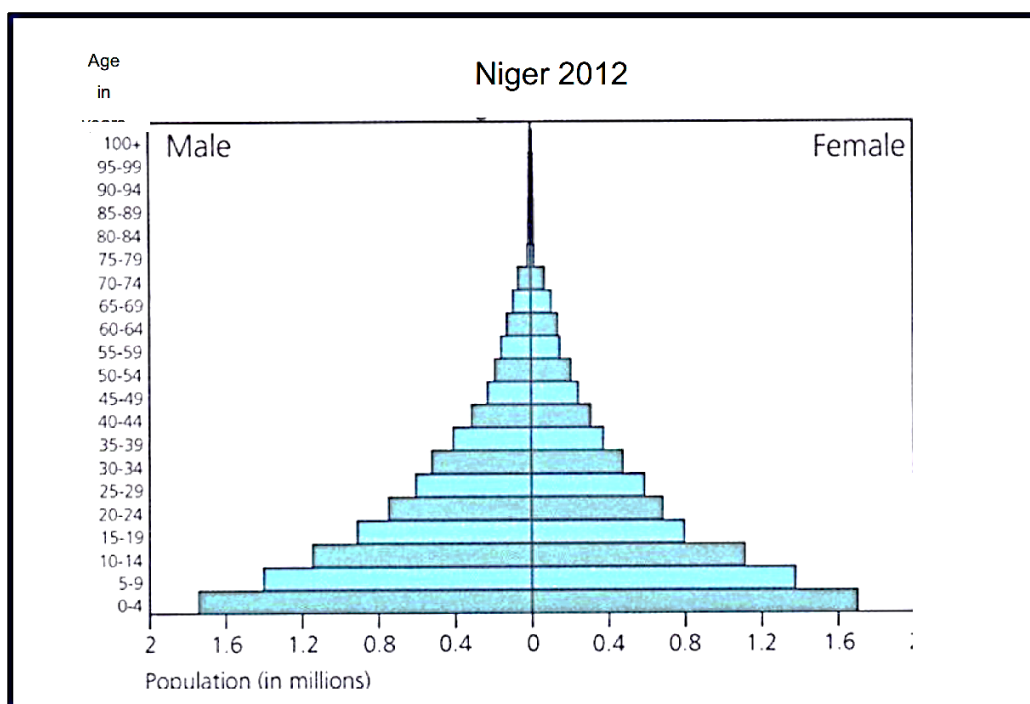
Vocabulary

Status: rank or position compared with others

Income: money received from wages

Population pyramid: a graph that shows the number of people in an area by their ages and gender

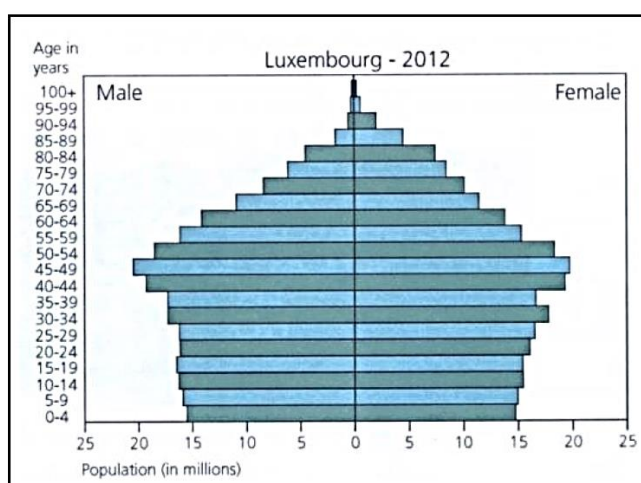
Economic **status** tells you a person's income. In population studies, **economic status** is an indicator that can help you to work out how well that person lives. All people are somewhere in a wide range of economic status. At one end of the range is a poor, underfed person in a poor country. At the other end, is a rich, well-fed person in a developed country. How rich or poor people are, affects their birth rates and death rates. Let's compare a poor and a rich country.



