MATHEMATICS ACTIVITIES

PUPIL'S BOOK 2

FOR LEARNERS WITH BLINDNESS
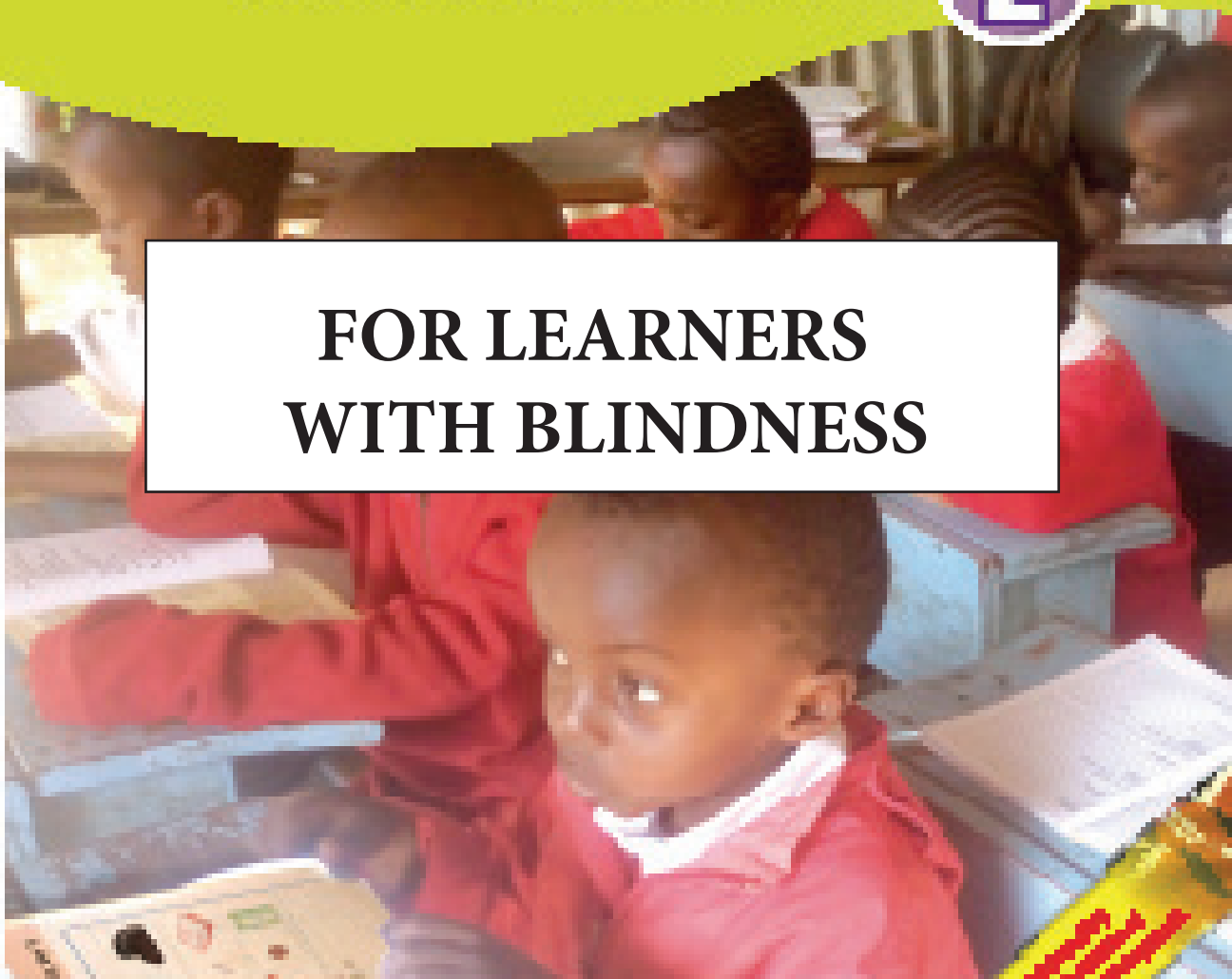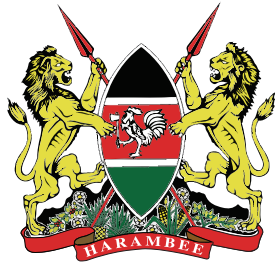
MATHEMATICS PUPIL'S

BOOK 2

First Published 2018

Foreword

The focus of education in any country is the provision of quality and inclusive education and training to all its citizens. The Government of Kenya is committed to this goal as one of the Sustainable Development Goals (SDGs), a contributor to other core SDGs and a right for all, irrespective of their physical status, according to the 2010 Constitution of Kenya. Quality education is paramount to any country in the development and building of a just and cohesive society that enjoys inclusive and equitable social development. In an effort to realise national aspirations of education as envisioned in all policy documents, the Government has provided a policy framework to offer direction in modernising and re-branding the country's education and training system including that of learners with special needs. These documents include *Vision 2030*, *the National Education Sector Strategic Plan 2018 – 2022 (NESSP)* and *Sessional Paper No. 1 of 2019*.

It is the focus of the Government to ensure maintenance and improvement of inclusive, equitable and quality education to avoid persistent regional disparities in the learning outcomes, as well as access to education based on gender, diverse needs, location and region. The basis of the ongoing education reform is to make education in Kenya competitive internationally and socio-economically viable. The Government is ensuring that education strives to stimulate innovation and enhance the acquisition of 21st Century skills through the provision and adaptation of content for learners with special needs.

The Ministry of Education, in partnership with Global Partnership for Education and other development partners, has invested heavily in the provision of educational materials, infrastructure, and human resources in order to enhance the quality of education delivered in Kenyan schools. Evidence-based interventions and global best practices have been adopted in teaching numeracy in early grades.

This adapted mathematics pupil's book for learners with special needs and disability is based on the Competency Based Curriculum and is approved by the Kenya Institute of Curriculum Development for use in schools. It will no doubt inform and guide the teaching and learning of mathematics in early grades. The design of the book ensures that all Kenyan learners with special needs and disability can perform arithmetic operations accurately and efficiently.

Prof. George A. O. Magoha, EGH,
Cabinet Secretary,
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Preface

The goal of the Ministry of Education is to provide quality and inclusive education to all learners irrespective of their socio-economic and physical status. Over time, reforms have been undertaken to improve the education sector with a view to making it globally competitive. The Competency Based Curriculum that has been rolled out emphasises nurturing every learner's potential to ensure they are engaged, empowered and ethical. Its focus is on the provision of quality inclusive education and relevance.

Research initiatives such as National Assessment Monitoring Learning Achievement (NASMLA) and Southern and Eastern Africa Consortium for Monitoring Education Quality (SACMEQ) indicate the need for improved achievement in literacy and numeracy competencies among learners with special needs. Recent developments in the education reform process emphasize the role of literacy and numeracy competencies in supporting learning, especially in the foundational early grades. The increasing focus on the quality of education has resulted in interventions that have shown a positive impact on literacy and numeracy outcomes.

The Ministry of Education has had an increasing focus on the quality of education in lower primary, particularly in the areas of literacy and numeracy. The Early Grade Mathematics component of the Kenya GPE's Primary Education Development (PRIEDE) Project is a scale-up of the Primary Mathematics and Reading (PRIMR), which was supported by USAID and DFID.

The overarching goal of Early Grade Mathematics is to improve early grade mathematics competency among learners. The programme aims at improving teacher capacity for effective delivery of classroom instruction, improving access to appropriate mathematics textbooks, teachers guides, and enhancing instructional support and supervision of teachers by Curriculum Support Officers and head teachers.

This adapted pupil's textbook for learners with special needs and disability is based on the Competence-Based Curriculum and approved by Kenya Institute of Curriculum (KICD) for use in the teaching of Mathematics in Early Grades. This book aims at helping pupils with special needs and disability to learn a variety of mathematical skills and concepts.

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Table Of Contents

TERM I

NUMBERS

NUMBER CONCEPT

Reading numbers

Activity

Read the numbers

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |

Work to do

Using the braille number cards given to you, read the numbers

Reading numbers

Activity

Read the numbers

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50

Work to do

Using the braille number cards given to you, read the numbers

Numbers and objects

Activity

How many objects are given to you?

1 object

3 objects

7 objects

10 objects

14 objects

17 objects

20 objects

Work to do

Write the number to represent objects given

to you.

Numbers using objects

Activity

How many objects are given to you.

23 object

27 objects

40 objects

49 objects

50 objects

Work to do

Write the number to represent objects given to you.

NUMBERS

WHOLE NUMBERS

Counting

Activity

Count forward by 2 from 1 to 19

Count backward by 2 from 19 to 1

Work to do

1 Count forward by 2 from 2 to 20

2 Count backward by 2 from 20 to 2

Counting

Activity

Count forward by 2 from 2 to 50

Count backward by 2 from 50 to 2

Work to do

1 Count forward by 2 from 1 to 49

2 Count backward by 2 from 49 to 1

Tens and Ones

Activity

45 can be shown using a place value tin

45 is **4** tens and **5** ones

Work to do

How many **tens** and **ones**?

