

MATHEMATICS (Pages 2-43)

STRAND 1: WHOLE NUMBERS

(Pages 2-15)

Activity 1 (Pages 2)

- | | | | |
|-----------|----------|------|------|
| 2 | 8 | 6 | 9 |
| | | | |
| | | Tens | Ones |
| | Hundreds | | |
| Thousands | | | |
- Tens of thousands
 - Hundreds
 - Ones
- 8
 - 80
 - 800
 - 8000
 - 80000
 - 80000
- | | | | |
|------|-----|----|---|
| 2 | 8 | 6 | 9 |
| | | | |
| | | 60 | 9 |
| | 800 | | |
| 2000 | | | |
- 2000
 - 200
 - 20000
-

	Number	Tens of Thousands	Thousands	Hundreds	Tens	Ones
(a)	620			6	2	0
(b)	4038		4	0	3	8
(c)	9652		9	6	5	2
(d)	34019	3	4	0	1	9
(e)	10436	1	0	4	3	6

Activity 2 (Pages 3)

- two thousand and ninety two
 - Two thousand nine hundred and eight
 - Four thousand three hundred and nineteen
 - Nine thousand five hundred and sixty eight.
- Accept correct numbers.
- Accept any four digit number.

Activity 3 (Page 3)

- sixty six
 - two hundred and eighty nine
 - two hundred and ninety nine
 - three hundred and fifty eight

- six hundred and sixty six
 - Nine hundred and ninety nine
 - Nine hundred .
 - Nine hundred and ninety one
 - one thousand
- 450
 - 414
 - 793
 - 306
 - 616
 - 999

Activity 4 (Page 3)

- Rehema
- Charity
- Rehema, James, Purity, Osman, Joan, charity
- 399, 420, 425, 435, 442, 452
- 645, 564, 456
 - 321, 312, 213, 123
 - 876, 867, 786, 768
 - 961, 916, 619, 196
- 519, 591, 915, 951
 - 284, 482, 824, 842
 - 176, 671, 716, 761
 - 405, 450, 504, 540

Activity 5 (Page 4)

- 0
 - 150
 - 920
- 10
 - 250
 - 950
- 100
- 860
- 1000

Activity 6 (Page 4)

- 2
 - 2
- 1, 2, 5, 10
 - 1, 2, 3, 6, 9, 18
 - 1, 2, 4, 7, 14, 28
 - 1, 3, 13, 39
 - 1, 2, 3, 6, 7, 14, 21, 42
 - 1, 2, 3, 4, 6, 8, 12, 16, 24, 48
- 1, 17

Activity 7 (Page 4)

- 1, 2, 3, 4, 6, 9, 12, 18, 36
- 8
 - 4
 - 10
 - 128
- 7
 - 7
 - 6
- 3
- 1
- 144

Activity 8 (Page 4)

- 9, 18, 27, 36, 45, 54, ____
 - 4, 8, 12, 16, 20, 24, ____
 - 6, 12, 18, 24, 30, 36
 - 8, 16, 24, 32, 40, 48
 - 14, 28, 42, 56, 70, 84

4. 690
5. 520
6. 620
7. 1680
8. 2430

Activity 2 (Page 8)

1. (a) 462 (b) 484
(c) 1089 (d) 1023
(e) 1271
2. 1290 eggs
3. 1972 or 1904 depending with the year

Activity 3 (Pages 8)

1. 529
2. 1323
3. 400
4. 960
5. 1680
6. 2520kg
7. 1728 bottles
8. 1404 words
9. 3420
10. 2592 lines

Activity 4 (Page 9)

2. $30 \times 30 = 900$
3. $50 \times 60 = 3000$
4. $70 \times 40 = 2800$
5. $90 \times 30 = 2700$
6. $20 \times 30 = 600$
7. $40 \times 20 = 800$
8. $50 \times 10 = 500$
9. $60 \times 10 = 600$
10. $30 \times 30 = 900$

