



eduresourceza.com



ST BENEDICT'S

Geography department

cover sheet

Name:	CLASS:	DATE: Nov 2017
November <i>G11 Examination Mapwork</i>	MARK TOTAL: 100	Teacher:
Assessor: Mr Cimma	Moderators: Mr Gregory; Mr Brouard	

SECTION:	SECTION MARK:	SCORE:
Q1 Multiple choice	16	
Q2 Map calculations	34	
Q3 Resources and economics	50	

PLEASE READ THE FOLLOWING INSTRUCTIONS CAREFULLY

- 1 This paper consists of 12 pages. Please check that your question paper is complete.
- 2 Read the questions carefully.
- 3 Answer ALL questions in the spaces provided on the question paper.
- 4 A magnifying glass and calculator may be used.
- 5 Credit will be given for
 - interpretation and explanation, and
 - evidence of personal observation in the field where this is appropriate to the question.

There is a GLOSSARY of words below explaining what the words in **bold** used in the questions mean.

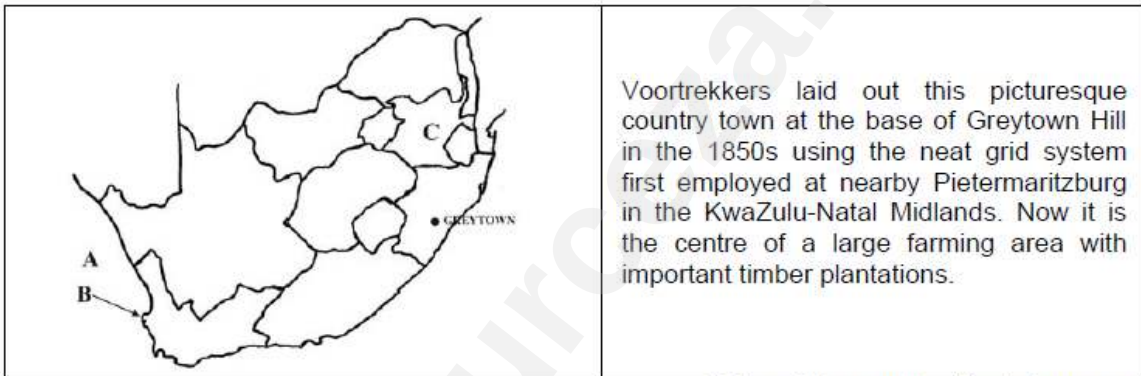
GLOSSARY

WORD	MEANING
Account for	To explain why, by giving reasons.
Analyse	To separate into parts or elements and to describe or examine each in detail; To break down into parts and then give and account.
Annotate	To add explanatory notes to a diagram, map or sketch.
Argue	To present reasons for or against.
Assess	To estimate or judge.
Calculate	To workout the value of something using a mathematical method.
Classify	To arrange or organise information into groups based on similarities.
Comment	To give your opinion or to make a statement about something; to write about generally.
Compare	To point out or show both similarities and differences.
Compile	To draw up or put a list together
Contrast	To point out only the differences.
Define	To give the precise meaning of
Demonstrate	To show that you understand something, to illustrate and explain; [can give examples].
Describe	To briefly give an account of something; to explain something and give reasons. (Note a map or diagram maybe part of a description).
Design	To make drawings, sketches or plans of something.
Determine	To discover as a result of investigation; To come to a decision or resolution.
Discuss	To explain by argument the various aspects of a statement.
Distinguish	To recognise or note differences between.
Draw	To create a picture with lines.

Elaborate	To add details or expand and answer.
Estimate	To make an approximate judgement or calculation.
Evaluate	To make an appraisal or express an opinion. To define, analyse and discuss.
Examine	To look at something carefully. To analyse and to discuss.
Explain	To make clear or plain or to make sure that the reader understands what is being said.
Explore	To comment on something in detail
Flow chart	A number of ideas which are linked together by means of a process
Give	To state or present the information.
Identify	To give the details or characteristics of something; to name
Indicate	To show or mark the position of something
Justify	To support an answer by giving reason, argument or evidence.
Label	To mark a diagram or sketch with simple information.
List	To present a series of names, facts, aspects or items.
Match	To connect similar things or things that belong together.
Mind Map	A diagram showing how different components of a system or topic relate to one another
Motivate	To provide valid reasons
Name	To state something; to give; to mention; to identify.
Opinion	To provide a personal view or attitude.
Outline	To give the essential features or main aspects.
Predict	To tell something in advance; to foretell of a future event.
Prove	To test by means of argument or evidence, so that something guessed at can be shown to be true and correct
Provide	To put forward; to give
Review	To make a survey of, examining the subject critically.
Select	To choose

