

Gr.7 Geography Term 3 Worksheets

Population growth and change

Birth rates, death rates and population growth rates

Date: _____

The world's population reached 7.6 billion people in May 2018. South Africa's population was 59,39 million in 2021.

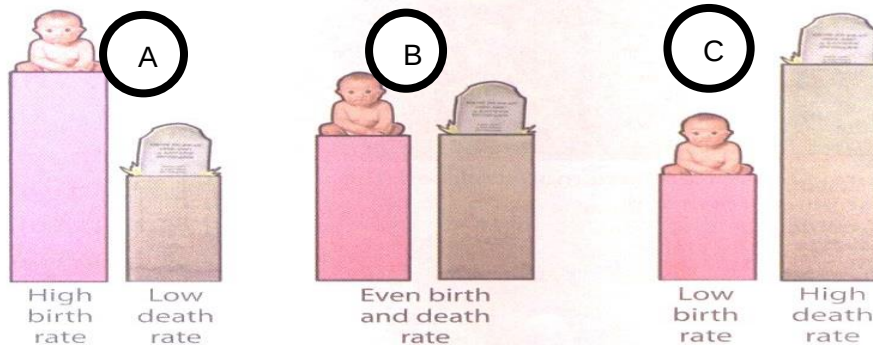
Every year, the number of people on Earth increases. In other words, the Earth's population is getting _____ and _____. Some parts of the world are very crowded, while other places have fewer people.

Word bank

Birth rate: the _____ 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 _____ year.

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



population growth
rate
=
birth rate - death

Population A will:

Population B will:

Population C will:

Infant mortality rates

Date: _____

Word bank

Infant: child _____ than one-year old

Mortality: death, dying

Life expectancy

Life expectancy is the average number of years a person in a specific place can expect to _____, 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.

Factors affecting life expectancy

- _____
- _____
- _____
- _____
- _____
- _____

Factors affecting birth rates and death rates

A number of different **factors** affect the birth rate and death rate in a country.

1. Disease
2. economic status
3. family needs
4. attitudes and beliefs
5. conflict and wars

1. Diseases

About COVID-19 (Coronavirus)

What is COVID-19?

Coronaviruses are a large family of viruses which may cause illnesses that are known to cause infections that impact on your _____ and your _____. The most recently discovered coronavirus causes coronavirus disease COVID-19 and it was unknown before the outbreak began in Wuhan, _____, in December 2019.

Who is most at risk?

The elderly, individuals with co-morbidities and healthcare workers have been found to be at a higher risk of death.

How is it transmitted?

The spread of the disease is thought to happen mainly via droplets produced when an infected person _____ or _____, similar to how flu spread. Thus far, the majority of cases have occurred in people with _____ contact to people with covid and healthcare workers caring for patients with COVID-19.

The problem is that you sometimes don't know that you have covid because you don't feel sick and then you infect other people than can become very sick and die.

How is COVID-19 treated?

<u>Most common symptoms</u>			<u>Less common symptom</u>		
			aches and pains	sore throat	diarrhoea
			headache	loss of taste or smell	a rash on skin

How can you prevent infection?

- Wash your _____ often with soap and water for at least 20 seconds. If soap and water are not available, use an alcohol-based hand sanitizer.
- Avoid touching your _____ with unwashed hands.
- Avoid _____ contact with people who are sick.
- _____ your cough or sneeze with a flexed elbow or a tissue, then throw the tissue in the bin.
- Clean and disinfect frequently touched objects and surfaces

STAY AT HOME WHEN SICK

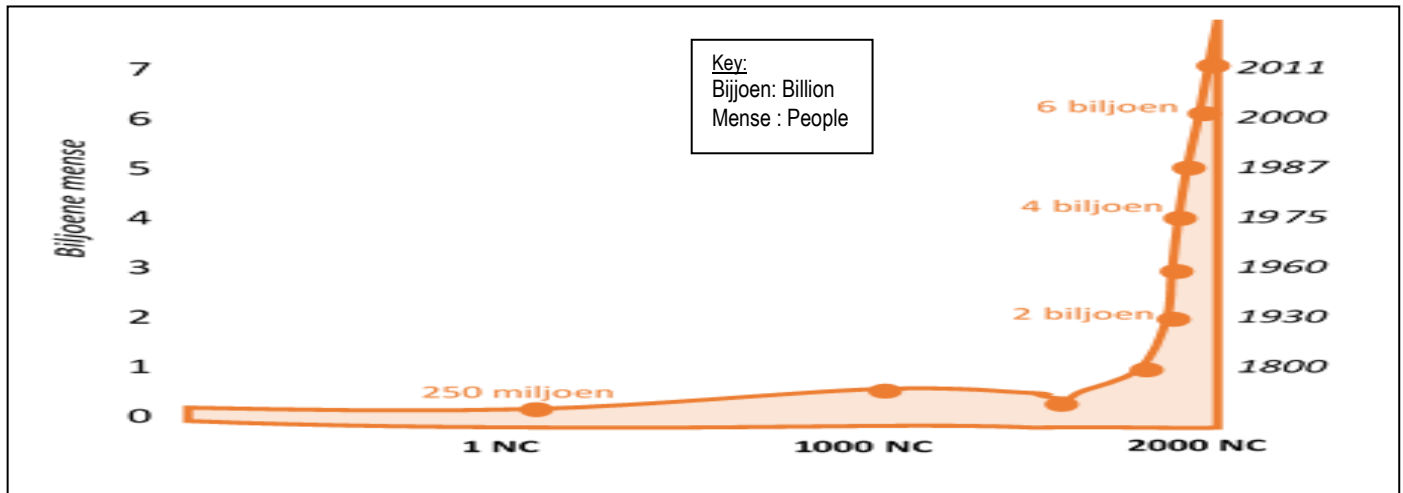
In this way, you protect yourself, as well as other people. Remember to seek _____ help.