Activity 5 (Page 9)

1. 12, 14, 16, 18
2. (a) 18, 21
(b) 45, 50
c) 36, 42
d) 60, 70, 80
3. 20, 30, 40, 50, 60, 70, 80, 90, 100

Division (Page 9 - 10)

Activity 1 (Page 9)

1. 3
2. 16
3. (a) 27 (b) 23
(c) 6 (d) 11
4. (a) 14 (b) 28

- (c) 12
5. sh. 24
6. 20 hectares
7. 7. 10 coins

Activity 2 (Page 9)

1. (a) 6 rem 1 (b) 12 rem 2
(c) 12 rem 3
2. 14 rem 4
3. (a) 16 rem 3 (b) 19 rem 1
(c) 10 rem 5 (d) 12 rem 2
4. 23 rem 1

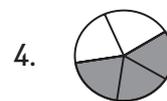
Activity 3 (Page 10)

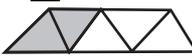
1. 4
2. 8
3. 48
4. 72
5. 7
6. 5
7. (a) $42 \div 6 = 7$ (b) $5 \times 9 = 45$
 $42 \div 7 = 6$ $9 \times 5 = 45$
(c) $3 \times 12 = 36$ d) $72 \div 9 = 8$
 $12 \times 3 = 36$ $72 \div 8 = 9$
- e. $84 \div 7 = 12$ (f) $11 \times 9 = 99$
 $84 \div 12 = 7$ $9 \times 11 = 99$
8. Assess learners on games involving division and multiplication using digital devices.

Fraction (Pages 10 - 12)

Activity 1 (Pages 10)

1. $= \frac{2}{4}$ or $\frac{1}{2}$
2. $= \frac{3}{8}$
3. $= \frac{1}{4}$



5. (a)  (b) 
- (c) 

Activity 2 (Page 11)

1. 4
2. 9
3. 8
4. 4 books
5. 18

- (b) 0.86, 0.68, 0.08, 0.06
- c) 0.2, 0.1, 0.09, 0.07
- d) 0.88, 0.1, 0.05, 0.04
- 5. 0.11
- 6. 0.1
- 7. 0.1, 0.101, 0.11

USE OF LETTERS (Pages 14 - 15)

Activity 1 (Pages 14)

For question 1 - 4. Mark any letter used to represent the unknown.

Activity 2 (Page 15)

1. $x + y$
2. $k - j$
3. $x + y + z$
4. Assess the learners
5. $A + B + c$

Activity 3 (Page 15)

1. (a) $7k$ (b) n
(c) $3a$ (d) $6e$
(e) $8x$ (f) $12z$
2. $2j$ eggs
3. $4e + 6g + 4k$
4. $10k$
5. $14n$ pages
6. (a) $5b + 5d$
(b) $10y + 3x$
(c) $7q + 9r - 7y$
(d) $4t - 2y$
(e) $b + 4c$
(f) $8n - 10m$
7. Assess the learner's work.

STRAND 2: MEASUREMENT (Pages 16-31)

Lengths (Pages 16- 20)

Activity 1 (Page 16)

1. Centimeters
2. Accept a length equal to 1cm.
3. Accept correct measurement only.

Activity 2 (Page 16)

1. Accept correct measurement only.

Activity 3 (Page 16)

Accept the correct measurement only.

Activity 4 (Page 16)

Accept the correct measurement only.

