BERGVLIET HIGH SCHOOL
GEOGRAPHY
GRADE 9

FINAL EXAMINATION
MONDAY 19 NOVEMBER 2025

MARKS: 75	TIME: 1½ HOURS

EXAMINER: MRS V. SINGARUM
MODERATOR: MR B. JOHNS

INSTRUCTIONS AND INFORMATION

1. Answer ALL the questions on this question paper.
2. Write your NAME, SURNAME and GRADE 9 CLASS on this cover.
3. Answer in FULL sentences except when asked to name, identify, or list.
4. Use the MARK ALLOCATION as a guide to how much to write.
5. Write neatly and legibly in BLUE or BLACK ink only.
6. Drawings and sketches can be done in PENCIL and labels in PEN.
7. The question paper consists of ELEVEN pages including this cover page.

SURFACES FORCES THAT SHAPE EARTH



RESOURCE USE AND SUSTAINABILITY



MARKING GUIDELINES

QUESTION 1 SURFACE FORCES THAT SHAPE THE EARTH

1.1 WEATHERING

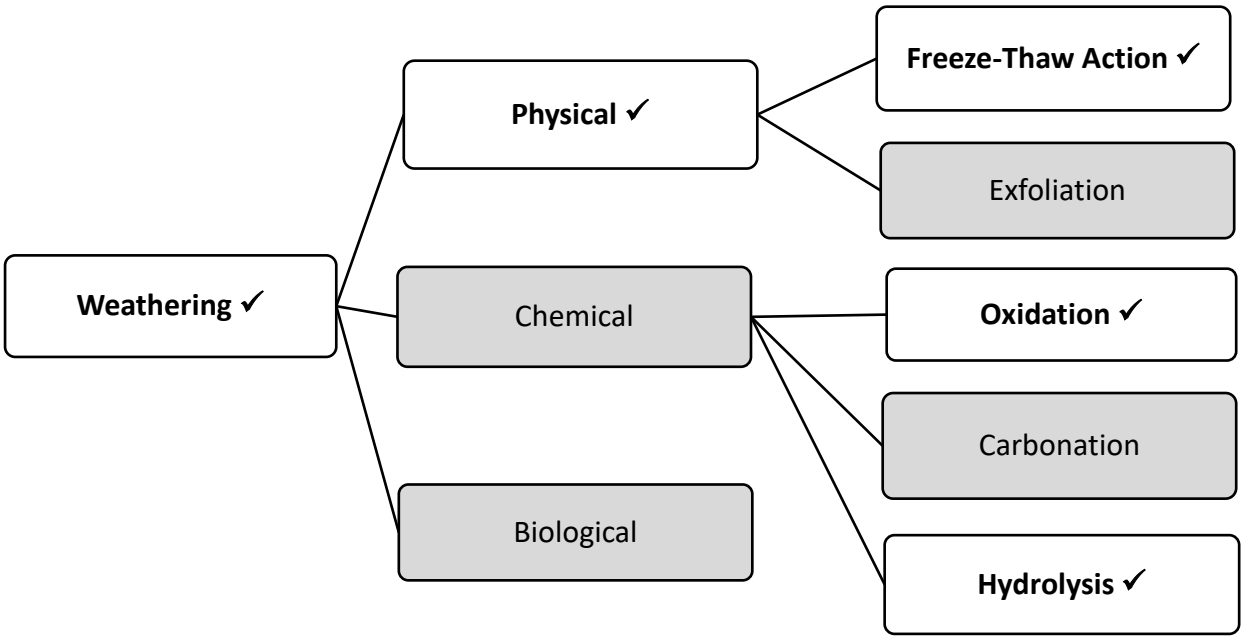
Match each statement in Column A with the correct term in Column B.
Write only the letter (**Y** or **Z**) next to the question number (1.1.1 to 1.1.5).

COLUMN A		COLUMN B	
1.1.1	Water and temperature are known as … in the process of weathering.	**Y**	agents
		Z	lichens
1.1.2	Repeated contraction and expansion causing the outer layers of the rock to be removed.	**Y**	carbonation
		Z	exfoliation
1.1.3	In chemical weathering, cold water absorbs … carbon dioxide than warm water.	**Y**	less
		Z	more
1.1.4	Oxidation takes place in rocks that contain …	**Y**	iron
		Z	platinum
1.1.5	A rabbit burrowing into the ground is an example of … weathering	**Y**	biological
		Z	chemical

1.1.1	**Y ✓**	1.1.2	**Z ✓**	1.1.3	**Z ✓**	1.1.4	**Y ✓**	1.1.5	**Y✓**

(5 x 1) (5)

Complete the mind map below by writing the missing information in the spaces provided.



