

**Wingen Heights Secondary School**

**Programme for the holidays**

**Grade 11 – Geography**

<b>Date</b>	<b>Study topic</b>
<b>20 / 03 / 2020</b>	<ul style="list-style-type: none"><li>• Hilly landscapes – Page 128</li><li>• Basaltic plateaus – Page 129,130</li></ul> <b>Activity 2</b>
<b>27 / 03 / 2020</b>	<ul style="list-style-type: none"><li>• Canyon landscapes – Page 131</li><li>• Karoo landscapes – Page 132,133,134</li><li>• Utilisation of landscapes associated with horizontally layered rock. – Page 135</li></ul> <b>Activity 3,4 and 5</b>
<b>03 / 04 / 2020</b>	<ul style="list-style-type: none"><li>• Dip slopes – Page 136</li><li>• Scarp slopes – Page 136</li><li>• Cuestas and hogbacks – Page 137</li></ul> <b>Activity 6 and 7</b>
<b>10 / 04 / 2020</b>	<ul style="list-style-type: none"><li>• Cuesta basins and cuesta domes – Page 139</li><li>• Utilisation of landscapes associated with inclined strata – Page 140</li><li>• Identification of igneous intrusions – Page 141</li></ul> <b>Activity 8 and 9</b>
<b>14 / 04 / 2020</b>	<ul style="list-style-type: none"><li>• Granite domes – Page 143</li><li>• Tors – Page 144, 145</li><li>• Types of slopes – Page 148,149</li></ul> <b>Activity 10,11 and 12</b>

1. Define the following:

1. Pressure Gradient force. (2)

2. Isobar. (2)

3. Geostrophic wind (2)

2. Explain why pressure decreases as altitude increases. (2)

Refer to FIGURE 1 showing the development of the South African berg wind.

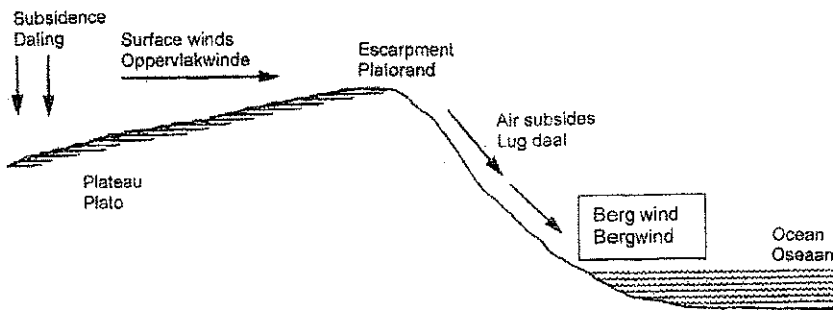


Figure 1 Berg Winds

3. Name the pressure cell visible in FIGURE 3 that results from subsidence over the plateau. (2)
4. How does the berg wind affect the weather along the southeast coast of South Africa? (4)
5. Name the environmental hazard associated with the development of berg winds. (2)
6. During which season do berg winds mainly affect the weather along the southeast coast of South Africa? (2)

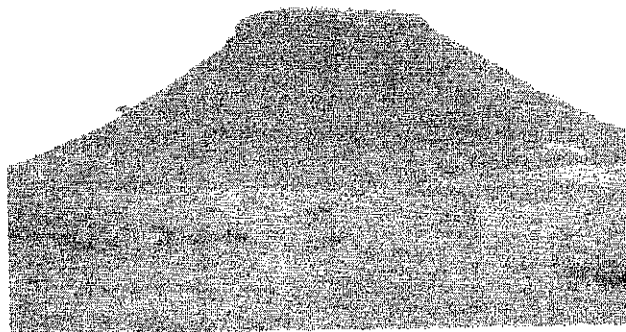


Figure 2

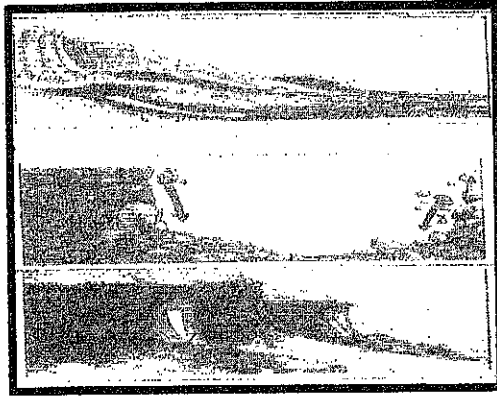
7. Draw a labelled field sketch of the photograph shown above. Label the slope elements. (2)