1. 37   is   3_   tens and   7_   ones

2. 54   is _____ tens and _____ ones

3. 61   is _____ tens and _____ ones

4. 78   is _____ tens and _____ ones

Reading and writing numbers
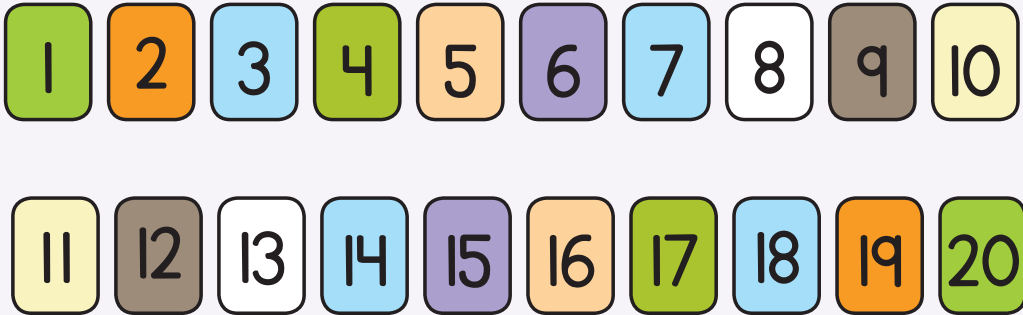
Activity

Read and write the numbers in symbols

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |

Work to do

Read and write the numbers in symbols

| 18 | 4 | 7 | 16 | 11 | 3 | 12 | 9 |

| 2 | 15 | 6 | 20 | 13 | 19 | 17 | 8 |

Reading and writing numbers

Activity
Read and write the numbers in symbols

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50

Work to do

Read and write the numbers in symbols

| 27 | 19 | 44 | 7 | 26 | 39 | 23 | 11 |
| 34 | 50 | 49 | 18 | 32 | 48 | 21 | 9 |
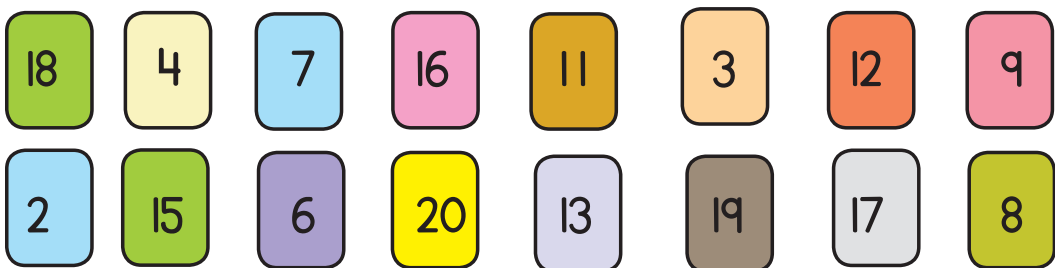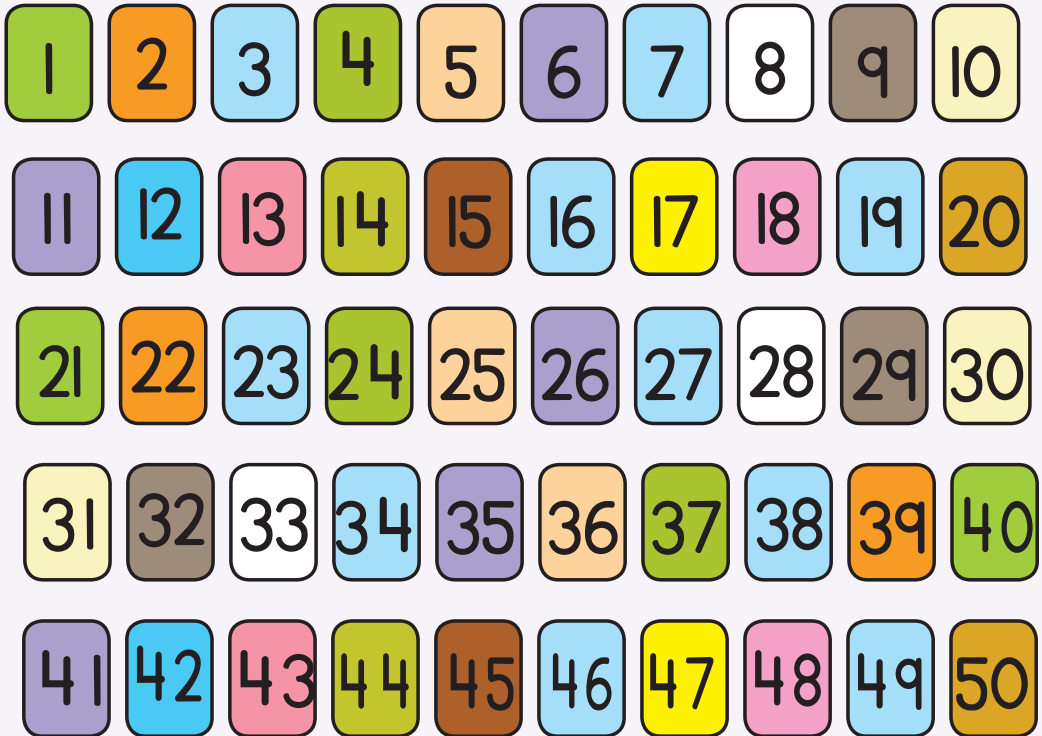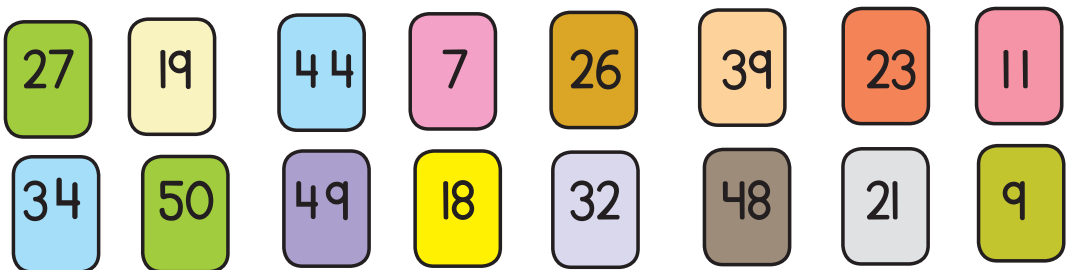
Numbers in words

Activity

Read and write the numbers in words

Number	Word
3	three
4	four
6	six
8	eight
10	ten

Work to do

Read and write the numbers in words

Number	Word
2	
5	
7	seven
9	
10	

Number patterns

Activity 1

Write the next number

12, 14, 16, _____

Are the numbers decreasing or increasing?
By how many?

Count forward by 2 to get the next number

12,14,16, <u>18</u>

Activity 2

Write the next number

19, 17, 15, _____

Are the numbers increasing or decreasing?
By how many?

Count backward by 2 to get the next number

19,17,15, <u>13</u>

Work to do

Write the next number

1. 7, 9, 11, _____

2. 17, 15, 13,_____

3. 4, 6, 8, _____

4. 10, 12, 14, _____

5. 20, 18, 16, _____

6. 19, 17, 15, _____

Number patterns

Activity 1
Write the missing number

20, 25, 30, 35, 40, _____

Are the numbers decreasing or increasing?
By how many?
Count forward by 5 to get the next number

20, 25, 30, 35, 40, <u>45</u>

Activity 2
Write the missing number

50 45, 40, 35, 30, _____

Are the numbers increasing or decreasing?
By how many?
Count backward by 5 to get the next number

50, 45, 40, 35, 30, <u>25</u>,

Work to do
Write the next number

1. 5,   10, 15,   20, 25,   _____

2. 15,   20, 25, 30, 35,   _____

3. 40,   35, 30, 25, 20,   _____

4. 45,   40, 35, 30, 25,   _____

5. 10,   15, 20, 25, 30,   _____

6. 30,   25, 20, 15, 10,   _____

NUMBERS
FRACTIONS

A half as part of a whole

Activity

Fold circular paper cut-outs given to you to make a half

A whole

Two equal parts

I out of 2 parts is a **half** of a **whole.**

Work to do

Make a half using circular paper cut-outs

A half as part of a whole

Activity

Fold the rectangular paper cut outs given to youto make a half

A whole

Two equal parts

I out of 2 parts is a **half** of a **whole.**

Work to do

Make a half using rectangular paper cut-outs

A Half ½

Activity

A half as a symbol

Two equal parts

I out of the 2 parts is ½

Two equal parts

I out of the 2 parts is ½

Work to do

Write and put ½ on half of the cut- out.

Making a whole

> ### Activity
>
> Match by colour to form a whole from the cut outs given.

Work to do

Match paper cut-outs by size to form a whole.

NUMBERS
ADDITION

Add

Activity 1

What is 23 + 5?
Count on 5 steps from 23;

24, 25, 26, 27, 28

23 + 5 = 28

Activity 2

Work out 23 + 5 = ☐

Write as

$$\begin{array}{r} 23 \\ + \ 5 \\ \hline 28 \\ \hline \end{array}$$

Count on 5 steps from 23;

24, 25, 26, 27, <u>28</u>

Work to do

Add

1. 14 + 3 = ☐

2. 34 + 5 = ☐

3. 7 + 21 = ☐

4. $$\begin{array}{r} 11 \\ + \ 8 \\ \hline \\ \hline \end{array}$$

5. $$\begin{array}{r} 41 \\ + \ 2 \\ \hline \\ \hline \end{array}$$

Add

Activity

What is 52 + 6?
Count on 6 steps from 52;

52 + 6 = 58

Work to do

Add

1. 91 + 3 = ☐

2. 2 + 36 = ☐

3. 62 + 5 = ☐

4. 4 + 85 = ☐

5. 71 + 7 = ☐

Add

Activity

What is **86 + 3**?

Add **6** ones to **3** ones to get 9 ones. Write 9 in ones place

Bring **8** down in tens place

Tens	Ones
8	6
+	3
8	9

86 + 3 = 89

Work to do

Add

1. 54 + 4 = ☐

2. 63 + 2 = ☐

3. 81 + 7 = ☐

4.   32
    + 4
    _____

    _____

5.   4 3
     + 5
    _____

    _____

6.   75
     + 3
    _____

    _____

Add

Activity

What is 3 + 2 + 4?

3 + 2 + 4 = 5 + 4

= 9

Add 3 + 2 to get 5
Then add 4 to 5 to get 9

Work to do

Add

1. 2 + 1 + 4 = ☐

2. 1 + 5 + 2 = ☐

3. 5 + 2 + 3 = ☐

4. 2 + 2 + 3 = ☐

5. 6 + 1 + 2 = ☐

6. 1 + 3 + 2 = ☐

Add

> **Activity**
>
> What is 23 + 15 ?
>
> Add 3 **ones** to 5 **ones** to get 8 **ones.**
>
> Add 2 **tens** to I **tens** to get 3 **tens.**
>
> Add 8 **ones** to 3 **tens** to get **38.**
>
> 23 + 15 = 38

Work to do

Add

1.   13 + 16 =

2.   21 + 28 =

3.   24 + 33 =

4.   27 + 12 =

5.   32 + 16 =

6.   17 + 11 =

Add

Activity

Add

$$\begin{array}{r} 34 \\ + 13 \\ \hline \\ \hline \end{array}$$

Add **ones** as 4 + 3 to get 7 **ones**

Write 7 in **ones** place

Add **tens** as 3 + 1 to get 4 tens

Write 4 in **tens** place

$$\begin{array}{r} 34 \\ + 13 \\ \hline 47 \\ \hline \end{array}$$

Work to do

Add

1. $\begin{array}{r} 26 \\ + 13 \\ \hline \end{array}$

2. $\begin{array}{r} 32 \\ + 10 \\ \hline \end{array}$

3. $\begin{array}{r} 22 \\ + 14 \\ \hline \end{array}$

4. $\begin{array}{r} 15 \\ + 32 \\ \hline \end{array}$

5. $\begin{array}{r} 14 \\ + 15 \\ \hline \end{array}$

6. $\begin{array}{r} 25 \\ + 23 \\ \hline \end{array}$

Number patterns

Activity

Work out the missing number

6, 9, 12, _____, 18

There are 3 steps from 6 to 9

Then add 3 to a number to get the next number.

6	+	3	=	9
9	+	3	=	12
12	+	3	=	15
15	+	3	=	18

The missing number is 15

6, 9, 12, <u>15</u>, 18

Work to do

Write the missing number

1.   12,   13,   14,   ____,   16, 17

2.   3,   5,   7, ____

3.   4,   8,   12, ____

4.   7,   10,   13,   16 ____

5.   9,   11,   13,   15, ____,   19

6.   3,   6,   9,   12, ____

NUMBERS
SUBTRACTION

Subtract

Activity

What is 7 - 4?

Count 4 steps backwards from 7, 6, 5, 4, 3

7 - 4 = 3

Work to do

1. 4 - 2 = ☐

2. 8 - 5 = ☐

3. 5 - 1 = ☐

4. 7 - 4 = ☐

5. 9 - 3 = ☐

6. 9 - 5 = ☐

Subtract

Activity

Subtract   9

          - 5
          _____

          _____

On the number line start at 9 .

Move 5 steps backward to stop at 4.

          9
        - 5
        _____
          4
        _____

Work to do

Subtract

1.   7
      - 2
    _____

    _____

2.   5
      - 3
    _____

    _____

3.   9
      - 4
    _____

    _____

4.   8
      - 1
    _____

    _____

5.   9
      - 6
    _____

    _____

6. Ben had 5 pencils. He gave Peter 2 pencils. How many pencils was Ben left with?

Subtract

Activity

What is 13 – 8?

13 – 8 = ☐

Steps

13 – 8 = 13 – 3 – 5   Break apart 8 as 3 and 5

13 – 8 = 10 – 5 = 5   Subtract 3 from 13 to get 10

13 – 8 = 5   Subtract 5 from 10 to get 5

Work to do

Subtract

1. 12 – 6 = ☐

2. 63 – 8 = ☐

3. 35 – 9 = ☐

4. 51 – 7 = ☐

5. 24 – 5 = ☐

6. 42 – 5 = ☐

Subtract

Activity

Subtract   58

         -   5

         ‾‾‾‾‾‾

         ‾‾‾‾‾‾

Write as ones
and tens

Tens	Ones
5	8
-	5
5	3

Steps

Subtract 5 ones from 8 ones to get 3 ones.

