TEACHERS WITHOUT BORDERS PROGRAMME

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In Bill Gates words, at the Mandela Day 'Living Together' address: "Maintaining the quality of this country's higher education system while expanding access to more students will not be easy. But it's critical to South Africa's future" – working together, we can help achieve this."

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Clifton School	Milnerton High	Rustenburg Girls' High	St Peter's
Durban Girls'	Northwood High	St Anne's DC	St Stithians
Fairmont High	Roedean	St John's DSG	Wynberg Boys' High
Herzlia High	Rondebosch Boys'	St Mary's DSG Kloof	Wynberg Secondary

NAME: **MEMO** Class:

Geography G8

June 2019

Time: 1 ½ Hours **Total:** 60

Examiner: Edmonds
Moderator: Bailey

PLEASE READ THE FOLLOWING INSTRUCTIONS CAREFULLY

1. This paper consists of 6 pages. And a 2 page colour insert.
2. Answer all questions on the paper
3. It is in your best interest to write neatly and legibly
4. Diagrams should be drawn in pencil

QUESTION ONE: MAPWORK

REFER TO THE MAP ON THE COLOUR INSERT PAGE

1.1 Provide the direction from Welcome Party (A4) to the Airport (B3). ____S_____ (1

1.2 Calculate the direct distance from Welcome party A4 (dot), to Arrowtown A6 (dot). Use the Linear scale and give your answer in Km. __3.25 Km__(1

1.3 Calculate the road distance from the middle of the bridge over the river in B4 eastwards through Queenstown to the middle of the bridge in A2. Use the ratio scale, and give your answer in Km. (show your working). __17.9 km_____ (2

Working: (Formula Cm on map x map scale) / 100 000

1.4 Provide the co-ordinates of the dot at Recovery Party in A4
__6_° ___50_' S ____26° _____56' E (2

1.5 Name the feature found at 7° 50'S 25° 56'E . airport_____ (1

1.6 Multiple choice: Write only the letter the most correct option in the space provided

1.6.1 Lines of Longitude
i) are measured as an angular distance North and South of the equator
ii) are called Parallels
iii) are used to calculate differences in time on earth
iv) are of equal length

The most correct statements are
a) i & iv b) ii& iii c) i & iii d) iii & iv Answer: _d____ (1

1.6.2 The International date line
a) is a straight line of Longitude
b) is found on the 0° E line of longitude
c) when it is at midnight the whole earth is on the same day.
d) None of the above statements are correct. Answer: _c____ (1

1.6.3 Lines of Latitude
a) never meet each other
b) are all the same length
c) divide the earth into the Eastern and Western Hemispheres
d) All the above statements are correct Answer:__a_____ (1

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QUESTION TWO: TIME

N.B. The earth makes one complete rotation of 360° in 24 Hours and as a result will move 15° in 1 hour and 1° in 4 minutes.
The earth rotates from west to east.

2.1 If you are in South Africa at 30°E at 8 am and you phone someone in England at 0°. Would the time in England be earlier or later than 8 am? __earlier____ (1

2.2 The time in South Africa 30°E is 10 am. Calculate the time in Madagascar 45°E.
__11 am_____ (1

2.3 Calculate the time in Walvis Bay in Namibia 14°E, if the time in Durban 30°E is 6am
__4:56 am _ (1

2.4 Refer to the cartoon below

In which direction (e-w or w-e) would the penguins need to travel across the IDL to go back a day? __w-e____ (1

4

QUESTION THREE: SEASONS

3.1 Mix and match: Match the word in column A with the statement in column B. (5

	COLUMN A	COLUMN B	ANSWER
3.1.1	21 June	Hours of daylight on the south pole on the 21 June	0
3.1.2	66½º	Latitude of the tropic of Capricorn and Cancer	23.5
3.1.3	23½º	Autumn Equinox in the Southern hemisphere	21 mar
3.1.4	21 March	Winter solstice in the Southern hemisphere	21 jun
3.1.5	0	Angle of the earth's axis to the horizontal plane	66.5

3.2 **Refer to the diagram of the earth on the Colour insert page and answer the questions that follow**.

3.2.1 a) Which season is the Southern hemisphere experiencing at **A**? __summer___ (1

b) On which date will the situation at **A** on the diagram occur? ___21 Dec _ (2

3.2.3 True or False. Write only the word True (if you think the statement is correct) or False (if you think the statement is incorrect) in the space provided.

IN THE SOUTHERN HEMISPHERE

a) Between A and B the days will be are longer than the nights. ____T_____ (1

b) Between C and D the nights will be getting shorter but will be still longer than 12

hours. ____T_____(1

c) Between B and C the days are becoming shorter and are less than 12 hours long
_____T_____(1

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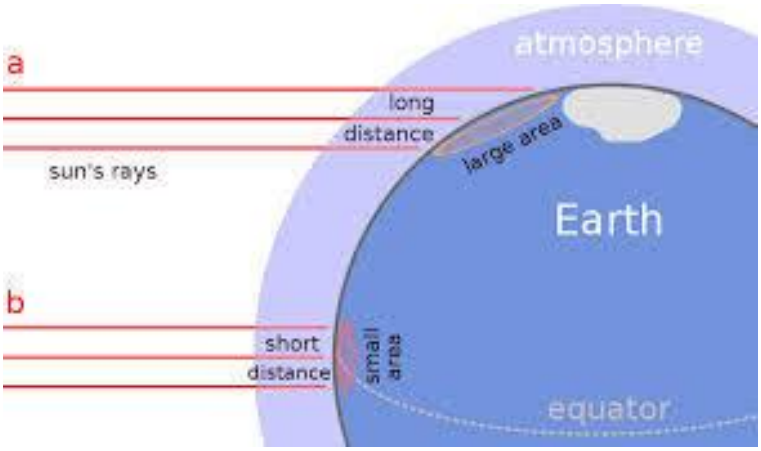
QUESTION FOUR: FACTORS THAT INFLUENCE TEMPERATURE AND RAINFALL

