

**KZN DEPARTMENT OF EDUCATION
GREENBURY SECONDARY SCHOOL
FINAL EXAMINATION – 2016
GEOGRAPHY PAPER 1
GRADE 10**

EXAMINER : R. RANGANATHAN

MARKS : 225

MODERATOR : S. SINGH

DURATION : 3 HOURS

DATE : 11/11/16

NAME OF LEARNER : _____ **GR/DIV :** _____

INSTRUCTIONS AND INFORMATION

1. This paper consists of 4 Questions.
2. Answer any 3 questions of 75 Marks each.
3. All diagrams are included in the ANNEXURE.
4. Leave a line between sub sections of questions.
5. Start each question at the top of a new page.
6. Number the answers correctly according to the numbering system used in this question paper.
7. Write neatly and legibly.
8. This paper consists of _13_ pages and an ANNEXURE of _10_ pages.
9. Write down the name of your educator on the top left hand corner of your answer booklet.

SECTION A – The Atmosphere and Geomorphology

You must answer **either** question 1 or 2 from this section.

QUESTION 1

1.1 Refer to Source 1A (Hydrological Cycle).

Provide the correct geographical term for the descriptions given for 1.1.1 – 1.1.7. Write down the number of the question and the correct answer next to it.

- 1.1.1 Largest reservoir of water.
- 1.1.2 Water changes to water vapour.
- 1.1.3 Water vapour changes to water.
- 1.1.4 Any form of moisture released from the atmosphere.
- 1.1.5 Water that flows on the earth's surface.
- 1.1.6 Moisture released from plants into the atmosphere.
- 1.1.7 Process whereby water seeps into the ground.

7X1=[7]

1.2 Provide a term for each of the following descriptions by choosing from the list below. Write only the term next to the question number.

PLATE BOUNDARY, INTERNAL FORCES, SEDIMENTARY,
BATHOLITH, OCEANIC CRUST, EXTERNAL FORCES, DORMANT,
LACOLITH, EXTINCT, LAVA, MAGMA

- 1.2.1 Forces that operate on the earth's surface.
- 1.2.2 Forces that operate inside the earth.
- 1.2.3 Part of the crust forming the sea floor.
- 1.2.4 The edge of a crustal plate.
- 1.2.5 Rocks that form in layers.
- 1.2.6 Volcano that will never erupt in future.
- 1.2.7 Largest of the intrusive igneous features
- 1.2.8 Molten rock that flows on the surface.

8X1=[8]

1.3 Refer to Source 1B. (Ozone Alert)

1.3.1 Name the 4 layers of the atmosphere. [4]

1.3.2 What force keeps these layers (ans. 1.3.1) in place? [2]

1.3.3 In which layer is the ozone found? [1]

1.3.4 Explain the significance of the ozone layer. [2]

1.3.5 What is happening to the ozone layer? [2]

1.3.6 Discuss 2 ways in which man can help with the problem
(ans. 1.3.5).

2X2=[4]

[15]

1.4 Refer to Source 1C (Synoptic Weather Map)

1.4.1 Is this a summer or winter map?

Provide a reason for your answer.

1+2=[3]

1.4.2 Name the fronts labelled X and Y. [4]

1.4.3 State the isobaric interval of the map. [2]

1.4.4 Refer to the weather station labelled A.

a) State the air temperature. [2]

b) Describe the cloud cover. [2]

c) State the wind direction. [2]

[15]

1.5 Refer to the sketch on Earthquake (Source 1D).

1.5.1 Define the term earthquake. [2]

1.5.2 Provide labels for E, F and G on diagram 3. [6]

1.5.3 Where will the effect of an earthquake be greater, A or B
on diagram 3. 2+2=[4]1.5.4 Name the instrument used to measure the intensity of an
earthquake. [2]

1.5.5 Explain 2 effects that earthquakes have on people. 2X2=[4]

1.5.6 Suggest 2 precautions that engineers should take when
constructing buildings at earthquake zones. 2X2=[4]

[22]

1.6 Study the sketch (Source 1E) that shows all the pieces of a very big continent.

1.6.1 What was the name of the huge landmass shown in the sketch? [2]

1.6.2 Name the theory depicted on this sketch. [2]

1.6.3 The sketch shows two factors that serve as evidence for this theory (ans. 1.6.2).

Explain these 2 factors that provide strong evidence for this theory.

2X2=[4]

[8]

[75 MARKS]

QUESTION 2

2.1 Match the statements in Column A with the concepts in Column B.

Write down only the correct letter from Column B next to your question number.

COLUMN A	COLUMN B
2.1.1 Average atmospheric conditions over long period.	a) Convection
2.1.2 Transfer of heat by vertical movement.	b) Climate
2.1.3 Radiation from the sun.	c) Precipitation
2.1.4 Any form of moisture released from atmosphere.	d) Insolation
2.1.5 Transfer of heat by contact.	e) Conduction
2.1.6 Amount of radiation reflected from a surface.	f) Albedo
2.1.7 Long wave radiation given off by earth.	g) Terrestrial radiation
	h) Weather
	i) Heat budget

7X1=[7]

2.2 State whether the following are True or False.

2.2.1 Fossils are remains of dead plants and animals.

2.2.2 A valley is a high lying area between 2 slopes.

2.2.3 Weathering is the breakdown of rocks.

2.2.4 Glaciers are huge rivers of ice.

2.2.5 Metamorphic rocks are formed from sediments.

2.2.6 The mantle is semi-molten material.

2.2.7 Tensile forces pull rocks apart.

2.2.8 Epicentre is the point of origin of an earthquake.

8X1[8]

2.3 Refer to Source 2A showing water in different states.

2.3.1 Name the processes labelled A, B, C and D. [4]

2.3.2 Identify the state of water at E. [2]

2.3.3 Name 2 forms of precipitation in liquid state. [2]

[8]

2.4 Refer to the cloud in Source 2B.

2.4.1 Briefly explain how clouds are formed. 4X1=[4]

2.4.2 Identify the cloud type. [2]

2.4.3 Describe 2 characteristics of the cloud you identified
(ans. 2.4.1). 2X2=[4]

2.4.4 Describe the weather conditions associated with this type
of cloud. 2X2=[4]

[14]

2.5 With the aid of a diagram, explain how the degree of latitude affects
Temperature.

Annotated diagram [2]

Explanation. [6]

[8]

2.6 Refer to Source 2C showing different types of folds.

2.6.1 Define the term 'folding'. [2]

2.6.2 What type of rock does folding take place in? [2]

2.6.3 Identify the types of folds at A, B, C, D and E. [10]

2.6.4 Name an example of a South African fold mountain. [2]

[16]

- 2.7 Refer to Source 2D – Case Study – Volcanoes.
- 2.7.1 Explain your understanding of a Volcano. [2]
- 2.7.2 Refer to Line 1 and 2 of the Case Study “after sleeping for 123 years.” What type of volcano was this? [2]
- 2.7.3 Explain the effects that this volcano had on the fauna and flora of Washington State. 2X2=[4]
- 2.7.4 What is a seismic tremor? [2]
- 2.7.5 Outline 2 positive effects that a volcanic eruption may have. 2X2=[4]
- [14]

[75 MARKS]

SECTION B – Population and Water Resources

You must answer at least ONE question from this section.

QUESTION 3

3.1 Select the correct answer from the list below to complete the sentences.

Write only the correct word next to each question

MALNUTRITION, INTERNATIONAL ORGANISATIONS, DEMOGRAPHY,
PULL FACTORS, DEATH RATE, DEPOPULATION,
INEQUALITIES, DEVELOPING, POPULATION

- 3.1.1 The decrease in the population of the rural areas is known as
- 3.1.2 The major difference between developed and developing nations of the world is that there are
- 3.1.3 The term refers to the total number of people living in a country.
- 3.1.4 The term refers to the study of populations.
- 3.1.5 The of a country refers to the total number of deaths per 1000 people per year.
- 3.1.6 The countries are mostly located in Africa, Asia and South America.
- 3.1.7 In areas where there is not enough food, they experience hunger which leads to
- 3.1.8 are organisations that operate worldwide.

