# **GEOGRAPHY**

Grade 11

REVISION BOOKLET

**TERM 3 & 4** 

This revision program is designed to assist you in revising the critical content and skills covered during Terms 3 and 4. The purpose is to prepare you to understand the key concepts and to provide you with an opportunity to establish the required standard and the application of the knowledge necessary to succeed in the GRADE 11 examination. The content in this revision booklet is mostly presented by means of mind maps. This will help you to understand the content easier and also see the relationship between the topics. In most cases, content is integrated with mapwork. This revision booklet should be used in conjunction with the lessons of term 3 and 4.

# **CONTENT**

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# **TERM 3: DEVELOPMENT GEOGRAPHY**

# 1. THE CONCEPT OF DEVELOPMENT

# 1.1 What is development?

Development refers to a number of characteristics that describe the **stage** a country has reached on **economic**, **cultural**, **social and technological levels**.

# **Development includes two aspects:**



# 1





# Standard of living

- is the material well-being of a person
- the value of their possessions and savings
- the type of home they live in
- whether they own items such as a washing machine, television, car, telephone

# **Quality of life**

- Is the general well-being of a person.
- It is affected by education, health care, services, utilities, environment, and social, political and religious freedom.



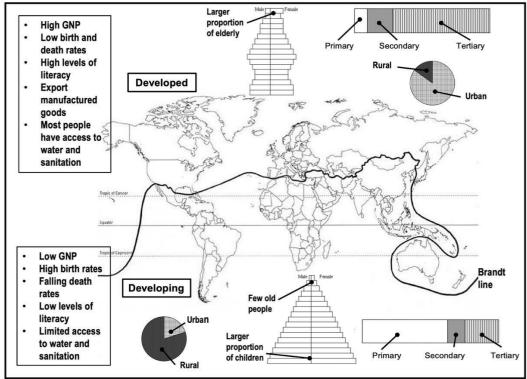






### 1.2 Economic, social and special aspects of development.

The Brandt line divides the world into a developed North and a developing South.

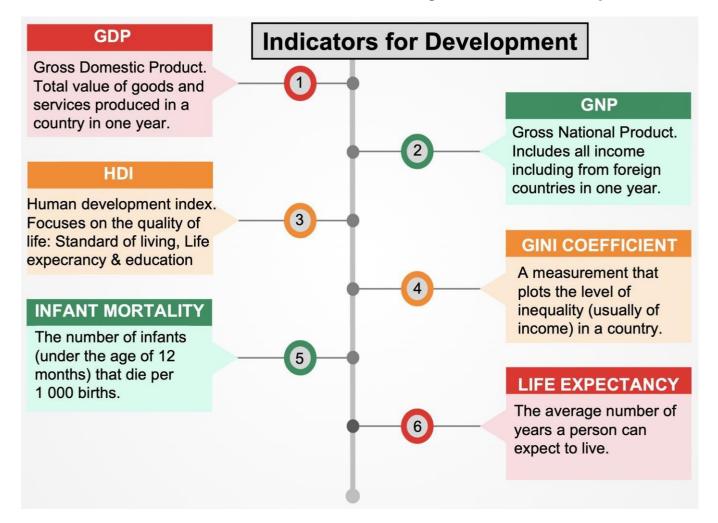


#### Take note of the following:

- Which countries are part of the developed/developing world.
- Most of the developed countries are in the northern hemisphere
- The difference in population pyramid. More elderly people in developed countries, more children in developing countries.
- The large number of people living in urban settlements in developed countries in comparison with the large number of people living in rural areas in developing countries.
- The difference in contribution of primary-, secondary, and tertiary activities
- Literacy levels
- Birth and death rates
- Access to water and sanitation