Write 3 in ones place.

Bring down 5 in tens place.

Work to do

Subtract

1.   26
    -   4
   ‾‾‾‾‾‾‾‾‾

   ‾‾‾‾‾‾‾‾‾

2.   3 9
     -   6
   ‾‾‾‾‾‾‾‾‾

   ‾‾‾‾‾‾‾‾‾

3.   45
     - 2
   ‾‾‾‾‾‾‾‾‾

   ‾‾‾‾‾‾‾‾‾

4.   78
    - 5
   ‾‾‾‾‾‾‾‾‾

   ‾‾‾‾‾‾‾‾‾

5.   87
     -   3
   ‾‾‾‾‾‾‾‾‾

   ‾‾‾‾‾‾‾‾‾

6. Fatuma has 18 books. She gives 3 books to her brother. How many books is Fatuma left with?

Add and subtract

Activity

What is 9 – 2 ?

Write as 9 – 2 = ☐

2 + ☐ = 9

2 + 7 = 9

9 – 2 = 7

Steps

Count on from 2 up to 9 as 3, 4, 5 , 6 ,7, 8, 9.

There are 7 steps.

The missing number is 7

Work to do

Write the missing number

1. 6 – 2 = ☐

   2 + ☐ = 6

2. 8 – 6 = ☐

   6 + ☐ = 8

3. 7 – 5 = ☐

   5 + ☐ = 7

4. 5 – 2 = ☐

   2 + ☐ = 5

5. 9 – 3 = ☐

   3 + ☐ = 9

6. 7 – 1 = ☐

   1 + ☐ = 7

Subtract

Activity

Write the missing number in ☐ - 3 = 5

Write as 3 + 5 = ☐

3 + 5 = 8

The missing number is 8.

Write 8 in the box

8 - 3 = 5

3, 5, 8 is a number family.

Work to do

Write the missing number

1. ☐ - 4 = 3

2. ☐ - 7 = 2

3. ☐ - 1 = 4

4. ☐ - 5 = 1

5. ☐ - 3 = 5

6. ☐ - 2 = 3

Subtract

Activity

Write the missing number in $\quad 8 - \boxed{} = 6$

Write $8 - 6 = \boxed{}$

$\qquad 8 - 6 = 2$

The missing number is 2.

Write 2 in the box

$8 - \boxed{2} = 6$

2,6,8 is a number family.

Work to do

Write the missing number

1. $\quad 8 - \boxed{} = 4$

2. $\quad 5 - \boxed{} = 3$

3. $\quad 9 - \boxed{} = 3$

4. $\quad 7 - \boxed{} = 4$

5. Teacher Ann has 9 rubbers. She gives 4 rubbers to Tom. How many rubbers is she left with?

6. Esther made 7 baskets. She sold 5 baskets. How many baskets was she left with?

Number patterns

Activity

Write the missing number in the pattern.

19, 16, 13 _____

There are 3 steps from 19 to 16

Then subtract 3 from a number to get the next number

19 – 3 = 16

16 – 3 = 13

13 – 3 = 10

The next number is 10

The pattern is 19, 16, 13, 10.

Work to do

Write the next number

1.   16,   15,   14,   ____

2.   9,   7,   5,   ____

3.   17,   15,   13,   ____

4.   19,   17,   15,   ____

5.   18,   16,   14   ____

6.   20,   15,   10,   ____

NUMBERS
MULTIPLICATION

Repeated addition

Activity 1

Write as repeated addition

1object   and   1object   is   2objects

| + | =   2

Activity 2

Write as repeated addition

2objects   and   2 objects   is   4objects

2   +   2   =   4

Work to do

Write the missing number

3 objects and 3 objects   is   6 objects

3   +   _____   =   _____

5 objects   and   5 objects   is   10 objects

_____   +   5   =   _____

4 object   and   4 object   is   8 objects

_____   +   _____   =   _____

Repeated addition

Activity 1

Write as addition

1 object and 1 object is 10 objects

| + | + | = 3

Activity 2

2 objects and 2 objects and 2 objects is 6 objects

2 + 2 + 2 = 6

Work to do

Write the missing number

3 objects and 3 objects is 6 objects

3 + _____ = _____

3 objects and 3 objects and 3 objects is 9 objects

3 + _____ + 3 = _____

2 objects   and 2 objects   is   4 objects

    2   +   _____   =   4

4 objects   and 4 objects   is   8 objects

_____   +   _____   =   _____

4 objects and 4 objects and 4 objects is 12 objects

    4   +   _____ + _____ =   _____

5 objects   and 5 objects   is   10 objects

_____   +   _____   =   _____

Repeated addition

Activity

Write as addition

2 objects and 2 objects and 2 objects

and 2 objects is 8 objects

2 + 2 + 2 + 2 = 8

Work to do

Write the missing number

3 objects and 3 objects and 3 objects is 9 objects

_____ + _____ + _____ = _____

4 objects and 4 objects and 4 objects
and 4 objects is 16 objects

4 + ____ + _____ + _____ = _____

3 objects and 3 objects and 3 objects
and 3 objects is 12 objects

_____ + _____ + _____ + 3 = _____

5 objects and   5 objects   is   10 objects

_____   +   _____   =   _____

5 objects and 5 objects and 5 objects

is 15 objects

5   +   ____   +   ____   =   _____

MULTIPLICATION

Repeated addition

Activity 1
Write as addition

3 objects and 3 objects and 3 objects
and 3 objects and 3 objects is 15 objects

3 + 3 + 3 + 3 + 3 = 15

Work to do

Write the missing number

2 objects and 2 objects and 2 objects
and 2 objects is 8 objects

___ + 2 + ___ + ___ = _____

4 objects and 4 objects and 4 objects
is 12 objects

4 + _____ + _____ = _____

2 objects and 2 objects and 2 objects
and 2 objects and 2 objects is 10 objects

2 + _____ + _____ + _____ + _____ = _____

5 objects and 5 objects and 5 objects
is   15 objects

_____ + _____ + _____ = _____

MULTIPLICATION

Multiplication '✕' Sign

Activity 1

Write using the '✕' sign

4 objects and 4 objects   There are 2 groups
 is 8 objects   each with 4 objects.

___4___   +   ___4___

4 + 4 is the same as 2 ✕ 4

Activity 2

2 objects and 2 objects and   2 objects

There are 3 groups each with 2 objects

This is the same as 3 x 2.

Work to do

Write the sign '✕' or the missing number

4 objects and   4 objects and   4 objects

 is the same as   3 _____ 4   objects

3 objects and 3 objects is the same as 2 _____ 3

5 objects and   5 objects and   5 objects

  is   15 objects

      is the same as 3 _____   _____

4 objects and   4 objects and   4 objects and

   4 objects is   15 objects

      is the same as _____ × _____

2 objects and   2 objects and   2 objects

   and 2 objects and   2 objects

      is the same as _____   _____   _____

Multiplication

Activity 1

Write as multiplication

3 objects and 3 objects is 6 objects

$$3 \quad + \quad 3 \quad = \quad 6$$

There are 2 groups with 3 objects each. This is same as 2 x 3.

Write 3 + 3 as 2 x 3 = 6

Activity 2

2 objects and 2 objects and 2 objects is 6 objects

There are 3 groups with 2 objects each.

This is same as 3 x 2

2 + 2 + 2 is 3 x 2 = 6

Work to do

Write as multiplication

1. 4 + 4 + 4 = 12

2. 5 + 5 = 10

3. 2 + 2 + 2 + 2 = 8

4. 3 + 3 + 3 + 3 = 12

5. 4 + 4 + 4 + 4 + 4 = 20

Multiplying by 1

Activity 1
Multiply by 1

2 objects   This is 1 group with 2 objects
This is written as 1 x 2 = 2

Activity 2
Multiply by 1

6 objects   This is 1 group with 6 objects
This is written as 1 x 6 = 6

Work to do

Multiply

1. 1 × 3 = [　]

2. 1 × 4 = [　]

3. 1 × 5 = [　]

4. 1 × 6 = [　]

5. 1 × 7 = [　]

6. 1 × 8 = [　]

7. 1 × 9 = [　]

MEASUREMENT
LENGTH

Measuring length

Activity

What is the length of the teacher's table ?

The length of the teacher's table is _____ pencils or sticks

Work to do

	Measure	Number of pencils or sticks
1	Length of the longer side of mathematics textbook	
2	Shorter side of teacher's table	
3	Shorter side of the door	
4	Length of the board	

Measuring length

Activity

What is the length of the classroom wall ?

The shorter side of the classroom wall is ___ sticks

Work to do

	Measure	Number of sticks
1	Length of chalkboard	
2	Longer side of classroom wall	
3	Length of classroom window	

MEASUREMENT

MASS

Measuring mass

Activity

How many textbooks have the same mass as the wooden block?

The mass of the wooden block is ____ text books

Work to do

	Measure	Number of text books
1	Mass of a stone	
2	Mass of a school bag	
3	Mass of a packet of sand	

Measuring mass

Activity

How many coins have the same mass as the exercise book.

The mass of the exercise book is _____ coins

Work to do

	Measure	Number of coins
1	The mass of a potato	
2	The mass of a rubber	
3	The mass of a pencil	
4	The mass of a piece of chalk	

MEASUREMENT
CAPACITY

Measuring capacity

> **Activity**
>
> How many cups full of water will fill the basin?
>
> _____ cups of water fill the basin

Work to do

	How many cups of water will fill?	Number of cups
1	A jerrycan	
2	A jug	
3	A bucket	
4	A sufuria	

Measuring capacity

Activity

How many bottles full of water will fill the basin?

____ bottles of water fill the basin

Work to do

	How many bottles of water will fill?	Number of bottles
1	A bucket	
2	A jug	
3	A sufuria	
4	A jerrycan	

Measuring capacity

Activity

How many tins of water will fill the basin?

_____ tins fill the basin.

Work to do

	How many tins of water will fill?	Number of tins
1	A jug	
2	A bucket	
3	A jerrycan	
4	A sufuria	

MEASUREMENT
TIME

Months of the year

Activity

There are 12 months in one year.
These are :

1.	January
2.	February
3.	March
4.	April
5.	May
6.	June
7.	July
8.	August
9.	September
10.	October
11.	November
12.	December

Work to do

Read and write the months of the year in order.

Months of the year

Activity

What activity takes place in the month of

Month	Activity
January	Opening School
June	Madaraka day
April	Drama festival
August	Music festival

Work to do

Write an activity for each month.

Month	Activitiy		Month	Activity
January			July	
February			August	
March			September	
April			October	
May			November	
June			December	

Days in a month

Activity

Using the braille calender you have been given

Work to do

1. Which months have 28 days? _____

2. Which months have 30 days?

_____   _____

_____   _____

3. Which months have 31 days?

_____   _____   _____   _____

_____   _____   _____

Measuring time

Activity

How much time?

Count the number of claps as you sing

National Anthem

Oh God of all creation
Bless this our land and nation
Justice be our shield and defender
May we dwell in unity
Peace and liberty
Plenty be found within our borders.

It takes ____ claps to sing the first stanza of the national anthem.

The number of claps is the time taken to sing.

Work to do

Sing the first stanza of the national anthem

Count how many?	Number
1. Claps	
2. Taps	
3. Thumb clicks	

MEASUREMENT
MONEY

Coins and notes

Activity 1
  How much?

  10 shillings coin

Activity 2
  How much?

  50 shillings note.

Work to do

How much?

1   _____ shillings.