Do not go back to school before you are not 100% healthy.



Write a paragraph of 8-10 lines about how we can prevent the spreading of covid in our schools (8x1) (8)

FIGURE A: World population growth since 1AD



Make use of FIGURE A and your own knowledge to answer the following questions:

1. How long did it take for the population to get from 1 billion to 2 billion? _____

2. How many years did it then take to double again (i.e. to get to 4 billion)? _____

3. See if you can work out when the population will get to 8 billion.

(Hint: Work out how long it took to get from. 5 billion to 6 billion and from 6 billion to 7 billion.)

4. Using what you learned in the last unit, explain the little dip in the line after 1350?

5. 'Deaths from war and conflict had no influence on population growth.' Use what you have learnt in the last unit and this graph to respond to this statement. Do you agree or disagree. _____

6. What do you think is going to happen if the population keeps expanding at this rate?

A number of different factors affect the birth rate and death rate in a country
 disease economic status family needs attitudes and beliefs conflict and wars

1. Diseases

Word bank

Factors: things that influence what happens

Epidemic: a disease that spreads through a population very quickly in a country or region.

Pandemic: a disease that spreads through a population very quickly in the world or in different countries.

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.

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 _____ 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. _____ 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 _____. Covid 19 and 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.

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

Two thirds of the people infected with HIV live in _____. Countries with a high percentage of people infected with HIV and AIDS often have a high death rate.

- **Tuberculosis (TB)**

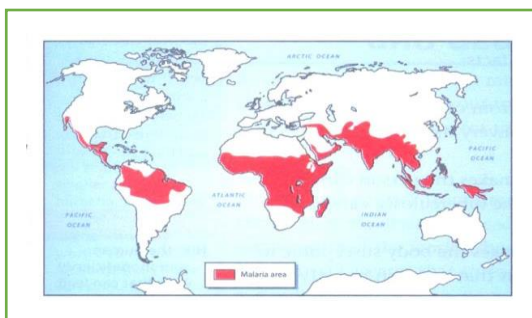
TB is a disease that affects a person's _____. When someone with TB coughs or sneezes, the air is filled with tiny droplets that contain the TB bacteria. If another person breathes _____ those droplets, he or she will become infected with TB. _____ and _____ are the two main reasons for the spread of 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 _____.

- **Malaria**

Word bank

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

Malaria is caused by certain kinds of _____. 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. People can help prevent malaria by _____ nets and using _____.



Malaria is a high risk in these areas

- **Diarrhoea**

Word bank

Diarrhoea: Running stomach, loose watery stools that happen more than normal

Gastroenteritis: an infection of the bowel

About 2000 children in Africa _____ 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 _____ areas where the water is not safe to drink and there are no proper toilets. Diarrhoea can be prevented by _____ 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.**

Make use of above information to answer the following questions:

1. Name the two countries which have the highest percentage of people with HIV and AIDS.

2. Explain what causes the following diseases:

Malaria - _____

Diarrhoea - _____

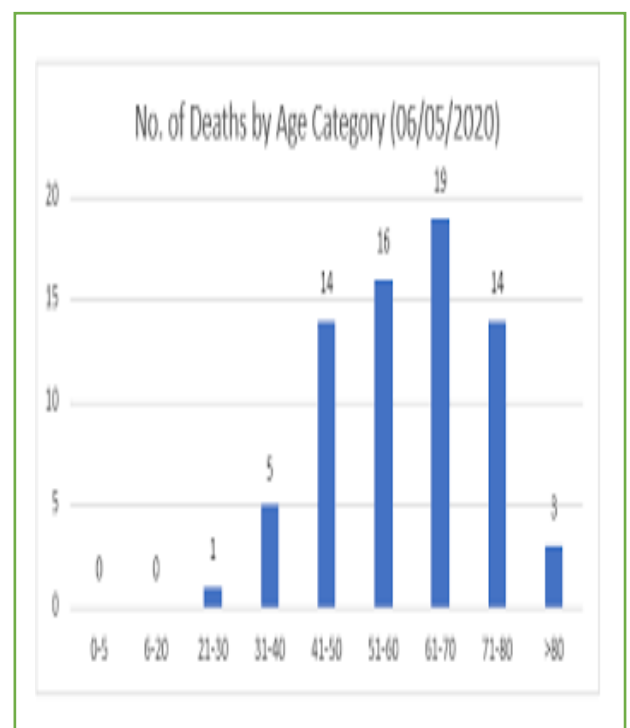
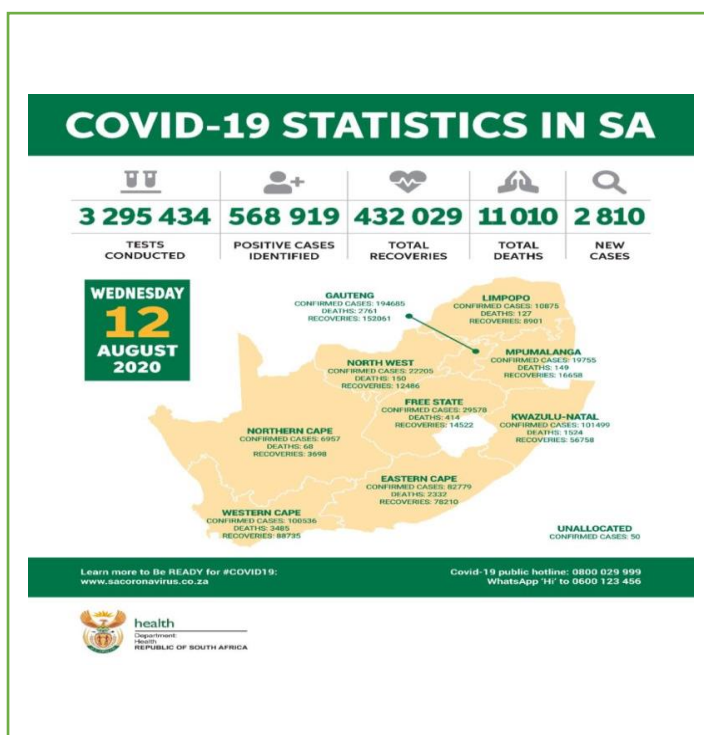
HIV and AIDS - _____

3. Name one way to prevent the spread of malaria. _____

4. What is the simplest way to treat a person with diarrhoea? _____

5. Which of the diseases has no cure? _____

Covid 19 statistics:



Pandemics of the past: Black Death and smallpox

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

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 plague virus was carried by _____. Fleas from the rats carried the virus and infected people by biting them.



The symptoms were:

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

Approximately 20 million people died.

We are not sure how the Black Death was stopped – it could have been due to people moving away and practising better hygiene.



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. Smallpox is a virus which can be spread by coughing, sneezing and spitting. The **symptoms** are a _____.

The influenza Pandemic of 1918-1919



The **Spanish flu**, also known as the _____, was an unusually deadly **influenza pandemic** caused by the _____. A virus. Lasting from February **1918** to April 1920, it infected 500 million people – about a third of the world's population at the time – in four successive waves

Compare the Spanish Flu pandemic to the Covid19

Your teacher will give his/her own worksheet to you.

