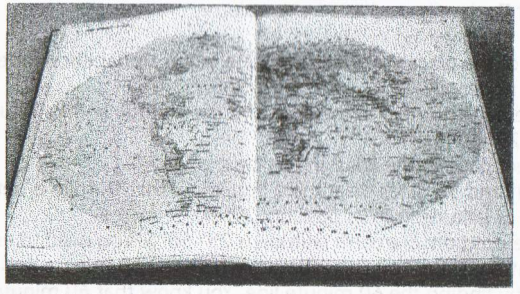
Unit 1 Maps and atlases

Word bank ABC

distorted	changed so that it is no longer accurate
representations	in the case of maps these show parts of the earth in a way that we can see a lot of information easily

An atlas is a book of maps. Maps are accurate representations of different parts of the world. A globe is a round model of the earth. Globes are useful because they show the world the way it really looks from space. The continents are in the correct position and have the correct shape. When continents are shown on maps, their size, location and shape may be distorted because maps show the earth in a 'flattened' way. Maps show more detail than globes. Maps are also easier to use than globes.

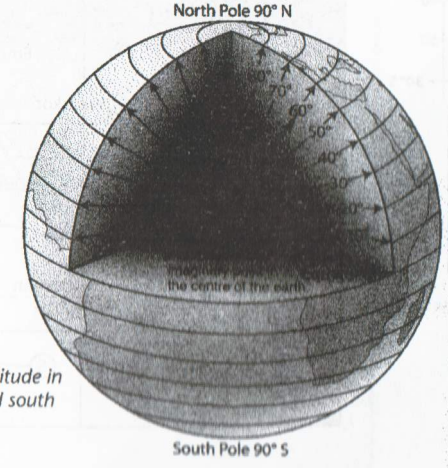


A world atlas is a book of maps that show different parts of the world.

1. Latitude and longitude – degrees and minutes

Lines of latitude

Lines of latitude are imaginary lines that circle the globe from east to west. They are used to locate places on the earth's surface. The equator is the line of latitude with the greatest diameter as it is the 'fattest' part of the earth. We give values to lines of latitude in degrees. The equator is the 0° line of latitude. We measure the angle of each line of latitude from the equator.



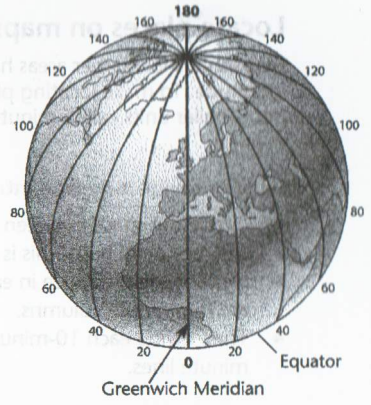
We measure lines of latitude in degrees both north and south of the equator.

Word bank ABC

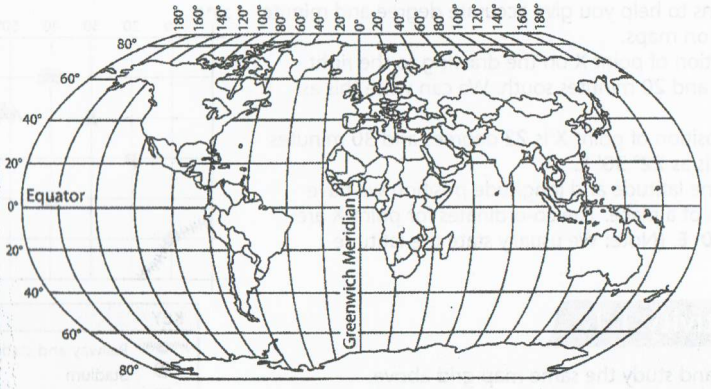
estimate	an approximate or rough judgement

Lines of longitude

Lines of longitude are imaginary lines that circle the globe from north to south. Lines of longitude are also called meridians. Each line of longitude passes through the North Pole and the South Pole. You should remember that the Greenwich Meridian (or Prime Meridian) is the 0° line of longitude. We calculate world time in zones from the Greenwich Meridian. There are 360 degrees of longitude on the globe that represents the earth. This is divided equally into 180 degrees east and 180 degrees west of the Greenwich Meridian.



Lines of longitude are measured to the east and to the west of the Greenwich Meridian.



We use lines of latitude and longitude on maps and globes to help locate places on the earth more accurately. For example, we can say a place is 30 degrees south (of the equator) and 10 degrees east (of the Greenwich Meridian). Maps only show certain lines of longitude. Most world maps only show lines of longitude and latitude 10 degrees or 20 degrees apart. You need to estimate where the lines that lie between these will be.

On maps that show larger areas such as a province, we may show lines of latitude and longitude in one-degree intervals.

Word Bank A B C

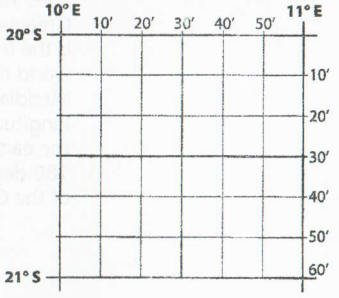
co-ordinates the point where one line of latitude and one line of longitude cross or meet

Locate places on maps using degrees and minutes

Maps that show larger areas have big spaces between each degree of latitude and longitude. To make locating places easier on these maps, we divide each degree into smaller units called minutes. There are 60 minutes in one degree – that's a lot of lines!

How to divide a degree into minutes

- Divide the space between one degree line and the next degree line in half – this is 30 minutes.
- Next divide the space in each half into three columns – these are ten-minute columns.
- Then divide each 10-minute column into ten equal one-minute lines.

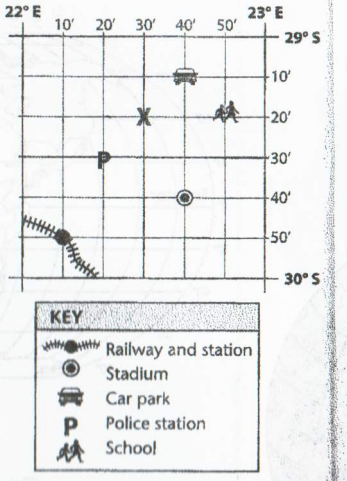


There are 60 minutes in one degree.

We use degrees and minutes to locate places on the earth more accurately. We do not show minutes on maps because all the lines would block out the detail of the map. You have to estimate where the minutes will go.
The symbol for degrees is ° and the symbol for minutes is ′.

Follow the instructions to help you give accurate degree and minute references for places on maps.

1. The latitude position of point X on the drawing to the right on is 29 degrees and 20 minutes south. We can write this as **29° 20′ S**.
2. The longitude position of point X is 22 degrees and 30 minutes east. We write this as **22° 30′ E**.
3. When we combine latitude and longitude position we have the co-ordinates of a place. The co-ordinates for point X are: **29° 20′ N, 22° 30′ E**. (Note: We usually state the latitude position first.)



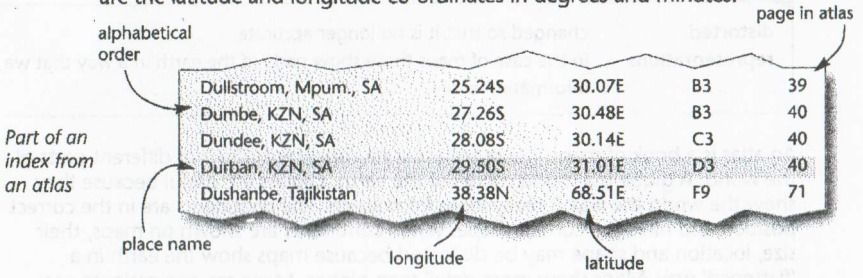
Classroom activity 1.1

Work on your own and study the same map grid above.

1. Identify the symbols at:
   a) 29° 50′ S, 22° 10′ E
   b) 29° 10′ S, 22° 40′ E
2. Give the latitude and longitude positions for:
   a) the police station
   b) the school.

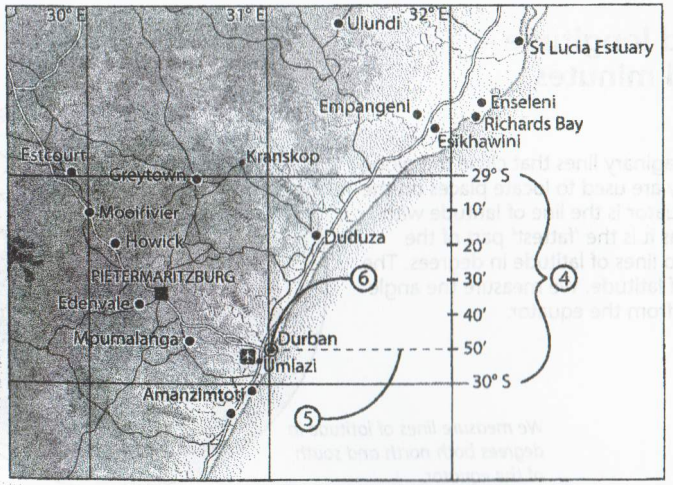
2. Using the atlas index to find places on a map

An index lists names of places in alphabetical order. The atlas index is at the back of the atlas. You will see a set of numbers next to each place name in the index. These are the latitude and longitude co-ordinates in degrees and minutes.



When you give the co-ordinates of a place, you state the latitude position first and the longitude position second. The following steps will help you locate places using an atlas. The city of Durban is used as an example.

1. Find the name of the place you want to locate in the alphabetical index. Durban will be under 'D'.
2. Write down the page number in the atlas and the latitude and longitude co-ordinates, e.g. 29° 50′ S, 31° 01′ E.
3. Go to the correct page in the atlas; in this case, page 40.
4. Look for the 29° and 30° lines of latitude. You know that Durban is between these two lines of latitude from its position: 29° 50′ S.
5. Find the latitude position: Durban's latitude is 29° 50′ S. You need to estimate where the minutes will be. You can estimate where the 50-minute line of latitude will be by finding the 60 minute line. You know that 60 minutes takes you to the next degree, which is 30°. So, 29° 50′ S will be close to 30° S.



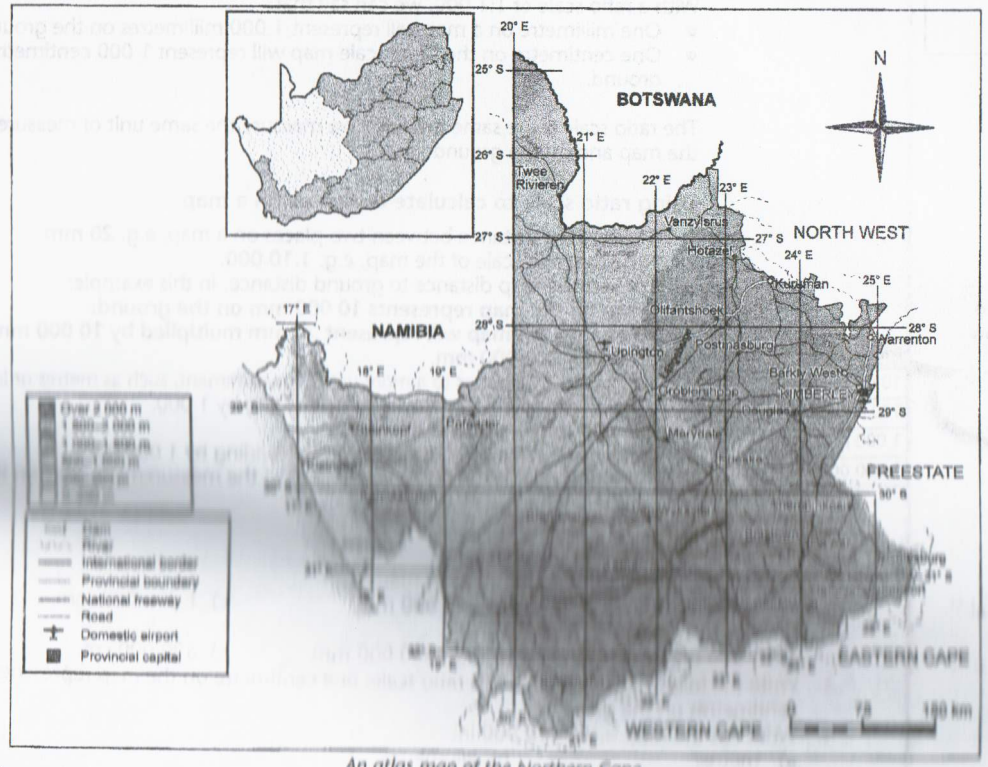
6. Find the longitude position: Durban's longitude is 31° 01′ E. This means that Durban is one minute east of 31°, so it is very close to the 31° line.
7. The point where the latitude and longitude co-ordinates meet gives you the location of the place you looked up in the atlas index. In the example of Durban, you will find the city at 29° 50′ S and 31° 01′E.

Classroom activity 1.2

Work with a partner to complete these tasks. Study the index and the map that follows. The map index shows a list of six places in the Northern Cape Province.

1. Write out the co-ordinates for:
   a) Upington
   b) De Aar.
2. Use these co-ordinates to locate Upington and De Aar on the map of Northern Cape. Point them out to another pair.
3. Create your own map index like the one on the right. Use the example to guide you.
   a) Give the latitude and longitude co-ordinates for Pofadder, Britstown, Barkly West and Calvinia.
   b) Add any two other places shown on the map. Give the latitude and longitude position for these places.

