



SOUTH AFRICAN COMPREHENSIVE ASSESSMENT INSTITUTE  
SUID-AFRIKAANSE KOMPREENSIEWE ASSESSERINGSINSTITUUT

**Adult Basic Education and Training (ABET)  
Site-Based Assessment  
Portfolio of Evidence**

**Mathematical Literacy:** NQF Level 1  
**Total:** 50 marks  
**Duration:** 7 hours  
**Task 1:** Assignment

**Learner Information**

**Name** : \_\_\_\_\_  
**Surname** : \_\_\_\_\_  
**Identity/  
Passport Number** : \_\_\_\_\_  
**Employee Number** : \_\_\_\_\_  
**Company** : \_\_\_\_\_  
**Centre** : \_\_\_\_\_  
**Date** : \_\_\_\_\_

**Declaration**

*I declare that this portfolio of evidence is my own work:* \_\_\_\_\_

**Signature**



**INSTRUCTIONS**

1. This task consists of **FOUR ACTIVITIES**.
2. Complete **ALL** questions in each **ACTIVITY**.
3. Learners should work on **ALL** activities individually.
4. You may use a calculator but show **ALL** your working.
5. Round off your answers to **TWO** decimal places (where necessary).
6. Write your answer in the simplest form.
7. Adhere to the numbering system used in this question paper.



**ACTIVITY 1: COMPOSITION OF AIR**

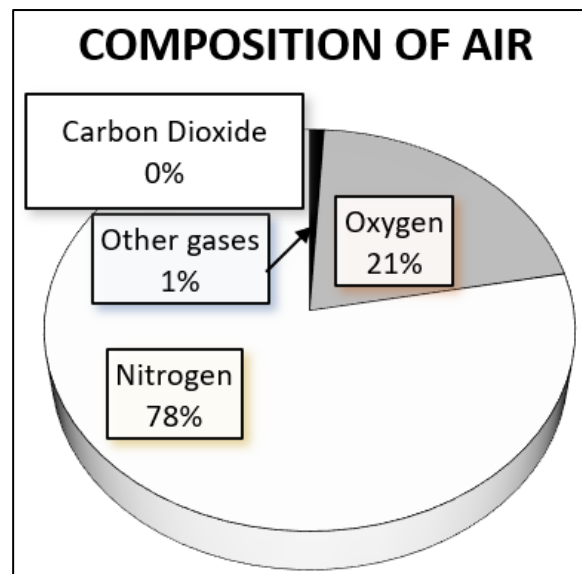
The air in the Earth's atmosphere consists of several gases. The gas we need to breathe is oxygen. One of the gases in the atmosphere is carbon dioxide, which is harmful to us.

Use the table and pie chart below to answer questions 1.1 – 1.4.

Examine the table showing the composition of air, and the pie chart representing the table.

**Table 1.1**

Nitrogen	Oxygen	Carbon dioxide	Other gases
78%	21%	0,04%	0,96%

**Pie chart: Composition of air**

1.1 Write 0,04% as a decimal fraction.

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(1)

- 1.2 If the percentages are rounded off to the nearest percentage, is the pie chart accurate? Answer Yes or No. You may assume the angles are correct.

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(1)

- 1.3 What is the approximate ratio of oxygen to nitrogen in the air? Show your working. Then circle the letter of the correct answer.

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- A 1 : 3  
B 1 : 4  
C 1 : 5  
D 1 : 6

(2)

- 1.4 Briefly mention one way in which this pie chart might be used to create a false impression by a manufacturing company wishing to convince the reader that its carbon dioxide emissions are unimportant.

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(2)

**Total Marks for Activity 1**

**[6]**



**ACTIVITY 2: PNEUMATIC OR AIR DRILL**

A pneumatic or air drill is powered by compressed air. Look at the features of this air drill and answer the questions.

- The drill completes 1 800 rpm (revolutions per minute)
- The average amount of air used by the drill is 200 litres of air per minute
- The price of the drill is R568,10 including 15% VAT.