Activity 5 (Page 17)

1. a) 300cm (b) 400cm
(c) 100cm (d) 150cm

- (e) 600cm (f) 1400cm
- g) 520cm h) 316cm
- 2. 500
- 3. 250
- 4. 180
- 5. 315

Activity 6 (Pages 17)

1. (a) 3m (b) 5m
(c) 6m (d) 2m
(e) 8m (f) 4m
(g) 7m (h) 9m
2. (a) 1m 45cm (b) 2m
(c) 10 m
3. 250cm
4. 2800cm
5. 3m

Activity 7 (Page 18)

1. (a) 8cm (b) 13cm
(c) 18m (d) 14cm
(e) 185m (f) 24cm
2. 9.3cm (b) 11cm
3. 82cm
4. 192cm

Activity 8 (Page 18-19)

1. (a) 7m 95cm
(b) 17m 44cm
(c) 10m 10cm
(d) 19m 13cm
2. 1m 33cm or 133cm
3. 13 m 40cm
4. 11m.

Activity 9 (Page 19)

1. (a) 12m 25cm
(b) 2m 64cm
(c) 4m 7cm
(d) 8m 48cm
2. 50cm
3. 1m 90cm
4. 1m 15cm

Activity 10 (Page 19-20)

1. (a) 24m 90cm (b) 16m 80cm
(c) 5m (d) 97m 28cm
2. 7m 20cm
3. 60m 80cm
4. 20m

Activity 11 (Page 20)

- (a) 3m 15cm (b) 2m 10cm
(c) 70cm
- 8m 5cm
- 16m 9cm
- 1m 30cm
- Assess learners work.

Area (Pages 20 - 22)

Activity 1 (Page 20)

Assess learner's work.

Activity 2 (Page 20)

Assess learner's work.

Activity 3 (Page 20)

- Assess the learner's work.
- (a) 20 (b) 9
(c) 20 (d) 16

Activity 4 (Pages 21)

- (a) 15 square units
(b) 20 square units
(c) 15 square units
(d) 25 square units
(e) 20 square units
(f) 8 square units
- 238 tiles
- Assess learners' digital games involving areas of rectangles and squares.

Volume (Pages 21 - 22)

Activity 1 (Page 21-22)

- (a) cube (b) cuboid
-

Cube	Cuboid
eg Dice	book

Assess learner's findings.

- Assess learners while using digital devices.

Activity 2 (Page 22)

- 18 cubes
- 8 cubes
- 32 cubes
- 72 cubes
- 14 cubes

Capacity (Pages 22 - 23)

Activity 1 (Page 22)

- 2
- 2

Activity 2 (Page 22-23)

- Assess the learner's work.
- 18 jugs
- 10 jugs

Activity 3 (Page 23)

-

	Half	quarter
(a)	10	20
(b)	2	4
(c)	3	6
(d)	24	48
(e)	4	8
(f)	40	80

- (a) 10 litres (b) 20 bottles
- 80 metres
- 25 litres

Activity 4 (Page 23)

- (a) 22 litres (b) 29 litres
(c) 34 litres
- 7 litres
- 16 litres
- 19 litres

Activity 5 (Page 23-24)

- (a) 2 litres (b) 6 litres (c) 55 litres
- 38 litres
- 14 litres
- 427 litres
- 43 litres
- 9 litres
- Assess digital game involving capacity

Mass (Pages 24- 25)

Activity 1 (Page 24)

Sugar

Activity 2 (Page 24)

- Assess the learner's work.
- (a) 5kg (b) 8kg
(c) 12kg (d) 15kg

Activity 3 (Page 24)

Assess the learner's work.

Activity 4 (Page 24)

- (a) 14 (b) 10
(c) 16 (d) 17
- 8
- 5kg
- 24 packets

Activity 5 (Page 24)

Assess the learner's work.

Activity 6 (Pages 24 -25)

- (a) 8 (b) 20
(c) 24 (d) 44
(e) 56 (f) 40
- 8kg
- 48
-

	No of kg masses	No of $\frac{1}{2}$ masses	No of $\frac{1}{4}$ masses
(a)	10	20	40
(b)	13	26	52
(c)	7	14	28
(d)	20	40	80
(e)	15	30	60

Activity 7 (Page 25)

- (a) 7kg (b) 20kg (c) 12kg
(d) 15kg (e) 1kg (f) $\frac{3}{4}$ kg
- 6kg
- 250kg
- 150kg

Activity 8 (Page 25)

- (a) 9kg (b) 19kg (c) 55kg
- 23kg
- 11kg
- 8kg

Time (Pages 25 - 27)

Activity 1 (Page 25)

- 8.20am
- 2.00pm
- 6.00am
- 8.40am
- 3.40pm
- 9.20am
- noon

Activity 2 (Page 26)

- (a) 7.30pm (b) 11.30am
(c) 5.00am
- Assess the learner's work.