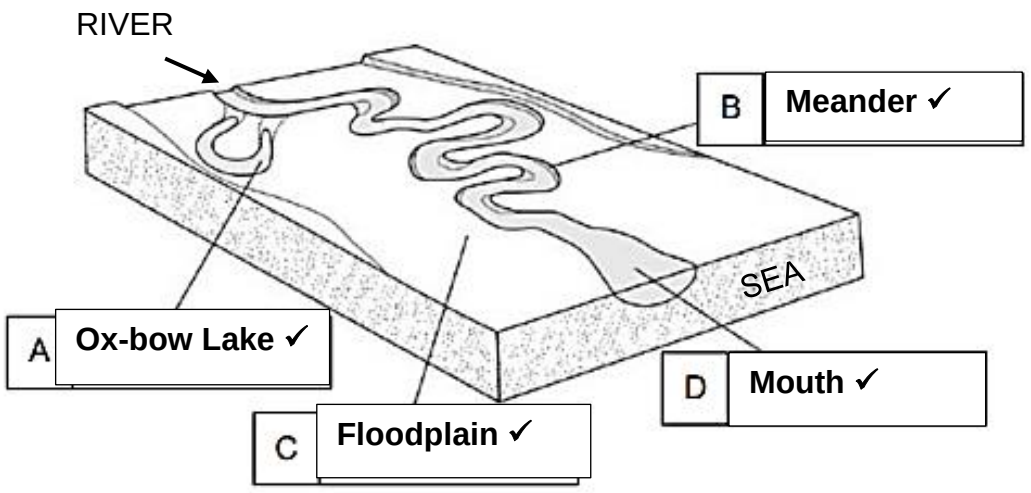
(5 x 1) (5)

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1.2 WEATHERING AND EROSION BY RIVERS

Study the diagram showing features of a river system.

FEATURES OF A RIVER SYSTEM



1.2.1 In which course (**upper**, **middle** or **lower**) of the river system are these features found?

Lower ✓

(1 x 1) (1)

1.2.2 Examine evidence from the diagram to support the answer to QUESTION 1.2.1.

Flat (level) gradient ✓✓
Close to sea
Meandering river
Floodplain/ox-bow lake present

(1 x 2) (2)

1.2.3 Use words from the list below to label **A**, **B**, **C** and **D** on the diagram

Ox-bow Lake	Mouth	Floodplain	Meander

(4 x 1) (4)

1.2.4 A delta is formed where a river enters the sea. State whether a delta is a depositional or an erosional landform, and explain why deposition or erosion takes place.

Depositional ✓ form

River slows down ✓✓ as it enters the sea.

(1 + 2) (3)

/10/

1.3 **SOIL EROSION**

Read the extract and then answer the questions that follow.

GULLY EROSION	
Poor land management along the Umzimvubu River in the Eastern Cape has led to extensive gully erosion, a problem quickened by a lack of resources and knowledge among farmers. This highlights how people's actions can increase erosion rates significantly, causing damage to agricultural land and water resources. **Glossary**: Gully erosion is a type of soil erosion where deep, narrow channels (gullies) develop in the landscape.	

1.3.1 Name the agent of erosion responsible for gully formation.

Water ✓ / rain

(1 x 1) (1)

1.3.2 State the human cause of gully formation along the Umzimvubu River.

Poor land management ✓

(1 x 1) (1)

1.3.3 Quote twelve consecutive words from the extract indicating that agriculture sped up the rate of gully erosion.

'…**a problem quickened by a lack of resources and knowledge among farmers**' ✓

(1 x 1) (1)

1.3.4 Explain evidence from the picture showing that the rate of soil erosion and gully formation was very high.

Gullies are long / deep / many ✓✓

Very bare soil / no vegetation

(1 x 2) (2)

1.3.5 Suggest ONE way in which soil erosion damages water resources.

Soil can **pollute water sources / rivers/ dams / lakes / groundwater ✓✓**

Eroded soil can silt up dams.

(1 x 2) (2)

1.3.6 In a paragraph of approximately EIGHT lines, discuss how agriculture (both crop and livestock farming) contributes to increased soil erosion.

[**NB**: Answers MUST be in FULL sentences and in PARAGRAPH form]

Natural vegetation is removed (exposing the soil). ✓✓

Ploughing loosens soil/rock. ✓✓

Overgrazing creates bare patches (which exposes soil). ✓✓

Livestock step on soil loosens the soil. ✓✓

Monoculture (same crop) weakens soil/strips of nutrients.

Poor irrigation (waterlogged) **washes soil away**.

Leaving fields bare/unplanted after harvesting.