<https://www.supplywise.co.za>

2.1 How many revolutions does the drill complete in 20 seconds?

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(2)

2.2 How long does the drill take to complete 2 700 revolutions?

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(2)

2.3 How many  $\text{cm}^3$  of air does the drill use in one second? Round off to the nearest whole number.  
(1 litre = 1 000  $\text{cm}^3$ )

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(3)

2.4 Calculate the price of the drill excluding VAT.

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(3)

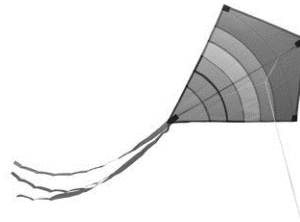
**Total Marks for Activity 2**

**[10]**



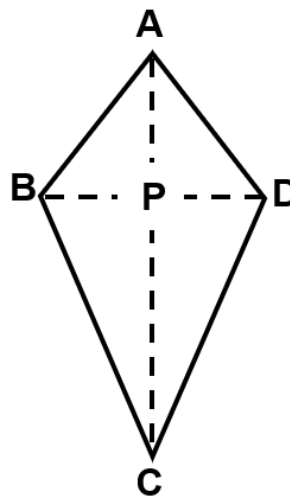
**ACTIVITY 3: KITE**

Flying a kite is a popular activity on a windy day.



Source: <https://stock.adobe.com>

The kite ABCD has diagonals AC and BD. Use the diagram to answer questions 3.1 to 3.6.



3.1 Are any of the lines in the diagram parallel? If they are, name them.

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(1)

3.2 Are any of the lines in the diagram perpendicular? If they are, name them.

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(2)

3.3 Which line is an axis of symmetry of the kite? \_\_\_\_\_

(1)

3.4 AB = 32 cm and BC = 45 cm. Determine the perimeter of the kite. Show working.

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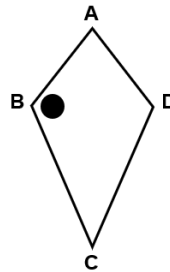
(2)

3.5 Count the total number of triangles in the diagram. Note: there are more than four.

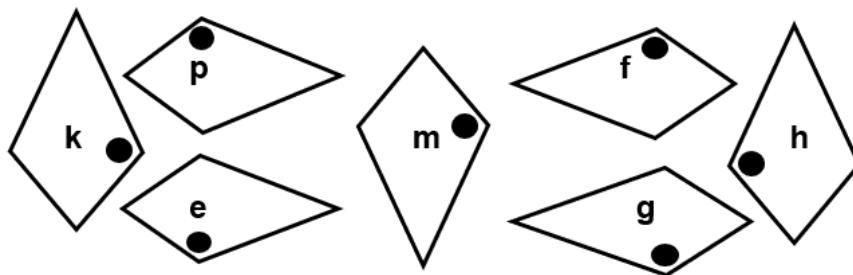
Number of triangles: \_\_\_\_\_

(1)

3.6 The kite has a marker at B, as shown.



The kite is rotated clockwise through 90°. Circle the correct letter to indicate the rotated kite.



(2)

3.7 True or false? A triangle cannot have more than one obtuse angle. Explain your answer.

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(2)