Niger is one of the world's poorest countries. Most people can't afford much education and most families are large. Many children do not get enough food, especially in times of drought when the crops fail (as they did in 2012). Many babies and children die. The average person does not live beyond 54 years of age.

The **population pyramid** for Niger shows that:

- the country has a high birth rate, which means there are many young children
- many children die before they reach the age of five
- the death rate is high (the graph bars get shorter every year)
- very few people live longer than the age of 70 years.



Luxembourg is the second richest country in the world. Most people in this country have good food to eat and get a good education. The birth rate is low, so families are small and can afford better education, food and doctors. The death rate is low and most people live to around 75 years of age.

2012	Niger	Luxembourg
Average income	R3020	R634300
Population below poverty	66%	0%
Can read and write	29%	100%
Underfed children 0-5	48%	<1%
Birth rate per 1 000	50	12
Infant mortality per 1 000	110	4
Death rate per 1 000	14	8
Growth rate per 1 000	36	11
Life expectancy, years	54	80

Comparing statistics for
Niger and Luxembourg

Activity 6

1. On which continent is Niger found? (1)
2. On which continent is Luxembourg found? (1)
3. Which country is in the poor South? (1)
4. Look at the population pyramid of Niger carefully:
 - a. How many males are there between 0 and 4 years? (1)
 - b. How many females are there between 40 and 44 years? (1)
 - c. How many people are there between 20 and 24 years? (3)
5. Why do you think that people in poorer countries tend to have more children than people in wealthier countries? (2)

Total: 10

Family needs, attitudes and beliefs

People have different attitudes and beliefs about how many children they should have. Things that influence their attitudes and beliefs include the kind of work they do, their religion, traditions and customs.



Photo 1:

Some rural communities have large families so that family members can help work on their farms.

Photo 3: Some religions do not allow people to use modern family planning methods.





Photo 2:

People may have a lot of children so they will be looked after when they are old.

Photo 4: In some communities it is the custom for leaders and very wealthy men to have many wives and children.



The governments of countries in Africa and Asia also have to decide whether they will try to reduce birth rates. In South Africa, the deep belief in **Ubuntu** is that one person's interest should not harm other people. Children suffer when parents do not limit their families.

Vocabulary

Ubuntu: an African word meaning 'being caring for other people'; Ubuntu also means 'I am what I am because of who we all are'

Activity 7

1. Match the words **religion**, **customs**, **care** and **work** with photographs 1 to 4. (4)
2. Do you think leaders and wealthy men should have more than one wife? Give a reason for your answer. (2)
3. Create two headings in your exercise book: 'Traditional attitudes' and 'Modern attitudes'. Then write the letter of each statement under the heading that you think is correct. (8)

- a. My child deserves the best education I can afford.
- b. I need to have many children because some may get sick and die.
- c. It's not right to limit how many children you have.
- d. I prefer to have a small family so I can afford a better lifestyle.
- e. I want to focus on my career first, and then have my first child when I am 30 years old.
- f. A woman needs more children to help with work in the house and in the fields.
- g. I want to give my child as much love and attention as I can.
- h. A woman must start having children as soon as she is married even if she is a teenager.