Activity 3 (Page 26)

- Morning time
- Early morning or late in the evening
- Noon

- 6.pm
- Noon to 1. pm at noon

Activity 4 (Page 26)

- (a) 180 (b) 240
(c) 320 (d) 540
- 660 minutes
- 420 minutes
- 600 minutes

Activity 5 (Page 26-27)

- (a) 3hrs (b) $2\frac{1}{2}$ hrs
(c) 48hrs (d) 120hrs
- (a) 3 days (b) 2 days
(c) $\frac{1}{2}$ day (d) 21 days
(e) 18 days
- (a) 7 weeks (b) 12 weeks
(c) 8 weeks (d) 5 weeks 5 days
- 30 days
- 180 minutes
- 4 weeks 3 days

Activity 6 (Page 27)

- (a) 2 hours (b) 6 hrs
(c) 1 hrs (d) 4 hrs
- 4 hours
- 1pm
- 12 hours
- Assess

Money (Page 27 - 31)

Activity 1 (Page 27)

- 1 shilling = 100 cents
- 1
- 200 cents

Activity 2 (Page 27-28)

- (a) 200 cents (b) 500 cents
(c) 1000 cents (d) 840 cents
(e) 6180 cents
- 700 cents
- 1500 cents
- 8000 cents

Activity 3 (Page 29)

- (a) 2 (b) 5
(c) 10 (d) 8
- (a) sh. 2 68cents
(b) sh. 8 80cents
(c) sh. 5 70cents
(d) sh. 3 98cents
- 2 shillings
- sh. 6 75cents

Activity 4 (Page 28-29)

1. a) Helps you to remember what to buy
b) Before going to shop
c) A shopping list
d) Amount of money you have and what you need most
e) Bread, milk, sugar, tea leaves.
f) Helps us to use money well.
g) Item prices and quantities
- 2.

Item	Price per item	Amount or cost(sh)
Rice	sh 200	sh 200
Sugar	sh 180	sh 180
Bread	sh 80	sh 80
Milk	sh 70	sh 70
Cooking oil	sh 350	sh 350
Total		sh 880

3.

Item	Price per item	Amount or cost(sh)
Exercise books	sh 60	sh 60
Pencils	sh 20	sh 20
Erasers	sh 15	sh 15
Rulers	sh 25	sh 25
Pens	sh 30	sh 30
Total		sh 150

4. Assess the learners work
5. Assess the learners work
6. sh 870
7. sh 650
8. sh 450

Activity 5 (Page 29)

1. Assess the learners work.
2. Assess the learners work.

Activity 6 (Page 30)

1. Change is the amount of money given into smaller denominations.
Balance is the amount of money given back by the shopkeeper after deducting cost of good.
2. Assess the learner's work.
3. 20 coins
4. Sh. 810
5. Assess the learners work.
6. Make follow-ups

Activity 7 (Page 30)

1. Sh. 200
2. sh. sh. 655
3. sh. 850
4. sh. 158
5. sh. 800

Activity 8 (Page 30)

Assess the learners.

Activity 9 (Page 30-30)

1. (a) things that we cannot live without are known as need.
(b) These we can live without are known as wants.
2. Assess the learner's work.
3. Assess the learner's work.
4. Assess the learner's work.
5. Assess the learner's work.