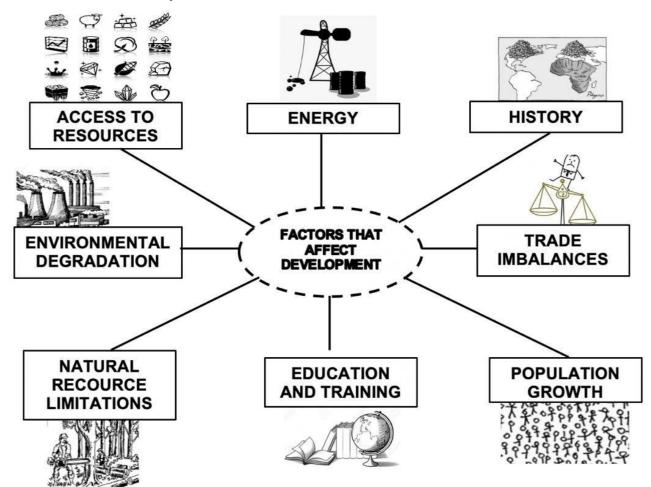
# 1.3 Economic, social, sustainable indicators of development

You must be able to define each of the following indicators for development



# 2. FRAMEWORKS FOR DEVELOPMENT

# Factors that affect development



# 3. TRADE AND DEVELOPMENT

### 3.1 International trade



#### What is international trade?

The exchange of goods and services between countries

# What are imports?

Goods that are brought into a country

# What are exports?

Goods that are shipped out of a country



#### 3.2 The balance of trade

# What is the balance of trade?

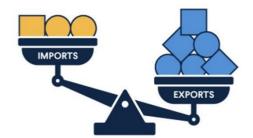
The difference in value between a country's imports and exports.



# What is a Negative and a Positive balance of trade? Negative balance of trade Positive balance of trade



When the value of the imports is greater than the value of the exports



When the value of the exports is greater than the value of the imports

# 3.3 Types of trading relationships





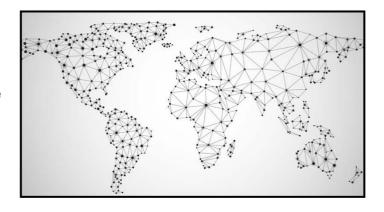


Free trade	The free movement of goods, capital and labour without regulations or controls (barriers)
Trade barriers	Regulations or policies that restrict international trade. Tariffs, quotas and subsidies
Fair trade	Trade between LEDCs and MEDCs in which fair prices are paid to the producers

# 3.4 Globalisation and its impact on development

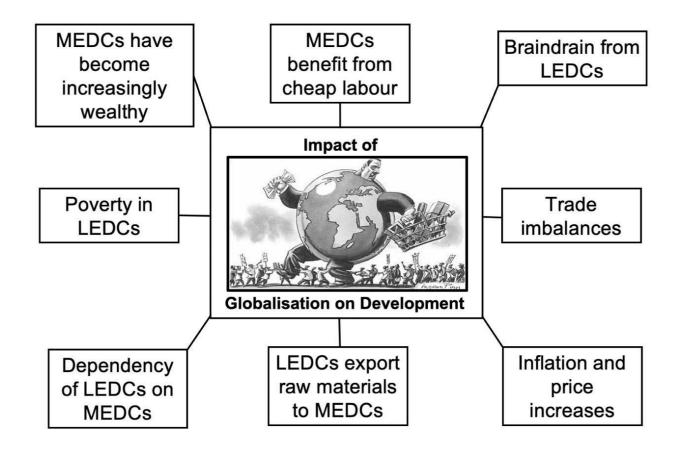
# 3.4.1 What is globalisation?

The process that links places throughout the world, making boundaries of little importance. The linking of the world's economies, societies and technologies NB Formulate your own definition on Globalisation, using the above





# 3.4.2 What is the impact of globalisation on development?



NB - Paragraph-type question regarding the impact of globalisation on development.

In a paragraph of approximately EIGHT lines explain the impact of globalisation on development


#### 4. **DEVELOPMENT ISSUES AND CHALLENGES**

# The effect of development on the environment

**Air pollution** from coal burning power stations contributes to acid rain, global warming and climate change.

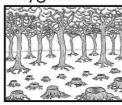


Water pollution is harmful to humans and plants, aquatic life and animals.