Places	Co-ordinates
Carnarvon	30° 55′ S, 22° 10′ E
Colesberg	30° 40′ S, 25° 08′ E
De Aar	30° 38′ S, 24° 02′ E
Kimberley	28° 40′ S, 24° 43′ E
Kuruman	27° 26′ S, 23° 27′ E
Noupoort	31° 15′ S, 24° 55′ E
Prieska	29° 40′ S, 22° 45′ E
Upington	28° 25′ S, 21° 15′ E
Victoria West	31° 25′ S, 23° 10′ E



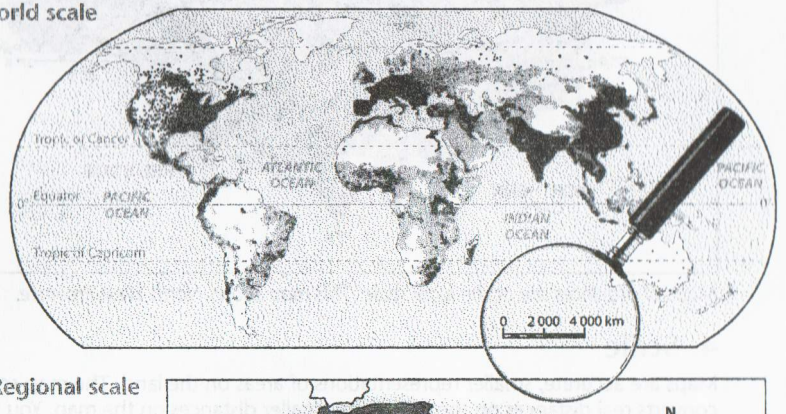
An atlas map of the Northern Cape

3. Kinds of scale in an atlas

Scale means making things smaller. You should remember from Grade 7 that not all the maps in an atlas have the same scale. The scales are different because the maps show different areas of land. Some maps in an atlas show the whole world. Some maps show countries, provinces or smaller regions. The scale of a map changes with the size of the area the map shows. Most atlases include maps at the following three scales:

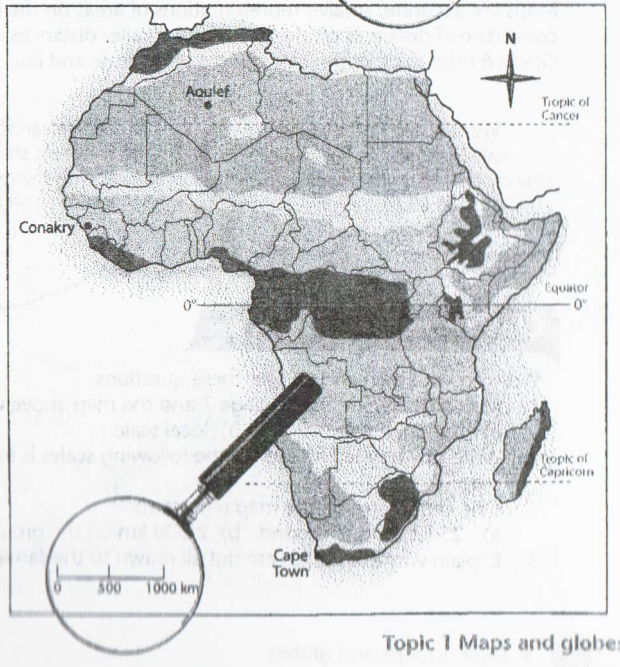
- world scale
- regional scale, such as maps of part of a continent
- local scale, such as maps of a country or province.

World scale

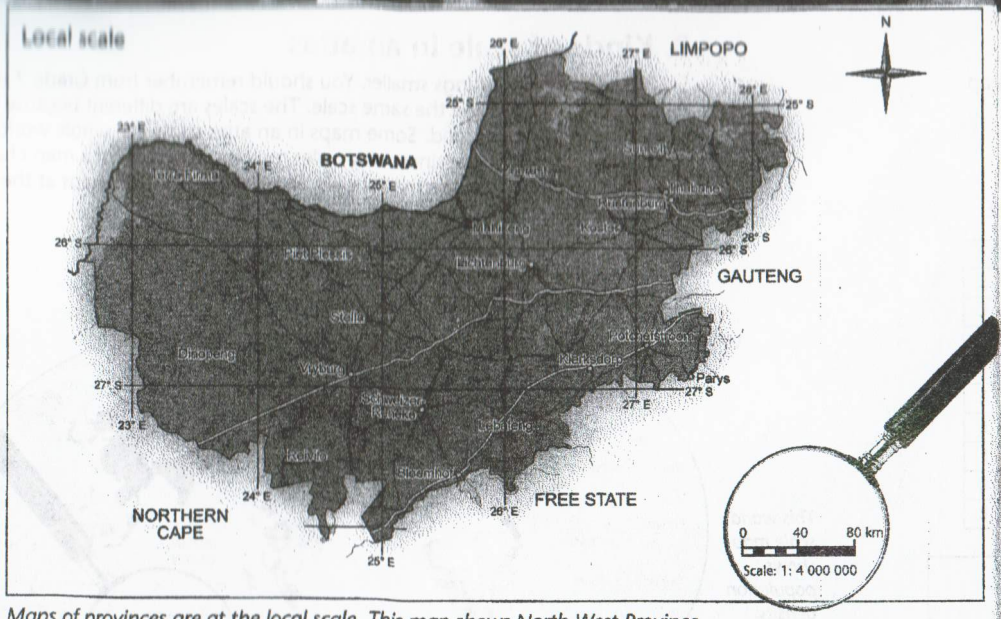


This world scale map shows population density.

Regional scale



This is a regional map that shows the natural vegetation of Africa.



Maps of provinces are at the local scale. This map shows North West Province.

4. Scale

Maps are accurate, smaller representations of areas on the land. The map scale converts real distances on the ground to smaller distances on the map. You learnt in Grade 6 how to describe scale using a word scale and line scale.

We can describe a world scale in words, for example: *One centimetre on the map represents 20 kilometres on the ground.*

We can show the scale of the map as a line. The line scale shows the distance on the map compared to distance on the ground. For example, a line scale may show kilometres on the ground as centimetres on the map.

0 20 40 60 km

Measurement table
10 mm : 1 cm
100 mm : 10 cm
1 000 mm : 1 m
1 000 000 mm : 1 km

Classroom activity 1.3

Work on your own and answer these questions.

1. Match the two maps on page 7 and the map above with:
   a) regional scale b) local scale c) world scale.
2. Write down whether each of the following scales is for a world map, a regional map or a local map:
   One centimetre on the map represents:
   a) 25 km on the ground b) 2 000 km on the ground c) 500 km on the ground.
3. Explain why atlas maps are not all drawn to the same scale.

Word bank ABC

ratio relationship between two amounts based on the number of times one number contains the other

Ratio scale or number scale

Ratio scale is another way of showing map scale. Ratio scale represents the scale in the same unit of measurement on the map and on the ground.

Example:
1 mm on the map represents 1 000 mm on the ground.
This shows us that one unit of measurement on the map represents 1 000 units of the same measurement on the ground.

We use the symbol : to show the ratio between the measurement on the map and the measurement on the ground.
We write the ratio scale as: **1:1 000.**

With a ratio scale we can change the kind of measurement we use. The ratio between the numbers on the map and on the ground will stay the same.
With a ratio scale of 1:1 000, we can say that:

- One millimetre on a map will represent 1 000 millimetres on the ground.
- One centimetre on the same scale map will represent 1 000 centimetres on the ground.

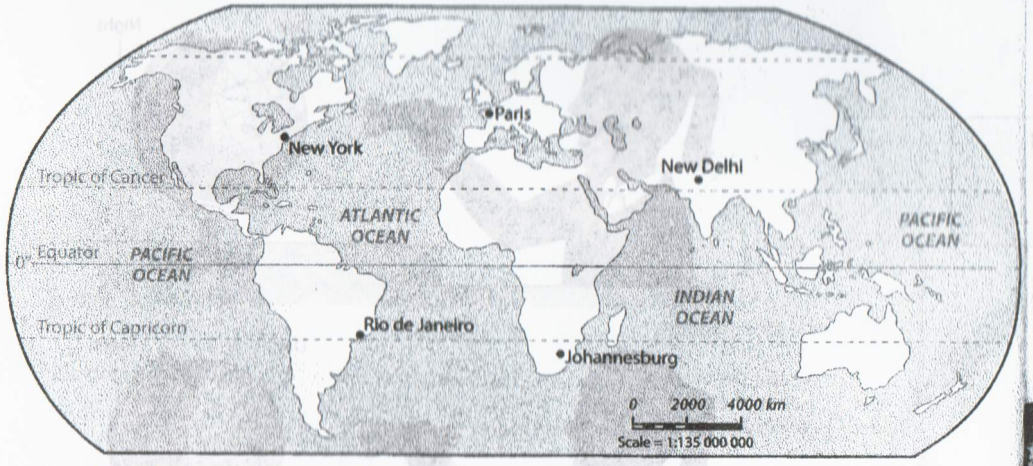
The ratio scale is the same provided we measure the same unit of measurement on the map and on the ground.

Using ratio scale to calculate distances on a map

1. Measure the distance between two places on a map, e.g. **20 mm**.
2. Note the ratio scale of the map, e.g. **1:10 000.**
3. Convert the map distance to ground distance. In this example:
   1 mm on the map represents 10 000 mm on the ground.
   20 mm on the map will represent 20 mm multiplied by 10 000 mm on the ground = 200 000 mm.
4. We convert millimetres to a more useful measurement, such as metres or kilometres.
   We convert millimetres to metres by dividing by 1 000.
   200 000 mm ÷ 1 000 = 200 m.
5. We convert millimetres to kilometres by dividing by 1 000 000.
   2 000 000 m ÷ 1 000 000 = 2 km. Look at the measurement table on the left.

Classroom activity 1.4

1. Convert the following measurements to metres:
   a) 100 000 mm b) 500 000 mm c) 1 000 000 mm
2. Convert the following to kilometres:
   a) 1 000 000 mm b) 550 000 000 mm c) 500 000 cm
3. Write the following word scale as a ratio scale: one centimetre on the map represents 10 000 centimetres on the ground.
4. Write out the ratio scale 1:10 000 in:
   a) metres b) kilometres.



The ratio scale on a map of the world

Calculate distances between settlements using different scales

Classroom activity 1.5 will help you to practise converting map distances to ground distances using different scales.

Classroom activity 1.5

Work with a partner and study the map of the world on this page, as well as the map of the North West Province on page 8.

1. How many millimetres on the ground are represented by one millimetre on the map of the world on this page?
2. Use the line scale on the map of the world to help you calculate the straight line distances between:
   a) Rio de Janeiro and Johannesburg
   b) Paris and New Delhi.
3. Examine the map of North West Province on page 8. Use the line scale to calculate the straight line distances between Mahikeng and the following places:
   a) Rustenburg
   b) Lebaleng
   c) Vryburg.
4. Use the ratio scale on the map of the world to calculate the distance in kilometres between New York and Paris. Show all your calculations.
5. Use the ratio scale on the map of North West Province to calculate distances between the following places in kilometres. Include all the calculations for each answer.
   a) Vryburg and Bloemhof
   b) Mahikeng and Parys
   c) Thabane and Klerksdorp.

5. Places in the news

In Grades 6 and 7 you located different news events on a map of the world. You should continue keeping a world map of news events this year. It helps you to learn about the world and practise your map skills.

A news map of the world

Homework activity

1. Find at least three news stories about events that are happening in the world. You can use newspapers and magazines, television, radio programmes and the internet as sources of news stories.
2. a) Make a short summary of each story. Write the summaries in your exercise book. Number each summary (1 to 3).
   b) Write each number on a blank map of the world in the correct place.
3. Give the co-ordinates in degrees and minutes for the places where the news stories happened.

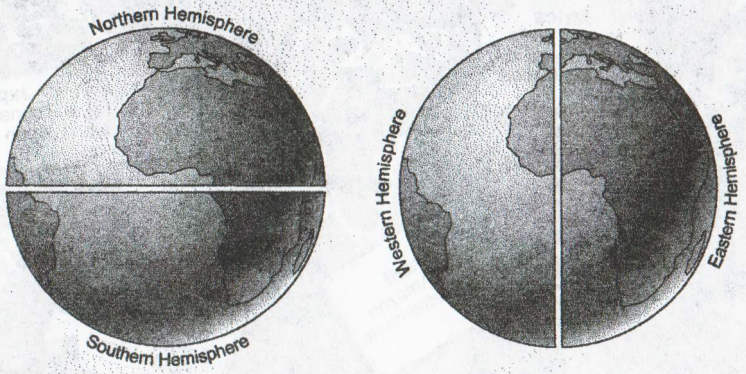
Unit 2 The globe

Word bank

axis	an imaginary line through the earth, between the North Pole and South Pole, around which the earth rotates
hemisphere	one half of the earth
rotates	to spin or turn around a fixed point

1. Hemispheres

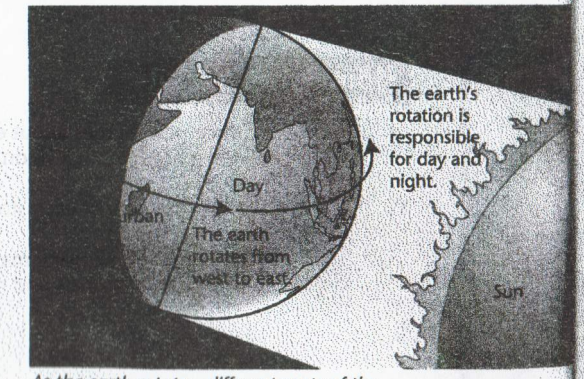
In Grade 6 you learnt that the world has four hemispheres. The equator divides the earth into the northern and southern hemispheres. The Greenwich Meridian and the 180° line of longitude also divide the world into the eastern and western hemispheres. Every point on the surface of the earth is in two hemispheres.