Show	To make clear, to point out, to explain
State	To present information or details plainly, directly and simply, without discussion.
Substantiate	To support an answer with proof or evidence.
Suggest	To propose an idea, explanation or solution by way of a plan.
Tabulate	To arrange information or figures in a table.

Position of Greytown in South Africa



[Adapted from: <pmb-midlands.kzn.org.za>]

1. *Multiple choice, skills and concepts:*

1.1 The ocean marked A on the outline map of South Africa is the ... ocean. (2)

Indian	
Agulhas	
Benguela	
Atlantic	

1.2 The export harbour at B on the map is... (2)

Richard's bay	
Cape Town	
Saldanha Bay	
Coega (Ngqura)	

1.3 The province marked C on the map is... (2)

Free State	
Mpumalanga	
Limpopo	
Gauteng	

1.4 The mineral exported through the harbour at B is... (2)

Diamonds	
Gold	
Iron ore	
Coal	

1.5 The main mineral that is mined in province C is... (2)

Platinum	
Bauxite	
Gold	
Coal	

1.6 The dominant agricultural activity around Greytown is... (2)

Subsistence crop farming	
Commercial crop farming	
Commercial forestry	
Subsistence fishing	

1.7 A vehicle travelling along the R74 from Greytown to Weenen would be travelling in which direction? (2)

NW	
SE	
SW	
NE	

1.8 The length of the R74 in block B2 [only] would be...

(2)

12km	
2400m	
2.5km	
1.2km	

Q 1 = 16 marks

2. Map calculations:

2.1 **Determine** the approximate area (m^2) of the unnamed dam in E5, E6, F5, F6.

Average width of dam: _____ m (1)

Average length of dam: _____ m (1)

Approximate area of dam: _____ m^2 (2)

Calculations:

2.2 A downhill cycle race starts at Kelly hill in C1 and ends at point 1 in C2.

2.2.1 **state** the length of the ride: _____ m (1)

2.2.2 **state** the vertical descent: _____m (1)

2.2.3 **determine** the average gradient of the path taken: _____m (2)

Calculations:

2.3 If the winning cyclist completes the downhill race in 3 minutes, **calculate** the speed of the cyclist's descent. (4)

Speed = distance / time

2.4 A competitor in the race falls and injures himself. He is airlifted to the hospital in E5 from the Kelly Hill. **Determine** the bearing the helicopter pilot has to fly on. (2)

--

2.5 The pilot needs to locate Kelly Hill by means of co-ordinates in order to pick up the injured patient. **Provide** the co-ordinates for Kelly Hill. (2)

S	E
---	---

2.6 In the space below draw a **cross section** from spot height 1392 in E3 to the Town Hall in F4. Use index contours only, at 1cm per 100m. On the cross section indicate the position of the footpaths and the start of the urban area. (12)



2.7 **Calculate** the vertical exaggeration of the cross section.

(4)

Calculations: $VE = VS/HS$

Answer

Q3 Local resources and economics.

3.1 Merthley Lake [D2, D3, E2, E3] is the only source of water for the municipal area of Greytown. Sometimes water restrictions have to be imposed.

State TWO **reasons** [with evidence from the map] why Merthley Lake alone cannot adequately meet the water needs of the people of Greytown. (4)

3.2 The Greytown area is known for its forestry activities. Find TWO pieces of **evidence** from the map that imply that forestry takes place in this area. For each of the pieces of evidence that you have located **explain** why it is related to forestry activities. (8)

<i>Evidence:</i>	<i>Explanation:</i>
1.	
2.	