[8]

3.2 Study the flood hydrograph Source 3A.

3.2.1 State the :

- a) Peak rainfall [1]
- b) Peak discharge [1]
- c) The term used to describe the time difference between peak rainfall and peak discharge. [1]

3.2.2 Choose the correct words with brackets.

- 3.2.2.1 X refers to (rising limb / base flow). [1]
- 3.2.2.2 Y refers to (falling limb / infiltration rate). [1]
- 3.2.2.3 The peak discharge occurred at (00:50 / 1:50). [1]
- 3.2.2.4 The stream resumed its normal flow at (midday / midnight). [1]

7X1=[7]

3.3 Refer to the Source 3B – Case Study – India

3.3.1 Why did the Indian government implement this national family planning programme? [2]

3.3.2 The Indian government's key focus was on improving access to contraception. Which was the most common form of contraception in India? [2]

3.3.3 China is another country that made birth control compulsory. Do you think India would be able to force people to use birth control? Give evidence from the case study to support your answer. 1+2=[3]

3.3.4 Provide definitions for the following terms :
 a) Birth rate [2]
 b) Fertility rate [2]

3.3.5 According to the statistics in this case study, the success of this programme has been slow. What were the reasons for the slow success? 2X2=[4]

3.3.6 Imagine you have been asked by the South African government to advice on how to bring about a lower birth rate in our country. What suggestions would you make besides that which was mentioned in the case study? 2X2=[4]

[19]

- 3.4 Refer to Source 3C. Stats on HIV in South Africa.
- 3.4.1 What does AIDS stand for? [2]
- 3.4.2 Which continent has the highest number of people living with HIV / AIDS? [1]
- 3.4.3 Suggest 2 measures that can be implemented by the government of this continent to reduce the incidences of HIV / AIDS. 2X2=[4]
- 3.4.4 Discuss the impacts of HIV / AIDS on the continent's economy. 2X2=[4]
- [11]
- 3.5 Refer to Source 3D – World's ocean currents.
- 3.5.1 Name 3 cold currents that flow in the southern hemisphere. [3]
- 3.5.2 In which direction are these currents (ans. 3.5.1) flowing? [2]
- 3.5.3 Explain why fishermen will welcome these cold currents. [2]
- 3.5.4 Why are some ocean currents warm and others cold? [2]
- 3.5.5 Name 2 factors that create surface ocean currents. 2X2=[4]
- 3.5.6 Discuss the significance of oceans under the following headings :
- a) Oceans as a source of oxygen. [2]
- b) Oceans as a source of food. [2]
- c) Oceans as a source of energy. [2]
- [19]
- 3.6 Refer to Source 3E – Newspaper Article.
- 3.6.1 Explain your understanding of "exploitation of fish stocks". [2]
- 3.6.2 Suggest 2 effects that depletion of fish stock can have on man. 2X2=[4]
- 3.6.3 What impact will the death of coral reefs have? [1]
- 3.6.4 Suggest two ways in which the fishing industry can be regulated so that it remains sustainable. 2X2=[4]
- [11]

[75 MARKS]

QUESTION 4

4.1 Refer to the two population pyramids in Source 4A. Indicate which pyramid, A or B is referred to in each of the descriptions below. Write down the question number and next to it, the letter of the correct answer.

- 4.1.1 Country with high birth rate.
- 4.1.2 Country with large number of young people.
- 4.1.3 Country with a high dependency ratio.
- 4.1.4 A triangular pyramid.
- 4.1.5 Country with a high life expectancy.
- 4.1.6 A developed country.
- 4.1.7 Country with high level of education.
- 4.1.8 Country with a high GDP.
- 4.1.9 Country with a low birth rate and low death rate.

9X1=[9]

4.2 Refer to Source 4B – Human causes of flooding.

Match the statements 1 – 6 with the letters in the picture. Write down the numbers 1 – 6 and next to each, the letter that matches the number.

4.3 Refer to Source 4C – Case Study – Xenophobia Attacks.

4.3.1 Explain the meaning of the following terms.

a) Refugee [2]

b) Xenophobia [2]

4.3.2 List three effects of these xenophobic attacks. [3]

4.3.3 Why do you think these immigrants leave their countries of birth? [2]

4.3.4 Explain why many South Africans do not want refugees in this country. 2X2=[4]

4.3.5 State one positive impact that refugees might have on South Africa. [2]

[15]

4.4 Refer to Source 4D – Case Study – The Gariep Orange-Fish – Sundays Inter-basin transfers.

4.4.1 What is an inter-basin water transfer? [2]

4.4.2 Name the 3 inter-basin transfers in South Africa. 3X2=[6]

4.4.3 Why are inter-basin transfers necessary? [2]

4.4.4 Name the urban area that benefited from this water transfer scheme. [2]

4.4.5 How does water get from the Gariep Dam into the Great Fish River? [2]

4.4.6 What is the extra water used for? [1]

[15]

4.5 Refer to Source 4E – Cartoon

4.5.1 List three reasons why people want to leave the rural areas. 2x3=[6]

4.5.2 What term is used to describe these factors that you listed in 4.5.1? [2]

4.5.3 Give 2 reasons why people want to move into the urban areas as suggested in the cartoon. 2X2=[4]

4.5.4 What is the term used to describe this movement? [2]

4.5.5 What are the consequences of this type of movement on the rural area? (2 answers). 2X2=[4]

[18]

4.6 Refer to Source 4F – Case Study.

4.6.1 What physical phenomenon was said to have caused the 2011 flooding? [2]

4.6.2 Assess the impact of the flooding on farmers. 2X2=[4]

4.6.3 According to the report in the case study, about 20 000 people needed emergency relief. What do you understand by “emergency relief”? [2]

4.6.4 The South African government admitted that it could have done more to prepare for the floods and hence reduce damages.
Suggest 2 important things that the government could have done to reduce the effects of flooding. 2X2=[4]

[12]

[75 MARKS]

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DEPARTMENT OF HSS
H.O.D. MR O RAMASAMI
Ramasami
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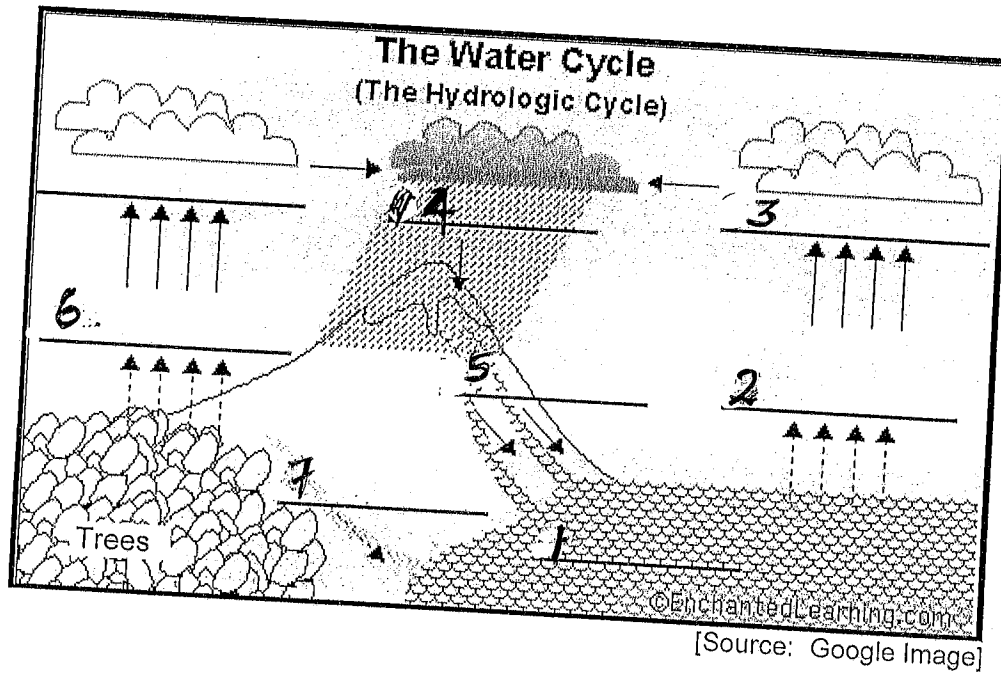
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GEOGRAPHY
PAPER ONE
ADDENDUM
NOVEMBER
2016

SOURCE 1A



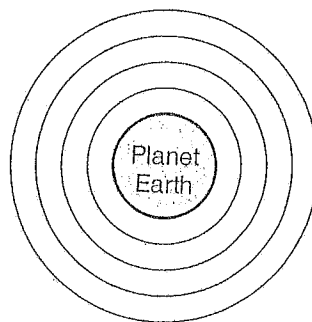
SOURCE 1B

Ozone alert

Scientists at the South Pole have warned that if the ozone layer continues to be eroded at the rate they have been recording for the past 20 years, life on Planet Earth will come under serious threat. The earth's atmosphere is made up of a number of gaseous layers. It looks very similar to the rings you see when you cut an onion through the middle. Planet Earth sits in the middle of the rings, which represent the layers of gas making up the atmosphere. Gravity keeps these layers in place, and because of gravity, more than half of the gases are found within five or six kilometres above sea level. As you move higher and higher into the atmosphere, the air gets thinner and it becomes more difficult to breathe.