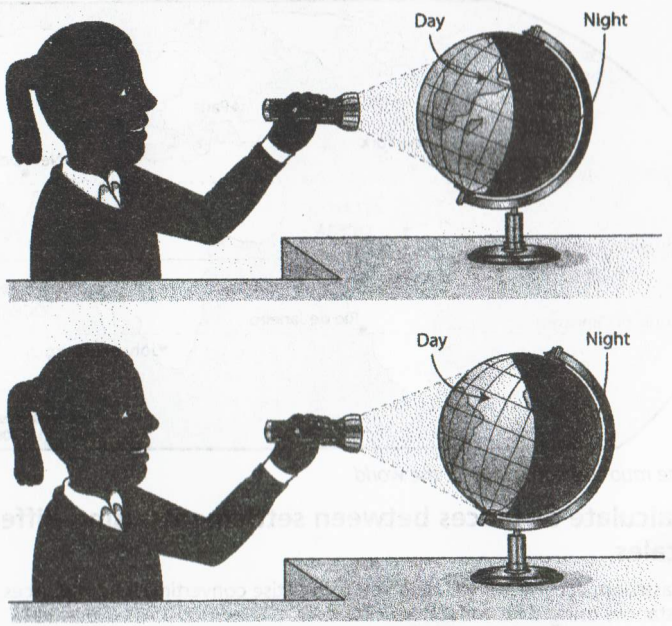
The earth's four hemispheres

2. The earth's rotation on its axis – day and night

The earth rotates on its axis. We cannot feel the earth's rotation but we know it rotates because the position of the sun in the sky changes during a day. The earth takes 24 hours to complete one 360-degree rotation. At the equator the earth rotates at a speed of 1 722 km per hour. During 24 hours, different places on the earth move into the sun's rays.



As the earth rotates, different parts of the earth's surface come into the sun's rays.



A simple experiment to demonstrate how the rotation of the earth causes day and night

Classroom activity 1.6

Work in small groups to complete this activity.

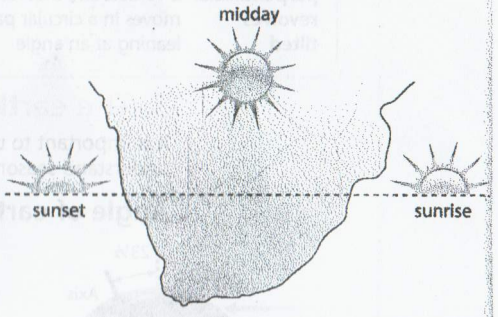
1. Use a torch and globe to do the experiment shown in the drawings above.
   a) Move the globe or ball from west to east.
   b) Notice which parts of the globe go in and out of the torch light or 'sun's rays'.
   c) Identify a place that experiences sunrise and a place that experiences sunset at the same time.
2. In which direction does the earth rotate?
3. How long does the earth take to rotate 360 degrees?
4. Name the two hemispheres where each of the following cities are located:
   a) Cape Town
   b) Moscow
   c) Los Angeles.
5. Write a paragraph to explain how the rotation of the earth causes day and night.

3. World time, time zones and the International Date Line

It is a different time in different parts of the world. An evening football match in Japan will happen at lunch time in South Africa. Time in Japan is eight hours ahead of time in South Africa.

Each place on the earth has day and night. Time is a measurement worked out by people. Even if you don't have a watch you can estimate the time by looking at the position of the sun in the sky.

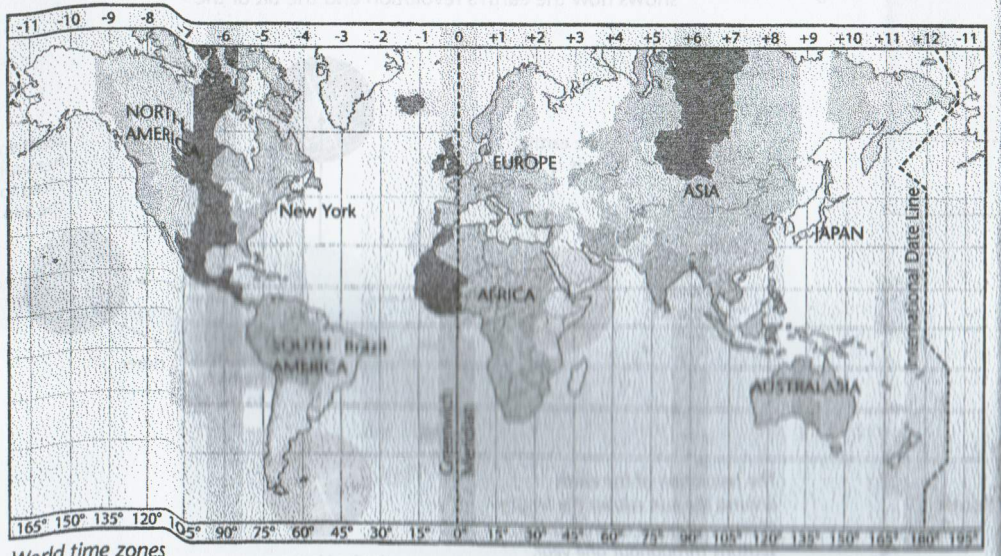
People have calculated that it takes 24 hours for the earth to complete one rotation. This means that time changes by one hour for every 15 degrees of longitude. This sum shows how to calculate time changes:
The earth takes 24 hours to complete one rotation on its axis.
360 degrees are covered in one rotation.
360° divided by 24 = 15°



The rotation of the earth from west to east means that places across the world have different times according to the sun.

World time zones

The world's time zones should change by one hour for every 15 degrees of longitude. Most countries adjust the time zones to fit in with the shape of their borders.



World time zones

Classroom activity 1.7

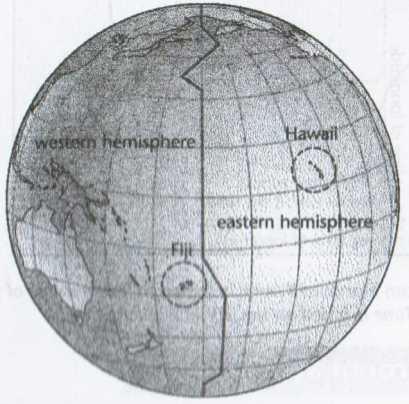
Work with a partner and answer the questions.

1. Are times earlier or later compared to South Africa in:
   a) Australia?
   b) South America?
2. What time will it be in South Africa if it is 8 p.m. in Japan?
3. Calculate the time difference between South Africa and Western Australia.
4. When it is 8 a.m. in Brazil, what time is it in South Africa?
5. Paul phoned his cousin in New York at 5 p.m. South African time. What time was it in New York?

Countries that cover a wide area of longitude have several time zones. Examples are the United States and Australia. According to longitude, China should have five time zones but in 1949 the Chinese government decided that China should have only one time zone.

The International Date Line

The International Date Line follows the 180° line of longitude. This line divides the world into the eastern and western hemispheres on the Pacific Ocean part of the world. The International Date Line is adjusted to fit in with the location and shape of countries and islands. Places in the eastern hemisphere are a day earlier than places in the western hemisphere.



The date changes either side of the International Date Line.

Fiji and Hawaii have a time difference of two hours, but they are one day apart. This is because Fiji is in the eastern hemisphere, on the opposite side of the International Dateline, to Hawaii, in the western hemisphere. So, when it is 6 p.m. on Saturday in Fiji, it is 8 p.m. on Friday in Hawaii.

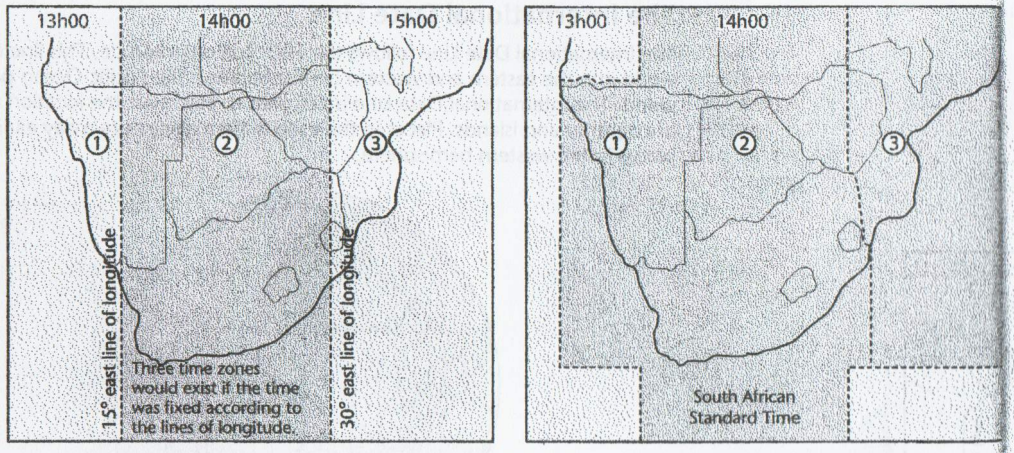
Classroom activity 1.8

Work on your own and answer these questions.

1. Name the line of longitude that the International Date Line is based on.
2. Why do countries adjust the International Date Line?
3. Explain why China should have five time zones.
4. If it is Wednesday in Fiji, what day is it in Hawaii?
5. Explain why Fiji and Hawaii have a different date.

4. South African Standard Time

The time zone in South Africa is called South African Standard Time (SAST). South Africa should have two time zones as the 15° and 30° lines of longitude both pass through the country. The South African government decided to adjust the time zones to fit the country's borders and use one time zone based on the 30° line of longitude.



South African Standard Time is adjusted to fit the shape of the country's borders. South African Standard Time is based on the 30° line of longitude.

Classroom activity 1.9

Work on your own and answers these questions.

1. Give the line of longitude from which South African Standard Time is based.
2. Which part of South Africa should have a different time zone, according to longitude?
3. Why do you think the government decided to have only one time zone in South Africa?
4. Name two other countries in southern Africa that have the same time as South Africa.
5. Namibia adjusts its time by one hour during winter, making time one hour earlier than South African Standard Time. Suggest reasons why Namibia adjusts its time in this way.

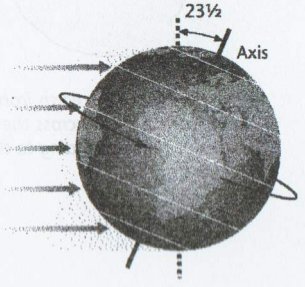
Word bank

perpendicular	a vertical line that forms a right angle with the horizontal
revolves	moves in a circular pathway around an object
tilted	leaning at an angle

5. The earth's revolution around the sun

It is important to understand the earth's relationship to the sun in order to understand seasons.

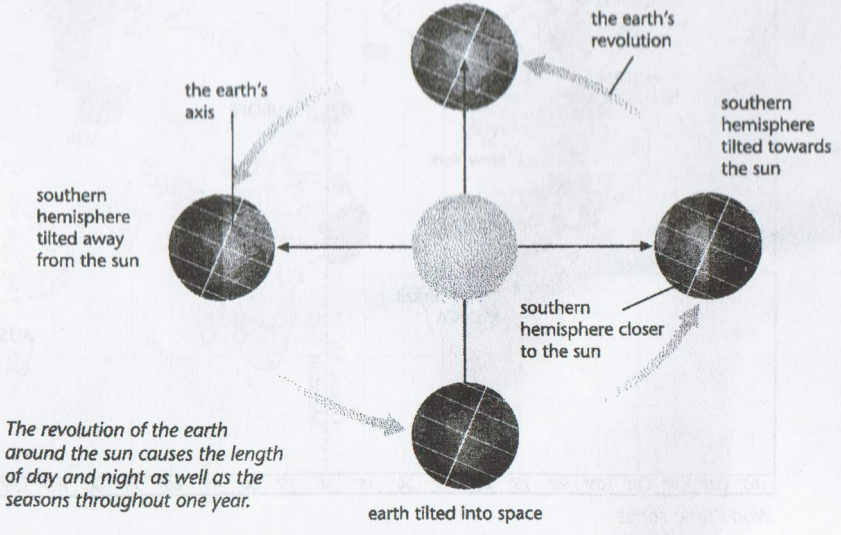
Angle of earth's axis



The earth tilts on its axis at an angle of 23½°.

The earth is not positioned parallel with the sun in space. It is tilted at an angle on its axis, 23½ degrees away from the perpendicular. The angle of the earth's axis affects the length of day and night and causes the different seasons. At certain times of the year different parts of the earth lean towards the sun, while at other times of the year these parts of the earth lean away from the sun. When a part of the earth leans away from the sun, this area is in the shadow of the earth for longer. This is the winter season. Days are shorter in winter.

