

# SCHOOL BASED ASSESSMENT MATHEMATICS

Grade 4 - 2023

#### ADVANCE INSTRUCTIONS TO THE TEACHER

(for Regular Learners, learners with Physical Disability and Hearing Impairment)

#### **Advance Instruction to the teacher for TASK 25.**

- 1. Prepare the following cut outs in sufficient quantities for the learners:
  - (a) Circles
  - (b) Equilateral triangles
  - (c) Squares
- 2. Call one learner at a time and give the learner any one cut out at random.
- 3. Ask the learner to fold the cut out and show you a line of symmetry. Score accordingly.
- 4. Once a cut out has been used, it should not be used again.

This paper has 8 printed pages.

© 2023 The Kenya National Examinations Council

Turn over

## **MATHEMATICS Grade 4**

## **Scoring Rubrics**

## Each question is awarded ONE mark.

#### Total marks is 25.

Question	Answer	Question	Answer
1.	Total value of digit 7 is 700	14.	$20 \ m \ 50 \ cm \div 5 = 4 \ m \ 10 \ cm$
2.	$42 \times 30 = 1260$ orange trees	15.	$(4 \times 60) + 30 = 270$ minutes
3.	Jared	16.	8 hours
4.	3672 + 2045 = 5717	17.	Business permit fees
5.	IX	18.	6 + 6 + 6 + 6 = 24 bricks
6.	sh 950	19.	$6 \times 8 = 48$ square units
7.	5648 - 3271 = 2377	20.	$\frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} = 1 \text{ kg}$
8.	4957 - 3674 = 1283 <b>seats</b>	21.	14 + 21 = 35 litres
9.	$48 \div 3 = 16$ friends	22.	y-3 oranges
10.	0.08	23.	He will face Class 4 Blue
11.	4 11	24.	Tuesday - 8
			Friday - THL THL THL 11
12.	1.35 m, 1.37 m, 1.53 m, 1.57 m	25.	Teacher to assess accordingly
13.	$800 \ cm + 20 \ cm = 820 \ cm$		

## SCHOOL BASED ASSESSMENT 2023

## **GRADE 4**

## SCORING RUBRICS FOR MATHEMATICS

STRAND/sub strand	EXCEEDS EXPECTATION (4)	MEETS EXPECTATION (3)	APPROACHES EXPECTATION (2)	BELOW EXPECTATION (1)				
	NUMBERS (12 questions)							
		1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12						
	Learner scores any 5 or 6	Learner scores any 4 questions	Learner scores any 2 or 3	Learner scores any 1				
	questions		questions	question				
Whole numbers,	Writes Hindu Arabic	Writes Hindu Arabic numerals	Writes Hindu Arabic	Writes Hindu Arabic				
Addition, Multiplication	numerals using Roman	using Roman numerals up to	numerals using Roman	numerals using Roman				
1,2,3,4,5,6	numerals up to 'X', and	'X', uses total value up to tens of	numerals up to 'X', uses	numerals up to 'X',				
	<b>beyond</b> , uses total value up	thousands, identifies odd	total value up to tens of	uses total value up to				
	to tens of thousands,	numbers <b>correctly.</b>	thousands, identifies odd	tens of thousands,				
	identifies odd numbers	Adds up to two 4-digit numbers	numbers with few errors.	identifies odd numbers				
	effectively.	with double regrouping,	Adds up to two 4-digit	with many errors.				
	Adds up to two 4-digit	multiplies up to a 2- digit	numbers with double	Adds up to two 4-digit				
	numbers with double	number by a 2- digit number	regrouping, multiplies up	numbers with double				
	regrouping, multiplies up	with regrouping and rounds off	to a 2- digit number by a	regrouping and rounds				

Mathematics Scoring Rubrics - RL,PD,HI SBA Grade 4 - 2023

STRAND/sub strand	EXCEEDS EXPECTATION (4)	MEETS EXPECTATION (3)	APPROACHES EXPECTATION (2)	BELOW EXPECTATION (1)	
	to a 2- digit number by a 2- digit number with	numbers to the nearest 10 correctly.	2- digit number with regrouping and rounds off	off numbers to the nearest 10 with	
	regrouping and rounds off		numbers to the nearest 10	difficulties.	
	numbers to the nearest 10		with few errors.	• Multiplies up to a 2-	
	systematically.			digit number by a 2-	
				digit number with	
				regrouping with many	
				errors.	
	Learner scores any 5 or 6	Learner scores any 4 questions	Learner scores any 2 or 3	Learner scores any 1	
	questions		questions	question	
Subtraction, Division,	Subtracts up to 4-digit	• Subtracts up to 4-digit numbers	Subtracts up to 4-digit	Subtracts up to 4-digit	
<b>Decimals, Fractions</b>	numbers with single	with single regrouping	numbers with single	numbers with single	
7,8,9,10,11,12	regrouping	correctly.	regrouping with few	regrouping with	
	systematically.	Divides up to a 2- digit number	errors.	difficulties.	
	Divides up to a 2- digit	by a 1- digit number without a	Divides up to a 2- digit	Divides up to a 2- digit	
	number by a 1- digit	remainder, writes fractions as	number by a 1- digit	number by a 1- digit	
	number without a	part of a group, identifies place	number without a	number without a	
	remainder, writes fractions	value of decimals, orders	remainder, writes fractions	remainder, writes	
	as part of a group,	decimals up to hundredths	as part of a group,	fractions as part of a	
	identifies place value of	correctly.	identifies place value of	group, identifies place	