2   _____ shillings

3   _____ shilling.

4   _____ shillings.

5   _____ shillings note.

Coins and notes

Activity 1
How much?

40 shillings coin.

Activity 2
How much?

100 shillings note.

Work to do
How much?

1   ____ shillings.

2   ____shillings.

3   ____shillings.

4   ____shillings.

5   ____shillings.

6   ____shilling.

Counting money

Activity 1
How much money?

7 shillings.

Activity 2
How much money?

26 shillings.

Work to do

How much?

1   _____shillings.

2   _____shillings.

3   _____shillings.

4   _____shillings.

5   _____shillings.

Counting money

Activity 1

How much money?

60 shillings.

Activity 2

How much money?

71 shillings.

Work to do

How much?

1 _____shillings.

2 _____shillings.

3 _____shillings.

4 _____shillings.

GEOMERTY
LINES

Straight and curved lines

Activity

Identify straight and curved lines

Work to do

1. Name places with curved lines

    _____

    _____

    _____

2. Name places with straight lines

    _____

    _____

    _____

GEOMETRY
SHAPES

Triangles, Circles and Rectangles

Activity

Which shape?

A

B

C
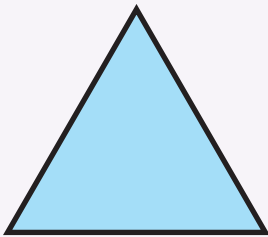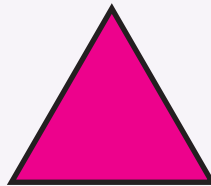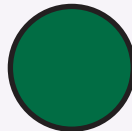
D

E
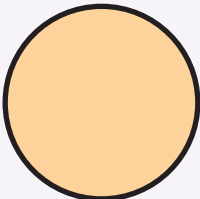
F
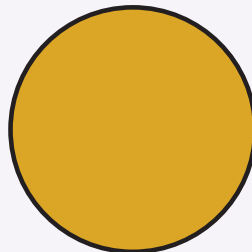
G

Triangles are **A** and **C**

Circles are **F** and **G**

Rectangles are **B** and **E**

Work to do

Which shape?
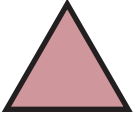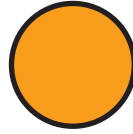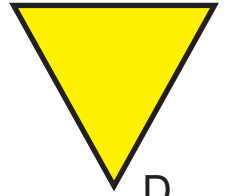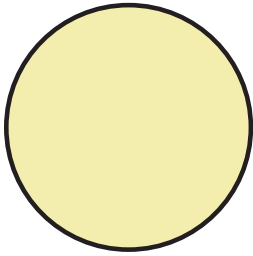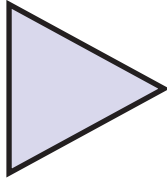
1. Triangles are?   ____ ____ ____

2. Circles are?   ____ ____ ____

3. Rectangles are ? ____ ____ ____

1. Read the numbers

| 16 | 23 | 48 | 35 | 7 | 44 | 29 | 34 | 2 | 50 |

2. How many objects are given to you

3   Count forward by 2 from 3 to 47

4   Count backward by 2 from 48 to 2

5   23 is _____ tens and ____ ones

6   Put objects given to you to represent number 6.

   Show the number to represent the objects given to you.

7   Write the missing number
    3, 8, 13, 18, _____

8   Write the missing number
    19, 17, 15, 13, _____

9   Which is a half from the cut-out given to you

10. $15 + 4 = \square$ 11. $82 + 7 = \square$ 12. $22 + 27 = \square$

13. $3 + 4 + 2 = \square$ 14. Write the missig number 5, 8, 11, ____, ____

15. $13 - 8 = \square$ 16. $33 - 5 = \square$ 17.
$$\begin{array}{r} 68 \\ -3 \\ \hline \end{array}$$

18. $\square - 6 = 3$ 19. $19 - \square = 12$

20. Tom has 3 books. Jane has 5 books. How many books do they have altogether?

21. Write as addition

2 objects and 2 objects and 2 objects is 6 objects

_____ + _____ + _____ = _____

22. 4 objects and 4 objects and 8 objects

_____ + _____ = _____

23. 3 objects and 3 objects and 3 objects is 9 objects

_____ + _____ + _____ = _____

24. 2 objects and 2 objects and 2 objects is 6 objects

_____ + _____ + _____ + _____ = _____

25 Share 9 oranges among 3 pupils

Each pupil gets _____ oranges

26 ☐ ÷ 2 = 4   **27** 18 ÷ 3 = ☐

28 12 ÷ ☐ = 3   **29** 24 ÷ ☐ = 8

30 21 ÷ 3 = ☐   **31** 15 ÷ ☐ = 3

32 which is than **shorter, longer** or **same as**?

A ⚊⚊⚊⚊⚊⚊⚊

B ⚊⚊⚊⚊⚊⚊⚊⚊⚊⚊

C ⚊⚊⚊⚊

D ⚊⚊⚊⚊⚊⚊⚊⚊

A   is _____ B

D   is _____ A

B   is _____ C

33 Write **heavier** or **lighter** from the items given to you

a   The book is _____ the ruler

b   The book is _____ the stone

64

c) The book is _____ the pencil

d) The book is _____ the orange

34 Which holds more

Basin   Tin

35 Which holds less

Kettle   cup

36 Which holds more, less or same as

Jerrrycan fills 10 jug

Sufuria   fills   5 jugs

The jerican hold_____ than the sufuria

37 Write the time from tactile clock given to you

The time is _____ o'clock

The time is _____ o'clock

The time is _____ o'clock

38 Set the time 6 o'clock in the digital face

39 Look at the calender and write the day of the week.

MAY 2018						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

a) May 8 _____

b) May 12 _____

c) May 23 _____

d) May 31 _____

e) May 29 _____

40 Write need or want

Item	Need or want
Dress	
Food	
Toy	
Ball	

41 How many?

20 shillings _____ five shillings coins

40 shillings_____ ten shillings coins

100 shillings_____ 50 shillings notes. _____

40 shillings coin   and _____ tens shillings coins.

42. Which is a straight line?

A   B

43. Which is a triangle?
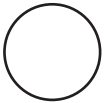
A   B   C

TERM 3

NUMBERS
NUMBER CONCEPT

Reading numbers

Activity

Read the numbers

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Work to do

Read the numbers

9 82 94 87 31 76 100 93

85 91 47 58 29 66 15 6
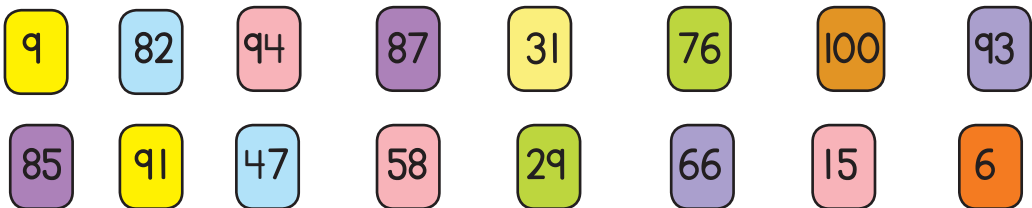
Numbers using objects

Activity

How many objects are given to you

77 objects, 85 objects, 96 objects, 100 objects

Work to do

Write the number to represent the objects given

to you

NUMBERS
WHOLE NUMBERS

Counting

Activity

Count forward by 10 from 10 to 100

Count backward by 10 from 100 to 10

Work to do

1. Count forward by 10 from 11 to 99.

2. Count backward by 10 from 99 to 11.

Hundreds, Tens and Ones

Activity

100 can be shown using spiked abacus

I hundreds   0 tens   0 ones

Work to do

How many **hundreds**, **tens** and **ones**?

1. 58 is **0**   hundreds **5**   tens **8**   ones

2. 81 is ____   hundreds ____ tens ____ ones

3. 97 is ____   hundreds____ tens ____ ones

4. 100 is ____ hundreds____ tens ____ ones

Reading and writing numbers

Activity
Read and write the numbers in symbols

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Work to do

Read and write the numbers in symbols

90 67 31 54 88 47 100 51

91 42 85 24 19 76 50 43

Reading and writing numbers

Activity

Read and write the numbers in words

Number	Word
16	sixteen
17	seventeen
18	eighteen
19	nineteen
20	twenty

Work to do

Write the numbers in symbols or words.

1. _____sixteen

2. 17_____

3. 18 _____

4. 19_____

5. _____twenty

6. 15_____

Number patterns

Activity 1

Write the missing number

77, 79, 81, 83, _____, 87

Are the numbers decreasing or increasing?
By how many?
Count forward by 2 to get the next number

77, 79, 81, 83, <u>85</u>, 87

Activity 2

Write the missing number

92, 90, 88, 86, _____, 82

Are the numbers increasing or decreasing?
By how many?

Count backward by 2 to get the next number

92, 90, 88, 86, <u>84</u>, 82

Work to do

Write the missing number

1. 50, 52, 54, 56, _____, 60

2. 69, 71, 73, 75, _____, 79

3. 100, 98, 96, 94, _____, 90

4. 89, 87, 85, 83, _____, 81

5. 59, 61, 63, 65, _____, 69

6. 48, 46, 44, 42, _____, 38

Number patterns

Activity 1
Write the missing number
20, 30, 40, 50,____, 70,
Are the numbers decreasing or increasing?
By how many?
Count forward by 10 to get the next number

20, 30, 40, 50, **60**, 70,

Activity 2
Write the missing number
80, 70, 60, 50, _____, 30
Are the numbers increasing or decreasing?
By how many?
Count backward by 10 to get the next number

80, 70, 60, 50, 40, 30

Work to do
Write the missing number

1. 40,   50,   60,   70,   ___,   90

2. 100,   90,   80,   70,   ___,   50

3. 15,   25,   35,   45,   ___,   65

4. 95,   85,   75,   65,   ___,   45

5. 10,   20,   30,   40,   ___,   60

6. 70,   60,   50,   40,   ___,   20

NUMBERS
FRACTIONS

A half and a quarter

Activity

Which is bigger?
Which is smaller?

A half of a whole

A quarter of a whole

A half is bigger than a quarter.

A quarter is smaller than a half.

Work to do

Using circular paper cut-outs, fold a half and a quarter.

1. Which is bigger?
2. Which is smaller?

A half and a quarter

Activity

Which is bigger?
Which is smaller?

A half of a whole

A quarter of a whole

A half is bigger than a quarter.

A quarter is smaller than a half.

Work to do

Using rectangular paper cut-outs, fold a half and a quarter.

1. Which is bigger?
2. Which is smaller?

Making a half

Activity

Match by colour to make a half.

Work to do

Match paper cut-outs by size to make a half.

A $\frac{1}{2}$ and a $\frac{1}{4}$ from the paper cut outs given to you

Activity

Write a $\frac{1}{2}$ or a $\frac{1}{4}$

a is a $\frac{1}{4}$

b is a $\frac{1}{2}$

c is a $\frac{1}{4}$

d is a $\frac{1}{2}$

Work to do

Write $\frac{1}{2}$ or $\frac{1}{4}$ from the paper cut-out given to you.

NUMBERS
ADDITION

Add

Activity

Add
$$\begin{array}{r} 56 \\ + 43 \\ \hline \\ \hline \end{array}$$

Write as **tens** and **ones**

Tens	Ones
5	6
+ 4	3
9	9

Steps

Add 6 **ones** to 3 ones to get 9 **ones**.

Write 9 in **ones** place.

Add 5 **tens** to 4 **tens** to get 9 **tens.**

Write 9 in **tens** place .