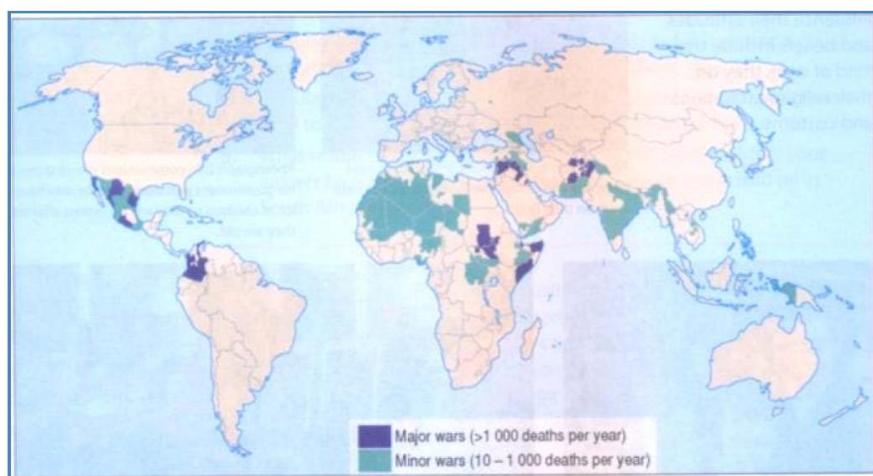
Total: 14

Geofact

In Chad (in West Africa), women have an average of 6.6 babies – the highest in Africa, but people earn an average of only R1 600 a year (the lowest in the world).

Conflict and wars

Between 1900 and 2000, approximately 160 million people died as a result of wars and conflicts across the world. Conflict and war have existed for as long as there have been people on Earth. Conflict refers to fighting between groups of people, while war refers to organised fighting between countries.



The map shows areas where there were wars and conflicts in 2011.

Wars affect a country's birth and death rate in the following ways:

- Wars keep birth rates low. People have fewer children during times of war.
- Wars prevent people from farming and living a normal life.
- Many people die from hunger and disease during wars.
- In time of war, the land is not properly farmed as farmers may have to leave the land and become soldiers. Some wars take place on the land where people usually farm. This means food is often in short supply during a war.

Name of war	Year	Estimated number of deaths
World War I	1914-1918	40 million
World War II	1939-1945	50 million
Russian Civil War	1917-1920	6 million
Second Congo War	1998-2003	5 million
Korean War	1950-1953	3 million
Vietnam War	1955-1975	5 million

Conflicts

In many places in the world, huge groups of people have been murdered because of their race, religion or tribe. This kind of large-scale murder is called **genocide**, which means the deliberate killing of a particular group of people by another group of people because they are of a different race, religion or tribe. For example, in the Amazon forest of Brazil, an average of one tribe a year has been wiped out since 1900.

Activity 8

Look at the table and the world map and answer the following questions:

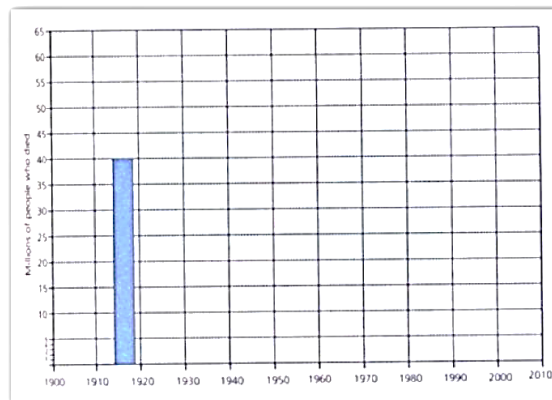
1. How many people died in wars and conflicts in the twentieth century? (1)
2. Name three countries in Africa where there were wars and conflicts in 2011. (3)
3. Explain why more people die of diseases and hunger during some wars than from injuries caused by fighting. (3)
4. Suggest ways that civilians get injured during wars. (2)

Activity 8 (Continued)

Group work

Draw a time line.

1. On a big sheet of paper, draw a time line (like the example below) for the years 900 to 2010. Mark in every 10 years and label the dates (1900, 1910, 1920 and so on).
2. Show the number of men, women and children who died in the wars listed above on your time line.
3. Give your time line a title.