The earth is always moving. It rotates on its axis, and it also revolves around the sun. Rotation causes day and night. The earth takes 24 hours to rotate on its axis. The earth takes 365 and one-quarter days to make one revolution around the sun. The diagram below shows how the earth's revolution and the tilt of the earth's axis cause the seasons.

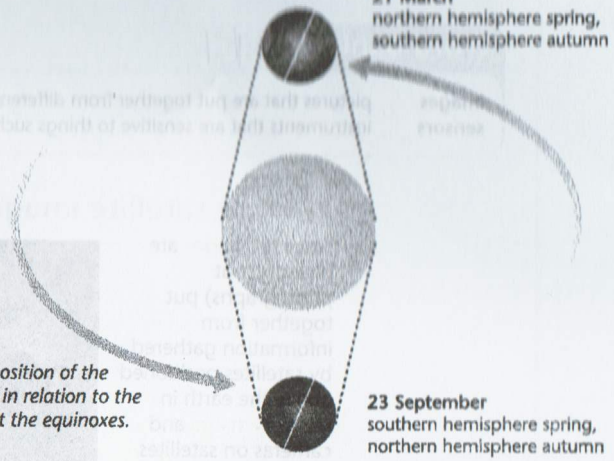


The revolution of the earth around the sun causes the length of day and night as well as the seasons throughout one year.

Equinoxes, solstices and angle of the midday sun

Equinox

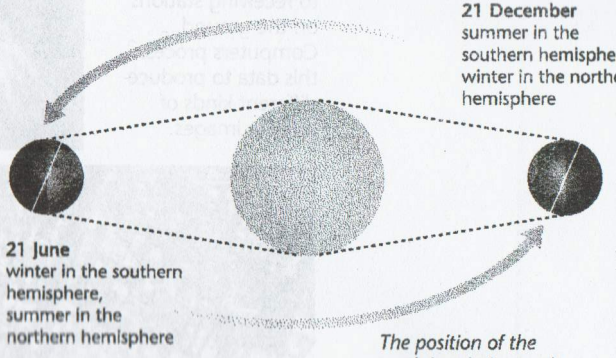
The equinoxes are the times of the year when day and night are the same number of hours for all places in the world. There are two equinoxes each year. The first is on 21 March and the second is on 23 September. On these dates, the sun is directly overhead at the equator. The earth does not tilt towards or away from the sun. The equinoxes occur in the spring and autumn seasons.



The position of the earth in relation to the sun at the equinoxes.

Solstice

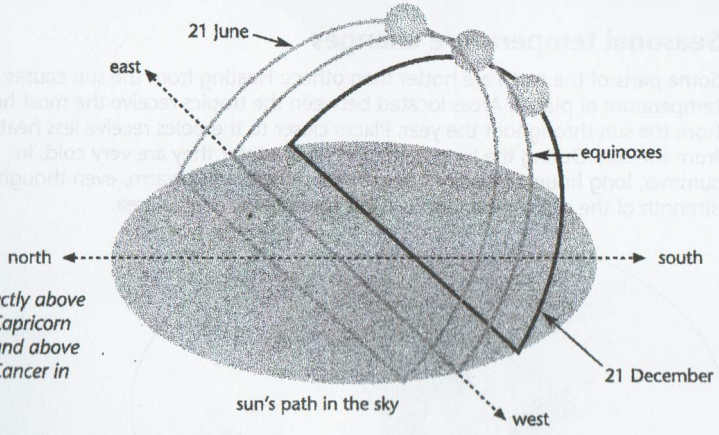
The solstices occur on 21 June and 21 December each year, when either the southern hemisphere or northern hemisphere is tilted towards the sun. On 21 June the northern hemisphere leans towards the sun. The sun's rays fall directly on the Tropic of Cancer, which is north of the equator.
On 21 December the southern hemisphere leans towards the sun. The sun's rays fall directly on the Tropic of Capricorn, which is south of the equator. The solstices happen in the summer and winter seasons.



The position of the earth in relation to the sun during the solstices.

Angle of the midday sun

You know that the temperature is hottest close to midday, even in winter. You may also have noticed that the sun does not get as high in the sky at midday in winter as it does in summer. The height of the sun in the sky depends on the position of the earth in its revolution around the sun. For places in the northern hemisphere, the sun reaches its highest point at midday on 21 June. This is when the sun is positioned over the Tropic of Cancer. For places in the southern hemisphere, the sun reaches its highest angle in the sky on the summer solstice on 21 December. This is when the angle of the sun is 90°, or perpendicular to the earth over the Tropic of Capricorn. At the equinoxes the sun is directly above the equator at an angle of 90° to the earth.



The sun is directly above the Tropic of Capricorn in December and above the Tropic of Cancer in June.

At the summer solstice the sun does not appear to set for places inside the Arctic and Antarctic circles. This photo shows the same place at different times during the day. The sun does not go below the horizon.

Seasonal changes in lengths of day and night

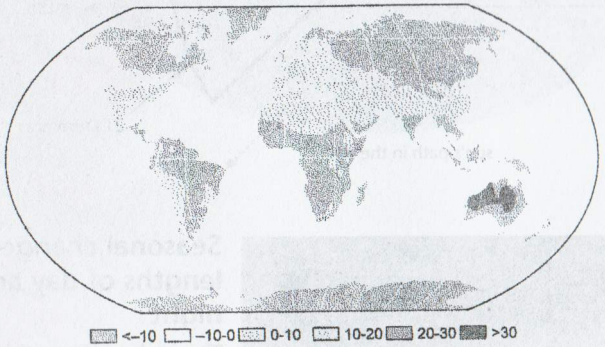
The angle of the earth's axis influences the number of hours of sunlight that different parts of the earth receive at different times of the year. In December, the parts of the southern hemisphere that are furthest from the equator receive long hours of sunlight. At this time of the year, the northern hemisphere receives less sunlight and has shorter daylight hours. In June the opposite is true. The northern hemisphere receives more hours of sunlight and longer daylight hours.

Homework activity

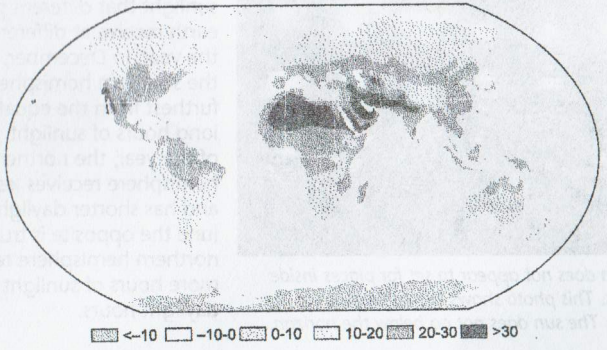
1. Copy the following paragraph into your exercise book and fill in the missing words.
During the December solstice, the _____ hemisphere is tilted _____ from the sun more than at any other time of year. As a result, the sun does not rise as _____ in the sky and days are _____.
2. Write a paragraph to explain how the tilt of the earth's axis and the revolution of the earth cause the length of day and night to change at different times of the year.

Seasonal temperature changes

Some parts of the earth are hotter than others. Heating from the sun causes the temperature of places. Areas located between the tropics receive the most heating from the sun throughout the year. Places closer to the poles receive less heating from the sun. During the long dark months of winter they are very cold. In summer, long hours of daylight help to keep these areas warm, even though the strength of the sun is weak because it is spread over a wide area.



Average temperature at certain latitudes in January



Average temperature at certain latitudes in July

Classroom activity 1.10

Work on your own and answer these questions.

1. What is the coldest part of the world in January?
2. a) Give the average temperature for much of South Africa in January.
   b) What is the temperature of the same area of South Africa in July?
3. Explain why temperature changes with the seasons.

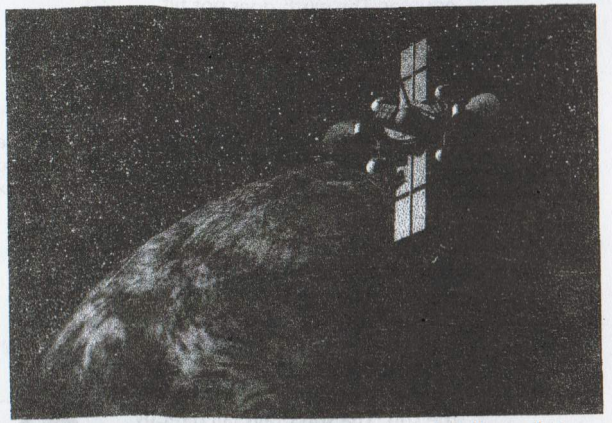
Unit 3 Satellite images

Word bank

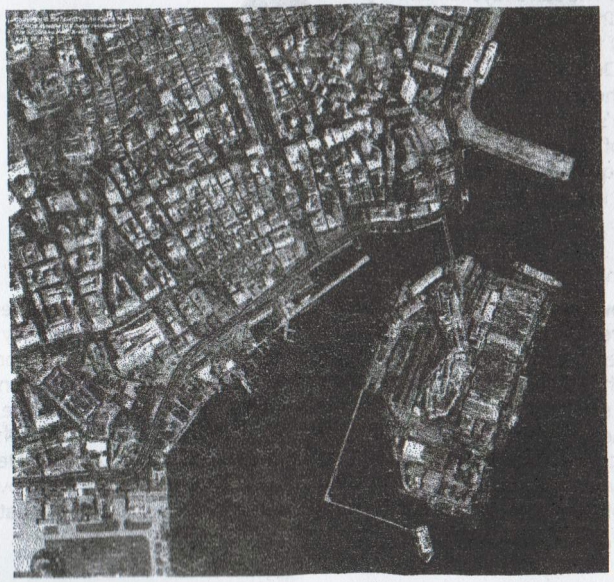
images	pictures that are put together from different kinds of electronic data
sensors	instruments that are sensitive to things such as light, movement and heat

1. What satellite images look like

Satellite images are pictures (not photographs) put together from information gathered by satellites positioned above the earth in space. Sensors and cameras on satellites send electronic data to receiving stations on the ground. Computers process this data to produce different kinds of satellite images.



Satellites collect information about the earth.

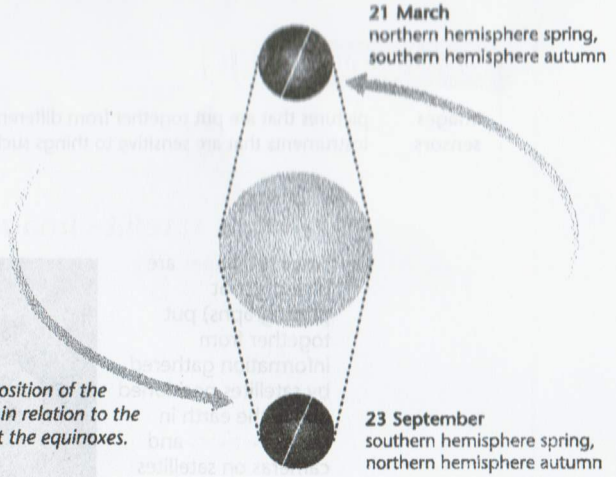


A satellite image showing part of the harbour in Rio de Janeiro, Brazil

Equinoxes, solstices and angle of the midday sun

Equinox

The equinoxes are the times of the year when day and night are the same number of hours for all places in the world. There are two equinoxes each year. The first is on 21 March and the second is on 23 September. On these dates, the sun is directly overhead at the equator. The earth does not tilt towards or away from the sun. The equinoxes occur in the spring and autumn seasons.



The position of the earth in relation to the sun at the equinoxes.

Solstice

The solstices occur on 21 June and 21 December each year, when either the southern hemisphere or northern hemisphere is tilted towards the sun. On 21 June the northern hemisphere leans towards the sun. The sun's rays fall directly on the Tropic of Cancer, which is north of the equator.
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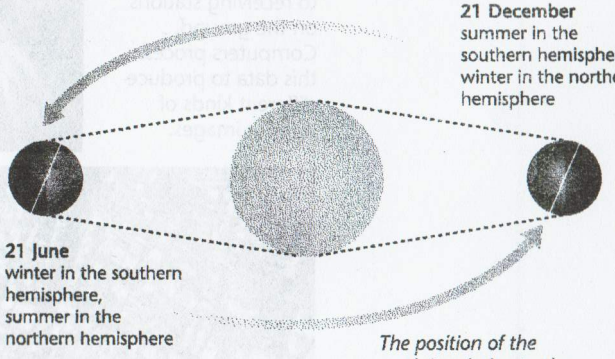
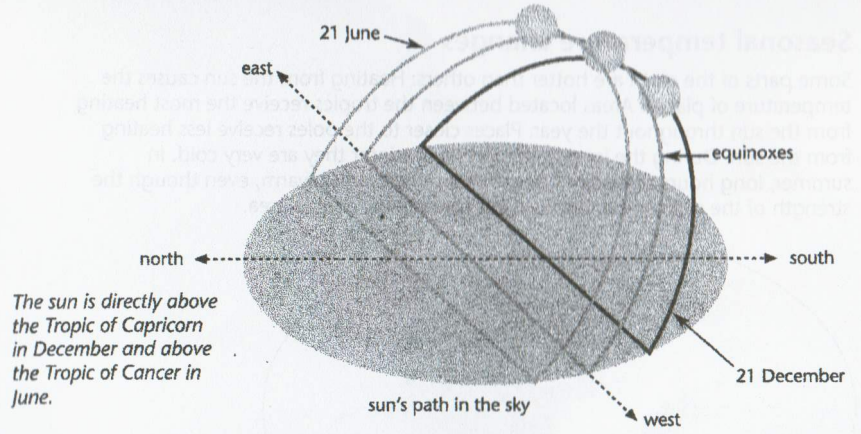


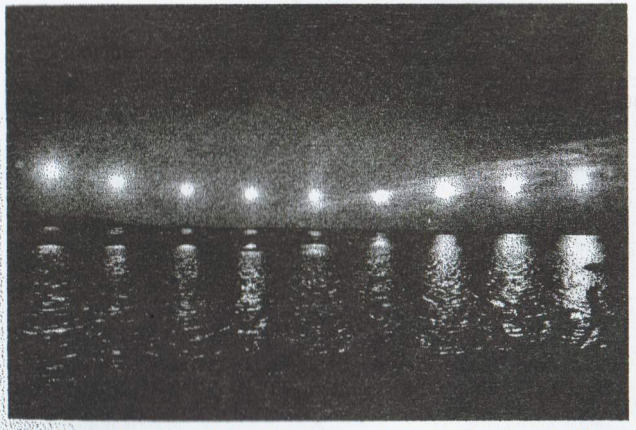
The position of the earth in relation to the sun during the solstices.