The amount of water vapour in the atmosphere varies according to temperature. On a hot, humid day there may be as much as four per cent water vapour in the air, but it usually contains about one per cent. Changes in the amount of water vapour affect the behaviour of the atmosphere and therefore influence our weather.

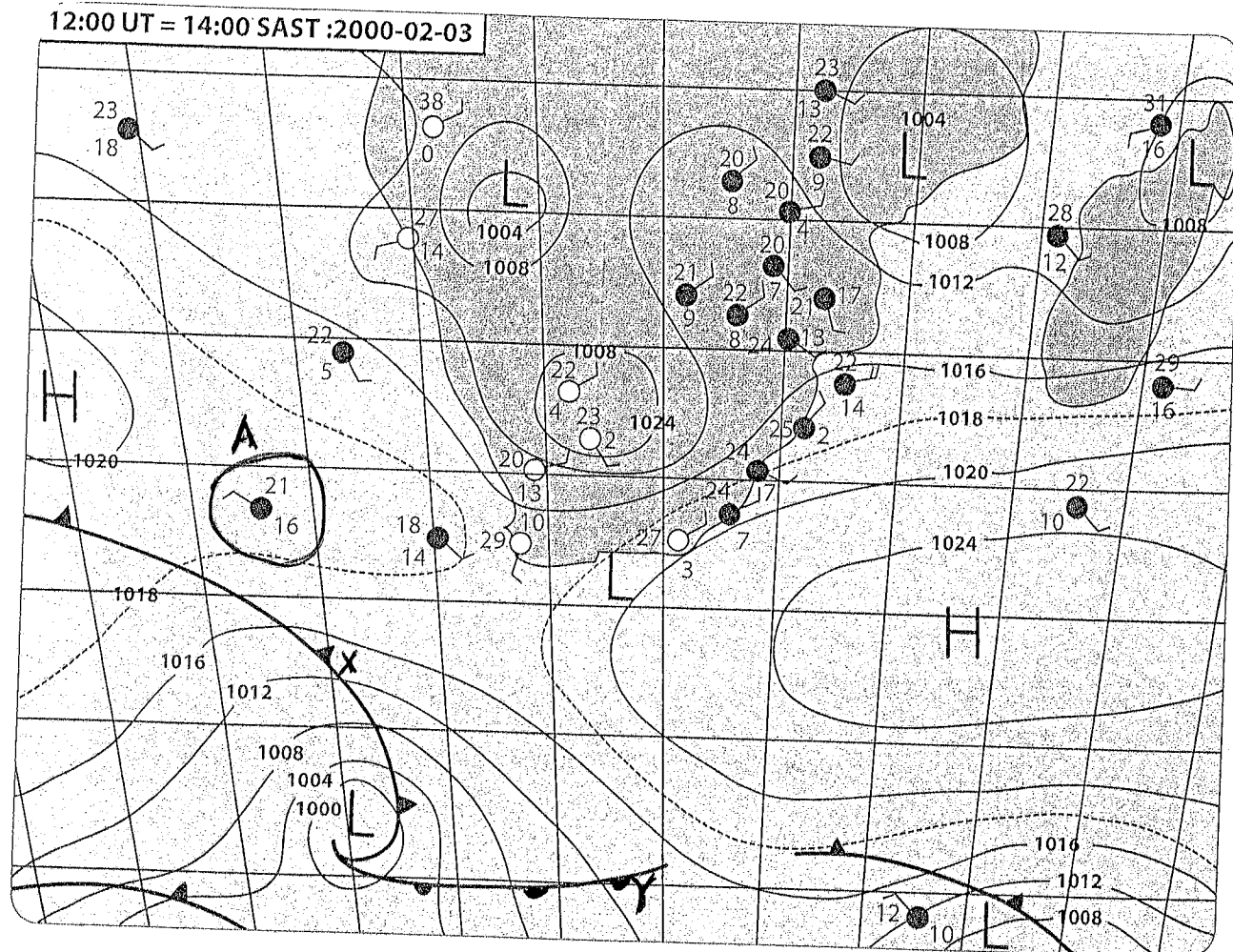
Ozone occurs in very small amounts in the lower atmosphere, but much more



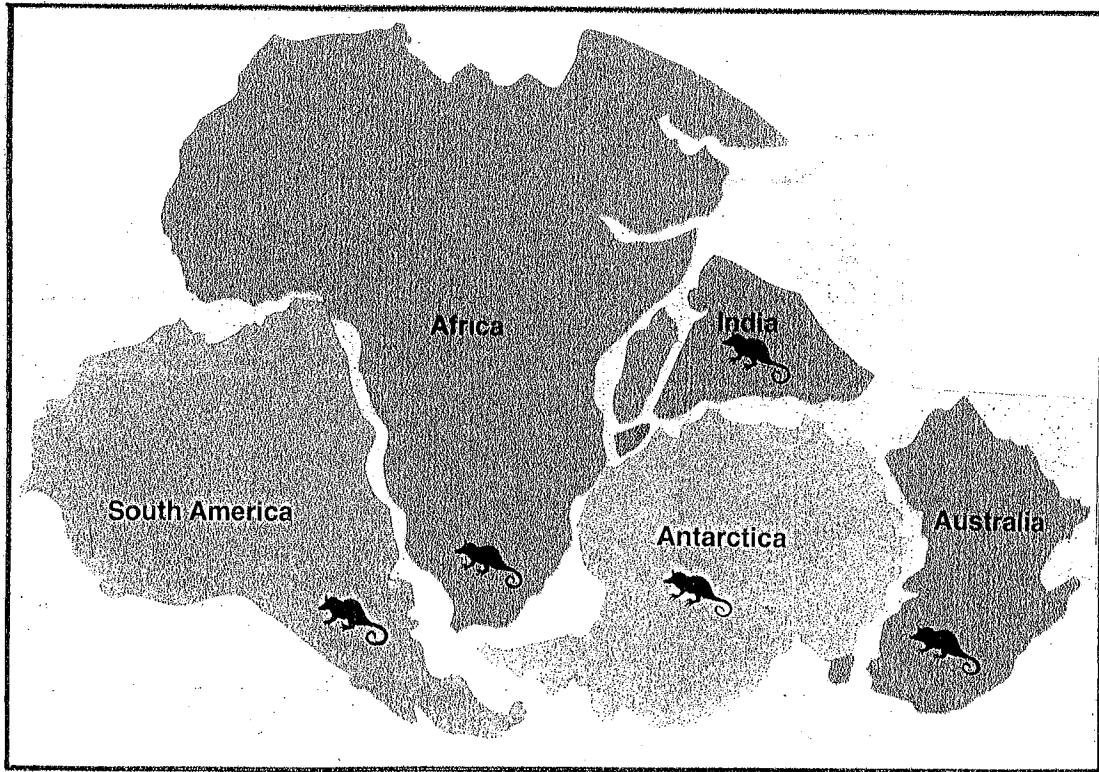
An onion cut in half gives us a good idea of how the layers of the atmosphere surround the earth

of it forms a layer two to five kilometres above earth's surface. The ozone layer is very important because it blocks the incoming ultra-violet (UV) rays from the sun. If ozone did not filter out most of the UV radiation, nothing could live on our planet. However, this layer is becoming thinner and developing holes in it and this is bad news for the future of Planet Earth.