Write a title to say what your time line shows

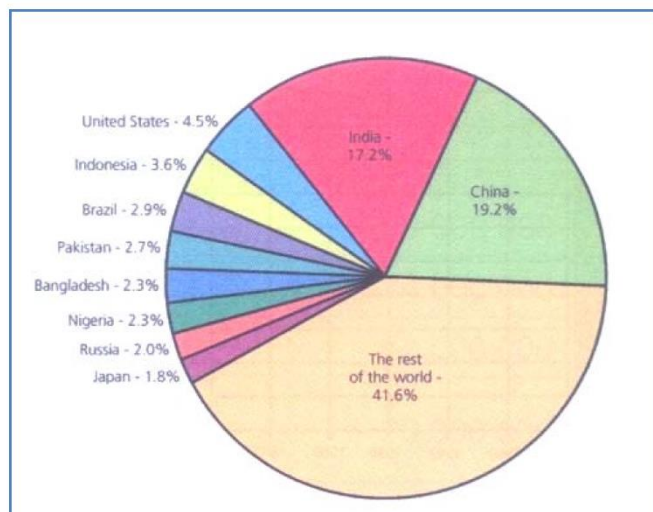
Government policy

Vocabulary

Populous: full of people

Overpopulation: too many people for the land to feed properly

The 10 most populous countries in the world



With over 134 billion people (in 2012), China is the world's most **populous** country. Its population doubled in the 50 years after 1952. In the 1970s, the Chinese government realized that if the population growth was not controlled, it would get to nearly 2 billion by 2030. Such overpopulation would cause the following serious problems:

✧ shortage of food ✧ shortage of water ✧ shortage of energy ✧ not enough land ✧ pollution

China's one-child policy

China started its 'one child per family policy' in 1979. Listed below are the rewards and punishments laid out in the policy.

Rewards for one-child parents	Punishment for two-child parents
• cash bonuses • more time off before the baby is born • better child care • better chance of getting a house	• up to half their income was taxed, or they would lose their jobs, or pay a fine • unborn baby was aborted • parents sterilised

Local officials of the Chinese Communist Party had to see that the policy was enforced. Sometimes they locked up pregnant women until they agreed to have their second baby aborted. Failing to have an abortion meant severe punishment.