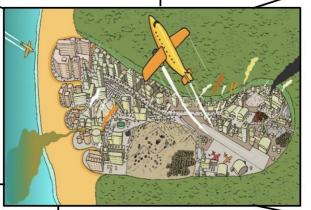
**Deforestation** 

results in soil erosion and less oxygen.



The supply of material goods increases but the

quality of life deteriorates.



Land pollution is caused by dumping refuse and builder's rubble, poor agricultural practices, industries and mining.



Nature makes space for people's homes, industry, infrastructure, mining, farmlands and pastures.



# 5. ROLE OF DEVELOPMENT AID

#### **DEVELOPMENT AID**

# What is development aid?

Development aid is aid given by governments and other agencies to support the economic, environmental, social and political development of developing countries.

# Explain the three types of development aid

#### Bilateral aid

Includes grants, loans and technical assistance

# Multilateral aid

assistance given by large organisations such as the United Nations. World Bank

### Conditional aid

has performance conditions attached to it.

# What is the impact of development aid?



# When is aid effective to LEDC's? It's ineffective when it:

- contributes to the training of personnel and builds technical expertise.
- provides humanitarian relief.
- encourages industrial development and creates jobs, and improves infrastructure.
- supports better economic and social policies.
- provides resources for investment and finance projects.
- supports countries to develop their natural resources and power supplies
- provides development of clean water and sanitation



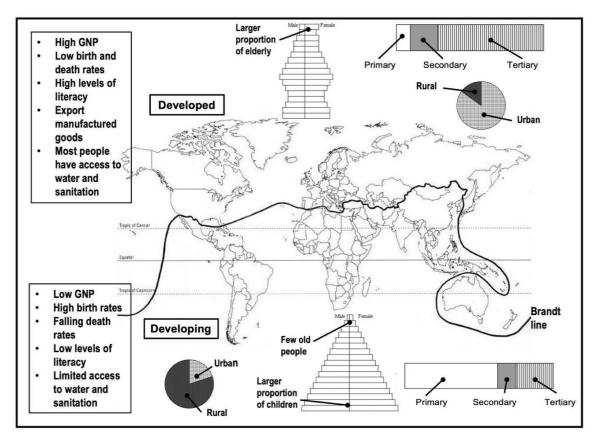
# When is aid ineffective to LEDC's? It's ineffective when:

- poor countries may struggle to repay loans.
- aid does not reach the people who need it most - the poorest people.
- corruption politicians use aid money for their own.
- it may be a condition of investment that:
  - the projects are run by foreign companies.
  - some of the resources or profits go back to the donor country.
- sometimes aid is tied to the purchase of goods from the donor country.

# **REVISION ACTIVITIES**

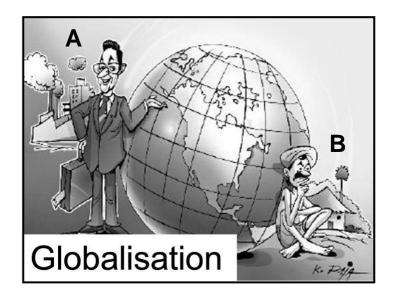
# **REVISION ACTIVITY 1 : CONCEPT OF DEVELOPMENT**

Refer to the infographic and complete the table



	Developed Countries	Developing Countries
Definition		
Hemisphere		
(North/South)		
Birth rate		
(High/low)		
Death rate		
(High/low)		
Elderly		
(More/less)		
Literacy levels		
High/low)		
Urban population		
(High/low)		
Rural population		
(High/low)		
Primary activities		
(More/less)		
Secondary activities		
(More/less)		

# **REVISION ACTIVITY 2: GLOBALISATION**



2.1	Define the term <i>globalisation</i> .	(1x2)	(2)
2.2	Identify the type of country regarding development at A and B.	(2x1)	(2)
2.3	Give TWO benefits to countries represented by A, from globalisation	(2x2)	(4)
2.4	Give two disadvantages to countries represented by B, from globalisation	(2x2)	(4)
2.5	Discuss how globalisation contributed to the rapid spreading of the coronavirus throughout the world.	(2x2)	(4)
2.6	Explain why the economic impact of the coronavirus would be worse in less economically developed countries (LEDC's)	(2x2)	(4)



# **REVISION ACTIVITY 3: DEVELOPMENT - CONCEPTS**

Give the correct definition/description for each of the following concepts.