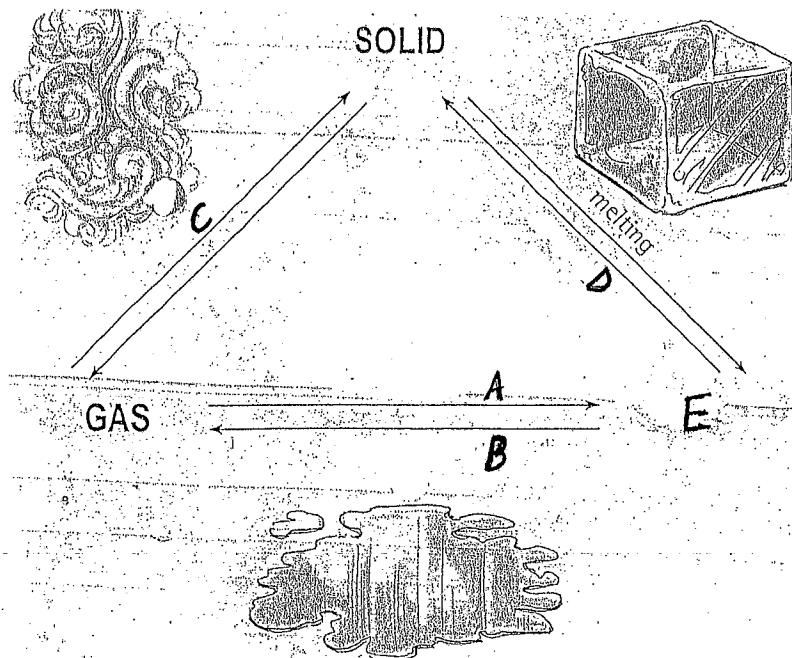
12:00 UT = 14:00 SAST :2000-02-03



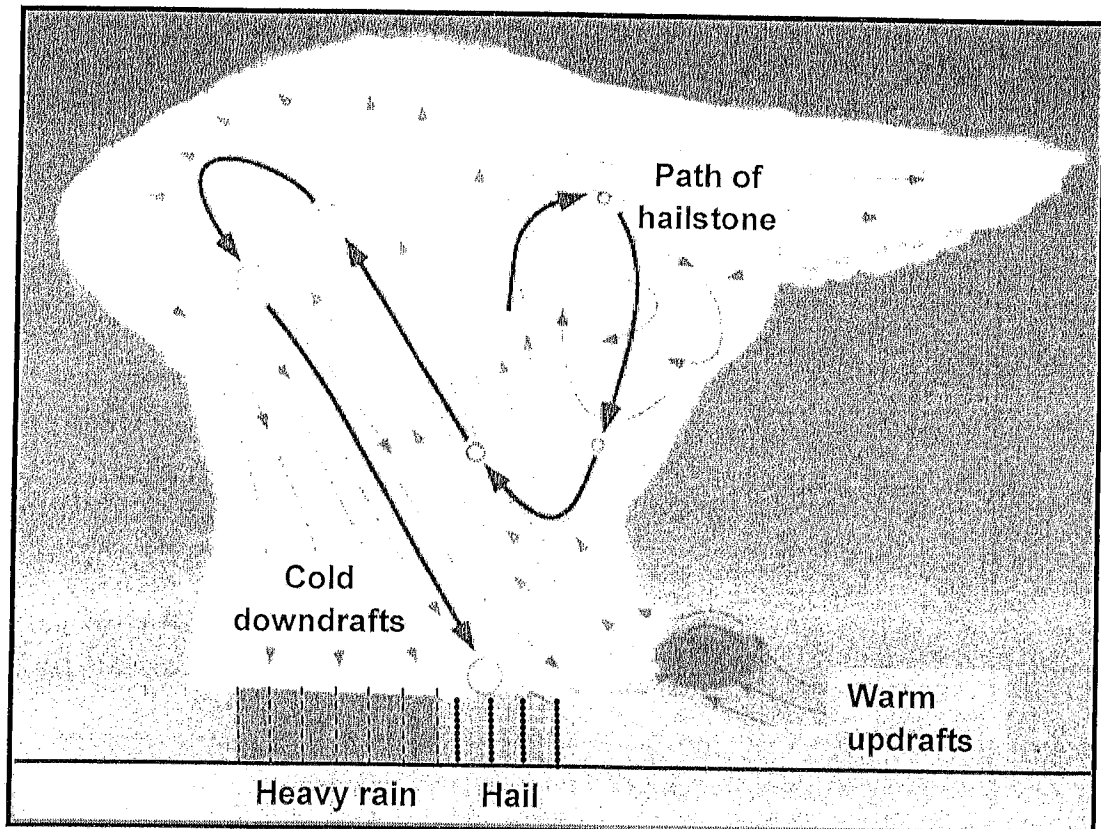
SOURCE 1E



SOURCE 2A



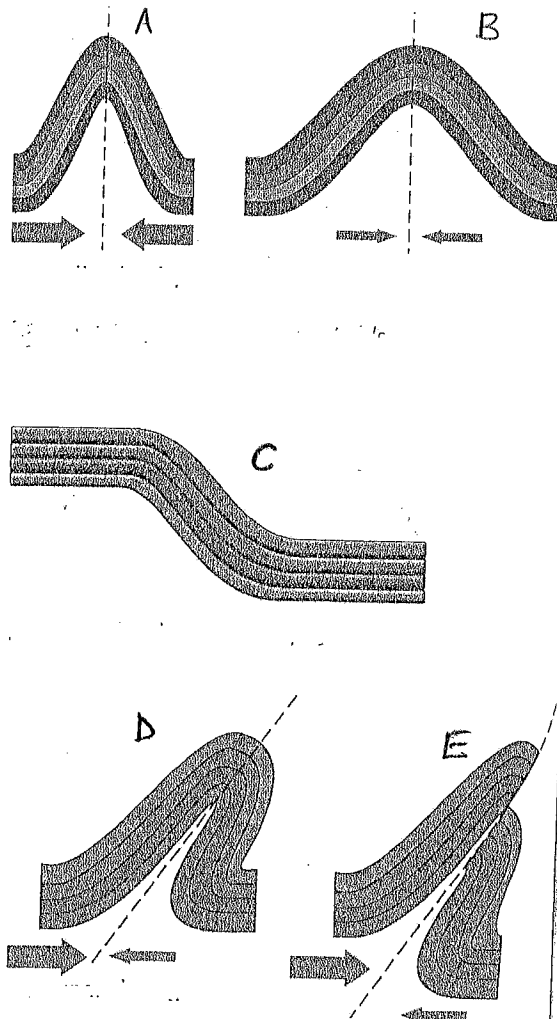
SOURCE 2B



[Source: Google Image]

SOURCE 2C

2c.



SOURCE 2D

Case studies: Volcanoes

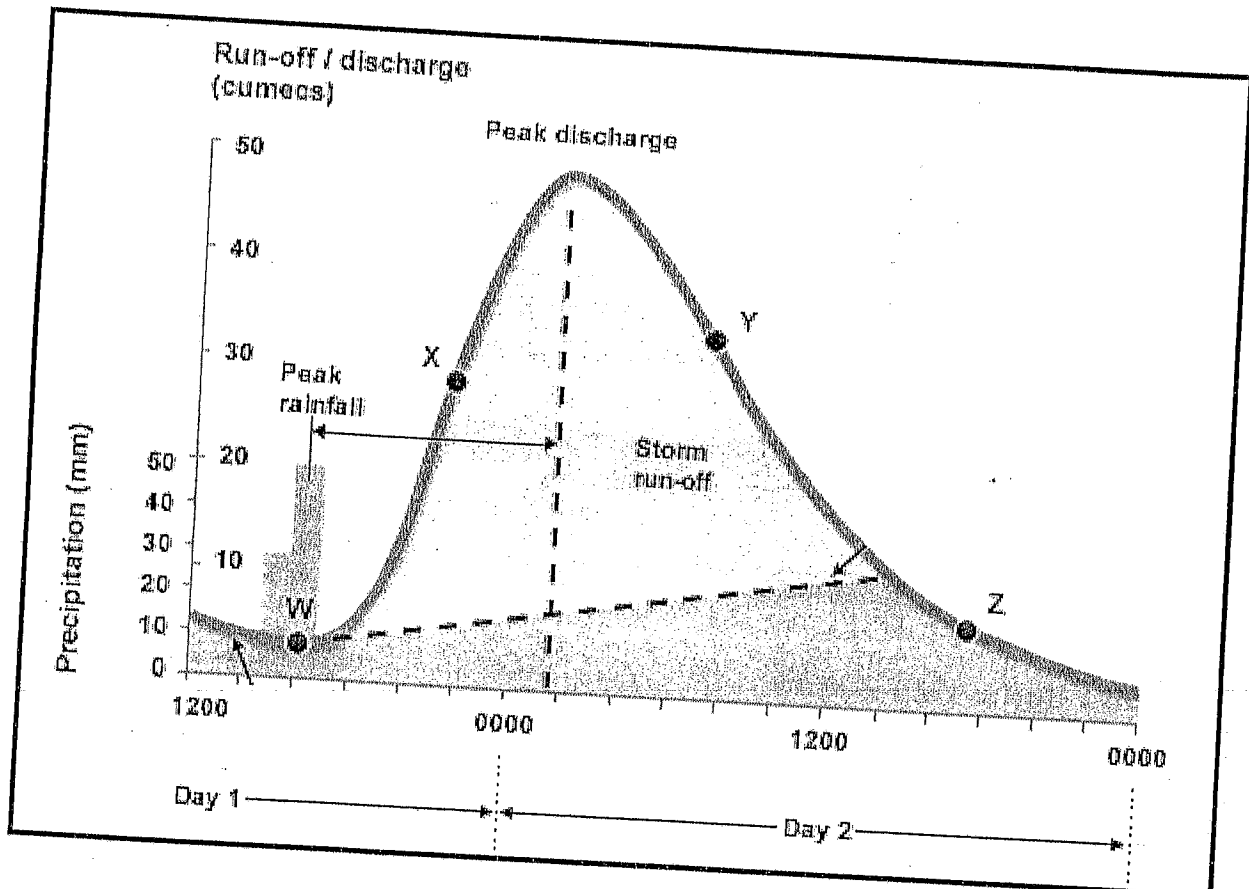
Case study: Mount St Helens blows its top