4.1 Draw a labelled diagram to show how latitude (distance from the equator) affects temperature on earth. (2



4.2 **Refer to the two Climate graphs, and the map of South Africa on page ii of the colour insert.**

a) Determine the highest rainfall for Durban. ___77mm_____ (1

b) Account for (explain why) the difference in rainfall between Durban and Port Nolloth.
_Dbn warm agulhas current = more evap =more precip

_PN cold Benguela current = less evap = less precip (2

c) Calculate the temperature range (Lowest to highest) for :Durban ___19°C (1
Bloemfontein __31°C (1

d) Account for (explain why) the difference in temperature range between Durban and Bloemfontein.
Bloem = continental climate land heats & cools rapidly
DBN maritime climate = oceans moderate climate so less extreme fluctuations in temp (2

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QUESTION FIVE: CLIMATE AROUND THE WORLD

Choose a word from the box below to correctly complete the sentences below

Thermometer Hygrometer Cup anemometer Barometer Hectopascals Millimetres Millilitres Isobars Percentage Precipitation m/sec

5.1 a) A _barometer_ is used to measure atmospheric pressure. (1

b) Atmospheric pressure is measured in hectopascals____. (1

c) Humidity is measured with a _hygrometer___ (1

d) The unit of measurement used by a cup-anemometer is _m/sec__ (1

5.2 Describe how snow is formed.
Wv rises. dpt is below freezing & crystalisation occurs (3

QUESTION SIX: SETTLEMENT

7

6.1 Name the 2 economic activities that take place in rural settlements.
Farming mining (2

6.2 a) What do the letters CBD stand for? _central business district (1

b) Describe two characteristics of the CBD. (2
tall buildings, high rental, central, congestion

6.3 Name the area around the CBD which is undergoing constant change.
Transition zone (1

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QUESTION SEVEN: ASTRONOMY

MULTIPLE CHOICE: Write the letter of the most correct option in the space provided (4

7.1.1 A lunar eclipse occurs when _a___
a) the shadow of the earth falls on the moon
b) the shadow of the moon falls on the sun
c) the shadow of the earth falls on the sun
d) the shadow of the moon falls on the earth

7.1.2 An solar eclipse occurs at: _a___
a) new moon b) first quarter c) third quarter d) Full moon

7.1.3 A spring high tide occurs at: _d___
i) Full moon phase ii) first quarter phase iii) third quarter phase
iv) new moon phase
a) iii & iv b) i & ii c) ii & iii d) i & iV

7.1.4 The force that is responsible for the same tide occurring on opposite sides of The earth is called? __b___
a) centrifugal force b) tidal force c) centripetal force d) magnetic force

7.2 **TRUE OR FALSE**: Write the word True or False in the space provided (5

7.2.1 We do not experience an eclipse of the moon every lunar month because the moons plane of revolution around the earth is tilted at 66.5° to the earth's revolution around the sun. __f_____

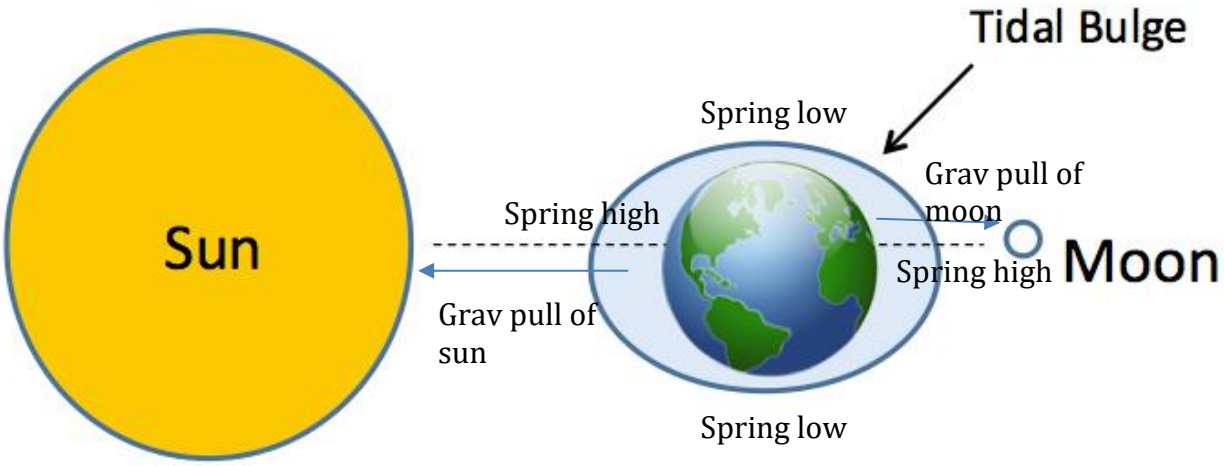
7.2.2 We experience two neap and two spring tides every lunar month. ___t_____

7.2.3 The sun's gravitational pull is less than that of the moon. ____f_____

7.2.4 Solar eclipses cover a smaller area than lunar eclipses. ___t_____

7.2.5 the area covered by the Partial shadow of a solar eclipse is called the footprint. ____f____

7.3 Draw a fully labelled diagram of a Spring tide (include the position of the sun moon & earth, the gravitational pull of moon & sun and the position if all the relevant tides. (4



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