This poster encourages people to have only one child

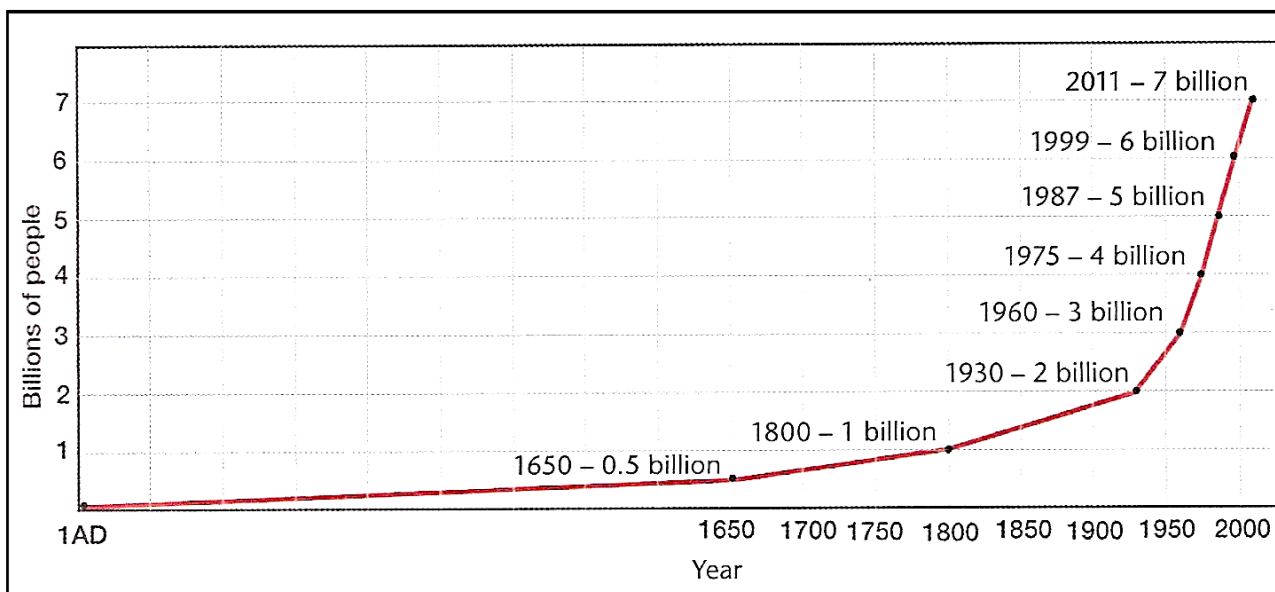
Activity 9

1. What effect should a one child policy have on birth rates?
2. Why do you think people were allowed to have a second child if the first child was a girl?
3. Do you think governments should tell people how many children they should have?
Give reasons for your answer.

World Population Growth

Pattern of world population growth from 1 AD to present day

The world's population is growing faster than ever before! A clear way to show population growth over time is on a line graph.



A line graph showing the growth in the world's population

Activity 10

Refer to the line graph above and answer the following questions:

1. When did the world's population reach 1 billion? (1)
2. How many years did it take the world's population to double from three billion to six billion? (1)
3. In which year did the world population reach 2 billion? (1)
4. In which year did the world population reach 5 billion? (1)
5. Estimate in which year the world's population was about the same as present day China's population. (1)

Total: 5

Developments that have affected population growth

There are three important reasons why the world's population increased so rapidly in the last 200 years: increased food production, scientific developments and improved health care.

Increased food production

Four important factors caused increased food production.

- Over the past 400 years, farmers slowly increased the amount of food they could produce. They did this by using newly invented and mass-produced tools.
- Traders and migrants took the new tools and farming methods to other parts of the world.
- In the 1920s, farmers started to use farm machines (like tractors, planters and harvesters) and fertilisers. These tools and products increased the production of most cereal crops. With more food available, some people were healthier and had larger families.
- The **Green Revolution** in agriculture from the 1950s to the 1970s brought the greatest increases in food production the world has ever seen. Scientists developed new varieties of cereals including maize, wheat and rice.





- 1 Scientific varieties of crops
- 2 Irrigation
- 3 Fertilisers
- 4 New farming methods

Vocabulary

Green Revolution: *a planned effort to improve farming methods and produce better crops, to reduce hunger in developing countries*

The Green Revolution has greatly increased the world's food supplies. However, in 2012, over one billion people in the world did not get enough food to eat. One in seven people is hungry.

The world's farmers grow enough food to feed everybody, but this does not mean that everybody can afford to buy the food they need. Many poor and unemployed people can't afford some of the new foods, no matter how much there is.

Activity 11

1. List three changes in farming that helped to increase food production. (3)
2. Explain what 'The Green Revolution' is. (2)
3. Explain why there are still many hungry people in the world, even though enough food is grown. (1)

Total: 6

Scientific developments

Due to the work of scientists, doctors and inventors, people now have a better chance of living longer. One reason for more people being in the world today is that they are dying later.

Disease control

Doctors and researchers have found ways of monitoring patients who are at risk of heart attacks, some kinds of cancer and other diseases. Many young people who might have died are now treated. They go on to live useful lives, sometimes producing their own families.



Infection control

Throughout history, infectious diseases have kept death rates up and populations down. However, medical science has found medicines for many of the worst diseases. One of these diseases is smallpox. Although a British doctor, Edward Jenner, invented a vaccine in 1796 that saved many lives, smallpox was still a risk. In 1966, there were still 15 million victims in 50 countries. Nearly 2 million people died of smallpox that year. But, year by year, the vaccines were improved, and people with the disease were not allowed to travel until they were better. By 1980 smallpox had been eradicated.