Activity 10 (Page 31)

Assess the learners responses

Activity 11 (Page 31)

1. Piggy bank and tin back
2. To save money
3. Accept correct answer

Activity 12 (Page 31)

1. sh. 620

Activity 13 (Page 31)

1. sh. 420
2. sh. 150
3. sh. 780
4. sh. 10
5. sh. 490
6. sh. 240 95 cents
7. sh. 200

STRAND 3: GEOMETRY (PageS 32 - 36)

Position and direction (page 31-32)

Activity 1 (Page 32)

Assess the learner's work.

Activity 2 (Page 32)

1. Assess the learner's work.
2. (a) A (b) D (c) C
(d) B (e) D (f) C

Activity 3 (Page 33)

1. Assess the learner's work.
2. (a) Clockwise
(b) Clockwise

- (c) Anti clockwise
- (d) Clockwise
- (e) Clockwise
- (f) Anticlockwise

Activity 4 (Page 33)

1. a) half (b) quarter
c) quarter (d) full
e) full (f) quarter
2. Assess the learner's work.

Angles (Page 33- 34)

Activity 1 (Page 33)

1. Make follow up
2. Assess the learner's work.

Activity 2 (Page 33)

Assess the learner's work.

Activity 3 (Page 33)

1. Assess the learners work
2. Right angle
3. Straight line (180 degrees)
- 4.. Acute angle
5. Acute angle
6. Assess the learner's work.

Activity 4 (Pages 34)

1. Assess learner's work
2. (a) equal to right angle
(b) more than two right angles
(c) less than one right angle
(d) greater than one right angle
(d) equal to two right angles
3. 90 degrees
4. 180 degrees facing opposite direction.
5. Quarter turn and turns through 90 degrees

Activity 5 (Page 34)

Assess the learner's different types of angles in the environment.

Plane figures (Page 34 - 36)

Activity 1 (Page 34-35)

1. (a) Circle (b) Triangle
(c) rectangle (d) square
(e) oval
2. Assess the learner's work.
3. Rectangle, triangle, rectangle, circle
4. Rectangle, square, triangle
5. Assess the learners work.

Activity 2 (Page 35)

Assess the learner's work.

Activity 3 (Page 35)

- 1- 3 Assess the learners work.
4. B, because it divides the rectangle into two equal parts.

Activity 4 (Page 35-36)

1. (a) oval
(b) square
(c) triangle
2. (a) triangle
(b) triangle
(c)



3. Assess shape and patterns formed

Activity 5 (Page 36)

1. (a) 4 sides
(b) Yes, the angles are equal.
(c) (i) Square all sides are equal.
(ii) Rectangle two opposite sides are equal.
d) Assess the learner's work.
e) In a square the diagonal intersect at 90° .
f) In a rectangle the opposite angles intersection of a diagonal at equal.

Activity 6 (Page 36)

1. a) 3 sides
b) Assess the learner's work.
c) check comparison
d) sum of interior angles is equal to two right angles.

STRAND 4: DATA HANDLING

(Page 37- 38)

Activity 1 (Page 37)

Assess the learner's work for all questions.

Activity 2 (Page 37)

Pupils	Tally mark	Frequency
boys		20
Girls		14

2.

Fruits	Tall mark	No of fruits
Oranges		6

Mangoes		7
Apples		10
Bananas		14
Pineapple		5

3.

Animals	Tally mark	Number of animals
Chickens		28
Cows		15
Dogs		4
Sheeps		10
Goats		8

Activity 3 (Page 37-38)

1. a)

Food item	Tally mark	Numbers of packets
Maize flour		22
Wheat flour		10
Beans		14
Sugar		10
Salt		2

- maize flour
- 11 packets
- 58 packets

Activity 4 (Page 38)

1.