	Concept	Definition/Description
1	Development	
2	Standard of living	
3	Quality of life	
4	MEDC	
5	LEDC	
6	GDP	
7	Human development index	
8	Infant mortality	
9	GNP	
10	GINI coefficient	
12	Life expectancy	
13	Balance of trade	
14	Positive balance of trade	
15	Negative balance of trade	
16	Free trade	
17	Trade barriers	
18	Fair trade	
19	Globalisation	
20	Development aid	

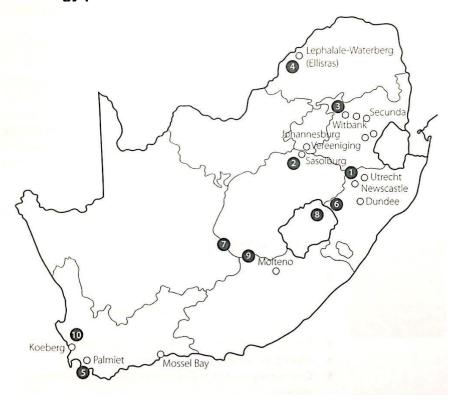
# **TERM 4: RESOURCES AND SUSTAINABILITY**

# 1. SOIL EROSION

#### What is soil erosion? Soil erosion occurs when the top layer of soil is removed from the land by water, wind or ice. Plants are then not able to grow, because the nutrients have been lost What are the effects of soil What are the causes of soil erosion? erosion? **Humans Physical** Fertile topsoil is removed Wind Deforestation More pressure on soil Poor farming practice Ice Fewer food can grow, less • Urban development Water food to eat · Construction of roads Steep slopes Dams will fill with slit Mining Low rainfall More sand deposited on continental shelf in sea **Animals** Past and present Occurred for millions of Overgrazing Ecosystems in rivers Trampling paths vears destroyed Overstocking • Increase in demands on Drinking water polluted soil • More land needed to settle How can soil erosion be managed? CONTOUR PLOUGHING Prevents water from PLANT TREES/ running down slope **VEGETATION** Protects soil CROP ROTATION **SOIL EROSION RETAINING** Plant different crops to **WALLS** preserve Prevents soil loss nutrients REDUCE LIVESTOCK Prevents overgrazing WINDBREAKS Rows of trees reduces wind erosion

# 2. CONVENTIONAL ENERGY SOURCES

# 2.1 Location of energy plants in South Africa



#### **Thermal**

- 1. New Castle
- 2. Sasolburg/Vereniging
- 3. Witbank/Middelburg
- 4. Lephalale-Waterberg

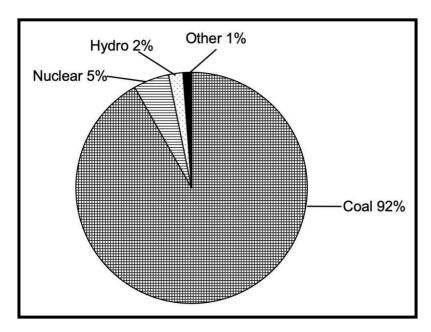
# **Hydroelectric**

- 5. Palmiet
- 6. TUVA
- 7. Van der Kloof
- 8. Muela
- 9. Gariep

# Nuclear

10. Koeberg

# 2.2 Production of electricity in South Africa



# **CONVENTIONAL ENERGY SOURCES**

What are Conventional energy sources?