2. Economic status

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

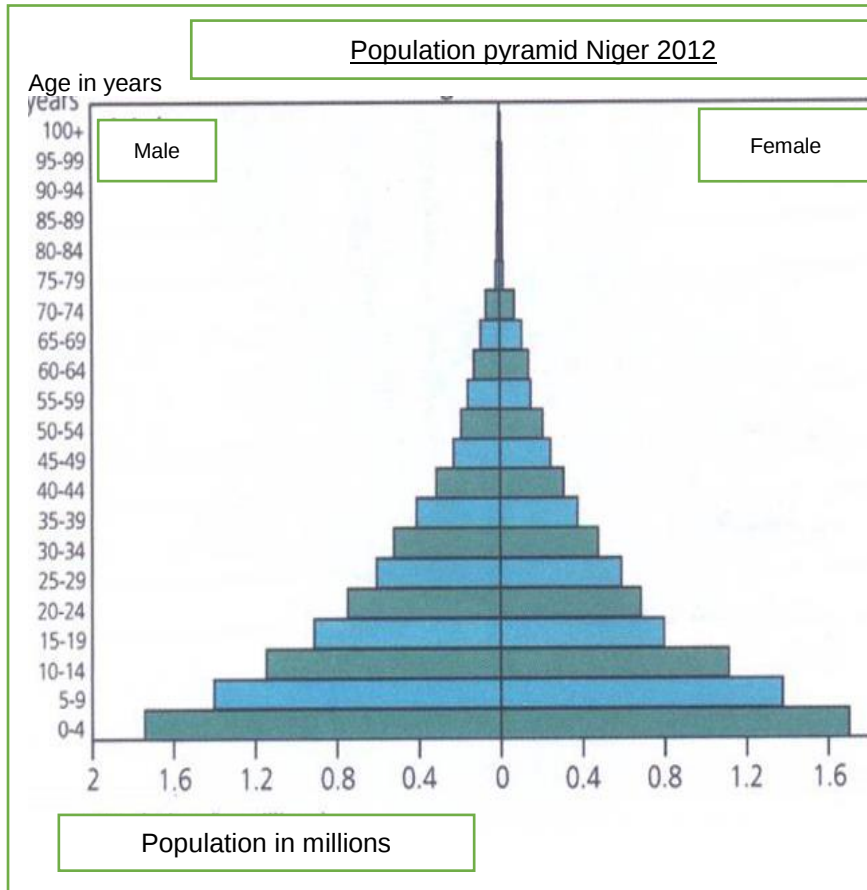
Economic status tells you a person's _____. In population studies, economic status is a method that can help you to work out how well that person lives. All people are somewhere in a wide range of economic status. At one end of the range is a **poor**, underfed person in a _____ country. At the other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

Niger is one of the world's poorest countries. Most people can't afford much _____ 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.

FIGUUR B:



Make use of FIGURE B to answer the following questions:

1. How many males between 0-4 years do you see on the population pyramid?

2. How many females between 0-4 years do you see on the population pyramid?

3. At what age does this population pyramid show no people?

4. What does this tell us about the life expectancy of this country?

5. Why do you think that people in poorer countries tend to have more children than people in wealthier countries?

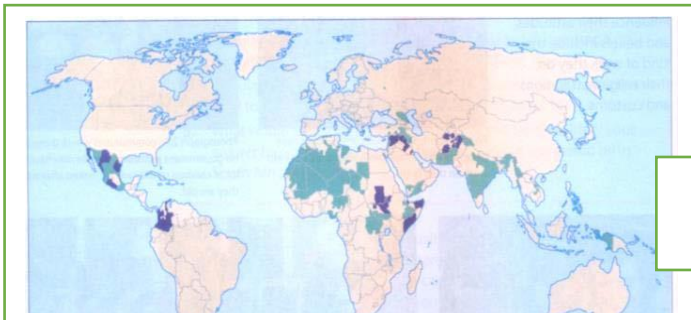
3. Family needs, attitudes and beliefs

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

The governments of countries in Africa and Asia also have to decide whether they will try to reduce birth rates. Children suffer when parents do not limit their families.

4. 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. _____ refers to fighting between groups of people, while _____ refers to **organised** fighting between countries.



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

5. Government policy

China's policy for one child

With more than 134 billion people (in 2012), China has the world's largest population. The Chinese government has realized that if population growth is not controlled, it would reach almost 2 billion by 2030. Such overpopulation would cause the following serious problems: food shortages, water shortages and insufficient land. Therefore, China started a one-child policy in 1979 but in 2015 the policy was revoked.

Developments that have affected population growth

Important reasons the world's population increased so rapidly

1. Increased food production

Over the past 400 years, farmers slowly increased the amount of food they could produce.

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 _____ 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.

2. 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 late.

3. 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 , marry and have families.

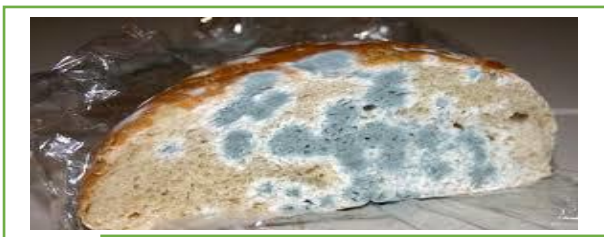
4. Improved sanitation

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.

5. 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 _____ 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 starving that they become weak and die, these people survive to live longer.

Long ago, our ancestors kept some foods fresh by _____ them. In modern times, ways of stopping food from decomposing are:

6. 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. 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.

- **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 clean water.

7. Medicines

Medicines reduce human suffering, improve the treatment of disease and return people to a healthy life.

8. 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.



9. 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.

Name 8 important reasons the world's population increased so rapidly:

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____