Work to do

Add

1.
$$\begin{array}{r} 47 \\ + 32 \\ \hline \\ \hline \end{array}$$

2.
$$\begin{array}{r} 53 \\ + 25 \\ \hline \\ \hline \end{array}$$

3.
$$\begin{array}{r} 62 \\ + 16 \\ \hline \\ \hline \end{array}$$

4.
$$\begin{array}{r} 71 \\ + 23 \\ \hline \\ \hline \end{array}$$

5. A box has 26 buttons. A tailor put 53 more buttons in the box. How many buttons are in the box altogether?

Add

Activity

What is **38 + 25** ?

38 + 25 = ☐

Steps

Add **8 ones** to **5 ones** to get **13 ones.**
Regroup **13 ones** as **1** tens and **3 ones.**
Write **3** as **ones** .
Add the **tens** as **1 + 3 + 2 = 6 tens.**
Write **6** as **tens.**

38 + 25 = **63**

Work to do

Add

1.   26 + 39 = ☐   2.   53 + 37 = ☐

3.   45 + 18 = ☐   4.   76 + 19 = ☐

5. Chalo planted 72 flowers on Monday. On Tuesday he planted 28 more flowers. How many flowers did he plant altogether?

6. In Grade two, there are 56 girls and 37 boys. How many pupils are there in Grade two altogether?

Add

Activity

Add
$$69$$
$$+ 24$$
_____

Write as **Ones** and **Tens**

Tens	Ones
6	9
+ 2	4
9	3

Steps

Add 9 **ones** to 4 **ones** to get 13 **ones.**

Regroup 13 **ones** as 1 **ten** and 3 **ones.**

Write 3 ones in the **ones** place.

Add tens as 1 + 6 + 2 = 9 **tens.**

Write 9 in the **tens** place.

Work to do

Add

1. 73
    + 19
    _____

    _____

2. 37
    + 56
    _____

    _____

3. 45
    + 38
    _____

    _____

4. 63
    + 27
    _____

    _____

5. Christine had 53 bags of maize. She bought 37 more bags of maize. How many bags of maize does she have altogether?

6. In a school, there are 37 tables. The school is given 24 more tables. How many tables are in the school altogether?

145

Number patterns

> **Activity**
>
> Write the missing number in the pattern
>
> 44, 54, 64, 74, _____
>
> There are 10 steps from 44 to 54
>
> Add 10 to a number to get the next number
>
> 44 + 10 = 54
>
> 54 + 10 = 64
>
> 64 + 10 = 74
>
> 74 + 10 = 84
>
> The missing number is 84
>
> The pattern is 44, 54, 64, 74, 84

Work to do

Write the missing number

1.   35, 40, 45, ___, 55   2. 52, 56, 60, ___,

3.   87, 90, 93, 96 ___,   4. 73, 75, 77, 79, ___, 83

5. Agnes bought 15 tomatoes on Monday. She bought 20 tomatoes on Tuesday. She bought 25 tomatoes on Wednesday. Using the pattern, how many tomatoes will she buy on Thursday?

6. Richard read 6 pages of a story book on Sunday. He read 9 pages on Monday. On Tuesday he read 15 pages. Using the pattern, how many pages will he read on Wednesday?

NUMBERS
SUBTRACTION

Subtract

Activity

What is 37 – 14?

37 – 14 = ☐

Steps

Subtract 4 **ones** from 7 **ones** to get 3 **ones**.

Write 3 as **ones**.

Subtract 1 **ten** from 3 **tens** to get 2 **tens**.

37 – 14 = 23

Write 2 as **tens**.

Work to do

Subtract

1. 27 – 16 = ☐

2. 39 – 14 = ☐

3. 45 – 13 = ☐

4. 35 – 23 = ☐

5. 94 – 50 = ☐

6. 56 – 32 = ☐

Subtract

Activity

Subtract 57
     - 26
     _____

Write as **Ones** and **Tens**

Tens	Ones
5	7
- 2	6
3	1

Steps

7 **ones** – 6 **ones** = 1 **ones**.

Write 1 in **ones** place.

Subtract the **tens** as 5 – 2 to get 3 **tens**.

Write 3 on **tens** place.

Work to do

Subtract

1.　　49
　　 - 27
　　_____

2.　　39
　　 - 21
　　_____

3.　　77
　　 - 23
　　_____

4.　　69
　　 - 61
　　_____

5.　　86
　　 - 43
　　_____

6.　　98
　　 - 36
　　_____

Add and Subtract

Activity

Use addition and subtraction

25 + 34 = 59 and 34 + 25 = 59

With subtraction, we write

59 - 25 = 34 and 59 - 34 = 25

The numbers 25, 34 and 59 make a number family

Work to do

Write the Missing numbers

1. 32 + 13 = 45   13 + 32 = ☐

   45 - ☐ = 13   45 - 13 = ☐

2. 21 + 18 = ☐   18 + 21 = ☐

   ☐ - 21 = 18   39 - 18 = ☐

3. 46 + 33 = ☐   33 + 46 = ☐

   79 - ☐ = 46   79 - ☐ = 33

4. 57 + 42 = 99   42 + 57 = ☐

   ☐ - 57 = 42   99 - ☐ = 57

Subtract

Activity
Write the missing number

[ ] $- 35 = 42$

Steps

To get the missing number, add 35 and 42 to get 77.

77 $- 35 = 42$

The missing number is 77

Work to do

Write the Missing numbers

1. [ ] $- 16 = 52$

2. [ ] $- 22 = 33$

3. [ ] $- 15 = 61$

4. [ ] $- 23 = 63$

5. [ ] $- 14 = 74$

6. [ ] $- 11 = 12$

Number Patterns

Activity

Write the missing number.

79, 76, 73, ____

There are 3 steps from 79 to 76.
Subtract 3 from a number to get the next

number as   79 – 3 = 76

76 – 3 = 73

73 – 3 = 70

The next number is 70

The pattern is 79, 76, 73, 70

Work to do

Write the next number

1. 59,   57,   55,   53   ____

2. 60,   55,   50,   45   ____, ____

3. 90,   80,   70,   60,   ____, ____

4. In April, 89 people went to hospital. In May, 86 people went to hospital. In June, 83 people went to hospital. Using the pattern, how many people went to hospital in July?

NUMBERS

MULTIPLICATION

Multiply

Activity

Multiply by 5

There are 5 groups.
Each group has 3 objects.
There are 15 objects altogether.

Write 3 + 3 + 3 + 3 + 3 = 15 as 5 x 3 = 15

Work to do

Multiply

1. 5 x 1 = ☐

2. 5 x 2 = ☐

3. 5 x 3 = ☐

4. 5 x 4 = ☐

5. 5 x 5 = ☐

6. 5 x 6 = ☐

7. 5 x 7 = ☐

8. 5 x 8 = ☐

9. 5 x 9 = ☐

Multiply

Activity
Multiply by 10

There are 10 groups.
Each group has 2 objects.
There are 20 objects altogether.

Write $2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 = 20$

as $10 \times 2 = 20$

Work to do
Multiply

1. $10 \times 1 = \boxed{}$ 2. $10 \times 2 = \boxed{}$

3. $10 \times 3 = \boxed{}$ 4. $10 \times 4 = \boxed{}$

5. $10 \times 5 = \boxed{}$ 6. $10 \times 6 = \boxed{}$

7. $10 \times 7 = \boxed{}$ 8. $10 \times 8 = \boxed{}$

9. $10 \times 9 = \boxed{}$

NUMBERS

DIVISION

Divide

Activity 1

　　　Divide

$$8 \div 4 = \boxed{}$$

$$8 \div 4 = \boxed{2}$$

Work to do

Divide

1. $4 \div 2 = \boxed{}$

2. $9 \div 3 = \boxed{}$

3. $8 \div 2 = \boxed{}$

4. $10 \div 5 = \boxed{}$

Divide

Activity 1

Teacher Tito shared 12 oranges equally among 3 pupils. How many oranges did each pupil get?

12 oranges shared among 3 pupils equally

Each pupil gets 4 oranges

$12 \div 3 = 4$

Work to do

1   $18 \div 3 =$ ☐

2   $8 \div 4 =$ ☐

3   Ruth shared 15 bananas equally among 3 children. How many bananas did each child get?

4   A pupil put 12 exercise books in equal groups of 4. How many groups are there?

Divide

Activity 1

Divide

$24 \div 3 = \boxed{}$

$24 \div 3 = \boxed{8}$

Work to do

1 $21 \div 3 = \boxed{}$

2 $24 \div 2 = \boxed{}$

3 $15 \div 5 = \boxed{}$

4 $20 \div 4 = \boxed{}$

5 Mwangi shared 15 exercise books equally among 3 pupils. How many did each pupil get ?

6 Sifuna has 25 marbles. He wants to share equally among 5 friends. How many does each get?

MEASUREMENT
LENGTH

Measuring length

Activity

Make a l metre stick using a tactile metre rule

Measure the length of the chalkboard using a l metre stick.

The length of the chalkboard is ____ l metre sticks.

The length of the chalkboard is ____ metres

Work to do

Use your 1 metre stick to measure,

Use a 1 metre stick to measure;	Number of 1 metre sticks	Metres
Length of classroom window		
Length of the longer side of the classroom		

Measuring length

Activity

Make a I metre string using a tactile metre rule.

Measure the length of the longer side of the classroom.
The length of the longer side of the classroom is ____I metre strings.

The length of the longer side of the classroom is ____ metres.

Work to do

Use a I metre string to measure;	Number of I metre strings	Metres
Length of the teacher's table		
Length of the short-er side of the class-room		

MEASUREMENT
MASS

Measuring mass

Activity

Which is heavier?
Which is lighter?
Which are same as?

The text book is lighter than the 1 kg mass.
1 kg mass is heavier than the text book.
____ text books are same as 1 kg mass .

Work to do

Write heavier than, lighter than or same as;

1. A shoe is _____ 1 kg mass.

2. 1 kg mass is _____ a school bag.

3. A text book is _____ 1 kg mass.

4. 1 kg mass is _____ a box of chalk.

Measuring mass

Activity

Use I kg sand bag to measure

The mass of rice is equal to two I kg mass of sandbags.
The mass of rice is 2 kgs.

Work to do

Use I kg sandbag to measure	Mass in kg
1 Potatoes	
2 A box of chalk	
3 Bean seeds	

MEASUREMENT
CAPACITY

Measuring capacity

Activity

How many litres can the pot hold?

____ 1 litre tins of water fill the pot.

The pot holds _____ litres.

Work to do

Use a 1 litre tin to fill	Number of 1 litre tins	Number of litres
Bucket		
Basin		

Measuring capacity

Activity

How many litres can the jerrycan hold?

____l litre tins fill a jerrycan.

The jerrycan is _____litres.

Work to do

Use a l litre tin to fill	Number of l litre tins	Number of litres
Basin		
Sufuria		
Bucket		

MEASUREMENT

TIME

Reading and telling time

Activity

What is the time?

11 : 00

6 : 00

The time is 11 o'clock   The time is 6 o'clock

Work to do

What is the time?

3 : 00 ____O'clock   **8 : 00** ____O'clock

12 : 00____ O'clock   **10 : 00**____ O'clock

2 : 00 ____O'clock   **1 : 00** ____O'clock

Reading and telling time

Activity

What is the time from the tactile clock given to you

The time is I o'clock

Work to do

Write the time

Clock	Time
When the hour hand is at 5 and the minute hand is at 12	
When the hour hand is at 12 and the minute hand is at 12	
When the hour hand is at 6 and the minute hand is at 12	

MEASUREMENT
MONEY

Goods and services

Activity

Write good or service

    Shoe making

    Cup

    Hair cutting

    Exercise book

    Handkerchief

    Hair plaiting

Service are ; shoe making, hair cutting and hair plaiting.