3.3 There are numerous economic activities that are linked to the forestry activities in the area. For each of the terms given below, **categorise** them as either primary, secondary or tertiary activities by writing them in the appropriate block. (12)

Cutting trees down; transporting them to the sawmill; processing the logs sawmill; providing water and power to the sawmill; producing paper; marketing the paper.

<u>Primary activity.</u>	<u>Secondary activity.</u>	<u>Tertiary activity.</u>

3.4 Using the processing of forestry products as an example, **explain** the concept of... (4)
Resource oriented industries.

3.5 The town of Greytown is located in the foothills Kwa Zulu Natal. The area contains numerous low grade fossil fuel deposits which can be used for Fracking, [Hydrological fracturing] a process whereby chemicals and water are pumped into the geological structures of the area, fracturing them. This enables hydrocarbon fuels to be extracted and converted to conventional fuel sources. During this process dangerous chemicals can contaminate the surrounding water table making it unusable. The process of fracking is very controversial and has been globally condemned by environmental groups. It at best, can only result in, short term economic gains and long term ecological damage.



3.5.1 **Categorise** the product of fracking as one of the following below.

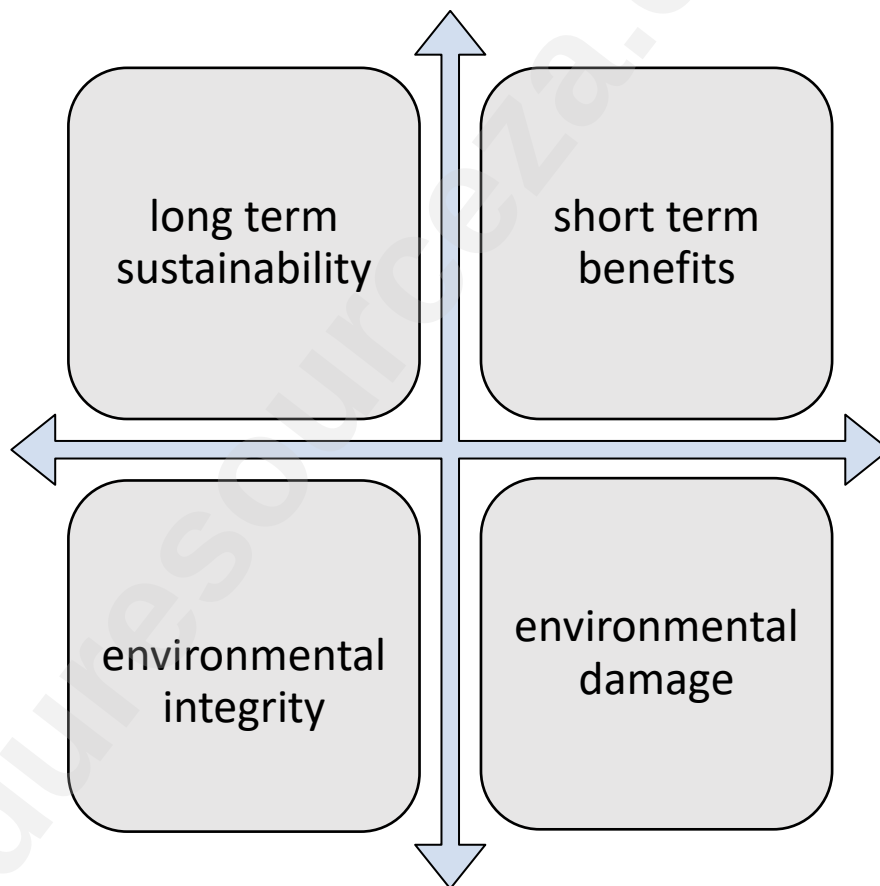
(2)

Renewable resource	
Sustainable resource	
Recycle-able resource	
Non-renewable resource	

3.5.2 You have been tasked to address the people of Greytown at a public hearing in which you explain the difference between the long term benefits of the forestry industry and the short term gains of fracking.

Use the schematic below [by annotating it] and the concepts provided to construct an **argument** to convince the people of Greytown to lobby against fracking in their area.

(20)



End of paper 100 mark:

You may tear off this section to help you complete your cross section ☺