Angle of the midday sun

You know that the temperature is hottest close to midday, even in winter. You may also have noticed that the sun does not get as high in the sky at midday in winter as it does in summer. The height of the sun in the sky depends on the position of the earth in its revolution around the sun. For places in the northern hemisphere, the sun reaches its highest point at midday on 21 June. This is when the sun is positioned over the Tropic of Cancer. For places in the southern hemisphere, the sun reaches its highest angle in the sky on the summer solstice on 21 December. This is when the angle of the sun is 90°, or perpendicular to the earth over the Tropic of Capricorn. At the equinoxes the sun is directly above the equator at an angle of 90° to the earth.



The sun is directly above the Tropic of Capricorn in December and above the Tropic of Cancer in June.



At the summer solstice the sun does not appear to set for places inside the Arctic and Antarctic circles. This photo shows the same place at different times during the day. The sun does not go below the horizon.

Seasonal changes in lengths of day and night

The angle of the earth's axis influences the number of hours of sunlight that different parts of the earth receive at different times of the year. In December, the parts of the southern hemisphere that are furthest from the equator receive long hours of sunlight. At this time of the year, the northern hemisphere receives less sunlight and has shorter daylight hours. In June the opposite is true. The northern hemisphere receives more hours of sunlight and longer daylight hours.

Homework activity

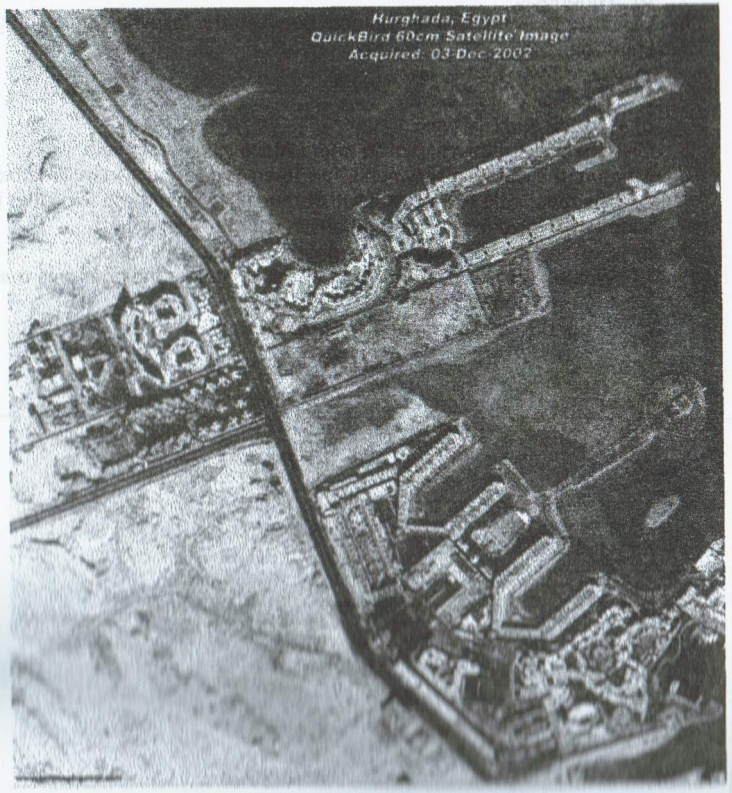
1. Copy the following paragraph into your exercise book and fill in the missing words.
   During the December solstice, the _____ hemisphere is tilted _____ from the sun more than at any other time of year. As a result, the sun does not rise as _____ in the sky and days are _____.
2. Write a paragraph to explain how the tilt of the earth's axis and the revolution of the earth cause the length of day and night to change at different times of the year.

Word bank

zoom in	make something appear closer than it actually is

2. Information from satellite images

Satellite images can be used to examine many conditions about the earth, including soil erosion, land use, vegetation and cloud patterns. Satellite images can also zoom in to show smaller areas of the earth's surface.

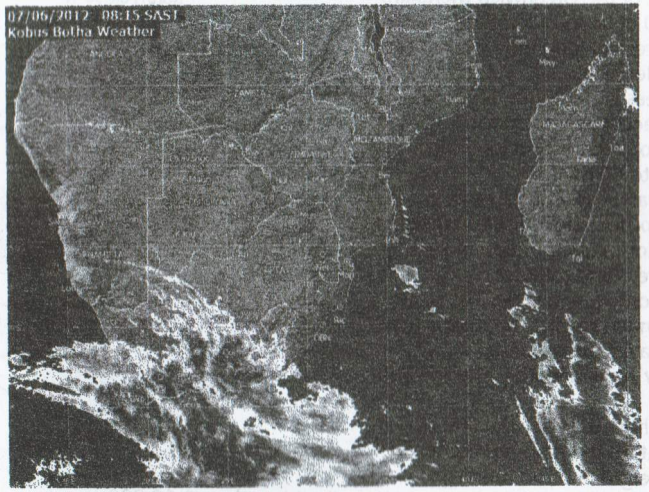


This is a satellite image of Hurghada holiday resort on the Red Sea in Egypt. Deep water appears dark on satellite images.

Word bank

forecast	to study data (in this case, about the weather) and state what is likely to happen a few hours or days later
meteorologists	scientists who study scientific data related to the weather

3. How satellite images are used



Information from weather satellites shows the position and types of clouds in the atmosphere. Sensors on board satellites can also determine temperature, wind speeds and cloud cover. A weather satellite gives information about conditions in the atmosphere every few hours. This helps meteorologists to forecast likely weather conditions on the ground. The satellite image on the left shows a band of cloud bringing wet weather to the south-west part of South Africa.

A weather satellite showing clouds and rain moving eastwards across South Africa.

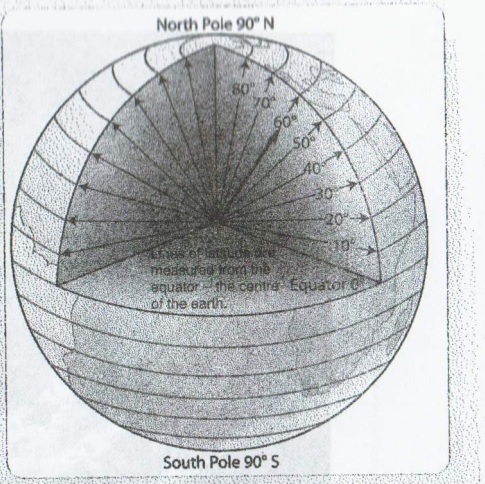
Classroom activity 1.11

Work with a partner and answer these questions.

1. Examine the satellite image above.
   a) In which season was this information recorded? Look at the date on the image to help you.
   b) What has been added to this satellite image to make it more useful?
   c) Between which latitudes are there clouds?
   d) Use an atlas to help you name settlements in three provinces that could experience rain at this time. The letters on the image will guide you.
   e) What do you think the weather is like in the rest of southern Africa?
   f) Look for differences in vegetation cover in the satellite image. What does vegetation indicate about rainfall?
2. How do you know that the satellite image of Rio de Janeiro on page 21 shows a harbour area?
3. Which satellite image on pages 21-23 shows the smallest area? Who do you think might find this image useful? Give your reasons.
4. On the satellite image of Hurghada on page 22 identify the areas of deep water and shallow water.
5. Write a few sentences in which you compare land use in the Hurghada image to land use in the Rio de Janeiro image. Look at the kinds of roads, buildings, open space and areas of water in each image.

Summary

- Lines of latitude circle the globe from east to west. Lines of longitude circle the globe from north to south.
- We measure the angle of each line of latitude from the equator, which is at 0°. There are 90 degrees of latitude north and south of the equator.
- Longitude lines are also called meridians. The 0° line of longitude is the Greenwich Meridian.
- We measure the other lines of longitude east and west of the Greenwich Meridian.
- There are 180 degrees of longitude east and 180 degrees of longitude west of the Greenwich Meridian.
- We use degrees and minutes to locate places more accurately on maps.
- Each degree of latitude and longitude can be divided into 60 minutes.
- The index of an atlas lists places in alphabetical order. The index also gives the latitude and longitude position of each place in degrees and minutes.
- All maps are drawn to a scale. The scale shows how much smaller the map is than the same area on the ground.
- We can show scale in words, as a line and as a ratio.
- Ratio scales show us what one unit of measurement on the map represents on the ground, e.g. 1 mm on the map represents 10 000 mm on the ground. We write this scale as 1:10 000.



- The shape of the earth means that one half of the earth will always be facing away from the sun while the other side faces the sun.
- The earth rotates on its axis. It takes 24 hours to complete one 360-degree rotation.
- The rotation of the earth means that all parts of the earth's surface move into and out of the sun's rays.
- The most obvious experience of the earth's rotation is day and night.
- Time changes by one hour for every 15 degrees of longitude.
- Time is measured from the Greenwich Meridian. Places to the east of the Greenwich Meridian have earlier times. Places to the west have later times.
- The angle of the earth's axis affects both the length of day and night and it causes the different seasons.
- The earth takes 365¼ days to complete one revolution around the sun.
- The solstices occur on 21 June and 21 December, when the sun is directly above the tropics.
- The equinoxes occur on 21 March and 23 September, when the sun is directly over the equator on the earth's revolution around the sun.
- Satellite images are made up of information sent from satellites in space to receiving stations on the ground.
- Satellite images can be used to examine a variety of conditions about the earth, including soil erosion, land use, vegetation and cloud patterns.

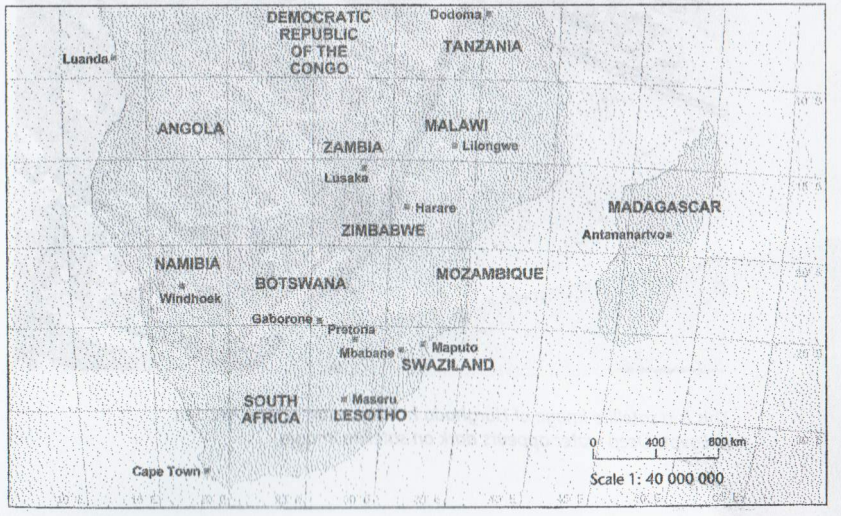
Formal assessment tasks

Note to teacher: There are more examples of formal assessment tasks in the *Teacher's Guide*.

Activity 1 (20 marks)

Examine the map of southern Africa on this page.