Goods are ; cup, exercise book and handkerchief.

Work to do

Write good or service

  Tailor

  Pencil

  Rubber

  Cook

  Transport

  Bread

Change

Activity 1

How many?

50 shillings note = two 20 shillings coins and one 10 shillings coin.

Activity 2

100 shillings note = one 50 shillings note, two 20 shillings coins and one 10 shillings coin.

Work to do

How many?

100 shillings note is____ 50 shillings notes.

100 shillings note is____ 50 shillings note ____ 10 shillings coins.

100 shillings note is____ 10 shilling coins____5 shillings coins.

100 shillings note is____ 20 shilling coins.

GEOMETRY
LINES

Making Curved lines

Activity

Make curved lines using items provided to you.

Work to do

Use plasticine or clay to make curved lines

Making curved lines

Activity

Make curved lines using items provided to you

Work to do

Make shapes with curved lines

GEOMETRY
SHAPES

Squares

Activity

Name the shape
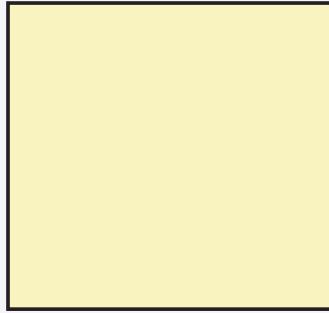
This is a **square** .

Work to do

From the shapes given to you which are squares?

Squares are ___ ___ ___ ___ ___

Making patterns

Activity

Make patterns

The pattern is Rectangle/Oval/ Rectangle ....

The pattern is Circle/Square/Triangle.........

The pattern is Triangle/Circle/Square/Oval......

Work to do

Make patterns using paper cut-outs of squares, triangles, circles, rectangles and ovals

1. Read the numbers

   90 84 99 11 50 32 40 63 79 53

2. Count the objects given to you and write the number

3. Count forward by 10 from 11 to 99

4. Count backward by 10 from 100 to 10

5. 84 is _____ hundreds _____ tens ____ ones

6.

   a) Put objects given to you to represent number 15

   b) Write the number to represent the objects given to you

7. Write in the missing number

   34, 44, 54, 64, _____

8. Write in the missing number

   97, 95, 93, 91, _____

9. Which is $\frac{1}{2}$ from the cut-outs given to you.

   Which is $\frac{1}{4}$ from the cut-outs given to you.

10. 38 + 27 = ☐

11.
$$\begin{array}{r} 55 \\ + \ 39 \\ \hline \\ \hline \end{array}$$

12. Kigen has 35 beads. His sister gives him 42 beads. How many beads does Kigen have altogether?

13. Wafula has 35 goats. Nekesa has 25 goats.

How many goats do they have altogether?

14. Write the missing numbers? 47, 57, 67, _____, _____, 97

15. 52 − 31 = ⬜

16.
$$\begin{array}{r} 95 \\ - \ 32 \\ \hline \\ \hline \end{array}$$

17. Complete the number family

9 + 6 = ⬜   6 + 9 = ⬜

15 − 9 = ⬜   15 − 6 = ⬜

18. Write the missing number $\boxed{} - 15 = 27$

19. 8, 12, 16, 20, ____, ____.

20. There are 44 people in birthday party. If 21 people leave the party. How any people are left?

21. $2 \times 3 = \boxed{}$ 22. $1 \times 4 = \boxed{}$

23. $4 \times 3 = \boxed{}$ 24. $3 \times 5 = \boxed{}$

25. $2 \times 4 = \boxed{}$ 26. $5 \times 2 = \boxed{}$

27, Share 20 books among 5 pupils

Each pupil gets _____ books

28, Divide

$9 \div \boxed{} = 3$ $14 \div 7 = \boxed{}$

$10 \div \boxed{} = 2$ $18 \div 3 = \boxed{}$

$12 \div 4 = \boxed{}$ $12 \div 2 = \boxed{}$

29. Which is **shorter than, longer than** or **same as**?

A ————————————————————————————————

B ——————————

C ————————

D ——

A is _____ D

B is _____ C

D is _____ B

30. Write heavier than or lighter than

The stone is _____ the duster

The apple is _____ the pineapple

31. Which is heavier than, lighter than or same as

The block of wood is _____ as the ball

The 1 kg mass is _____ the book.

The 1 kg mass is _____the1 kg mass.

The shoe is _____ the 1 kg mass.

32. Which holds more from the item s given

A glass is filled 8 spoons

A glass is filled 6 spoons

33. Which holds less from the items given to you.

34. Which holds same as from items given to you

35. Write the time from the tactile clock face given to you

The time is _____ o' clock

The time is _____ o' clock

The time is _____ o' clock

36. Set the time 2 o'clock in the talking digital clock face.

37. Look at the calendar. write the day of the week.

OCTOBER 2018						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

a) October 5 _____

b) October 11 _____

c) October 14 _____

d) October 20 _____

e) October 31 _____

38. Write good or service

No	Item	Good or servoce
1.	Tailor	
2.	Bread	
3.	Transport	
4.	Rubber	

39. How many?

40 Shillings coin _____ ten shilling coins

20 Shillings coin _____ five shillings coins

50 Shillings note _____ 10 shillings coin and _____ 5 shillings
coins.

40. Make a curved line using items given to you

41. Complete the pattern from the shapes given to you

Circle, Triangle, Rectangle, Circle , Triangle

MATHEMATICS

PUPILS BOOK 2

This book is for use by learners in Grade 2.

This book has:

- Covered all the concepts in the mathematics curriculum design for grade 2.
- Identified lessons for each week
- Variety of examples and activities
- Variety of strategies for working out questions
- Clear illustrations

This book has been developed by a team of experts from the Kenya Institute of Curriculum Development (KICD), Kenya Institute of Special Education (KISE), Ministry of Education (MoE), Primary Education Development Project (PRIEDE), Teachers Service Commission (TSC) Centre for Mathematics Science and Technology Education in East Africa (CEMASTEA).

TERM 2

NUMBERS
NUMBER CONCEPT

Reading numbers

Activity
Read the numbers

Work to do

Which tree has ?

35   53   67   18   15   50   76   33

10   49   77   5   69   46   25   2
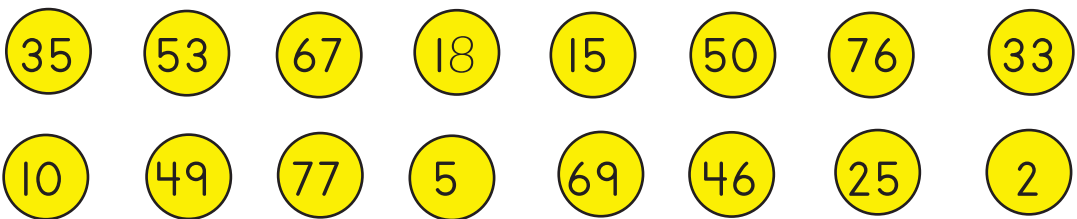
Numbers and objects

Activity

How many objects are given to you you have been given to represent

52 objects

61 objects

75 objects

80 objects

Work to do

Write the number to represent the objects given to you.

NUMBERS
WHOLE NUMBERS

Counting

Activity

Count forward by 5 from 5 to 100

Count backward by 5 from 100 to 5

Work to do

1. Count forward by 5 from 5 to 100.

2. Count backward by 5 from 100 to 5.

Hundreds, Tens and Ones

Activity

100 can be shown using number tins

1 hundreds   0 tens   0 ones

100 is **1 hundreds 0 ten**s and **0 ones**

Work to do

How many **hundreds**, **tens** and **ones**?

1. 23 is __0__ hundreds __2__ tens and __3__ ones

2. 36 is ____ hundreds____ tens and ____ ones

3. 77 is ____ hundreds____ tens and ____ ones

4. 100 is ____ hundreds____ tens and ____ ones

Reading and writing numbers

Activity

Read and write the numbers in symbols

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80

Work to do

Read and write the numbers in symbols

73 46 74 29 65 55 38 14

62 60 53 80 77 52 43 6

Reading and writing numbers

Activity

Read and write the numbers in words

Number	Word
9	nine
10	ten
11	eleven
12	twelve
13	thirteen
14	fourteen
15	fifteen

Work to do

Read and write the numbers in words

1. 9 _____

2. 11 _____

3. 12 _____

4. 13 _____

5. 14 _____

6. 15 _____

Number patterns

Activity 1

Write the missing number

27,29,3l, 33, _____, 37

Are the numbers decreasing or increasing?
By how many?

Count forward by 2 to get the next number

27,29,3l, 33, <u>35</u>, 37

Activity 2

Write the missing number

46, 44, 42, 40, _____, 36

Are the numbers increasing or decreasing?
By how many?

Count backward by 2 to get the next number

46, 44, 42, 40, <u>38</u>, 36

Work to do

Write the missing number

1. 24,   26,   28,   30,   _____, 34

2. 42,   40,   38,   36,   _____, 32

3. 20,   18,   16,   14,   _____, 10

4. 17,   15,   13,   ll ,   _____, 7

5. 39,   41,   43,   45,   _____, 49

Number patterns

Activity 1
Write the missing number

60, 65, 70, 75,_____, 85,

Are the numbers decreasing or increasing?
By how many?
Count forward by 5 to get the next number

60, 65, 70, 75, **80**, 85,

Activity 2
Write the missing number

90, 85, 80, 75, _____, 65

Are the numbers increasing or decreasing?
By how many?
Count backward by 5 to get the next number

90, 85, 80, 75, **70**, 65

Work to do
Write the missing number

1. 45,   50,   55,   60,   ____,   70

2. 85,   80,   75,   70,   ____,   60

3. 100,   95,   90,   85,   ____,   75

4. 70,   75,   80,   85,   ____,   95

5. 55,   50,   45,   40,   ____,   30

6. 30,   35,   40,   45,   ____,   55

NUMBERS
FRACTIONS

A quarter

Activity

Fold circular cut-out given to you to make a quarter

A whole

Four equal parts

I out of 4 parts
is a **quarter** of a **whole**

Work to do

Make a quarter using circular paper cut-out.

A quarter

Activity

Fold to rectangular cut outs given to you make a quarter

A whole

Four equal parts

I out of 4 partsis a **quarter** of a **whole**

Work to do

Make a quarter using rectangular paper cut-out.

A Quarter ($\frac{1}{4}$)

Activity

A quarter as $\frac{1}{4}$

Four equal parts

1 out of 4 parts is $\frac{1}{4}$

Four equal parts

1 out of 4 parts is $\frac{1}{4}$

Work to do

Write and put $\frac{1}{4}$ on a quarter of the cut-out.

Making a whole

Activity

Match by colour to make a whole.

Work to do

Match paper cut-outs by size to make a whole.

NUMBERS
ADDITION

Add

Activity

What is $14 + 8$?

$$14 + 8 = 14 + 6 + 2$$
$$= 20 + 2$$
$$= 22$$

$$14 + 8 = 22$$

Steps

Break apart 8 as 6 + 2

Add 6 to 14 to get 20

Add 2 to 20 to get 22

Work to do

Add

1. $19 + 5 =$ ☐

2. $15 + 8 =$ ☐

3. $27 + 6 =$ ☐

4. $38 + 9 =$ ☐

5. $13 + 9 =$ ☐

6. $37 + 5 =$ ☐

Add

Activity

Add 28
   + 9
_____

Steps

• Write as **ones** and **tens**

Tens	Ones
2	8
+	9
3	7

Add 8 **ones** to 9 **ones** to get 17 **ones**.