8. Types of Mass Movement

A

B

C



Refer to the diagrams above (A,B and C)

1. For each sketch A-C shown in the diagram above, **identify** the type of mass movement (6)
2. Which of these movements is the most rapid? (2)
3. Extreme weather such as a heavy rain can trigger mass movement.  
Describe and explain **FOUR** factors which will affect the nature and speed of movement. (8)
4. Suggest **TWO** strategies which can be put in place, to counter-act mass movement in severe weather conditions. (4)

Refer to synoptic pressure cell below:

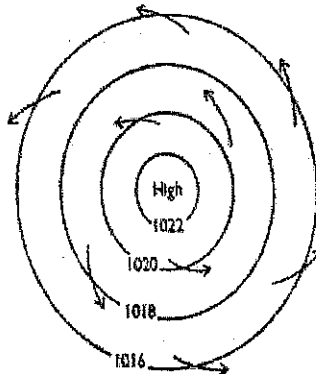
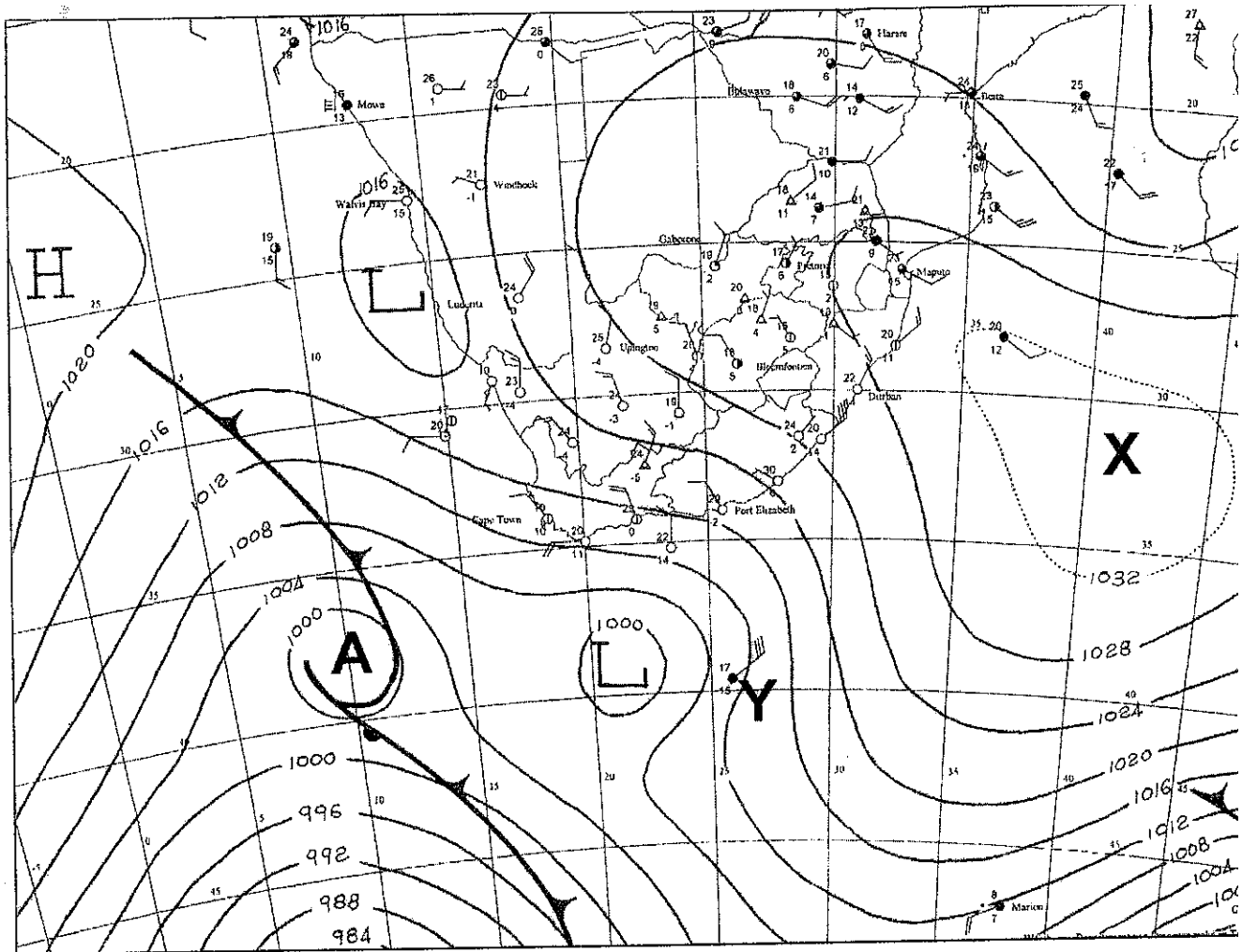