In 1980, Mount St Helens in Washington State in the US erupted after sleeping for 123 years. It blew the top off the mountain with all the energy of a hydrogen bomb, throwing ash and debris 20 km up into the sky. Sixty-two people and thousands of animals (including 200 black bears) were killed. Beautiful lakes were destroyed and forests of trees were flattened like matchsticks (see Figure 3.5.1.1). It rained ash for days in Washington, Oregon and Idaho States, smothering rooftops and cars and clogging up swimming pools. It produced enough ash to fill a football field 250 km high.

Scientists had picked up on seismic tremors two months before and issued evacuation warnings. The eruption was caused by interactions between the North American Plate, the Pacific Plate and the little Juan de Fuca Plate.

Source: Adapted from *Plate Tectonics and Planet Earth, Volcano*

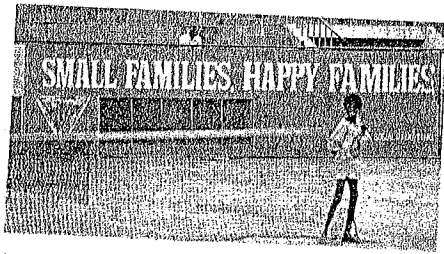
SOURCE 3A



[Source: Google Image]

Case study: India – focus on birth control

SOURCE 3B



The red triangle indicates family planning services in India. It can be seen outside shops and clinics that offer family planning products, as well as on messages that promote reproductive health services and population control.

In 1952, the Indian government implemented a national family planning programme to reduce birth rates. Its policy has been through various stages, but key to all of them has been a focus on improving access to contraception. The government has set up an extensive network of healthcare facilities that provide information about birth control methods

and make a range of techniques available. Sterilisation of women is the most common form of contraception in India. Population problems and population control measures were introduced into the school curriculum. However, there have also been more aggressive measures. In the 1970s, the government introduced forced sterilisation of men who had more than two children. This policy caused Indira Gandhi, the prime minister, to be forced out of office.

There has been a decrease in both birth rate and the total fertility rate in India since the 1950s, as Table 4.14 shows. However, change has been slower than was hoped for – or needed. In 2000, the Indian population reached 1 billion. About 27 million babies are born there each year, and 17% of the world population now

lives there – on just over 2% of the world's productive land.

Table Birth rate and the total fertility rate in India.

	Birth rate /1 000	TFR
1951	40,8	6
1981	34	Not available
1992	30	3,5
1997	26,4	3,3
2010	21,34	2,65

Reasons for the slow success

Some reasons for the slow success are:

- the large youthful population – in 2009 half the population was under 25 years of age
- the low age of marriage – about 50% of girls marry below the legal age of 18

SOURCE 3C

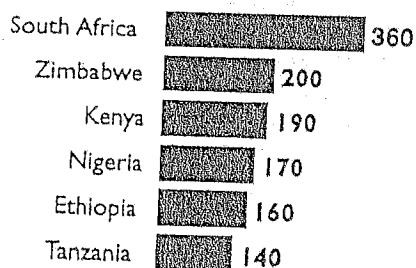
AIDS in South Africa

Among the estimated 40 million people living with HIV/AIDS around the world at the end of 2001, the vast majority, 28 million, live in sub-Saharan Africa. The virus has spread at such a rapid rate in South Africa that the country is home to more HIV-positive people than any other nation.

Deaths from AIDS

AIDS killed more people in South Africa during 2001 than in any other country.

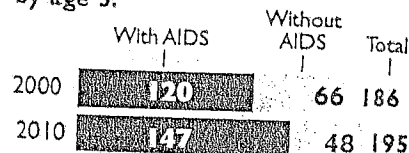
Deaths from AIDS, in thousands:



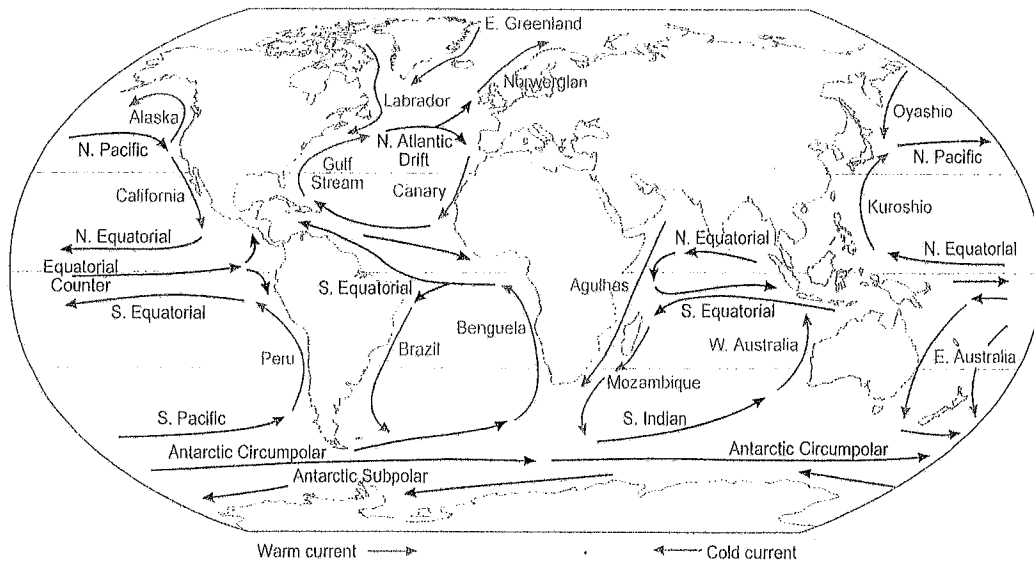
Child mortality

Child mortality in South Africa as a result of AIDS is likely to grow even worse this decade.

Deaths per 1,000 births by age 5:



SOURCE 3D



SOURCE 3E

RIPPLE EFFECT OF EXPLOITING FISH STOCKS

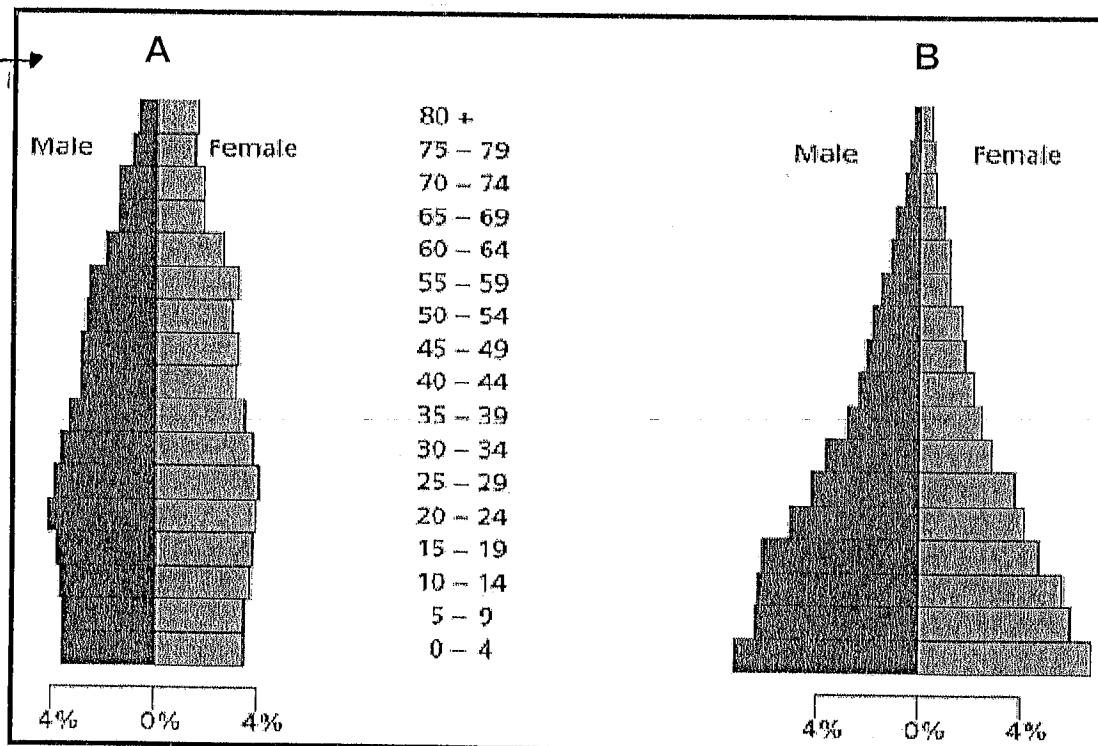
Kamcilla Pillay

Marine biologists predict that fish stocks will be depleted by 2050, upsetting the delicate balance of the world's oceans. The loss of fish will have a domino effect (an effect on one level will affect the next level) where other species are affected, for example whales will have a shortage of food.

This is made worse by the increasing death of coral reefs. Corals store carbon, and this will have an impact on the climate. There is a serious need to investigate other means of harvesting fish.

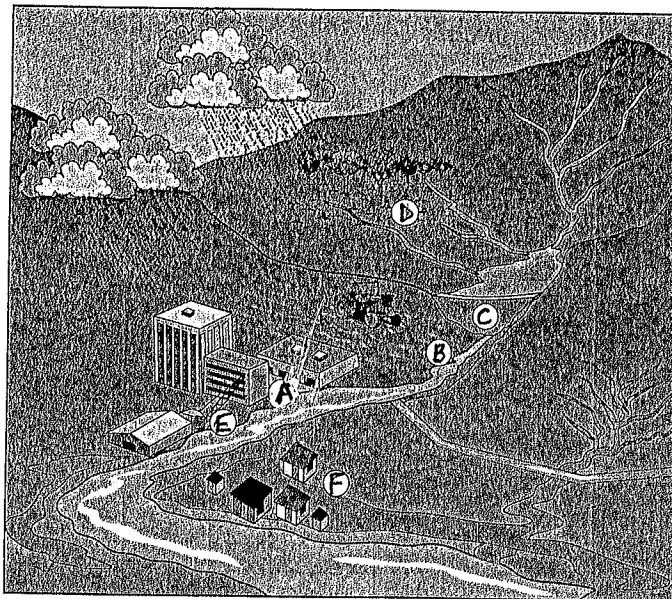
[Source: *Daily News*, June 2011]

SOURCE 4A



[Source: Google Image]

SOURCE 4B



1. Urban areas have rapid water run-off, causes rapid rise in river levels
2. Altering the shape of river channels may cause rivers to flow faster
3. Building dams that change the natural flow of rivers – threat of dams breaking or overflowing
4. Deforestation and vegetation removal increases run off
5. Destruction of wetlands reduces soil's capacity to retain water
6. Poverty and overpopulation may force people to live in flood risk areas

SOURCE

4C →

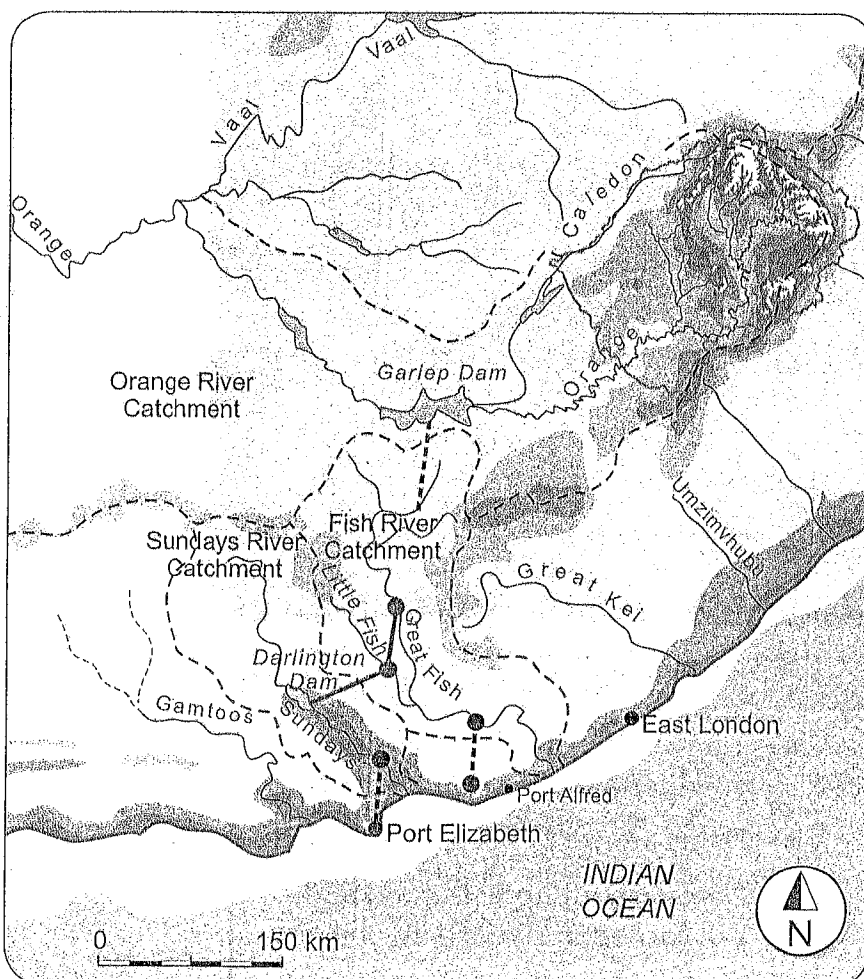
Case study: Xenophobic attacks in South Africa

Each year there are reports of xenophobic attacks in various parts of the country. These attacks were particularly violent and widespread in May 2008. In a period of just two weeks, more than 60 people were

killed, several hundred injured, and many thousands displaced when homes and businesses were attacked by angry mobs accusing foreigners of taking their jobs.

