education

Department of Education
FREE STATE PROVINCE

NOVEMBER EXAMINATION

GRADE 10

MATHEMATICAL LITERACY P2

MARKING GUIDELINE

NOVEMBER 2022

MARKS: 75

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Symbol/*Simbool*	Explanation/*Verduideliking*
M	Method/*Metode*
M/A	Method with accuracy/*Metode van akkuraatheid*
CA	Consistent accuracy/*Volgehoue akkuraatheid*
A	Accuracy/*Akkuraatheid*
C	Conversion/*Herleiding*
S	Simplification/*Vereenvoudiging*
RT	Reading from a table/graph/diagram/*Lees vanaf tabel/grafiek/diagram*
SF	Correct substitution in a formula/*Korrekte vervanging in formule*
O	Opinion/Example/Definition/Explanation/*Opinie/Voorbeeld/Definisie/Verduideliking*
P	Penalty, e.g., for no units, incorrect rounding off, etc./*Penalisasie, bv. vir geen eenhede/verkeerde afronding ens.*
R	Rounding off/*afronding*
NPR	No penalty for rounding/*Geen penalisering vir afronding nie*
NPU	No penalty for the units/*Geen penalisering vir eenhede nie*
AO	Answer only, if correct, full marks/*Slegs antwoord, indien korrek, volpunte*
MCA	Method with consistent accuracy/*Metode met volgehoue akkuraatheid*

This marking guideline consists of 04 pages

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Marking Guidelines

QUESTION1 [15 MARKS]		ANSWER ONLY FULL MARKS	
Q	**Solution**	**Explanation**	**T/L**
1.1.1	The line that divides the swimming pool into two equal parts. ✓✓O A straight line passing from side to side through the centre of the swimming pool. ✓✓O	2 A correct explanation (2)	M L1
1.1.2	Radius = $\frac{1830}{2}$ ✓ MA = 915 cm = $\frac{915}{100}$ ✓ MA = 9,15 m ✓ A OR 1830 ÷ 100✓ M = 18,3 m 18,3 m ÷ 2 ✓ M = 9,15 m✓ A	1 MA dividing diameter by 2 1 MA Converting cm to m 1 A Answer (3)	M L1
1.1.3	B Circumference of the circle = 3,142 × diameter✓✓A	2A correct formula (2)	M L1
1.2.1	18 ✓✓A	2A correct no of houses (2)	MP L1
1.2.2	Hospital✓✓A	2A correct name of the building (2)	MP L1
1.2.3	1,4 cm✓✓A Measure the paper printed at your school	2 A Correct measurement (±1) (2)	MP L1
1.2.4	$\frac{1}{12}$✓ A ✓A	1A numerator 1A denominator (2)	MP L1

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QUESTION2 [20 MARKS]			
Q	**Solution**	**Explanation**	**T/L**
2.1.1	112 + DJ = 113 ✓✓A	2 A Correct number of people (2)	MP L1
2.1.2	For easy movement. ✓✓O OR Uncomfortable to sit on the short side. Accept any other logical reason.	2O correct reason (2)	MP L4
2.1.3	Walk pass the dance floor towards table 11 and 12, at the end of table 12 turn left and walk straight until he/she passes the podium, the gift table will be just behind the podium✓✓A OR Walk until the end of table 10, turn left, walk pass the dance floor, at the end of the dance floor, turn right, walk straight until he/she passes the podium, then turn left, the gift table will be just behind the podium✓✓A **Accept any logical direction**	2A correct direction (2)	MP L2
2.1.4	$\frac{7}{13}$ x 100✓A = 53,85%✓CA	1A correct fraction 1CA percentage **NPR** (2)	MP L2
2.2.1	(24 ÷ 6) + (12 ÷ 6) ✓RT ✓M = 4 + 2 = 6 ✓CA	1 RT no of screws 1 M division by 2 and adding 1 CA number of screws (3)	MP L2
2.2.2	Chair seat ✓A and stretcher ✓A	2A chair seat 1A stretcher (3)	MP L2
2.2.3	Allen key ✓✓A	2 A correct explanation (2)	MP L1
2.2.4	94 + 2 = 96 cm ✓A 42 + 2 = 44 cm✓M 41 + 2 = 43 cm✓M Dimension = 96 × 44 × 43 = 181 632 ✓MCA	1MA adding 2 1M answer 1M answer 1MCA dimension (4)	MP L2

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QUESTION 3 [20 marks]

Q	Solution	Explanation	T/L
3.1.1	Figure 1: Analogue✓A Figure 2: Digital ✓A	1 A analogue 1 A digital (2)	M L1
3.1.2	Ten minutes past ten ✓✓A	2 A correct time (2)	M L2
3.1.3	Morning ✓✓A	2 A correct answer (2)	M L1
3.2.1	8 popsicles/8✓✓A	2 A correct answer (2)	M L1
3.2.2	16 popsicles✓A ✓M $\frac{16}{8}=2$ 2 servings × 3=6 ✓M 6 × 128g= 768 g✓CA OR ✓M $\frac{16}{8}=2$ ✓M 2 × 384 g= 768 g✓CA	1 A 16 Popsicle 1 M numerator & denominator 1 M x 3 1 CA 1 M numerator & denominator 1 M x 384 g 1 CA answer (4)	M L3
3.2.3	**Duration for making popsicles** ✓M 15 minutes × 2 =30 minutes 30 minutes + 5 hours ✓M 5 hours 30 minutes ✓CA Option 1 ✓M 13:00 – 07:00 = 6 hours ✓A Tshepang has enough time to make popsicles ✓O Option 2 ✓M 07:00 + 05:30 = 12:30✓A Popsicles will be ready 30 minutes before the party starts. ✓O	 1 M 15 minutes x 2 1 M adding 1 CA answer 1 M subtracting 1 A answer 1 O reason OR 1M adding 1 A answer 1 O reason (6)	M L2
3.2.4	Degree Celsius ✓✓A	2A correct definition (2)	M L2

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QUESTION 4 [20 MARKS]			
Q	**Solution**	**Explanation**	**T&L**
4.1	Perimeter is the total distance around the vegetable garden ✓✓A	2A correct definition	M L2
4.2	✓A 8,5 m + 2 m + 5,5 m + 6 m + (5,5 + 2) m + 2,5 m = 8,5m + 2m + 5,5m + 7,5m + 2,5 m ✓M = 32 m ✓CA	1A calculating 2,5 m 1M adding all values 1CA perimeter (3)	M L2
4.3	✓MA **32 m** – 1m = 31 m ✓A ✓MA 31 m ÷ 1,5 m = 21 panels✓CA	**CA from question 4.2** 1MA subtracting 1 metre 1A length 1MA dividing with 1,5 1CA simplification (4)	M L2
4.4	Total area ✓SF (8,5 × 2) + (5,5 × 6) ✓SF = 17 + 33✓M = 50 m²✓CA	1SF substitute into formula 1SF substitute into formula 1M adding area 1CA simplification (4)	M L2
4.5	100g = 1 m² … = 50 m² ✓MA 50 m² × 100 g = 5 000 g✓A 5 000 g ÷ 1 000 ✓MCA = 5 kg ✓CA **5 kg** ÷ 2,5 = 2 bags ✓MCA 2 × R48,90 ✓MCA = R 97,80✓CA	1MA multiplying by100 1A correct answer 1 MCA (÷ 1 000) 1CA simplification 1MCA calculating number of bags 1MCA multiplying with R48,90 1CA correct answer (7)	M L4