education

Department:
Education
North West Provincial Government
REPUBLIC OF SOUTH AFRICA

PROVINCIAL ASSESSMENT

GRADE 10

MATHEMATICAL LITERACY P2

JUNE 2024

MARKS: 50

TIME: 1 hour

This question paper consists of 6 pages and 1 annexure.

INSTRUCTIONS AND INFORMATION

1. This question paper consists of FOUR questions. Answer ALL the questions.
2. Use ANNEXURE provided for QUESTION 2.1
3. Start EACH question on a NEW page.
4. Leave a line after each sub question.
4. Number the answers correctly according to the numbering system used in this question paper.
5. You may use an approved calculator (non-programmable and non-graphical), unless stated otherwise.
6. Show ALL calculations clearly.
7. Round off ALL final answers appropriately according to the given context, unless stated otherwise.
8. Indicate units of measurement, where applicable.
9. Diagrams are NOT necessarily drawn to scale, unless stated otherwise.
10. Write neatly and legibly.

QUESTION 1

1.1 Use the table below to write down the letter of the explanation or definition (A to C) of 1.1.1 and 1.1.2.

Column A (Instrument)		Column B (Function)	
1.1.1	Thermometer	A.	Measures length of a pencil
1.1.2	Measuring tape	B.	Measures length of a soccer field
		C.	Measures body temperature

(4)

1.2

Brandy is an athlete born on 30 January 2008. He won a 1 500 m race during school athletics held on 7 February 2024.

1.2.1 Convert the distance of 1 500 m to kilometres. (2)

1.2.2 How old was Brandy in 2024? (2)

1.3

Write down the type of the scale shown above. (2)

[10]

QUESTION 2

2.1 Annexure attached for Question 2.1 shows part of Rustenburg mall layout. Refer to the ANNEXURE to answer the questions that follow.

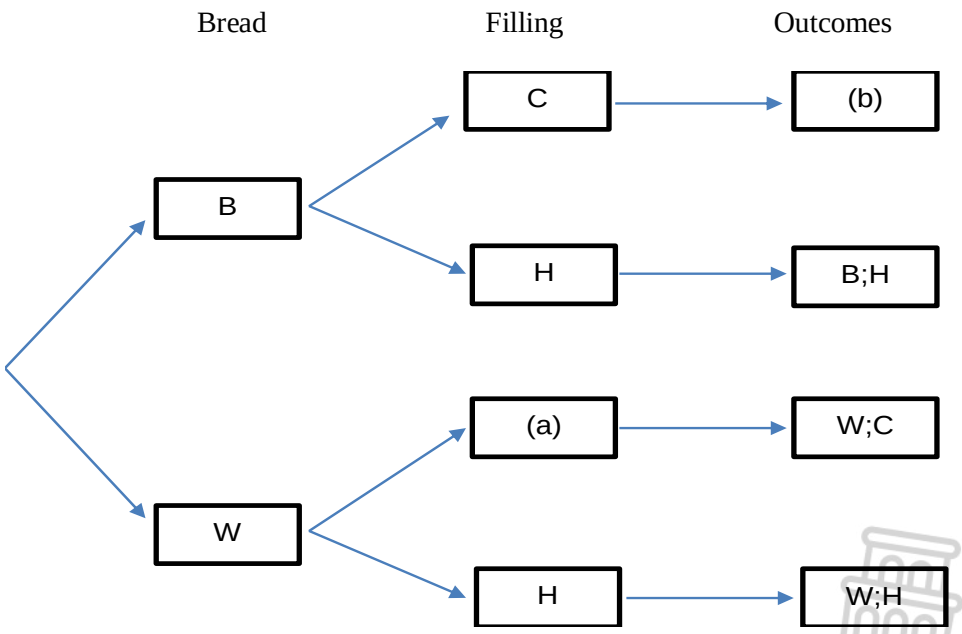
2.1.1 Define the term layout. (2)

2.1.2 Where would you find Ster Kinekor with reference to Game store? (2)

2.1.3 Give a detailed direction for someone who is at shop number 63 who wishes to go to Ster Kinekor, (4)

2.1.4 Give a reason why there must be an information desk in the mall. (2)

2.2 Pick n Pay is selling sandwiches in different combinations. Below is a tree diagram showing possible combinations: White bread (W) or Brown bread (B) with Cheese(C) or Ham (H).