Road user	Tally marks	Number
Cars		14
Buses		8
lorries		10
vans		7
Tuktuks		15
Motocycles		20

- 10 lorries
- ||||
- 20 motorcycles
- 6

6. 74

Activity 5 (Page 38)

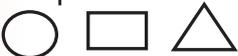
Assess the learners work

Assessment Task 1 (Pages 38- 39)

- Six hundred and twenty four
- Hundreds
- 1000
- viii
- 660
- 622
- 10527
- 8m 15cm
- odd
- 395
- 15, 18, 21, 24, 27, 30
- 225cm
- square
- $\frac{26}{3}$
- 285, 582, 852
- 9.15 am
- Reflex angle
- $\frac{9}{19}$
- $1\frac{2}{3}$
- 0.03
- 1 hour 40 minutes
- $(q + n + y)$ Packets
- metres
- 1350
- 71 rem 3
- $\frac{1}{2}$ kg
- 16745
- 96 rem 1
- car
- 

Assessment Task 2 (Pages 39 - 40)

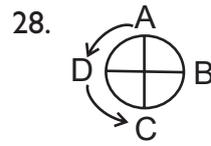
- Hundreds
- 909
- 10775
- 1680
- 9
- 6
- 12 cubes
- 8m 10cm
- 22m

10. 56
11. 30
12. 135 minutes
13. Right angle
14. 8
15. 0.72
16. sh. 2 50 cents
17. 3791 females
18. 14kg
19. Denominator
20. 55m 75 cm
21. 15 squares
22. 12
23.  cube
24. 9.42pm
25. 
26. $(2y + 3g + 2n)$ fruits
27. 74 hours
28. 365 litres
29. 2850
30. 64cm

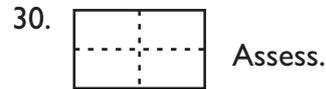
Assessment Task 3 (Pages 41 - 42)

1. 6000
2. Four hundred and fifty five
3. 209 bags
4. 1000
5. 999, 379, 245, 155
6. 120
7. 1, 2, 7, 14
8. 12
9. 10, 20, 30, 40, 50, 60
10. 108, 110
11. 8
12. 7312
13. $\frac{3}{8}$
14. 127m 20cm
15. 2066
16. 400
17. 6
18. 0.92
19. $\frac{12}{5}$
20. Hundredths
21. 0.52, 0.01, 0.09, 0.05
22. 5.6cm
23. 446cm
24. 4m 88cm

25. (a) 9 (b) 38 (c) 9
26. $12g + 4t$
27. Obtuse angle



29. Sh. 750

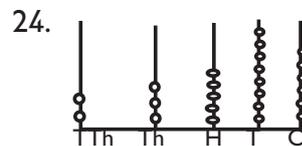


Assessment Task 4 (Pages 42- 43)

1. six hundred
2. 5
3. $6\frac{2}{3}$
4. 831
5. 2 hours 50 minutes
6. 88
7. 4 days
8. Ones
9. 80
10. 56
11. 2800
12. 64



14. 10
15. 24 squares units
16. ten thousands
17. ii, iv, vi, viii, ix, x
18. 586
19. 9000
20. 432, 423, 342, 324
21. 24
22. 6
23. 50

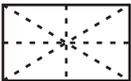


25. 416 seats
26. 641
27. 4600



29. 110
30. sh. 410

Assessment Task 5 (Pages 43- 44)

1. Nine hundred and ninety six.
2. Thousands
3. 6590
4. $\frac{25}{3}$
5. 2960
6. 9 square units
7. 35, 42, 49
8. 29 groups
9. 56
10. Acute angle
11. $\frac{1}{4}$
12. $\frac{9}{12}$
13. $4\frac{1}{5}$
14. 34m
15. 6
16. 0.04
17. Tenths
18. $7x + 3$
19. 99 learners
20. Quarter anticlockwise turn
21. 26 pupils
22. 8t lions
23. arrow roots, water, shoes
24. $\frac{3}{4}$ kg
25. 6 hours 40 mins
26. Rectangle
27. 48m
28. centimetres
29. 336 books
30. 

Assess