STRAND/sub strand	EXCEEDS EXPECTATION (4)	MEETS EXPECTATION (3)	APPROACHES EXPECTATION (2)	BELOW EXPECTATION (1)
	decimals, orders decimals		decimals, orders decimals	value of decimals,
	up to hundredths		up to hundredths with few	orders decimals up to
	systematically.		errors.	hundredths <b>with</b>
				difficulties.
		MEASUREMENT (9 questions) 13, 14, 15, 16, 17, 18, 19, 20, 21		
	Learner scores <b>all</b> the <b>5</b> questions	Learner scores any 4 or 3 questions	Learner scores any 2 questions	Learner scores any 1 question
Length, Time and	Converts metres to	Converts metres to centimetres,	Converts metres to	Converts metres to
money	centimetres, works out	works out division involving	centimetres, works out	centimetres, works out
13,14,15,16,17	division involving metres	metres and centimetres	division involving metres	division involving
	and centimetres	correctly.	and centimetres with few	metres and centimetres
	systematically.	Converts units of time, works	errors.	with many errors.
	• Converts units of time,	out time duration and identifies	• Converts units of time,	• Converts units of time,
	works out time duration	money that citizen pay to the	works out time duration	works out time
	and identifies money that	county governments	and identifies money that	duration and identifies
	citizen pay to the county	accurately.	citizen pay to the county	money that citizen pay
	governments effectively.		governments with few	to the county
			errors.	governments with
				many errors.

STRAND/sub strand	EXCEEDS EXPECTATION (4)	MEETS EXPECTATION (3)	APPROACHES EXPECTATION (2)	BELOW EXPECTATION (1)	
	Learner scores all the 4 questions	Learner scores any 3 questions	Learner scores any 2 question	Learner scores any 1 question	
	Calculates area of squares	Calculates area of squares as a	Calculates area of squares	Calculates area of	
	as a product of number of rows and columns, works	product of number of rows and columns, works out volume of	as a product of number of rows and columns, works	squares as a product of number of rows and	
Area, Volume, Capacity and Mass	out volume of cubes,	cubes, measures capacity in 1/4	out volume of cubes,	columns, works out	
18,19,20,21	measures capacity in ¼ litre and adds capacity	litre and adds capacity involving litres in real life	measures capacity in <sup>1</sup> / <sub>4</sub> litre and adds capacity	volume of cubes, measures capacity in 1/4	
	involving litres in real life	situations <b>correctly.</b>	involving litres in real life	litre and adds capacity	
	situations <b>systematically.</b>		situations with <b>few errors.</b>	involving litres in real life situations with	
				difficulties.	

STRAND/sub strand	EXCEEDS EXPECTATION (4)	MEETS EXPECTATION (3)	APPROACHES EXPECTATION (2)	BELOW EXPECTATION (1)			
	GEOMETRY, DATA HANDLING AND ALGEBRA (4 questions) 22, 23, 24, 25						
	Learner scores <b>all</b> the <b>4</b> questions	Learner scores <b>any 3</b> questions	Learner scores any 2 questions	Learner scores any 1 question			
Position and direction, Angles, 2-D Shapes, Data and Use of letters, 22, 23,24, 25	Identifies different types of angles in the environment, quarter turns in the environment and lines of symmetry, represents data using a frequency table and forms algebraic expressions effectively.	Identifies different types of angles in the environment, quarter turns in the environment and lines of symmetry, represents data using a frequency table and forms algebraic expressions <b>correctly.</b>	Performs any 2 of the following; identifies different types of angles in the environment, quarter turns in the environment and lines of symmetry, represents data using a frequency table and forms algebraic expressions with few errors.	Performs any 1 of the following; identifies different types of angles in the environment, quarter turns in the environment and lines of symmetry, represents data using a frequency table and forms algebraic expressions with difficulties.			

## THE KENYA NATIONAL EXAMINATION COUNCIL MATHEMATICS SCORING SHEET GRADE 4

		Sub strand	Sub strand	Sub strand	Sub strand	Sub strand	Comment
		Whole	Subtraction,	Length, time,	Area, mass,	Position and	
		numbers,	division,	money	volume,	direction,	
		addition,	fractions,		capacity	angles,	
S.No	Name of Learner	multiplication	decimals			2-D shapes,	
				Questions	Questions	data, use of	
		Questions	Questions	13,14,15,16,17	18,19,20,21	letters	
		1,2,3,4,5,6	7,8,9,10,11,12			Questions	
						22,23,24,25	
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							

THIS IS THE LAST PRINTED PAGE

Mathematics Scoring Rubrics - RL,PD,HI SBA Grade 4 - 2023