**TOTAL MARKS FOR ACTIVITY 3**

**(11)**





**ACTIVITY 4: WIND**

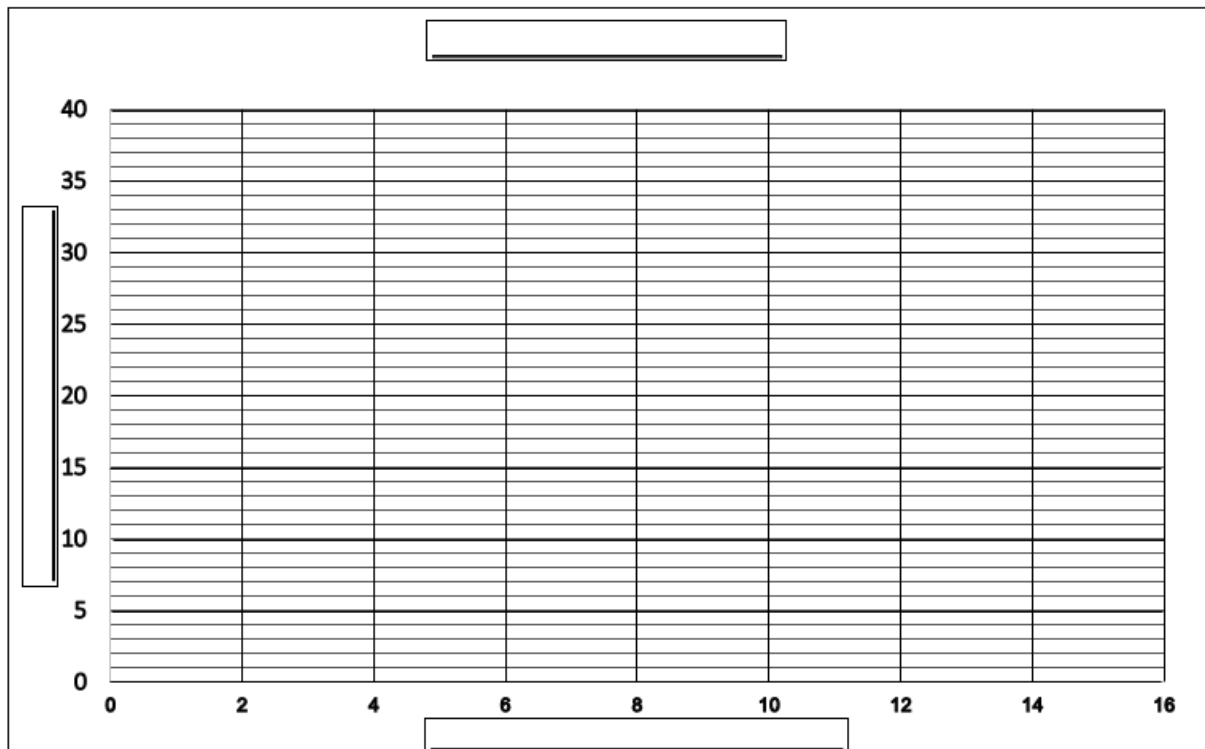
One of the windiest places in South Africa is Gqeberha (previously Port Elizabeth). Examine the table showing the wind speed in Gqeberha for a two week period in July.

Use the table to answer questions 4.1 to 4.6.

**Table 4.1: Gqeberha wind speed**

Date (July)	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Wind speed (km/h)	8	16	10	24	12	32	18	38	28	34	18	26	10	20

- 4.1 Use the table to draw a line graph for the Gqeberha wind speed over the given period. Use the grid provided. Place date on the horizontal axis. Label the graph fully.



(5)

- 4.2 On which three consecutive days (one after the other) was the wind speed greater than 25 km/h? Give the dates.

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(2)

- 4.3 **TRUE or FALSE:** If the wind speed was high one day, it was lower the next day.

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(1)

- 4.4 How can the wind be described over the given time period? Circle the letter for the best description.

- (a) Consistently strong
- (b) Consistently weak
- (c) Variable

(1)

- 4.5 Determine the mean wind speed for the first **10** days of July. Show working.

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(3)

- 4.6 Determine the median wind speed for the first **10** days of July. Show working.

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(3)



- 4.7 A summary of the wind speed is made for the given period. The following categories are used:

Low wind speed: 0 – 15 km/h

Medium wind speed: 16 – 30 km/h

High wind speed: 31 – 45 km/h

- (a) Use the table to complete the tally and frequency table of wind speeds.

Wind speed	Tally	Frequency
Low		4
Medium		
High		

(4)

- (b) Use your answer from question 4.7(a) and circle the correct answer:  
The mean wind speed falls in the category of:

- A. Low wind speed  
B. Medium wind speed  
C. High wind speed

(1)

- 4.8 Lebo goes kite flying with his friends on one day in the first two weeks of July. They select a day without knowing what the weather will be like. What is the probability that they choose a day with high wind speed? Give the answer as a percentage, rounded off to a whole number.

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(3)

**TOTAL MARKS FOR ACTIVITY 4**

**(23)**

**TOTAL MARKS FOR TASK 1**

**[50]**



**Total for Task 1: 50 Marks**

	<b>Activity</b>	<b>Maximum Mark</b>	<b>Learner's Mark</b>	<b>Moderated Mark</b>
<b>Task 1</b>	<b>Activity 1</b>	<b>6</b>		
	<b>Activity 2</b>	<b>10</b>		
	<b>Activity 3</b>	<b>11</b>		
	<b>Activity 4</b>	<b>23</b>		
	<b>Total: Task 1</b>	<b>50</b>		