Use the information and the diagram above to answer questions that follow.

2.2.1 Write down the missing information for (**a**) and (**b**) (2)

2.2.2 Determine the probability, as a percentage, of choosing a white bread with ham? (2)

[14]

QUESTION 3

3.1 Kgosi is planning to prepare a meal for his family. He came across this recipe on the internet.

Beef Stew Recipe

Serves 8 people

Ingredients

- 0,9 kg Beef stew
- 1 Onion
- 4 cups beef broth
- 400 g potatoes
- 200 g carrots
- Pinch salt
- ½ teaspoon black pepper

NOTE: 1 cup = 250 ml 1 teaspoon = 5 ml

Prep time = 15 minutes cooking time = 1 hour 40 min

[From www.healthyfitnessmeals.com]

3.1.1 Convert the amount of black pepper to millilitres. (2)

3.1.2 Kgosi has 5 cups of beef broth. He states that they are enough to prepare beef stew for 12 people. Verify showing all calculations whether his statement is correct. (3)

3.1.3 Write down the mass of potatoes to the mass of carrots as a ratio in its simplified form. (3)

3.2 The cost of stewing beef is R89,90/kg

Kgosi claims that he can get more than 3,8kg with R350.00. Verify, showing all calculations whether his claim is valid. (3)

3.3 Kgosi finished cooking at 12:55. At what time did he start with the preparation and cooking? (3)

[14]

QUESTION 4

4.1 Below is a picture of a branded T -shirt taken on January 2024. The brand was established in 1966. (Fine print reads 'EST 1966').

NB: Scale 1: 9

Use the information and the diagram above to answer the questions that follow

4.1.1 Explain the meaning of the scale above. (2)

4.1.2 Measure the width (shown by the arrow) of the t-shirt above in order to determine the actual width of the t-shirt, rounded off to the nearest cm. (4)