1. Name two countries that the Tropic of Capricorn passes through. (2)
2. Identify the cities at these locations:
   a) 25° 58′ S, 32° 35′ E
   b) 15° 26′ S, 28° 20′ E
   c) 8° 50′ S, 13°, 15′ E (3)
3. Give the latitude and longitude co-ordinates in degrees and minutes for:
   a) Harare
   b) Windhoek. (2)
4. Calculate the straight line distances between the following cities using the line scale.
   a) Cape Town and Lusaka
   b) Windhoek and Harare
   c) Luanda and Maputo (3)
5. Give the scale of the map of southern Africa as a word scale. (1)
6. Measure the distance between Cape Town and Maputo in millimetres. Use the ratio scale to calculate the distance between these two cities in kilometres. Include your calculations in your answer. (4)
7. a) Explain why the map on this page is a small scale map. (2)
   b) Would a large scale map show a smaller area or a bigger area than the map on this page? (1)
   c) Suggest two uses of large scale maps. (2)

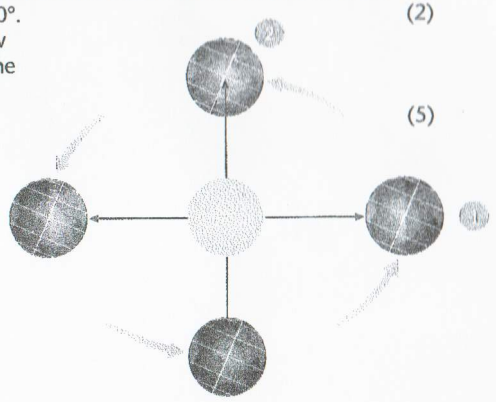


Southern Africa

Activity 2 (10 marks)

Study the diagram that follows.

1. Match the numbers on the diagram with the words *equinox* and *solstice*. (2)
2. On what date is the summer solstice in South Africa? (1)
3. Match two of the following numbers with *rotation* and two numbers with *revolution*: 24, 23½°, 365 ¼, 360°. (2)
4. Write a paragraph to explain how the revolution of the earth and the tilt of the earth's axis cause the different seasons. (5)

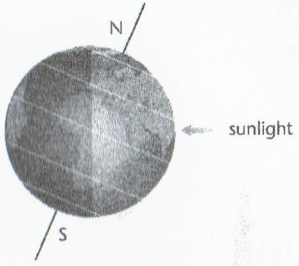


Activity 3 (10 marks)

1. Match the words and meanings in the table below. Write out your answers as complete sentences. (4)

Words	Meanings
Equinox	The position of the sun in the sky above the horizon
Solstice	The times of the year when the sun is directly above one of the tropics
Earth's axis	The times of the year when the sun is directly above the equator
Angle of the midday sun	The angle the earth is tilted away from the perpendicular

2. Copy and complete the following sentences.
   a) Time should change by one hour for every _____ degrees of longitude.
   b) The date is different by one day either side of the _____.
   c) Places to the east have _____ times than places to the west of South Africa. (3)
3. Make a copy of the diagram on the right.
   a) Label the earth's axis.
   b) Mark an X in a place where the days are long.
   c) Shade the side of the earth that is experiencing night. (3)



Total: 40 marks

Topic 2

Climate regions

What this topic is about

- Factors that influence temperature and rainfall
- South Africa's different climate regions
- Difference between weather and climate
- Different kinds of world climates

Look at the picture

1. Suggest a place in South Africa where this place could be.
2. Describe what you think the temperature and rainfall of this area are like.
3. Make one statement about the weather in this place.
4. Make a statement about the climate of the area.

SECTION A : COMPREHENSION

READ THE PASSAGE CAREFULLY AND ANSWER THE QUESTIONS THAT FOLLOW.

IMIJONDOLO - Life in the informal world *by Themba Nyathikazi*

Shack settlements, generally known as 'imijondolo', sprawl all over the country. The significant 'great trek' of people who left their rural areas in search of greener pastures in the urban areas has been the major contributor to the informal dwellings that are seen in most parts of the Durban Metropolitan region these days.

In the old days we found that the migration of workers played a very important role in this new type of housing. Men had to find jobs around Durban in order to supplement their incomes and feed their families. Some brought along their families to the glittering city life whilst others left their wives and children in the rural areas.

The influx control laws meant that people who came to the cities had to be accommodated either in barracks or hostels controlled by the city officials. At that time, it was quite important that this labour market be accommodated around the city's peripheral areas for the benefit of the industrial sector. Many workers chose to stay in the shack settlements.

A transitional period followed soon after when the authorities decided to mark or give numbers to each shack unit after negotiations with the shack communities. The numbers meant that the shack owners are therefore recognised by the authorities and the authorities could control and easily identify the shacks. A degree of compromise among the authorities and the shack communities has eventually developed. Access routes and footpaths have been designed including the provision of toilet facilities.

Most people still collect drinking water from water stand pipes that are located in convenient spots within the informal settlement. In most instances, primus stoves and gas cylinders are used for cooking. It is not unusual to find expensive household appliances such as hi-fi systems, television sets and expensive fridges in some shacks.

Some people might sneer at the type of food cooked in these areas, but the locals enjoy pig trotters and chicken feet. The locals salivate when this snack, popularly known as "walkie talkies', is mentioned. Chicken feet sold in supermarkets are sometimes called 'lost relatives'. Sorghum beer and home brewed vodka or 'Isiqatha' are prepared in big drums at secluded spots within the shack settlement. Police and the health authorities find it difficult to locate these hidden factories.

Campaigns such as 'water and electricity for all' introduced by the Durban Metro Council make it possible for people living in these informal areas to survive even under strenuous conditions. Services rendered by the authorities signify improved relations with the shack dwellers.

Community upliftment programmes have been introduced in these areas, such as Masakhane, anti-crime and clean-up campaigns. The humour and the atmosphere that prevails in informal settlements make people feel part of a single community. There is a spirit of neighbourliness and solidarity when you chat to the members of the shack community.

There are many 'spazas' or tuck shops and a large amount of beer and soft drinks is stocked. It is interesting to note that shacks are usually built at night with the daytime free of the hammering sounds whilst people go to neighbouring areas to look for scrap material and wood for building purposes. Entertainment and sport facilities are rather scarce or not available in these areas.

In most informal settlements, to be allowed in as a local resident, one has to be introduced to the self- proclaimed landlord or be prepared to pay a certain amount of money. Sometimes payment in kind, like a case of beer and a bottle of brandy, secures a newcomer a piece of land. Those who have been accepted as newcomers will in turn impose restrictions on other newcomers. They often ask for money from newcomers before introducing them to the landlord.

Unemployment, poverty, illiteracy, crime and disease is the day to day burden of these communities. However, there is planned social transformation in many informal settlements around Durban where efforts at building capacity, promotion of community development, skills training and self employment are being introduced and promoted.

There is also confidence in the new government especially when one thinks of the 'milk and honey' that has been promised, namely, houses and better infrastructure.

To live in an 'umjondolo' is not to live without hope. Life can always get better!

Glossary:

influx	:	inflow	(line 9)
transitional	:	changing	(line 14)
strenuous	:	difficult	(line 33)
self-proclaimed	:	claimed by oneself	(line 46)
transformation	:	change	(line 52)
infrastructure	:	basic structure / organisation	(line 56)

ANSWER THE FOLLOWING QUESTIONS CAREFULLY.

REFER TO THE MARK ALLOCATION IN DETERMINING THE LENGTH OF YOUR RESPONSE.

1. Explain in English what the Zulu term "imijondolo" means. (1)
2. Explain in your own words what the major contributor to the informal dwellings has been. (2)
3. What were the consequences of the influx control laws? (2)
4. Quote one reason why it was considered important that these migrant workers were housed around the city's peripheral areas. (2)
5. What were two of the positive things which happened as a result of the numbering of the shacks? (2)
6. Name the unusual items that can be found in an informal settlement and say why they are considered to be unusual. (4)
7. What is the popular snack of pig's trotters and chicken feet know as? (1)
8. Why would most people sneer at this diet? (2)
9. The police and health authorities regularly search the shack settlements, but most often in vain. What is it that they are searching for and why do they battle to locate it? (3)
10. Account for the shacks being built at night. (2)
11. Explain in your own words the several practices that take place before one is allowed in as a local resident. (3)
12. List three of the day-to-day burdens of the communities. (3)

Comprehension : 2

Motivate children with love, instead of fear

WITH most schools and tertiary institutions closing shortly for the winter vacation, parents are virtually "pulling out teeth" coping with the new generation of children who are far ahead and more astute in terms of their thinking, exposure to information, and struggling to ward off negative influences of a rapidly changing and evolving society. When President Barack Obama was recently asked what he considered the most difficult job, he politely said: "It's bringing up my children."

Perhaps some of the following comments may help parents who are trying to achieve a balance between what is currently considered good parenting vs traditional ways of rearing children in a new dynamic society.

Some current generation parents are attempting to play a more active role, spending more quality time rather than being caught up in the vicious cycle of time and the rat-race, and pressure and demands of the adult world, while others seem to deny some of the harsh realities and may cope by burying their heads in the sand, hoping that problems will go away.

Discipline techniques need to be more sharpened and more child-friendly, drawing on the skills to motivate children with love, not fear. Parents have become like guinea pigs when it comes to disciplining children and realise that they cannot use some of the tools of the older generation who did not spare the rod and labelled it "growing pains". Gone are also the days of fasting and home-grown chicken, to the double-beef burgers, grilled pork-ribs and the 500gram fillet steak and sushi (raw fish). The century has changed from subservient children to questioning youngsters with analytical minds that often fuel their attitudes, likes, aspirations and behaviour.

However, the basic that parents look forward to in children are issues relating to obedience, honesty, respect, transparency, open-communication, trust, responsibility and maturity in the choices they make.

Society in general is undergoing the pangs of transformation, with many individuals being caught up in the rough seas of life. In addition, while digital technology (Mxit and Facebook) present unlimited opportunities for virtual interaction, it also poses dangers where young and unsuspecting children are lured into undesirable activities and/or abuse. Parents must note the old adage of "smooth runs the water where the brook is deep". They should therefore act as mentors and promote a culture whereby children can talk to them openly.

Parenting is hard and understanding our parenting styles is a first step in dealing with daunting demands. There are a few types of parenting – permissive parenting where parents are overindulgent, too lenient and spoil the children. The second type of parenting is called authoritarian parenting where orders must be followed without any excuses. Authoritarian parents are often over-protective and may either intrude on a child's need for personal space, privacy or control based on past inflexible social conditioning habits. This often results in rebellion and secretive behaviour that may lead to lurking dangers.

Research has shown that it is healthy to involve children in decision making, and also, to see the world from a child's perspective. Listening, empathy and cultivating an environment that underpins the notion of safety, security, nurturing, refined values and being a safe anchorage, enables our children to experience life and its challenges. I recall an old man telling his daughter on her first night out that she must be home at 12 midnight and not bring disgrace on the family. She subsequently came home at 5am the next morning, but before the father could speak, she told her dad that he should not worry as she had already brought disgrace on the new boyfriend's family.

Young people must be allowed to unwind, relax and enjoy themselves during the breaks, within the limits of maturity, responsibility and self development and growth. Parents must always provide quality-time, love, caring, support and understanding, so necessary for our children to grow in this challenging society.

ASHWIN K SINGH

Durban

Questions :

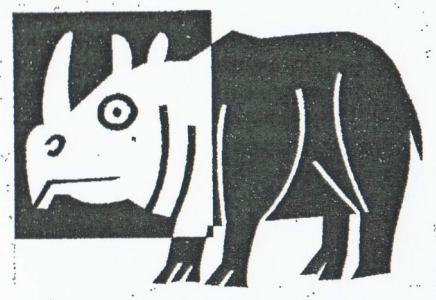
1. Why are parents virtually 'pulling out their teeth'?
2. How are the current generations parents trying to close the gap between their children and them? Explain
3. How have children changed from the past? Give two ways they have changed?
4. What type of discipline won't work on the new generation of children? Why?
5. Describe problems that children of the new generation face. List at least 2 problems.
6. In this day and age do you think that your parents should be permissive parents? Explain.
7. What problems could an authoritarian parent face? Explain
8. Why is it important for parents to ask children their opinions in decision-making?
9. Do you think being a parent is an easy/difficult task? Explain
10. Is being a parent a problem for only poor people or does this issue affect everyone? Quote from the passage.

Section A: Comprehension – Question 1

Read the passage printed below and answer the questions that follow.

SOUNDING THE HORN

by Christopher Clarke



1. Unless you've been hibernating you would have heard this statistic countless times: last year, 668 rhino were brutally butchered for their horns within South Africa's borders. That's almost two rhinos every day for 365 days.
2. Rhino poaching in our national parks is referred to as a 'war' and we are told that increasing numbers of rangers, helicopters and tracker dogs are being sent out to fight this raging battle. Despite all the fighting rhetoric, it's clear we're losing this war. Badly. The East's demand for rhino horn is growing, and so is the death toll. However, in Namibia, the situation couldn't be more different. Numbers of reported poaching incidences in the past two decades has not reached three figures. Why do these different poaching situations exist just a few hundred kilometres from each other?
3. Namibia has a smaller and more dispersed rhino population in what is mainly a desert, so the tracking of animals and transporting of horns is more difficult. Here the Kruger National Park shares a long border with Mozambique where wildlife regulation is poor. Easy accessibility from Johannesburg makes it convenient for poaching syndicates and our officials are considered to be more corrupt than Namibia's.
4. Namibia also has a unique and successful government programme – unimaginatively called Community-Based Natural Resource Management – where local communities have an interest in protecting rather than poaching rhinos. These communities sell licences to tourism businesses which then have to pump money back into the communities.
5. Namibia's rhinos are free-roaming while South African conservation has been based on the 'fortress approach' where wildlife is enclosed behind fences. This means it is far removed – both literally and metaphorically – from local communities who don't feel any sense of responsibility about fighting poachers. Because local wildlife tourism hasn't financially benefitted South African local communities, they are easily swayed by the financial benefits of poaching.
6. The ever-rocketing black market price of rhino horn means it is only a matter of time before Namibia faces the same frightening statistics as South Africa. A few warning shots have been fired and last year a rhino cow was poached in a remote region of Namibia.
7. South Africa should take the lead in trying to stop poaching. We hear 'this is war, this is war', but we need to see real action from government. It needs to be taken more seriously.