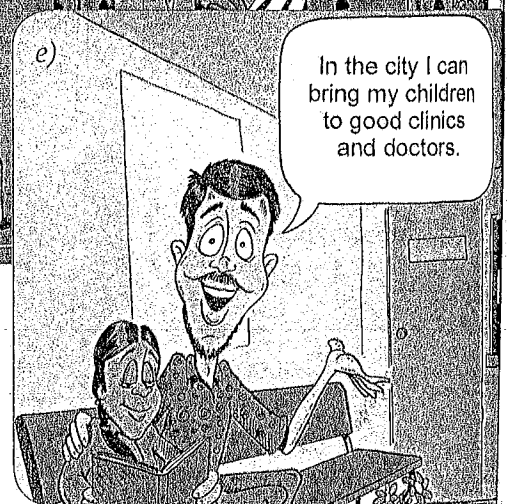
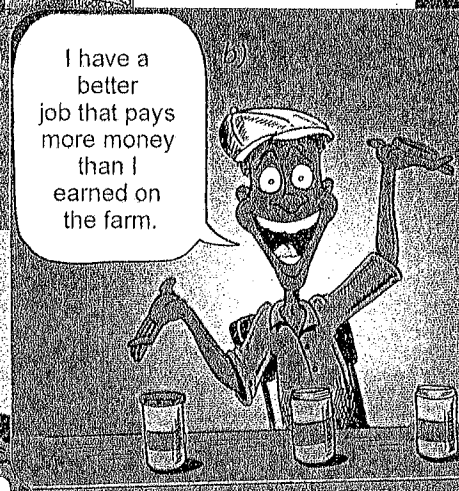
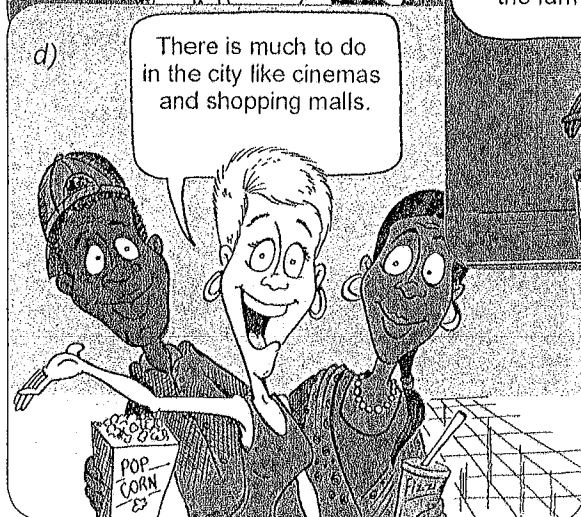
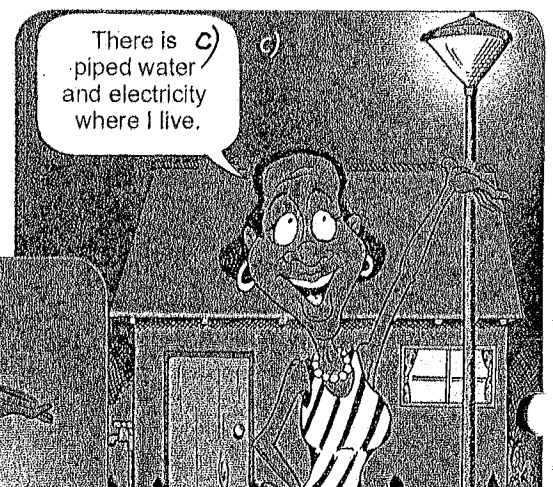
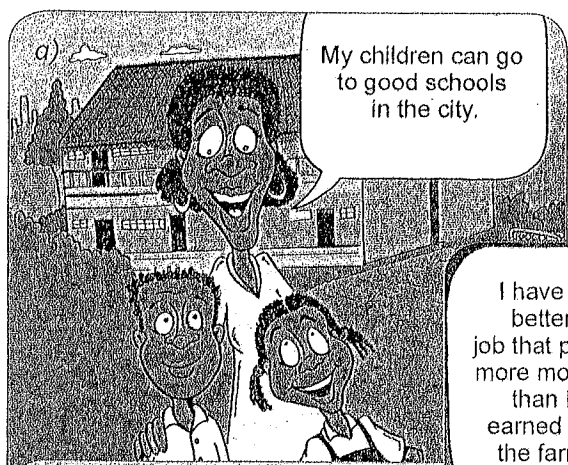
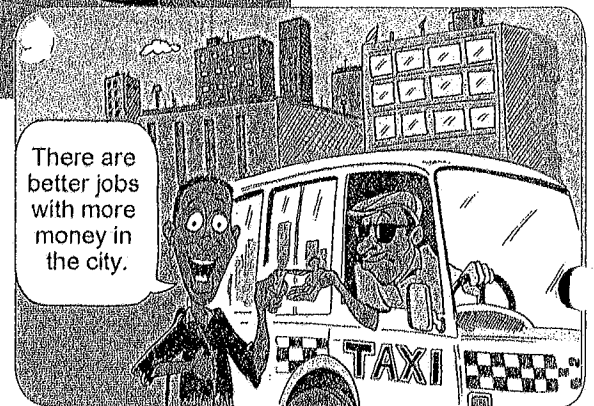
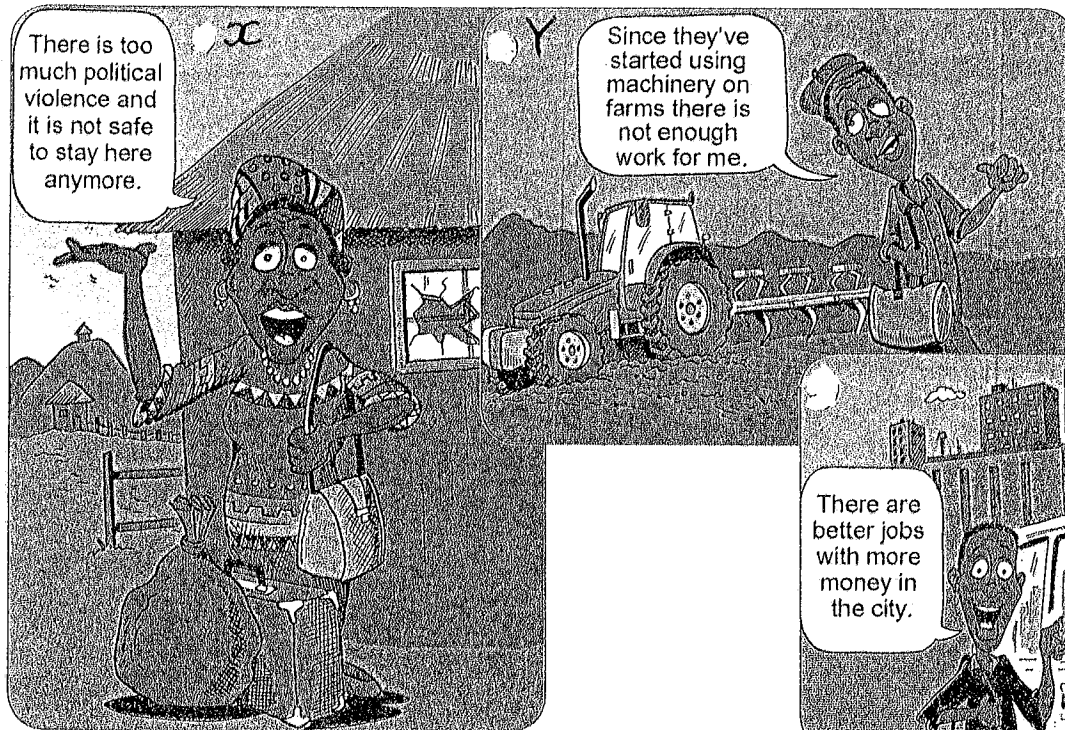
SOURCE 4D →

The Gariep-Orange-Fish-Sundays inter-basin transfers



A complicated canal and tunnel system takes water from the Gariep Dam to the Nelson Mandela Metropolitan area via the Fish and Sundays Rivers. This system transfers water from the Gariep-Orange river basin to the Fish and Sundays river basins. The extra water is used for irrigation in the rural areas as well as supplying the urban centres in the Nelson Mandela Metropolitan area.

1. Water is piped from the Gariep Dam into the Great Fish River basin.
2. A weir at Elandsdrift diverts water from the Great Fish River into a canal and through a tunnel into the Little Fish River.
3. A second weir diverts water into a canal and into Darlington Dam on the Sundays River.
4. A pipeline pipes water from the Sundays River to the Nelson Mandela Metropolitan area.



Case study: South Africa counts the cost of recent floods

27 January 2011

The South African government admitted it could have been better prepared for floods that have killed more than 120 people. Weeks of above normal rains, caused by the "La Niña" weather phenomenon – also blamed for deadly floods in Brazil and Australia – have devastated thousands of homes and farms since mid-December.

Disasters have been declared in 33 municipalities in eight of South Africa's nine provinces. The Social Development Ministry puts the death toll at 123 with 13 000 homes having been destroyed. A further 20 000 people needed emergency relief, the ministry said.

Early damage assessment by organised agriculture is that farmers alone have suffered losses of two billion rand. "The rough estimate is one billion rand for crop damages

and the same amount more or less for infrastructure," said Dawie Maree, an economist with AgriSA. Small farmers were also hit hard. One woman looked out from her flooded house in the Free State and said, "You can't even speak of crops in the fields. Everything is under water. I don't know what I am going to eat."

Maphaka Tau, a senior disaster official, said that more could have been done to limit the damage. Tau warned that rising dam levels would lead to the opening of further dam sluice gates. The country's biggest dam, the Gariep



The flooded Gariep-Orange River near Uppington.

Dam, is already 112 percent full and set to hit 122 percent of its capacity by Saturday.

(adapted from J. Gerardy, AFP, <http://newsinfo.inquirer.net/breakingnews/world/view/20110127-316867/South-Africa-braces-for-months-of-deadly-floods>)

GREENBURY SECONDARY SCHOOL



DEPARTMENT OF HSS
H.O.D. MR D RAMASAMI

Ramasami
02/11/16

Nov - 2014 - Grade 10 - Geography.
Marking Memo.

QUESTION 1

1.1. 1 Ocean/Sea.

2 Evaporation

3 Condensation

4 Precipitation

5 - ground water.