Edward Jenner

Vocabulary

Eradicate: get rid of, wipe out, destroy, remove

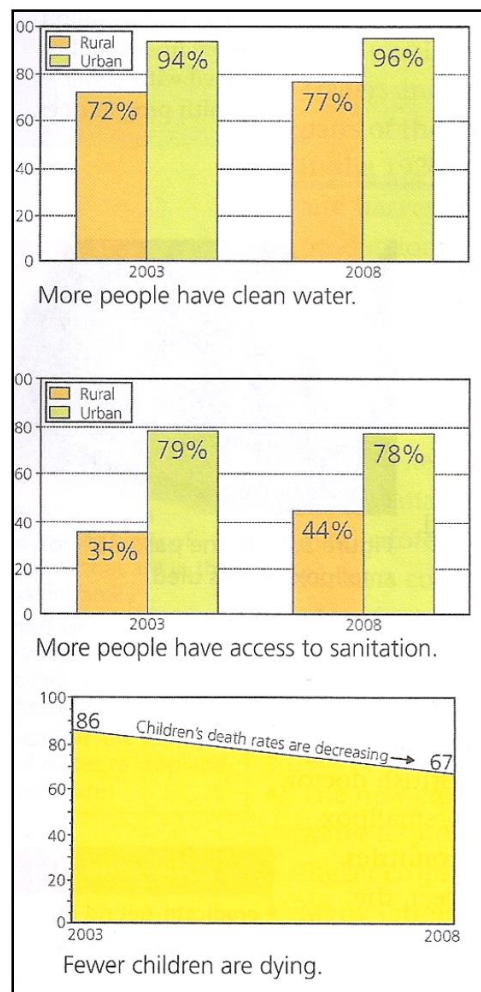
Improved sanitation

More and more poor people are crowded together in towns and cities. These conditions often cause infectious diseases and epidemics to spread quickly, due to shortages of fresh, clean water.

Approximately 750 million people worldwide do not have clean water. However, every year, richer countries are helping to improve the lives of poorer people in these ways:

- They have improved the supply of clean water, so that millions of people no longer need to drink and wash in polluted water.
- They have improved the sanitation links by building proper sewerage systems which have sealed pipes that carry away sewage to be purified.

These graphs show how, in only 5 years, the provision of clean water and sanitation cut down child death rate. Millions of young lives have been saved.



Canned and frozen food

People all need good food to eat. However, food that is stored for too long starts going bad. Food also goes bad if it takes too long to get from the farm to the market.

What makes food go bad? The bacteria and mould that grow on and in food cause food spoilage. These organisms are tiny, simple living things that are visible only through a microscope.

There are thousands of different kinds of bacteria and moulds. Some kinds are helpful and even essential for human life, while others cause diseases and poisons that can make people sick.



Bacteria and mould growing on food (like meat, fruit and bread) causes the food to decompose.

Cooking food kills most bacteria and moulds. Cooked food, sealed in cans and jars, can be stored for years without going bad. This method of preserving food makes it possible to send fruit, fish and meat from one country to another. This is one way to provide food to people who cannot produce all their food needs. Therefore, instead of being so **undernourished** that they become weak and die, these people survive to live longer.

Vocabulary

Undernourished: underfed, not getting enough of the right kinds of food

Long ago, our ancestors kept some foods fresh by drying them. In modern times, the two main ways of stopping food from decomposing are canning and refrigeration. Other methods also include drying and pickling.

Refrigeration

Chilled or frozen foods can reach the market weeks or months later without being cooked. At low temperatures, mould and bacteria grow very slowly, which slows down food decay for long enough to get the food to market. People in Europe or Japan can buy fresh-looking beef from Argentina, mutton from New Zealand and fruit from South Africa and Canada.

Countries that are not able to produce the food they need import chilled and frozen food. Examples include:

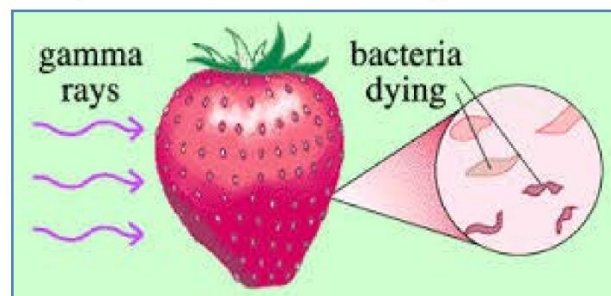
- desert countries without enough pastures and orchards
- crowded countries without enough farmland to grow all the food they need

- countries recovering from floods and droughts
- countries where war interrupts food production



Chemicals of different kinds are used to preserve foods by preventing bacteria and moulds from growing on and in them. Sugar, salt, vinegar and antibiotics all slow down food decay. However, for health reasons, some buyers avoid these foods.