(Adapted from an article in *The Big Issue*, February/March 2013, Issue number 206, volume 17)

QUESTIONS:

Keywords

hibernate: to spend winter in an inactive or dormant state

dispersed: spread out

1.1 Refer to paragraph 1.

1.1.1 'Hibernating' implies that if you have not heard about the numbers of rhino slaughtered in South Africa last year, you must be:

a) lazy **b)** asleep

c) a bear. (1)

1.1.2 What does the word 'countless' tell you about how often the media has covered stories on rhino poaching? (2)

1.2 Refer to paragraph 2.

1.2.1 Substitute the word 'rhetoric' (underlined in paragraph 2) with one of the following choices:

a) talk **b)** words

c) speaking. (1)

1.2.2 How do we know that more rhino are going to be slaughtered unless we find a solution to the poaching problem? (1)

1.2.3 Look carefully at the sentence 'Numbers of reported poaching incidences in the past two decades has not reached three figures.' According to this sentence, what is the maximum number of rhinos that could have been poached in Namibia in the last twenty years? (1)

1.3 Refer to paragraph 3. Why do you think the 'tracking of animals and transporting of horns' would be more difficult in a desert? Make two points. (2)

1.4 Refer to paragraphs 4 and 5.

1.4.1 Does the author approve of the name 'Community-Based Natural Resource'? (2)

1.4.2 Is the following statement true or false?

The Namibian Community-Based Natural Resource Management works because it ensures that local rural communities make money out of protecting wildlife. (1)

1.4.3 Quote three consecutive words (words which follow one another) from the text to support your answer. (1)

1.4.4 Study the sentence 'South African conservation has been based on the "fortress approach" where wildlife is enclosed behind fences.' How does this sentence explain why the author says that our wildlife has been *literally* removed from communities? (2)

1.5 Refer to paragraph 6. What does 'ever-rocketing' imply about the price of rhino horn? (1)

Subtotal:15

Section B: Language

Question 2

Enjoy the following fun facts about rhinos and then answer the language questions below.

1. The name rhinoceros means *nose horn* and is often (short) to rhino.
2. Rhinos have three toes on each foot.
3. It is silly but despite their name, White rhinoceros are actually grey.
4. Relative to their large body size, rhinoceros have small brains.
5. Rhinoceros horn is made from a protein called keratin which is found in fingernails and hair.
6. Rhinoceros are herbivores (plant eaters). Rhinos eat 60 to 80 kg per day. Rhinos can deposit dung piles of nearly a metre high.
7. A group of rhinoceros is called a *crash*.
8. It may not seem so until one is charging directly at you, but rhinos are a fast bunch and are good at running. Black rhinos can run up to 64 km per hour.
9. Contradictory to common thought, rhino skin is incredibly soft and sensitive, especially to sunburn and insect bites – irritations which mud can help soothe.
10. The closest living rhino relatives are horses, zebras and tapirs. Don't know what a tapir is? It is a rare nocturnal, hoofed mammal with a stout body, sturdy limbs, and a short flexible proboscis (trunk), native to the forests of tropical America and Malaysia. Now you know.

2.1 A question about sentence 1:

Give the correct form of the word in brackets. (1)

2.2 A question about sentence 2:

Provide a homophone for the word 'toes' and use it correctly in a sentence. Underline your homophone. (2)

2.3 Is sentence 3 an example of fact or opinion? (1)

2.4 Refer to sentence 4. What would the answer be to the question, *Is a rhino's brain small compared to the rest of its body?* (2)

2.5 Correct the error in sentence 5. Write out the sentence and underline your correction. (1)

2.6 The following questions refer to the sentences numbered 6.

2.6.1 Join the THREE SENTENCES numbered 6 into ONE sentence by using the following words: *which; and.* (2)

2.6.2 True or false?

The idea of a metre high pile of dung has a bad connotation? (1)

2.7 Is 'crash' (sentence 7) a collective noun, an abstract noun, a common noun or a verb? (1)

2.8 Questions about sentence 8:

2.8.1 There are two present participles used in this sentence. Write down the one used as a noun. (1)

2.8.2 Is 'km' an acronym or an abbreviation? (1)

2.8.3 Write 'km' out in full. (1)

2.9 Write down the underlined word from sentence 9 and underline the prefix it contains which means *against.* (1)

Subtotal:15

Section C: Response to literature

Question 3

The questions below will test your understanding of the short story *The old woman* by Bessie Head.

While some of the questions are based on extracts from the text, others will examine how well you know the story.

3.1 Extract 1

> Yet … it was a shock when she suddenly bent double, retched and coughed emptily, and crumbled to the ground like a quiet sigh …
> 'The old lady is ill,' I said.
> 'No,' she said curtly. 'I am not ill …'
> … but old ladies have no more shame left.
> They are like children. They give way to weakness and cry openly …

3.1.1 At the beginning of the story, the old lady is described as being 'thin and frail'. This extract begins with the word 'yet'.

Complete the following sentence by choosing the best option a), b) or c).

When the old lady collapses, the narrator is surprised because:

a) despite her apparent weakness, the old lady appeared strong.

b) she did not expect the old lady to stay standing for so long.

c) old ladies don't often fall over. (1)

Section D - Summary Writing

Question 6

- List SEVEN **reasons why you should travel** underneath one another.
- Use full sentences.
- Write only ONE point per sentence.
- Use your OWN words.

- Your summary must be between 70-80 words in length.
- Indicate the number of words you used in brackets at the end of your summary.
- You will be penalised if you use more than 80 words or if you do not indicate the number of words used.

One of the most freeing parts of travelling is that it's a clear time out from everyday life. Freeing yourself from the drudgery of everyday life also helps to give you time to think through what's really important to you. By allowing you to contrast your own life with those of others in different countries, it gives you a totally fresh perspective on your own life. You are able to look at things from a different viewpoint and you come to realise what is important and what not.

Travel can help you find your passion in life by introducing you to new ideas and concepts that you've never heard of before. You will be able to meet and get to know people whom you would never meet in normal circumstances. If you want to meet a large number of varied, interesting new people in a short time, travel is one of the best ways to go about it.

It's not that easy to push yourself beyond your comfort zone when you're living in the same place, going to the same job and seeing the same people all the time. However, when you find yourself in a completely different country with a completely different daily routine, it's a lot easier to imagine yourself doing things that you'd never imagined.

And then there's another possibility of what could happen to you if you take time out of your life and go travelling: you might not come home again! You might decide to set up life in a new place. Who knows, that might happen to you!

(Adapted from "Relevant Magazine", 8 Reasons to travel abroad by Natalie Thomas)

EXERCISE 1

Complete each of the following by adding a subject, object or verb to make it a complete sentence.

1. Rhadia _____ if you will help her.
2. Steve _____ angry that he had lost _____.
3. _____ starts next weekend.
4. Our _____ is very close to us.
5. Mr North is giving us _____.
6. _____ is happy.
7. We _____.

EXERCISE 2

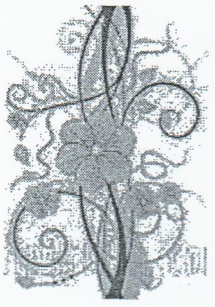
Underline the **subject** in each of the following sentences and circle the **verb**.

1. Mary was not very pleased.
2. We all seek happiness.
3. Jumping over the fence, Jonathan grazed his knee.
4. Patrick is not a very pleasant boy.
5. The school is in Durban.
6. The dolphins frolicked in the waves.
7. Female mosquitoes carry malaria.
8. I love chocolate cake.
9. My homework is finished.
10. I ran to the shop.

EXERCISE 3

Which of the following are full sentences?

1. Philip knew.
2. Joseph had gone home.
3. She is eating.
4. Flowers are everywhere.
5. With accidents and tragedies.
6. The teacher and her pupils talked quietly.
7. Without even thinking about it, she jumped.
8. Walking quietly through the fields and the valley.
9. John was.
10. Mary cried.
11. Accidents, poor health and old age.
12. Without any doubt, you are the naughtiest child in school.



SENTENCES

Every complete sentence must have, at least, a subject and a finite verb. The sentence must also express a complete thought. If a sentence is lacking one of these essential components, it is a sentence fragment.

A full sentence needs:
a **subject** (the person/thing doing the action)
and **a predicate** (which tells you about the subject)

The predicate needs:
a finite **verb** (the thing being done)

The predicate can have:
An **object** (the receiver of the action)
A **direct object** is the first thing or person to receive the action done on it.
An **indirect object** is the second things or person to be involved in the action.

subject **predicate**

The boy kicked the ball to the man.

verb direct object indirect object

Examples of incomplete sentences are:

Paula is. (Paula is what? This has a subject and a verb but does not express a complete thought.)

Eating cake. (This is lacking a subject - who or what is eating cake?)

A book without a cover. (What about a book without a cover? Is the book doing something? Is someone doing something to the book? We don't know, because there is no verb.)

And I went home. (The conjunction "and" makes this clause dependent. A dependent clause can't stand alone – it needs to be attached to an independent clause.)

To make full sentences out of the above examples:

Paula is very clever. (add a complete thought)

The children are **eating cake**. (add a subject and a finite verb)

A book without a cover can get damaged easily. (add an action)

I finished my work **and I went home**. (add an independent clause)

An adjectival clause acts as an adjective in a sentence and gives more information about the noun. The adjectival clause has to be connected to the noun by a relative pronoun – which or that (if the noun is a thing), who or that (if the noun is a person)

E.g.: I bought the book ***that you recommended.***

Madiba was the president ***who introduced the Rainbow Nation ideal.***

EXERCISE 5

In each of the following sentences the adverbial clause has been underlined. State whether it is an adverbial clause of **time, place, manner or cause.**

1. I saw Mary when I went to the play.
2. We left when the play had ended.
3. He left early so as not to outstay his welcome.
4. He did well in the test because he had studied hard.
5. He proposed to her very awkwardly while they were at the farm.
6. Because he had failed the exam, he felt very unhappy.
7. When she called, we had already left.
8. We will finish after he leaves.
9. He asked me, looking shyly into my eyes, whether I would join him.
10. He works a lot because he needs to do much better.
11. He was able to buy a new car because he won the Lotto.
12. We will go to the museum after we have finished school today.
13. If you hope to do well, you must work hard.
14. The policeman spoke to me very rudely while writing out the ticket.
15. Because she was sick, she did not come to my party.
16. You may go wherever you like.

EXERCISE 6

Combine these sentences into one sentence by making an **adjectival clause** in each.

1. I love movies. Movies are exciting.
2. Do you have a dog? The dog is large with white fur.
3. She is the lady. The lady helped me find the magazine I was looking for.

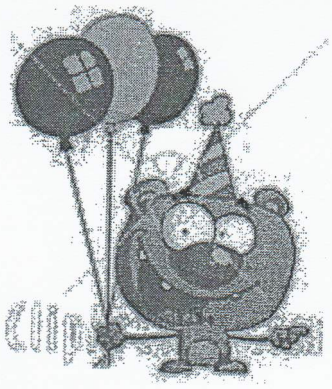
PHRASES and CLAUSES

Clauses contain verbs – they can either be a whole sentences or a part of a sentence. A main part of a sentence is a main clause or an independent clause.
Phrases do not contain finite verbs and do not make sense on their own.

EXERCISE 4

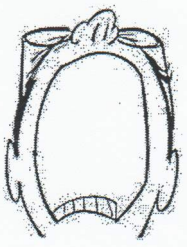
Decide whether the following are phrases or clauses:

1. The balloons popped.
2. Long and loud.
3. After the party.
4. They moved quietly.
5. With a sigh.
6. We skipped.
7. As flat as a pancake.
8. It rained heavily.
9. Thunder and lightning.
10. In a while.
11. Before breakfast.
12. The wind roared.



TYPES OF CLAUSES

Clauses help to tell us more about what is happening in the main clause. **An adverbial clause** acts like an adverb and tells us the place, time, cause or reason for something happening. Usually, the clause is separated from the main clause by a comma.



Adverbial clauses of <u>place</u> answer the question: Where?

E.g.: ***Wherever there are children,*** *there is noise.*

Adverbial clauses of <u>time</u> answer the question: When?

E.g.: ***After I have bathed,*** *I am completely relaxed.*

Adverbial clauses of <u>cause</u> answer the question: Why?

E.g.: I did not go to her house ***because I was tired.***

Adverbial clauses of <u>manner</u> answer the question: How?

E.g.: ***As I crept quickly and quietly,*** *I snuck into the house.*

A noun clause is a clause which does the work of a noun in a sentence. It is a group of words containing a subject and a finite verb of its own.

E.g.: You really do not want to know ***what the kids have been up to.***

Whoever broke the vase *will have to pay for it.*

4. Mount Everest is very dangerous to climb. Mount Everest is the highest mountain in the world.
5. Cars are very efficient. The cars run on electricity.
6. Dr. Jones writes books. Dr. Jones is a retired university professor.
7. This is the ring. My mother gave me the ring for my wedding.
8. New York's Long Island has a booming real estate market. Long Island is shaped like a fish.
9. The manager is from Brazil. She is in my office.
10. The music is rock and roll. I listen to the music.