6 Exapotranspiration

7 Infiltration

1.2.1. External

1.2.2. Internal

1.2.3. Oceanic Crust

1.2.4. Plate Boundary.

1.2.5. Sedimentary

1.2.6. ~~Domant~~ Extinct.

1.2.7. ~~Moho Discontinuity~~ BATHOETH

1.2.8. Lava

1.3.1. Troposphere
Strato

Meso

Thermo

1.3.2. Gravity.

1.3.3. Stratosphere

1.3.4. Protects us from dangerous UV Rays. - (Bombardment)

1.3.5 - Getting thinner / hole

1.3.6 - Use ozone friendly products, if any reasonable answer.
- Stop/Reduce pollution

1.4.1. Summer - Date / T° - relatively high
C/Front - far from continent

1.4.2. X - Cold FRONT
Y - WARM FRONT

1.4.3 - 4 mb/hPa

1.4.4. a) 21°
b) Overcast
c) N/Westerly

1.5.1. Violent vibration / sudden slippage of Earth's Crust

1.5.2. E - Focus

F - Epicentre

G - Seismic Wave

1.5.3. A - closer to Epicentre - where greatest intensity is felt / B - further away from Epicentre

1.5.4. Seismograph

1.5.5. Damage to infrastructure / property } open
Loss of lives / property

1.5.6. - Build on Stilts

- Use lighter material eg Wood

1.6.1. PANGAEA

1.6.2. Continental Drift

1.6.3. - Fit like jig-saw puzzle
- Similar fossils / animals

Question 2.

2.1. B

2.15. E

2.1.2. A.

2.16. F

2.1.3. D

2.17. G

2.14. E

2.2.1. TRUE

2.2.5. FALSE

2.2.2. FALSE

2.26. TRUE

2.2.3. TRUE

2.2.7. TRUE

2.2.4. TRUE

2.2.8. FALSE

2.3.1. A - Condensation

B - Evaporation

C - Crystallisation

D - freezing.

2.3.2. Liquid.

2.3.3. Rain, Dew.

2.4.1. Water bodies - heated.

- Water changes to Water Vapour (gas).

- Comes into contact with cooler surface - Accumulation is called

- Condenses to form tiny droplets - clouds

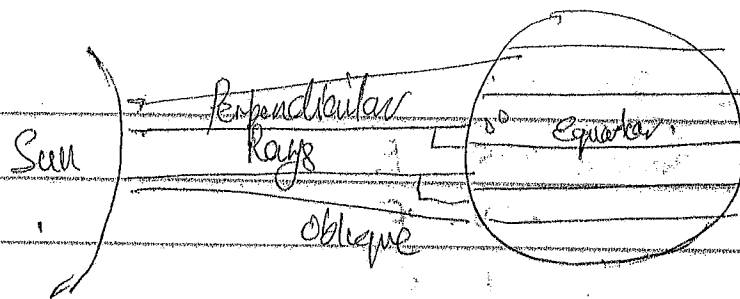
2.4.2. Cumulo Nimbus (Cb)

2.4.3. - Large/Dense towering clouds

- Large vertical extent / Anvil shaped

- associated with hail, thunder and heavy R/Fall

25.



Areas close to Equator - receive direct Rays.

- hence receive greater amt. of sun.
Warmer / Higher $^{\circ}\text{C}$

Areas Away from Equator - receive oblique / indirect rays
- hence lower $^{\circ}\text{C}$

2.6.1. Bending of the earth's crust

2.6.2. Sedimentary

2.6.3. A - closed / Isoclinal

B - open fold.

C - Monocline

D - over fold.

E - over thrust

2.7.1. A hole through which hot ash, lava, gas/dust/^{Debris} are emitted thro'

2.7.2. Dormant

2.7.3. Animals killed (black bears)

Destroyed forests and trees.

2.7.4. Shaking of the earth's surface resulting in sudden release of energy in the earth's crust that creates seismic waves.

2.7.5. Precious metals eg. gemstones

Fertile Soil / creation of Islands

Question 3.

3.1.1. Depopulation

3.1.5. death rate

3.1.2. inequalities

3.1.6. developing

3.1.3. population

3.1.7. malnutrition

3.1.4. Demography

3.1.8. International organisation

3.2.1. a) 50 mm (approx.)

b) 50 ^{cm} (approx.)

c) Lag time

3.2.2.1. Rising limb

3.2.2.2. Falling limb

3.2.2.3. 1:50

3.2.2.4. midnight

3.3.1 To reduce birthrates

3.3.2. Sterilisation of women

3.3.4. No - When Indira Gandhi implemented a policy of forced sterilisation in men, she was forced out of office.

3.3.4. a) Birth rate - no of births per 1000 babies/people

b) Fertility rate - no. of child bearing mothers

3.3.5. 1) Half the youthful pop. in 2009 were under 25 yrs of age

2) About 50% of the girls marry before/below legal age of 18.

3.3.6. - One child policy.

- Educⁿ

- Awareness programmes.

3.4.1. Acquired immunodeficiency syndrome

3.4.2. Africa

3.4.3. Educⁿ - use of condoms

- Awareness programmes
- Anti-retrovirals

3.4.4. - Sick labour force - low production

- HIV infected - high cost of an ARVS
- Few econ. active pop - high dependency ratio

3.5.1. W. Australia

Peru

Banguela

3.5.2. North / N.W - accept.

3.5.3. Upwelling of cold waters - nutrient rich - good fish catches.

- Also - contain more O₂ - growth of plankton - attract fish.

3.5.4. Warm currents - come from equatorial regions - hence warm.

Cold currents - come from polar regions - hence cold.
(or temperate)

3.5.5. Wind

Earth's rotation

3.5.6. a) Ocean contains plankton - coral reefs - thus provide O₂

b) Ocean provide fish - protein - food.

c) Waves - provide H.E.P. - Energy.

3.6.1. Using more fish than is required for human consumption - Catching more fish / too many more fish than is required

3.6.2. - Species can become extinct

- Other species can have shortage of food, eg whales
- Death of corals - less carbon - impact - rely on climate.

3.6.4 - Legislation - quotas - eg. 3 fish per rod, etc.

- Large Mesh Size

- Fishing seasons

- Japanese fines

- Fishing permits / licence

Question 4.

4.1.1. B

4.1.6. A

4.1.2. B

4.1.7. A

4.1.3. B

4.1.8. A

4.1.4. B

4.1.9. A

4.1.5. A

~~4.1.10.~~

4.2. 1 - A

2 - B

3 - C

4 - D

5 - E

6 - F

4.3.1. a) Refugee - person who leaves his country to seek refuge in another country because of political instability eg. unrest / War / poverty.

b) Xenophobia - fear / hatred of foreigners.

4.3.2. More than 60 people - killed.

Severed hundred injured.

Many thousands displaced.

4.3.3. Political instability / Poverty / Lack of jobs / Less opportunities

4.3.4. They take the jobs of S.A. Africans

4.3.5. They bring skills / contribute to economy.

4.1.1. When water is moved from one catchment/river basin
or to another using pipes, canals and tunnels.
- When water is transferred/pumped from areas of
high rainfall/sufficient water to areas of insufficient
water/rainfall.

4.1.2. Gaborone/Orange - Fish Sunday.
Kgal Tsele
Lesotho Highlands

4.1.3. To provide water to areas that do not have.
so that development of an area/country can take place.

4.4. Nelson Mandela Metropolitan area.

4.5. Water is piped/travels in a tunnel.

4.6. Irrigation in the rural areas.

4.5.1. Political violence - not safe

- Not enough jobs - lack of jobs

4.5.2. Push Factors

4.5.3. Better jobs/shopping malls/cinemas/earn more money
Better schools/good clinics/doctors/piped water/electricity

4.5.4. Rural - urban migration

4.5.5. Ghost Towns

- Nobody to man the farms.

- Low food production/schools + shops close down.

- Danger factor - aged and children alone in farms.

4.6.1. La - Nina.

4.6.2.(i) Farms have been devastated/destroyed. — Crops destroyed.

(ii) Farmers suffered losses of 2 billion rands.

(iii) 1 billion for crop damage + 1 billion for infrastructure.

163. - Organised help - usually from govt and specialised organisations like Red Cross

4.6.4. - Govt could have:

- given early warning signals - to evacuate etc.

- Inspection of dams regularly - ascertain the levels -

- When levels too high - sluice gates should be opened.

- Support programmes for farmers - so that they could be adequately prepared for shocks such as these

(Open Ended - accept any reasonable answer)

C

C