(4 x 2) (8)

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[35]

QUESTION 2 RESOURCE USE AND SUSTAINABILITY

2.1 RESOURCE USE

Various options are provided as possible answers to the following questions.
Choose the answer and write only the letter (A–D) in the block next to each question.

2.1.1 Fuels that contain carbon are called …

A petrol appliances.
B fossil fuels.
C natural utilities.
D fuel sources.

B ✓

2.1.2 … resources are extracted from the physical environment.

A Human
B Mineral
C Natural
D Synthetic

C ✓

2.1.3 Information awareness and marine protected areas are strategies that decrease ….

A overfishing
B coal mining
C oil production
D sustainable fishing

A ✓

2.1.4 Resources with a limited supply that can run out if used unwisely.

A Renewable
B Non-renewable
C Sustainable
D Unusable

B ✓

2.1.5 In South Africa, electricity is mainly generated using … as an energy source.

A biomass
B coal
C oil
D natural gas

B ✓

(5 x 1) (5)

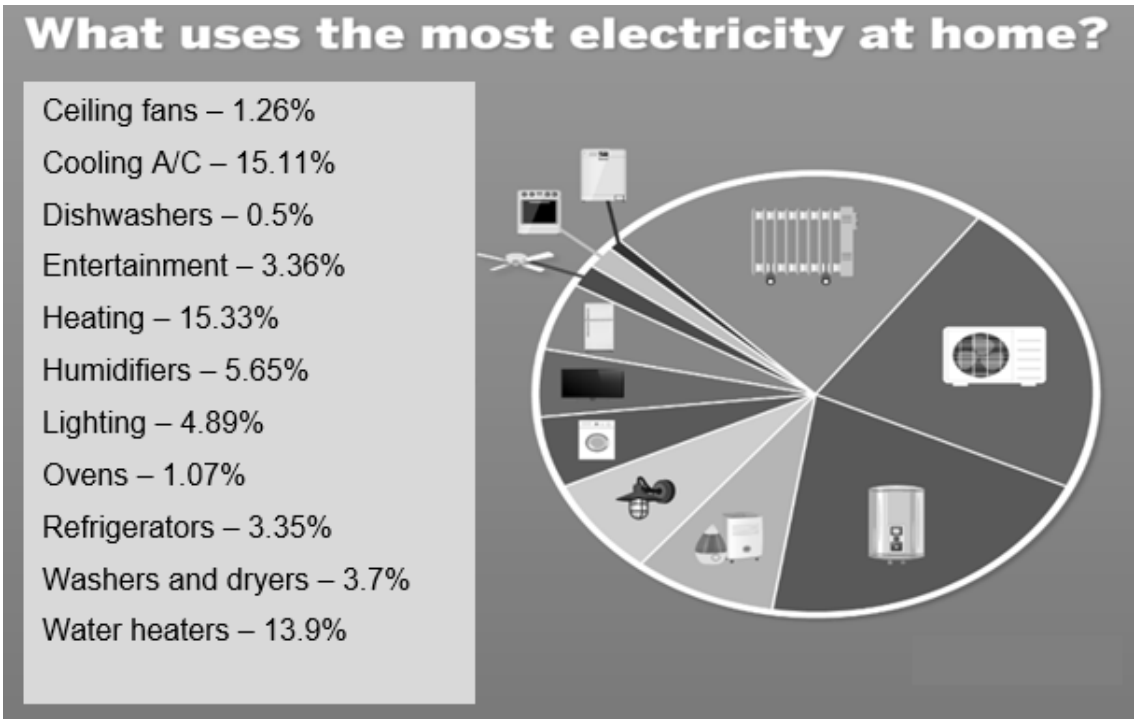
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2.2 SUSTAINABLE USE OF RESOURCES

Study the infographic on energy efficiency and answer the questions that follow.

ENERGY EFFICIENCY

Recent energy efficiency facts and statistics show that with climate change becoming more of a concern, the demand for sustainable homes has increased as prospective homebuyers are looking to reduce utility bills and lessen their carbon footprint.



2.2.1 Give TWO reasons (from the infographic) why prospective buyers are becoming more interested in energy efficient homes.

To **reduce utility bills**. ✓

To **reduce their carbon footprint**. ✓

(2 x 1) (2)

2.2.2 List the source that uses the highest and lowest percentage of energy.

Highest

Heating ✓

Lowest

Dishwashers ✓

(2 x 1) (2)

2.2.3 Name ONE example of entertainment in the home that uses electricity.

TV ✓ / **gaming consoles** / **computers** /**wifi** (accept other examples)

(1 x 1) (1)

2.2.4 Calculate the total percentage of electricity used by the kitchen appliances depicted below. Show ALL calculations.