Figure 4

9. Indicate which hemisphere this pressure cell represents. Give a reason for your answer. (4)
10. Provide a definition for Coriolis force. (2)
11. Provide another name for a High Pressure system. (2)
12. **Describe** and **account for** the seasonal change in position of the sub-tropical high pressure belt in the Southern Hemisphere. (4)



21.

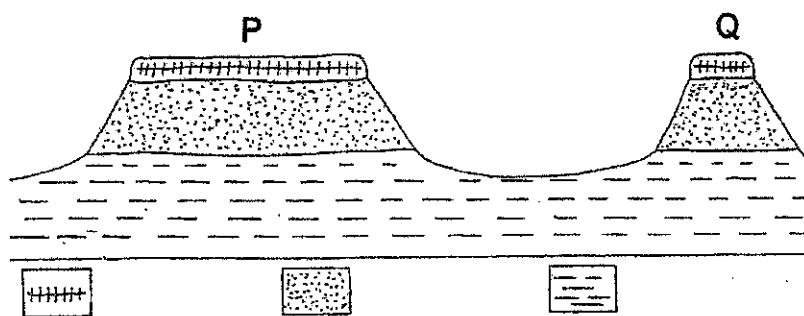


Figure 5

The figure above illustrates a structural landscape typically found in the Karoo.

1. Identify landforms P and Q respectively.
2. What evidence in the figure suggests that landforms P and Q developed from the same landform that existed earlier?
3. Which rock type in the diagram is the most resistant to erosion?
4. Give ONE reason for your answer to QUESTION 3.
5. Briefly describe how landform P will change into landform Q.

Study the diagram showing the normal atmospheric conditions in the Pacific ocean.

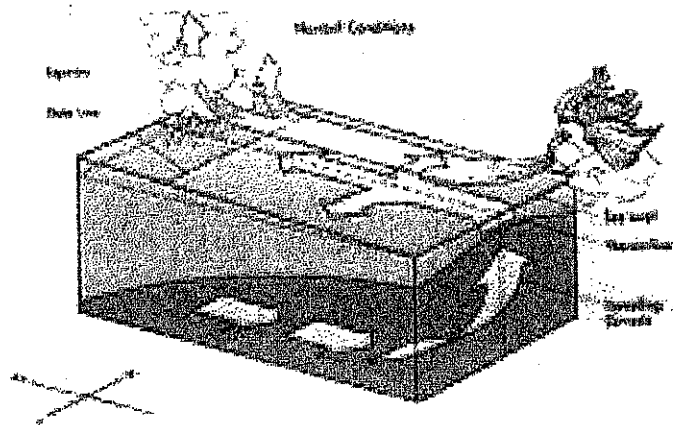


Figure 5

13. What does the word El Nino mean ? (1)
14. Using the diagrams as a guide explain the formation of El Nino. 2x4 (8)

Refer to the synoptic weather map below:

15. Provide labels for the following:
- X**
  - isobaric pattern **Z**
  - Name the cyclone at **A**. (3)
16. Provide TWO reasons for the wind direction at **Y**. (2)
17. Describe the pressure gradient at **Z** (2)
18. Give the approximate pressure reading at **X**. (1)
19. List the weather conditions being experienced at Marion island (**F**) (5)
20. Name the wind found at **F**. (2)