Irradiation of fresh meat, fruit and vegetables involves using ultraviolet rays, X-rays and gamma rays to kill bacteria and viruses on the outside of the food (where most of them are). This process keeps the food fresh for longer.



INFORMAL ASSESSMENT

1. Name the 5 scientific developments that have given people a better chance of living longer. (5)
2. What foods do you eat that is either frozen or kept in a fridge? Name 5. (5)
3. Describe what happens to this food if you do not keep it in a fridge. (2)
4. Draw a picture of a can. Inside the drawing of your can, write the names of the different foods you could eat that come from a can. (8)
5. Refer to the graphs on page 26.
 - a. What percentage of people in rural areas had clean water in 2003? (1)
 - b. Was there an increase or decrease in the percentage of people in rural

areas that had clean water in 2008? Give the percentage. (2)

- c. What could be the reason for less people having access to sanitation in urban areas in 2008? (1)
- d. What saved the lives of people who were infected with smallpox? (1)

TOTAL: 25

Improved health care

Two hundred years ago, most people believed that disease was caused by bad air. Since then, we have learned that diseases are caused by germs (the bacteria and viruses that spread disease). We have also learned many ways of preventing diseases and of treating patients who have a disease.

Immunisation

Immunisation is a method of protecting people from getting certain infectious diseases. In 2010, 55% of South Africa infants under the age of one were **immunised** against TB, polio, measles and hepatitis B. Immunisation artificially stimulates the body's immune system to provide protection against specific serious infections. This is done by giving a vaccine.



Cleanliness

Washing your hands, body and clothes helps to reduce bacteria, insects and fungi that can lead to illness. Until 150 years ago, people did not know that they could help prevent disease by:

- washing their hands with soap and water after using the toilet and before eating
- washing food before eating it
- cooking food thoroughly
- drinking water from clean, safe sources.



Geofact

People rarely used soap to wash their bodies until the late 19th century. Soap was usually made from animal fats and ashes, and was too harsh for bodies. A gentler soap, made with olive oil, was too expensive for most people.

Medicines

Medicines reduce human suffering, improve the treatment of disease and return people to a healthy life. Many universities and laboratories are busy with research to find new medicines. Between them, at any one time, they are working on about 3 000 new medicines.



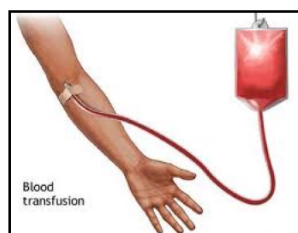
Surgery

Over the past 200 years, many new ways of operating on people have been developed. Some operations remove infected parts of the body like the appendix and tonsils. Other operations repair injuries.



Blood transfusions

Blood transfusions are a way in which people can give some of their blood to save a patient who has lost a lot of blood during an operation or in an accident.



Activity 12

1. What are diseases caused by? (1)
2. Why did people in the early 1800s not use soap often? (2)
3. Describe how washing hands can help to control the spread of contagious diseases. (2)
4. Explain the advantage of being immunised. (1)
5. Answer the following questions about organ transplants:
 - a. Think of a reason some people agree with organ transplants. (1)
 - b. Think of a reason why other people don't like the idea. (1)
 - c. What is your opinion? (1)

Total: 9

Sources:

RANBY, P. Social Sciences Grade 7

RANBY, P. Platinum Social Sciences Grade 7

EARLE, J. Social Sciences Today Grade 7