Total = **1.07 + 3.35 + 0.5** ✓ = **4.92** ✓ %

(2 x 1) (2)

2.2.5 Describe sustainable ways in which electricity used by the following sources (appliances) can be reduced (decreased):

<u>Heating</u>:

Insolate home (**ceilings/walls/double glaze windows/geyser blankets**). ✓✓

Seal doors/ windows properly.

Use thicker clothing/bedding inside home.

<u>Lighting</u>

Energy-saving bulbs. ✓✓

Switch off lights when not needed.

(2 x 2) (4)

2.2.6 Suggest TWO reasons why more South Africans are not using alternative (green / carbon-neutral) energy sources in the home.

Expensive (in short-term) ✓✓

Technology not readily available (infrastructure not in place). ✓✓

Coal is relatively cheaper/readily available to mine.

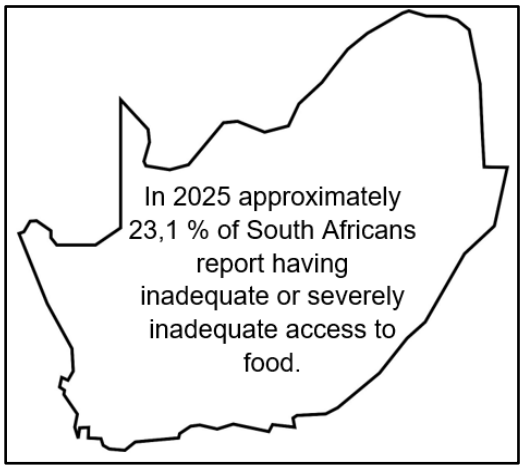
National grid/infrastructure in place to use coal as energy source.

(2 x 2) (4)

/15/

2.3 **FOOD SECURITY**

Refer to the information on food security in South Africa.





Percentage of Households by Food Insecurity 2025		
	Moderate Food Insecurity	Severe Food Insecurity
Female-headed Households	19.7	7.9
Male-headed Households	15.2	6.2

Maize Production in South Africa (2023/2024)				
Crop	Area Planted (2024)	Tons Produced (2024)	Area Planted (2023)	Tons Produced (2023)
Maize	2.596 million hectares	797 682	2.636million hectares	1 194 134

2.3.1 Define the concept of *food security*?

Everybody has permanent access to sufficient, safe, nutritious food ✓✓ to maintain a healthy and active lifestyle.

[Concept] (1 x 2) (2)

2.3.2 List the THREE elements of food security.

Food **availability** ✓

Food **access** ✓

Food **use** ✓

(3 x 1) (3)

2.3.3 Which element of food security does the placard (poster) of the man at the traffic lights refer to?

Food **access** ✓

(1 x 1) (1)

2.3.4 Suggest ONE economic reason why the man at the traffic lights does not have money.

Unemployment ✓✓

Low income/salary

[**NB:** Do not accept poverty – it is considered a social factor]

(1 x 2) (2)

2.3.5 Explain ONE reason why female-headed households face greater food insecurity than male-headed households.

Higher levels of unemployment amongst women. ✓✓

Lower earnings/salaries/wages amongst women.

No partner/spouse to contribute towards financial responsibility.

(1 x 2) (2)

2.3.6 Discuss ONE way in which empowering women (females) can lead to improved food security for their families.

Improve education levels/skills training. ✓✓

Greater employment/earning opportunities.

Training in making nutritious meals.

(1 x 2) (2)

2.3.7 Describe the relationship between the amount of maize planted and the amount harvested from 2023 to 2024.

Area planted increased (from 2023 to 2024**) but the amount of maize produced decreased.** ✓✓

(1 x 2) (2)

2.3.8 Suggest (and explain) ONE possible reason for the trend in the amount of maize produced between 2023 and 2024.

Droughts (low rainfall) destroyed crops. ✓✓

Floods destroyed crops

Pests destroyed crops.

[**NB**: Climate change could be used instead of flood / droughts]

(1 x 2) (2)

2.3.9 Discuss the role that the following can play in increasing maize production in South Africa.

Genetic Modification

Makes seeds/crops more drought/pesticide/herbicide resistant so maize can survive. ✓✓

Sustainable Farming Practices

[**NB**: Use a specific example of a sustainable farming practice]

Crop rotation (improves soil quality and yields). ✓✓

Pest control/management (decreases negative impact of pests).

Limit/reduce the amount of ploughing (retains soil quality).

Use natural/organic fertilisers (compost; animal manure).

Cover soil with dry leaves/plants (to protect soil).

Plant trees as wind breaks to protect crops.

(2 x 2) (4)

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[40]

GRAND TOTAL: **75**