Regroup 17 **ones** as 1 **ten** and 7 **ones**

Write 7 in the **ones** place

Take the 1 **ten** to the **tens** place

Add the **tens** as 1 + 2 = 3 **tens**

Write 3 in the **tens** place

Work to do

Add

1.   28
    + 8
_____
_____

2.   22
    + 9
_____
_____

3.   37
    + 6
_____
_____

4.   15
    + 5
_____
_____

5.   34
    + 7
_____
_____

6.   33
    + 9
_____
_____

81

Add

Activity

What is $68 + 5$?

$68+5 = 68 + 2 + 3$

$\quad\quad = 70 + 3$

$\quad\quad = 73$

$68+5 = 73$

Steps

Break apart 5 as 2 + 3.

Add 2 to 68 to get 70

Add 3 to 70 to get 73

Work to do

Add

1. $46 + 6 =$ ☐

2. $68 + 5 =$ ☐

3. $74 + 7 =$ ☐

4. $55 + 8 =$ ☐

5. $82 + 9 =$ ☐

6. $39 + 3 =$ ☐

Add

Activity 1

There are 46 trees in a farm. Linda planted 9 more trees. How many trees are there altogether?

Steps

Write as

Tens	Ones
4	6
+	9
5	5

Add 6 **ones** to 9 **ones** to get 15 **ones.**

Regroup 15 **ones** as 1 **ten** and 5 **ones.**

Write 5 in the **ones** place.

Take the 1 **ten** to the **tens** place.

Add **tens** as 1 + 4 = 5 **tens.**

Write 5 in the **tens** place.

Work to do

Add

1. 42
    + 8
    _____
    _____

2. 86
    + 9
    _____
    _____

3. 59
    + 7
    _____
    _____

4. Amina has 18 books. Jane has 7 books. How many books do they have altogether?

5. Jesse has 8 fish. He bought 33 more fish . How many fish does he have altogether?

Add

Activity

What is 7 + 5 + 3?

7 + 5 + 3 = ☐

$\quad$ 7 + 3 = 10

$\quad$ 10 + 5 = 15

7 + 5 + 3 = 15

Steps

Add 3 to 7 to get 10.

Add 5 to 10 to get 15

Work to do

Add

1. 4 + 6 + 5 = ☐

2. 3 + 8 + 4 = ☐

3. 9 + 4 + 1 = ☐

4. 7 + 5 + 2 = ☐

5. 6 + 8 + 2 = ☐

6. 3 + 9 + 7 = ☐

Add

Activity

What is $64 + 23$?

$64 + 23 = \boxed{}$

$64 + 23 = 87$

Steps

Add 4 **ones** to 3 **ones** to get 7 **ones**.

Add 6 **tens** to 2 **tens** to get 8 **tens**

Write 7 as **ones** and 8 as **tens**

Work to do

Add

1. $35 + 23 = \boxed{}$

2. $65 + 31 = \boxed{}$

3. $16 + 43 = \boxed{}$

4. $75 + 12 = \boxed{}$

5. Musa had 76 camels. He bought 22 more camels. How many camels does he have altogether?

6. Grade two had 34 pupils in term one. In term two, 12 more pupils joined the class. How many pupils are there altogether?

Add

Activity

What is 18 + 27?

18 + 27 = ☐

Steps

Add **8 ones** to **7 ones** to get 15 **ones.**

Regroup 15 **ones** as I **ten** and 5 **ones**.

Add **tens** as I + I + 2 = 4 **tens.**

18 + 27 = 45

Write 5 as **ones** and 4 as **tens.**

Work to do

Add

1. 17 + 23 = ☐

2. 22 + 19 = ☐

3. 18 + 34 = ☐

4. 16 + 18 = ☐

5. A tailor had 28 shorts. He made 22 more shorts. How many shorts does he have altogether?

6. Grade two pupils planted 25 trees. Grade three pupils planted 18 trees. How many trees did they plant altogether?

Add

Activity

Add 　　31

　+　　19

_____

_____

Write as **Ones** and **Tens**

Tens	Ones
3	1
+ 1	9
5	0

Steps

Add 1 **ones** to 9 **ones** to get 10 **ones**.

Regroup 10 **ones** as 1 **ten** and 0 **ones**.

Write 0 in the **ones** place.

Take the 1 **ten** to the **tens** place.

Add **tens** as 1 + 3 + 1 = 5 **tens**.

Write 5 in the **tens** place.

Work to do

Add

1.　13
　+ 19
_____
_____

2.　24
　+ 17
_____
_____

3.　36
　+ 14
_____
_____

4.　28
　+ 15
_____
_____

5　Mary has 25 bananas. She buys 19 more bananas. How many bananas does she have altogether?

6　Mwau had 18 chicken. He bought 23 more chicken. How many chicken does he have altogether?

Number patterns

Activity

Write the missing number in the pattern

17, 19, 21, 23, ____, 27

There are 2 steps from 17 to 19.

Add 2 to a number to get the next number

17 + 2 = 19

19 + 2 = 21

21 + 2 = 23

23 + 2 = 25

The missing number is 25

The pattern is 17, 19, 21, 23, <u>25</u>, 27

Work to do

Write the missing number

1. 35, 37, 39, 41 ____, 45

2. 25, 28, 31, 34, ____

3. 15, 20, 25, ____, ____, 40

4. John planted 30 trees on Monday. He planted 35 trees on Tuesday and 40 trees on Wednesday. Using the pattern, how many trees did he plant on Thursday?

5. Jane sold 15 pencils in April. She sold 17 pencils in May and 19 pencils in June. Using the pattern, how many pencils did she sell in July?

NUMBERS
SUBTRACTION

Subtract

Activity

What is 70 – 30?

70 is 7 tens and 30 is 3 tens

> 7 tens take away 3 tens is 4 tens.
> 4 tens is 40

70 – 30 = 40

Work to do

1. 30 – 10 = ☐

3. 70 – 40 = ☐

2. 50 – 20 = ☐

4. 90 – 50 = ☐

5. A father had 40 cows. He gave his daughter 10 cows. How many cows was he left with?

6. Alice had 80 packets of milk. She gave her friends 30 packets. How many packets of milk was she left with?

Subtract

Activity

Work out 50
      − 20
    _____

    _____

5 tens take away 2 tens is 3 tens

3 tens is 30

   50
 − 20
 _____
   30
 _____

Work to do

1.   50
    − 30
   _____

   _____

2.   40
    − 10
   _____

   _____

3.   60
    − 20
   _____

   _____

4.   90
    − 40
   _____

   _____

5. Salim had 50 fish. He sold 40 fish. How many fish was he left with?

6. Nduku made 30 chapati. She sold 20 chapati. How many chapati remained?

Add and Subtract

Activity

Use addition and subtraction

7 + 8 = 15

With addition, we write

7 + 8 = 15   and   8 + 7 = 15

With subtraction, we write

 15 – 8 = 7   and   15 – 7 = 8

The numbers 7, 8, 15 make a number family .

Work to do

1. 9 + 5   = 14   5 + 9 = ☐

    14 – ☐ = 9   14 – 9 = ☐

2. 6 + 8 = ☐   8 + 6 = ☐

    14 – 6 = ☐   14 – 8 = ☐

3. 8 + 5 = 13   5 + 8 = ☐

    13 – 5 = ☐   13 – 8 = ☐

4. 12 + 3 = ☐   3 + 12 = ☐

    15 – 3 = ☐   15 – 12 = ☐

Subtract

Activity

Write the missing number

13 – ☐ = 5

- To get the missing number, subtract the smaller number from the bigger number as

  13 – 5 = 8

- The missing number is 8.

  5, 8 , 13 is a number family

13 – 8 = 5

Work to do

Write the missing number

1. 77 – ☐ = 71

2. 68 – ☐ = 63

3. 29 – ☐ = 25

4. 57 – ☐ = 54

5. 89 – ☐ = 81

6. 95 – ☐ = 93

Subtract

Activity
Write the missing number

$\boxed{}$ – 4 = 6 • To get the missing number add the two given numbers as

4 + 6 = 10

• The missing number is 10

$\boxed{10}$ – 4 = 6

Work to do
Write the missing number

1. $\boxed{}$ – 6 = 21

2. $\boxed{}$ – 7 = 32

3. $\boxed{}$ – 3 = 44

4. $\boxed{}$ – 5 = 42

5. $\boxed{}$ – 2 = 95

6. $\boxed{}$ – 4 = 81

Subtract

Activity

Write the missing number

$59 - \boxed{} = 34$

To get the missing number subtract the smaller number from the bigger number as

$59 - 34 = 25$

The missing number is 25

$59 - \boxed{25} = 34$

Work to do

Write the missing number

1. $34 - \boxed{} = 23$

2. $66 - \boxed{} = 32$

3. $87 - \boxed{} = 45$

4. $28 - \boxed{} = 16$

5. $25 - \boxed{} = 14$

6. $98 - \boxed{} = 64$

Number Patterns

Activity

Write the missing number in the pattern.

39, 37, 35 _____

There are 2 steps from 39 to 27.

Subtract 2 from a number to get the next number,

39 - 2 = 37

37 - 2 = 35

35 - 2 = 33

The missing number is 33

The pattern is 39, 37, 35, 33

Work to do

Write the missing number

1. 28, 26, 24, 22, _____

2. 49, 48, 47, _____, 45

3. 30, 25, 20, _____, 10

4. 50, 40, 30, _____

5. 40, 38, 36, _____, _____, 30

NUMBERS
MULTIPLICATION

Multiply

Activity

Multiply by 2

3 objects   and   3 objects   is   6 objects

3   +   3   =   6

There are 2 groups each with 3 objects, giving 6 objects

Write 3 + 3 = 6 as **2 x 3 = 6**

Work to do

Multiply

1.   2 x 1 = ☐

2.   2 x 2 = ☐

3.   2 x 3 = ☐

4.   2 x 4 = ☐

5.   2 x 5 = ☐

6.   2 x 6 = ☐

7.   2 x 7 ☐

8.   2 x 8 = ☐

9.   2 x 9 = ☐

Multiply

Activity

Multiply by 3

4 objects and 4 objects and 4 objects is 12 objects

$$4 \quad + \quad 4 \quad + \quad 4 \quad = \quad 12$$

There are 3 groups with 4 objects each, giving 12 objects

Write $4 + 4 + 4 = 12$ as $3 \times 4 = 12$

Work to do

Multiply

1. $3 \times 1 =$ ☐

2. $3 \times 2 =$ ☐

3. $3 \times 4 =$ ☐

4. $3 \times 5 =$ ☐

5. $3 \times 6 =$ ☐

6. $3 \times 7 =$ ☐

7. $3 \times 8 =$ ☐

8. $3 \times 9 =$ ☐

Multiply

Activity

Multiply by 4

3 objects and 3 objects and 3 objects and 3 objects is 12 objects

3 + 3 + 3 + 3 = 12

4 x 3 = 12

Work to do

Multiply

1.   4   x   1   =   [ ]

2.   4   x   2   =   [ ]

3.   4   x   3   =   [ ]

4.   4   x   4   =   [ ]

5.   4   x   6   =   [ ]

6.   4   x   7   =   [ ]

7.   4   x   8   =   [ ]

8.   4   x   9   =   [ ]

NUMBERS

DIVISION

Equal sharing

Activity

Share equally 6 bottle tops between 2 pupils.
Pick one bottle top at a time

3 bottle tops   3 bottle tops

Each pupil gets $\boxed{3}$ bottle tops

Work to do

How many each?

Share 8 oranges equally between 2 pupils.

Each pupil gets ☐ oranges

Share 6 seeds equally between 2 pupils.