The three conventional sources of energy used to generate electricity are: Fossil fuels (oil, gas and coal), water and nuclear power. Coal is the most widely used source

THERMAL ELECTRICITY GENERATION USING COAL		
How generated?	What is the impact of coal mining?	What is the impact of thermal power stations?
Coal extracted from a mine  Coal pulverised into a fine powder  Coal burned in	<ul> <li>Open cast mining scars the landscape.</li> <li>Land covered by mine dumps.</li> <li>Ecosystems are disrupted.</li> <li>Dust from mining reaches the atmosphere.</li> <li>Noise pollution.</li> </ul>	<ul> <li>Power stations are unsightly.</li> <li>Takes up large areas.</li> <li>Use large amount of water.</li> <li>Produce greenhouse gasses.</li> <li>Produces harmful acid rain.</li> </ul>
boilers to heat water	NUCLEAR	ENERGY
Water turned into steam	What are the advantages of nuclear energy?	What are the disadvantages of nuclear energy?
Steam used to turn blades of a turbine  An electrical current is produced  Sent to homes and factories via power lines	<ul> <li>Sustainable, there is no shortage of fuel.</li> <li>Produces a large amount of energy.</li> <li>Saves on valuable non-renewable fossil fuel.</li> <li>Reduces carbon emissions.</li> <li>Clean, no emission of greenhouse gasses.</li> </ul>	<ul> <li>Potentially dangerous.</li> <li>Disposal of nuclear waste is problematic.</li> <li>Very expensive to construct.</li> <li>Can be damaged by earthquakes and tsunamis.</li> <li>Dangerous for environment.</li> <li>Radiation causes health risks.</li> <li>Strong nagative public perception.</li> </ul>



#### 3. NON-CONVENTIONAL ENERGY SOURCES

WIND ENERGY		
What is a non-conventional energy source?	What is wind energy?	
<ul> <li>An energy resource which is less commonly used.</li> <li>Non-conventional energy resources are renewable.</li> <li>Examples are wind energy, solar energy, tidal energy, biomass and geothermal energy</li> </ul>	Energy created by wind has been caught and used for milling, pumping water and sailing ships.	
Where in South Africa is wind energy used to generate electricity?		
We have 33 wind farms at various stages of the stages	of development	

- We have 33 wind farms at various stages of development.
- Provinces with the best wind energy potential are Western Cape (WC), Northern Cape (NC), Eastern Cape (EC) and KwaZulu-Natal.
- Examples of wind farms are: Darling (WC), Cookhouse (EC), Copperton (NC)

# What is the future of non-conventional energy sources in South Africa?

- There is enormous potential to increase wind and solar power operations.
- Could reduce costs of electricity.
- The negative environmental impact of coal-fired power stations.
- Many of our coal-fired power stations are old

# What is the impact of using non-conventional energy on the economy of SA?

#### **ADVANTAGES**

- Jobs are generated
- Less cost to reduce pollution.
- Energy source as it is free.
- Wind and solar power use no water
- Lower cost on public health and safety.
- Cost per unit of electricity is cheaper.

#### DISADVANTAGES

- Job losses in coal mining and coal-fired power stations.
- Unfavourable weather and atmospheric conditions can make solar and wind energy unreliable
- Starting a non-conventional energy plant can be costly.

# What is the effect of using non-conventional energy on the environment of SA?

#### **ADVANTAGES**

- It is renewable and will not run out.
- The energy source is clean.
- Produces no greenhouse gas emissions
- Land in-between wind turbines can still be used for farming.
- Less damage to land, animal habitats and biodiversity.
- Reduces the demand for non-renewable fossil fuels.
- Produces no air and water pollution during operation.

#### DISADVANTAGES

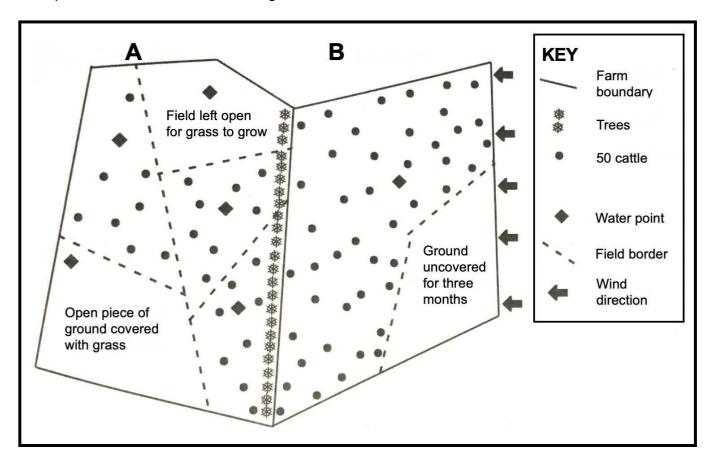
- Wind turbines create noise pollution.
- Wind turbines harm and kill birds, bats and insects.
- Heat bouncing of reflective surfaces of solar panels on large solar farms can harm, blind and kill passing birds and insects.
- The aesthetic value of the environment suffers as a result of large wind and solar farms.