EXERCISE 7

Add suitable noun clauses to complete each of the following sentences.

1. I saw _____.
2. We forgot our _____.
3. _____ left early.
4. He did well in the _____.
5. He proposed to _____.
6. _____ felt very unhappy.
7. _____ had already left.
8. We will finish the _____.
9. He works on _____.
10. _____ won the Lotto.

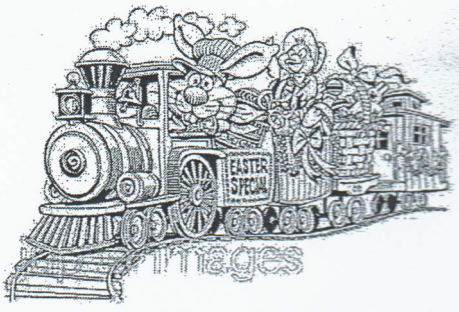
SIMPLE SENTENCES

A simple sentence, is an independent clause or a main clause. It contains a subject and a verb, and it expresses a complete thought.

In the following simple sentences, subjects are in bold, and verbs are underlined.

Some **students** <u>like</u> to study.
Paul <u>plays</u> rugby.

COMPOUND SENTENCES



A compound sentence contains two independent/main clauses joined by a coordinating conjunction: *for; and; nor; but; or; yet; so* (FANBOYS)

or through adding a semi colon between the two clauses. In the following compound sentences, subjects are in bold, verbs underlined, and the conjunctions are in italics.

Some **students** like to study in the mornings, *but* **others** like to work in the evening.
Paul plays rugby in the afternoons *and* **he** enjoys hockey on weekends.

EXERCISE 6

Combine these simple sentences to form compound sentences:

1. The game continued. It rained heavily.

2. We spoke to him. Andrew explained it.

3. The small blue car crashed. Two people were hurt. The car was travelling at a great speed.

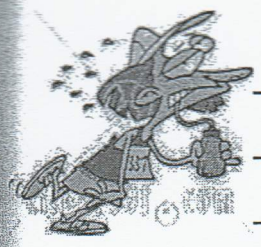
4. I am leaving for a while. If a message comes for me, keep it. I will be back shortly.

5. The weather improves. We must go for a picnic.

6. Julian must go now. He must not go at all.

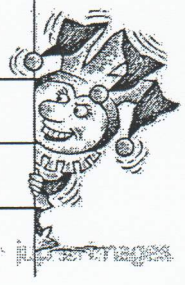
7. The family had not travelled far. The car got a puncture. It had driven over a sharp stone. It was heavily loaded.

8. Joseph runs very well. His legs work with perfect rhythm. He has won many races. He has an exceptional talent.



9. The wind blew harder. The sailor decided he must find shelter. He sailed to the harbour.

10. The plane was due to leave the Cape Town airport at 11.30 a.m. It arrived an hour late. I had arrived early. I did not want to miss it.



COMPLEX SENTENCES

A complex sentence has an independent/main clause joined by one or more subordinate clauses – the subordinate clause cannot stand on its own. A complex sentence always has a subordinator such as *because, since, after, although,* or *when* or a relative pronoun such as *that, who,* or *which*.

In the following complex sentences, the main clause is indicated in bold.

When Janet handed in her essay, **she forgot to give the teacher the last page.**
The students are studying because they have a test.
Paul is very upset because he was dropped from the first team.

EXERCISE 7

Add an **adverbial clause** to each of the following simple sentences to make **complex sentences**.

1. I am hungry. (adverbial clause of cause)

2. We are going out. (adverbial clause of place)

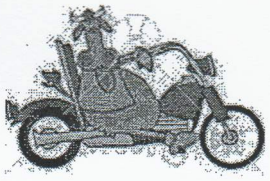
_____

_____

3. Jemima was angry. (adverbial clause of cause).

_____

_____



4. Steven is buying a motorbike. (adverbial clause of time)

_____

_____

5. Jennifer left the club. (adjectival clause)

_____

_____

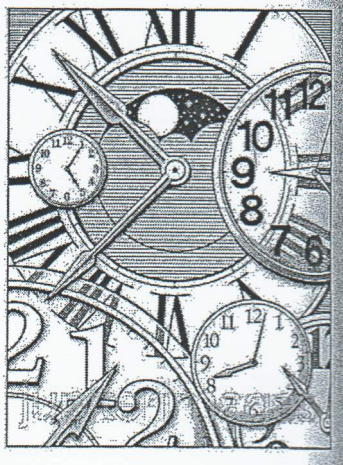
6. The children at the party ate. (adverbial clause of manner) & (adjectival clause)

_____

_____

EXERCISE 8

Underline the **main clauses** in each of the following sentences. State whether they are simple, compound or complex sentences.



1. The teacher noticed that the page was missing.
2. Some of the students went out to play during break.
3. The teacher walked into the classroom, greeted the students, and did roll-call.
4. Alex played chess while Janet went shopping.
5. Alex played football, yet Janet went shopping.
6. Although the Springboks are the better team, they lost.
7. The house has a huge garden that winds all around the lake.
8. The offices are cramped, claustrophobic and unpleasant.
9. He left the job because it was depressing and demoralising to him.
10. The children love to eat cakes and sweets but then they do not eat supper.

GRADE 8

WRITING SKILLS

TRANSACTIONAL WRITING (20 MARKS)

Write an informal letter to your pen pal (friend from another country) addressing your concerns about the Corona Virus and some of the precautions that was put into place by the president of South Africa.

ESSAY WRITING (30 MARKS)

CHOOSE ONE OF THE FOLLOWING TOPICS AND WRITE A NARRITIVE/DESCRIPTIVE ESSAY (200-250 WORDS)

1. Use the quote "oh, what a tangled web we weave, when first we practice to deceive" as the theme of your story.

2. Write a story about a funny situation

3. My special place

4. Celebration

Verkleinwoorde (iets wat klein is)

As iets klein is, skryf ons gewoonlik -ie, -jie, -tjie, -pie, -kie, -etjie of - 'tjie agteraan die woord.

Afrikaans het meer verkleinwoorde as ander tale.

Enkelvoud	Verkleinwoord
Boek	Boekie
Tafel	Tafeltjie
Lied	Liedjie
Raam	Raampie
Heining	Heininkie
Pan	Pannetjie
Foto	Foto'tjie

Kan jy sien dat verkleinwoorde op verskillende maniere gevorm kan word? Las net -ie, -tjie, -jie, -pie, -kie, -etjie en -'tjie agter aan die woorde!

Verkleinwoorde met -ie

Woorde wat op -s, -k, -p, -g en -f (skaapgif) eindig, se verkleinwoorde word gevorm deur -ie by te voeg.

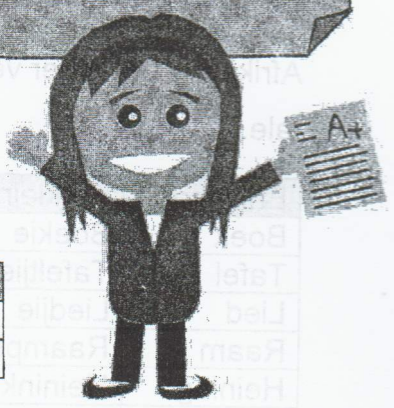
Enkelvoud	Verkleinwoord
Huis	Huisie
Tak	Takkie
Ploeg	Ploegie
Duif	Duifie
Skaap	Skapie

Kan jy uitwerk waarom takkie twee k's (kk) kry? En wat het van die twee a's in skaap geword? Kyk weer na meervoude.

Verkleinwoorde met -tjie

Enkelvoud	Verkleinwoord
Stoel	Stoeltjie
Blaar	Blaartjie
Koei	Koeitjie
Dier	Diertjie

Die meeste woorde in Afrikaans kry 'n -tjie in die verkleining. Onthou, ons spreek -djie en -tjie soos -kie uit.



Verkleinwoorde met -jie

As 'n woord op -d of -t eindig, kry dit net -jie in die Verkleinwoord.

Enkelvoud	Verkleinwoord
Hond	Hondjie
Kat	Katjie

Verkleinwoorde met -pie

Enkelvoud	Verkleinwoord
Oom	Oompie
Duim	Duimpie
Boom	Boompie
Arm	Armpie

Kan jy sê hoekom dié woorde 'n -pie in die verkleining kry? Kyk na die laaste klank.

Verkleinwoorde met -kie

Woorde met meer as een lettergreep wat op -ng eindig, kry -kie in die verkleinwoord.

Enkelvoud	Verkleinwoord
Koning	Koninkie
Horing	Horinkie
Rekening	Rekeninkie
Piesang	Piesankie

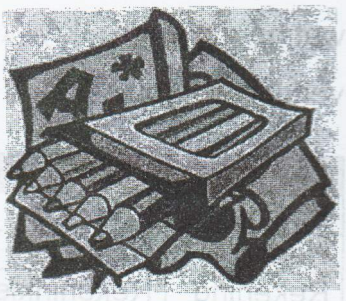
Verkleinwoorde met -etjie

Woorde met 'n kort klank (bv. a, e, i, o en u) voor l, m, n, r en ng, kry -etjie in die verkleining. Hierdie woorde het net een lettergreep.

Enkelvoud	Verkleinwoord
Ring	Ringetjie
Pen	Pennetjie
Kar	Karretjie
Bul	Bulletjie
Dam	Dammetjie
Tol	Tolletjie

Verkleinwoorde met -'tjie

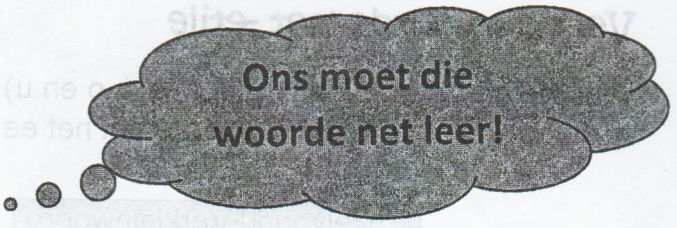
Woorde wat op -i, -o, -u of 'n beklemtoonde -a eindig, kry -'tjie in die verkleining.



Enkelvoud	Verkleinwoord
Taxi	Taxi'tjie
Foto	Foto'tjie
Skadu	Skadu'tjie
Ma	Ma'tjie

Daar sal altyd woorde wees wat nie na al die reëls wil luister nie.

Enkelvoud	Verkleinwoord
Gat	Gaatjie
Glas	Glasie
Pad	Paadjie
Mandjie	Mandjietjie



A **Aktiwiteit 1:**

Kies die regte vorm van die verkleinwoord in kolom B om by die regte woord in kolom A te pas.

Kolom A	Kolom B
1. Hoek	a) - tjie
2. Skoen	b) – jie
3. Piesang	c) – etjie
4. Bed	d) - ie
5. Slang	e) - kie
6. Video	f) -pie
7. Boom	g) – 'tjie

F.Doba

1.) Grade 8(EMS)-Revision of all activities from textbook for term 1 and notes from Notebook (Page 4.44)

2.) Grade 10(Business Studies)

Studying for Term 1 work from the scope

3.) Grade 11(Business Studies)

Studying of Term 1 work from scope

4.) Grade 12(Business Studies)

Complete activities from Term 1 in notes

Summarise notes on Insurance and Assurance from notes

Completion of Notes in notebook

S.Omadat

1.) Grade 7(SS)

All activities for Term 1 Geography (Page - 4;6;7;8;9;10;11;16;17;19;20;21;22;23;24)

Study for History Test

2.) Grade 8(SS)

Worksheets Attached

D.Naidu

1.) Grade 8(N/S)

Blue Book study guide Page 63-77

R.Munilal

Homework plan for holidays

1.) Grade 8(N/S)-

The role of modern scientists in the cure of diseases (Worksheet-Page 64/65)

Revision for exams

Scope for exams

2.) Grade 8(Technology)

Page 42/52 – Technology workbook

3.) Grade 9(Technology)

Page 26/27 Worksheet

4.) Grade 9(Social Sciences)

Geography Revision (Page 23/24) – Platinum Textbook

Scope for Exam

Accounting

Work for the holidays

1.) Grade 7(EMS) –Read through Term 2 Unit 1 from Head start EMS (Textbook).

Do the following activities:

Act.1 Pg.59

Act.2 Pg.60

Act.4 Pg.63

2.) Grade 9(EMS) –New Era Accounting Textbook

Task 1.6

Task 1.7

Task 3.8(Only CPJ/CRJ)

3.) Grade 10(Accounting) –New Era Accounting Study Guide

Question 8 -15

4.) Grade 11(Accounting) –New Era Accounting Study Guide

Question 17/19

New Era Accounting Textbook

Question 13 -13.1/13.2/13.5/13.6/13.11/13.12

5.) Grade 12 (Accounting) NSC – Matric Support /Intervention book

Task C3 Pg.58

D2 Pg.66

F1 Pg.82

F2 Pg.85

F3 Pg.88

H2 Pg.94

H3 Pg.96

Work with past papers syllabus covered in Term 1(Companies)

Grade 9

Maths workbook

Purple band: ii – xxvii

Turquoise band: pg 2 – 67

Grade 8

Maths workbook

Page 2 – 57