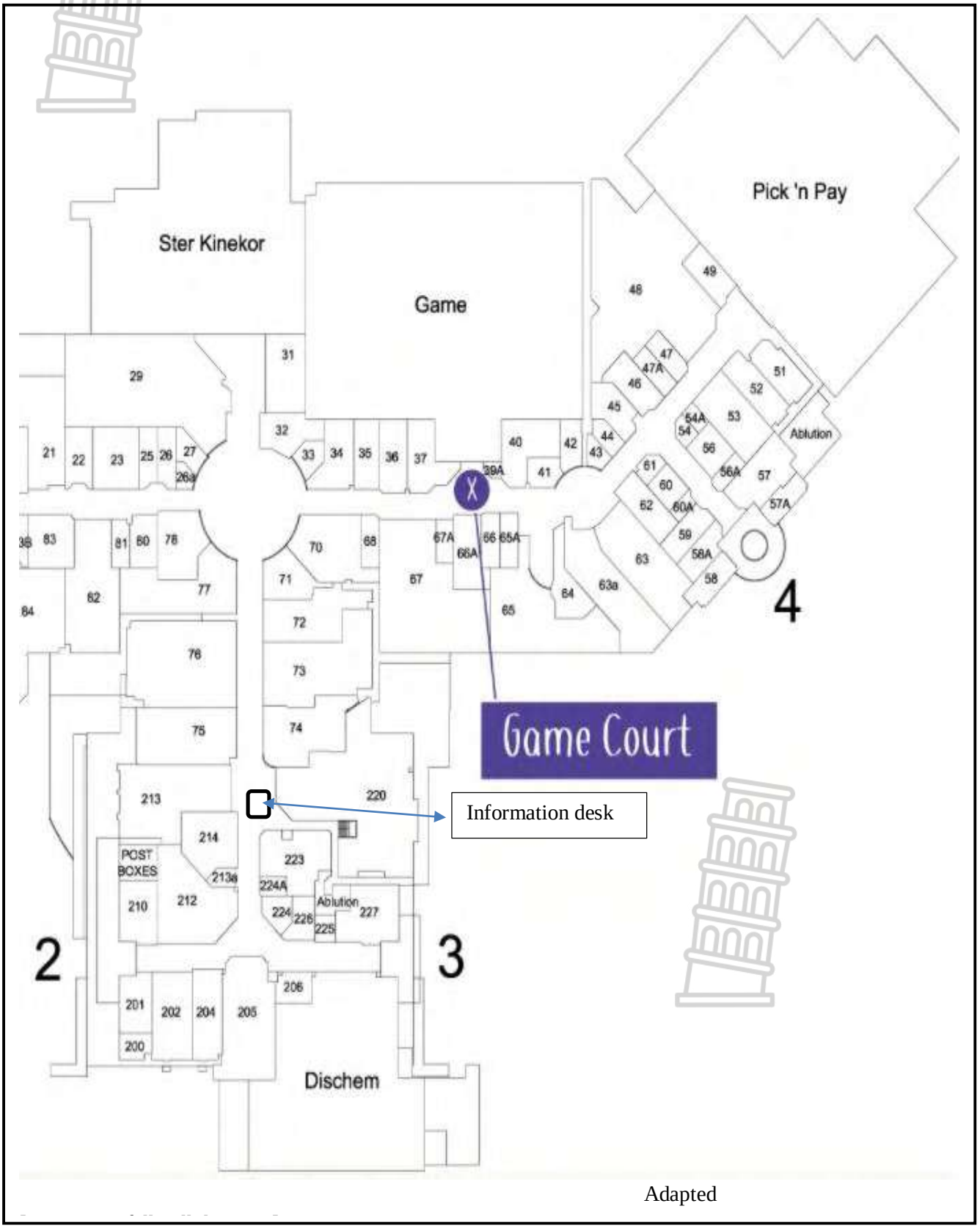
4.1.3 Determine the period in decades, since the t-shirt was established. Round of the answer to the nearest decade. (4)

4.2 A **1 litre** bottle of concentrate juice reads 'Makes 8'. Give a reason why it is always important to stick to the dilution ratio. (2)
[12]

TOTAL: 50

NAME: _____ **CLASS:** _____

ANNEXURE: QUESTION 2.1



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GRADE 10

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JUNE 2024
MARKING GUIDELINES

MARKS: 50

Symbol	Explanation
M	Method
MA	Method with accuracy
MCA	Method with consistent accuracy
CA	Consistent accuracy
A	Accuracy
C	Conversion
S	Simplification
RT	Reading from a table/a graph/document/diagram
SF	Correct substitution in a formula
O	Opinion/Explanation/Reasoning
P	Penalty, e.g. for no units, incorrect rounding off, etc.
R	Rounding off
NPR	No penalty for correct rounding
AO	Answer only

This marking guidelines consists of 5 pages.

NOTE:

- If a candidate answers a question TWICE, only mark the FIRST attempt.
- If a candidate has crossed out (cancelled) an attempt to a question and NOT redone the solution, mark the crossed out (cancelled) version.
- Consistent accuracy (CA) applies in ALL aspects of the marking guidelines; however, it stops at the second calculation error.
- NOTE: consistent accuracy (CA) does not apply in cases of a breakdown.
- If the candidate presents any extra solution when reading from a graph, table, layout plan and map, then penalize for every extra item presented.
- As a general marking principle, if a candidate has incurred one mistake and there is evidence of sound mathematics thereafter, then that candidate should lose one mark only.
- Rounding is an independent mark.
- In opinion type questions marks will only be awarded if relevant calculations are shown.