# **REVISION ACTIVITIES**

# **REVISION ACTIVITY 1 : SOIL EROSION**

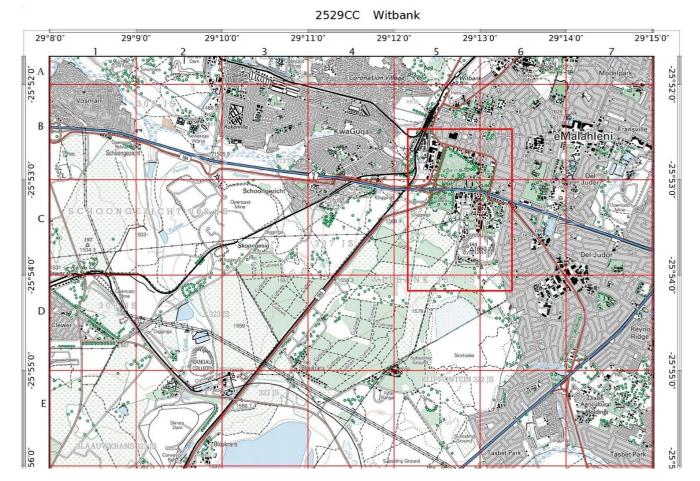
The questions are based on the diagram below.



- 1.1 Define soil erosion (1x2) (2)
- 1.2 What type of erosion is shown on the diagram? (1x2) (2)
- 1.3 Discuss THREE causes of soil erosion. (3x2) (6)
- 1.4 At what farm (A or B) did the famer has not taken preventative measures (1x2) (2) against erosion.
- 1.5 Explain what other farmer has done to manage the effects erosion on his (3x2) (6) farm.

# **REVISION ACTIVITY 2: MAPWORK APPLICATION**

The questions are based on the topographic map of WITBANK (EMALAHLENI)



# **GENERAL INFORMATION OF EMALAHLENI (WITBANK)**

**eMalahleni** (previously known as Witbank, is a city situated on the Highveld of Mpumalanga and lies halfway between Johannesburg and Nelspruit. Established in 1890 as Witbank, the city is known for its coal-mining in the surrounding region. The city has grown rapidly around heavy industry, and a coal firing power station at the Witbank Dam supplies electricity to a wide area. In eMalahleni, the average annual temperature is 15.4 °C. About 693 mm of precipitation falls annually.

- 2.1 eMalahleni is situated in ...
  - A Gauteng
  - B KwaZulu-Natal
  - C Mpumalanga
  - D the Western Cape (1x1) (1)
- 2.2 The name of the city, eMalahleni is a reflection of the mineral mined in the area. eMalahleni means "place of ..."
  - A gold
  - B diamonds
  - C coal
  - D iron

(1x1) (1)



2.3 The main activity found in blocks C2-C3 is ... manufacturing В farming С mining education (1x1) (1) D 2.4 Is the mineral mined in the mapped area a renewable or a non-renewable resource? Give ONE reason for your answer. (2x2) (4)Give TWO non-conventional energy sources that could replace the 2.5 thermal power stations of eMalahleni (Witbank) in the future. (2x2) (4)2.6 Describe TWO impacts, visible on the map, that mining activities had on the environment in this area. (2x2) (4)Give ONE example of attribute data with respect to mine course in block 2.7 D2. (1x1) (1)

# **REVISION ACTIVITY 3: RESOURCES - CONCEPTS**

Give the correct definition/description for each of the following concepts.

	Concept	Definition/Description
1	Soil erosion	
2	Conventional energy source	
3	Thermal electricity	
4	Non-conventional energy source	