QUESTION 1 [10 MARKS] Answer only AO – full marks			
Q	**Solution**	**Explanation**	**T & L**
1.1.1	C✓✓	2A answer (2)	M L1
1.1.2	B✓✓	2A answer (2)	M L1
1.2.1	Distance = (1 500 ÷ 1 000)km✓ = 1,5km✓	1M dividing by 1 000 1A answer (2)	M L1
1.2.2	2024 - 2008 ✓ = 16 years✓	1MA subtracting correct years 1A correct age (2)	M L1
1.3	Bar scale ✓✓ OR Line scale ✓✓	2A correct name of scale (2)	MP L1
		[10]	

QUESTION 1 [14 MARKS]			
Q	**Solution**	**Explanation**	**T & L**
2.1.1	Layout is a plan showing arrangement and design of a building. ✓✓	2A answer (2)	MP L1
2.1.2	On the left side of Game store.✓✓	2A answer (2)	MP L2
2.1.3.	Turn left from shop number 63 into the passage towards Game court✓, then continue straight into the circle✓, then turn right at shop number 32 or 27✓ until you pass between shop no 29 and 31✓ to enter into Ster Kinekor.	1A turn left 1A towards Game court 1A turn right at shop number 32 or 27 1A pass between 29 and 31 (4)	MP L2
2.1.4	For enquiries.✓✓ OR To connect/give guidance to customers to any store or department in the mall.✓✓	2A reason (2) ***NB: Accept other reasonable responses***	MP L4
2.2.1(a)	C ✓ OR cheese✓	1A answer (1)	P L3
2.2.1(b)	B;C✓ OR brown bread with cheese✓	1A answer (1)	P L3
2.2.2	$P = \frac{1}{4} \times 100$✓ $= 25\%$✓	1MA multiplying correct fraction by 100 1A answer (2)	P L2
		[14]	

QUESTION 3 [14 MARKS]			
Q	**Solution**	**Explanation**	**T & L**
3.1.1	½ × 5ml ✓= 2,5ml✓	1M method 1A answer (2)	 M L1
3.1.2	No. of cups = $\frac{12people}{8people}$ × 4cups✓ = 6cups✓ His statement is incorrect.✓ **OR** No. of people = $\frac{5\ cups}{4cups}$ × 8people✓ = 10 people✓ His statement is incorrect.✓	1MA multiplying correct values 1CA 1A Conclusion 1MA multiplying correct values 1CA number of people 1A Conclusion (3)	 M L4
3.1.3	400:✓ 200✓ 2:1✓	1RT reading both correct values 1A correct order 1A Simplification (3)	 M L2
3.2	Cost = R89,90/kg × 3,8kg✓ = R341,62✓ Claim is valid✓ OR Number of kilograms = $\frac{R350}{R89,90/kg}$ ✓ = 3,893….kg✓ Claim is valid✓	1 MA multiplying correct values 1CA simplification 1 Conclusion 1MA dividing correct values 1CA answer 1 Conclusion (3)	 F L4
3.3	Starting time = 12:55 – 15min – 1hour 40min✓✓ = 11:00✓ OR Prep time + cooking time = 15min + 1hour 40min✓ = 1hour 55min Starting time = 12:55 – 1hour 55min✓ = 11:00✓	2MA subtracting Both times. 1CA simplification 1MA adding times. 1M subtraction 1CA simplification (3)	 M L2
		[14]	

QUESTION 4 [11 MARKS]			
Q	**Solutions**	**Explanation**	**T & L**
4.1.1	One unit on paper/diagram represents 9 units in real life.✓✓ OR The size of a t-shirt on paper is 9 times smaller than the real one.✓✓	2A explanation (2)	MP L1
4.1.2	Measured width = 4,5cm✓ Actual width = 4,5cm × 9✓ = 40.5cm✓ ≈41cm✓	1A 1MCA 1CA 1R (4) ***Accept the range 4.5cm-4.7cm***	MP L3
4.1.3	No. of years = 2024 -1966✓ = 58 years✓ Decades = 58 ÷ 10✓ = 5,8 ≈6 decades✓	1MA subtracting correct years 1S simplification 1M dividing by 10 1R rounding off correctly (4)	M L3
4.2	A juice that is diluted too much will taste awful.✓✓ OR Mixing a concentrate juice with less water will result in a very sweet juice.✓✓	(2)	M L4
		[12]	
		TOTAL: 50	