Each pupil gets ☐ seeds

Share 8 balls equally among 4 pupils

Each pupil gets ☐ balls

Share 15 pebbles equally between 5 pupils

Each pupil gets ☐ stones

Equal grouping

Activity 1

Using items given to you,
Pick 3 items at a time
How many groups?

There are 4 groups

Work to do

Using items given to you,

Pick 2 at a time

How many groups

Pick 3 at a time

How many groups

Pick 5 at a time

How many groups

4 Pick 4 at a time

How many groups

Division ÷ sign

Activity 1

Using the objects given to you, share equally

This is $10 \div 2$

Activity 2

Using the objects given to you, share equally

Put into 3 equal groups

This is $6 \div 3$

Work to do

1 Share equally to 3 pupils 6 objects
   This is $6 \div 3$

2 Put into 2 equal groups 8 objects
   This is 8 _____ 2

3   Share equally to 2 pupils 4 objects

4 _____ 2

4   Put into 5 equal groups 4 objects

10 _____ 5

5   Share equally among 3 pupils 4 objects

_____ ÷ 3

DIVISION

Activity 1

6 Balls Share equally to 3 pupils each gets 2 Ball

$$6 \quad \div \quad 3 \quad = \quad 2$$

Work to do

Write

12 balls Shared equally to 2 pupils each gets 6 balls

_____ ÷ _____ = _____

12 sticks Shared equally to 2 pupils each gets 6 sticks

_____ ÷ _____ = _____

12 cups Put into 2 equal groups, each group has?

÷ =

_____ _____ _____

12 stones Put into 5 equal groups, Each group has___ 6 stones

_____ ÷ _____ = _____

Divide

Activity 1

Divide by 2

$10 \div 2 = \square$

10 balloons shared equallyto 2 each get 5 balloons pupils

10 shared equally between 2 is 5

$10 \div 2 = \boxed{5}$

Activity 2

Divide by 3

$6 \div 3 = \square$

6 balloons   put into 2 groups is 3

6 put into groups of 3 is $\boxed{2}$

$6 \div 3 = 2$

Work to do

Divide

1   $6 \div 2 = \boxed{}$ 2 $9 \div 3 = \boxed{}$

3   $8 \div 2 = \boxed{}$ 4 $10 \div 2 = \boxed{}$

MEASUREMENT
LENGTH

Measuring length

Activity

Measure the length of the chalkboard

The length of the chalkboard is _____ sticks

Work to do

What is the length of the?	Number of sticks		
	Blue	White	Red
1 Longer side of classroom wall			
2 Shorter side of classroom wall			

Measuring length

Activity

Measure the classroom wall using a 1metre stick

The classroom wall is ____ 1metre sticks.

The classroom wall is ____ metres.

Work to do

Measure	Number of 1metre sticks	Length in metres
1 The Longer side of the classroom wall		
2 The shorter side of the classroom wall		
3 The teacher's table		

MEASUREMENT
MASS

Measuring mas

> **Activity**
> Measure mass
>
> The mass of the sand is l kilogram.
>
> We write kilogram as **kg.**

Work to do

Write things measured in kilograms.

I kilogram mass

Activity

Use a beam balance to make a I kg mass of soil.

Work to do

Using a beam balance make I kg mass of:

  Seeds

  Stones

  Sand

MEASUREMENT
CAPACITY

Measuring capacity

Activity

How many jugs full of water will fill the basin?

_____ jugs full of water fill the basin.

Work to do

How many jugs full of water will fill ?	Number of jugs
1 A bucket	
2 A jerrycan	
3 A sufuria	

Measuring capacity

Activity 1

How many jugs full of water will fill the bucket?

_____ jugs of water fill a bucket

Activity 2

How many tins full of water will fill the bucket?

_____ tins full of water will fill the bucket

Work to do

How many?

_____   1litre tin   fill the   Bucket

_____   Bowl   fill the   Bucket

Measuring capacity

Activity

How many litres does the pot hold?

The pot is filled by _____ I litre tins.
The pot is _____ litres

Work to do

How many will fill?	Number of I-litre tins	Capacity in litres
Jerican		
Sufuria		
Small Sufuria		

MEASUREMENT

TIME

Measuring time

Activity

How much time

Count the number of nods

> **Wimbo wa taifa**
> Ee Mungu nguvu yetu
> Ilete baraka kwetu.
> Haki iwe ngao na mlinzi
> Natukae na undugu
> Amani na uhuru
> Raha tupate na ustawi.

It takes ____ nods to sing the first stanza of the National Anthem

Work to do

Sing the first stanza of the National Anthem?

Count how many	Number
1 Foot thumps	
2 Nods	
3 Thumb clicks	

Measuring time

Activity

Count the number of nods

> **National Anthem**
> Oh God of all creation
> Bless this our land and nation.
> Justice be our shield and defender
> May we dwell in unity
> Peace and liberty
> Plenty be found within our borders.

It takes____ nods to sing the first stanza of the National Anthem.

Work to do

Sing a familiar song and count the number of nods.

A clock face

Activity

What is in the tactile clockface?

This is a clock face. It has two hands.
The long hand is called **minute hand.**
The Short hand is called **hour hand.**
The clockface has the numbers **1-12**

Work to do

Identify the **hour hand** and **minute hand** on the

tactile

Reading and telling time

Activity 1

Read the time on the tactile clock face

The time is 6 o'clock

Activity 2

The time is 3 o'clock

Work to do

Read the time on the tactile clock face

The time is _____ o'clock

The time is _____ o'clock

The time is _____ o'clock

MEASUREMENT
MONEY

Buying and selling

Activity

Buy and sell

Classroom shop

Price List
1. Packet of milk 40/-
2. Bread........................ 60/-
3. Exercise book 15/-
4. pencil 10/-
5. Bar soap 30/-
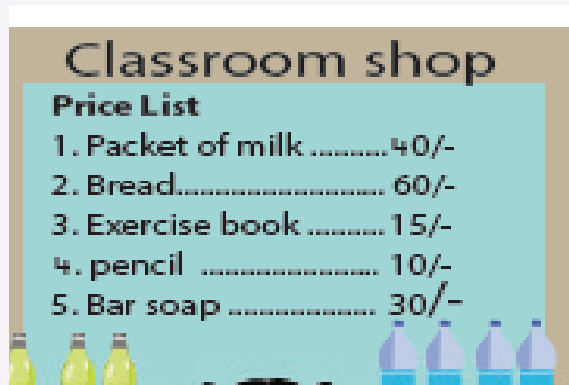
Work to do
How much?

Item	Price
Milk	
Exercise book	
Bread	
Pencil	

Change

Activity 1
How many?

5 one shilling is equal to 5 one shilling coin

5 shilling coin = **5** one shilling coins

Activity 2
How many?

10 shillings is equal to 10 one shilling coin

10 shilling coin = 10 one shilling coins

Work to do
How many?

1 20 shillings _____ five shillings coins

2 40 shillings _____ twenty shillings coins

3 20 shillings _____ ten shillings coins

4 40 shillings _____ five shillings coins

Needs and wants

Activity

Tell a need or a want

Radio   Dress   House

Ball   Food   Car

Work to do

Write need or want

Item	Need or want
Radio	
Ball	
Food	
Car	
House	
Dress	

Spending and saving

Activity

How much saving?

Susan   Job

Sh 55   Sh 60

Susan bought milk at Sh 55. Job bought the same type of milk at Sh 60.

Susan spent Sh 5 less than Job.

Susan saved Sh 5.

Work to do

1. Hellen bought a school bag at Sh. 70. Joash bought the same type of bag at Sh.90. How much money did Hellen save?

2. Juma and Amina live in the same homestead. Amina paid Sh. 30 to school. Juma paid Sh. 20 to the same school. How much money did Juma save?

GEOMETRY
LINES

Making straight lines

Activity

Make straight lines using items given to you

Work to do

Use plasticine or clay to make straight lines

Making straight lines

Activity

Make straight lines using items given to you

These are straight lines

Work to do
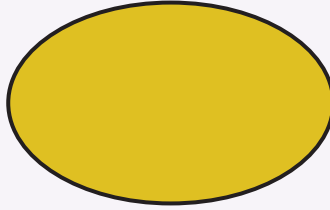
Make straight lines using items given to you.

GEOMETRY
SHAPES

Ovals

Activity

Name the shape

This is an **Oval**

Work to do

Which is oval from the shapes given to you

Oval shapes are

___ ___ ___ ___

___ ___ ___ ___

Making patterns

> ### Activity
>
> Make patterns from paper cut out given
>
> The pattern is Rectangle/Circle/Rectangle/Cirle..
>
> The pattern is Circle/Oval/Cirle/Oval .....
>
> The pattern is Triangle/Oval/Rectangle....

Work to do

Make patterns using paper cut-outs of triangles, circles, rectangles and ovals

1. Read the numbers

13 6 31 29 58 17 67 46 25

2. How many objects are given to you?

3 Count forward by 5 from 41 to 99

4 Count backward by 5 from 100 to 5

5 100 is _____ hundreds _____ tens and ____ ones

6 Put objects given to you to represent number 11

Write the number to represent objects given to you.

7 Write the missing number

64, 69, 74, 79, _____

8 Write the missing number

83, 81, 79, 77, _____

9 Which is a quarter from the cut-out given to you?

10. $17 + 14$ = ☐

11. $16 + 19$ = ☐

12.
$$\begin{array}{r} 28 \\ + \ 29 \\ \hline \end{array}$$

13. $28 + 7$ = ☐

14. Daniel planted 19 lemon trees last week. He planted 24 lemon trees this week. How many lemon trees has Daniel planted altogether?

15. 13, 17, 21, 25, _____, _____

16. $70 - 50$ = ☐

17. Complete the number family

$4 + 8$ = ☐ $8 + 4$ = ☐

$12 - 4$ = ☐ $12 - 8$ = ☐

18. ☐ $- 5$ = 8

19. $19 -$ ☐ = 12

20. Fill in the missing number in the pattern 70, 68, 66, ___, ___

21 5 ojects, 5 objects, 5 objects = 3 x 5 = _____

22 3 ojects, 3 objects, 3 objects = 3 x 3 = _____

23 4 ojects, 4 objects, 4 objects = 3 x 4 = _____

24 5 ojects, 5 objects, = 2 x 5 = _____

25 5 ojects, 5 objects, 5 ojects, 5 objects, = 4 x 2 = _____

26 Share 12 books among 3 pupils

Each pupil gets _____ books

$\boxed{} \div 2 = 4$ $18 \div 3 = \boxed{}$

$12 \div \boxed{} = 3$ $24 \div \boxed{} = 8$

$21 \div 3 = \boxed{}$ $15 \div 5 = 3$

27 which is **shorter than, longer than** or **same as**?

A ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

B ~~~~~~~~~~~~~~~~~~~~~

C ~~~~~~~~~~~~~~~~~~~~~~

D ~~~~~~~~~~~~~

A is _____ B

D is _____ A

B is _____ C

28 Write **heavier than** or **lighter than** or **same as**

Ball A is _____ ball B

The cup is _____ the stone

The ruler is _____ the book

The pencil is _____ the stone

29. Look at the calendar. Write the day of the week

SEPTEMBER 2018						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

September 9 _____

September 14 _____

September 20 _____

September 24 _____

September 29 _____

30. Write need or want

No	Item	Need or want
1.	Water	
2.	Food	
3.	Phone	
4.	Bicycle	

31. How many?

a 5 shillings coin _____one shilling coins

b 10 shillings coin _____ five shillings coins

c 100 shillings note_____ 50 shillings notes. _____
   20 shillings coin and _____ 5 shillings coins.

32. Make straight line using items given to you.

33. Complete the pattern from the cut-outs given to you.

   Triangle, Rectangle, Circle, Triangle, Rectangle _____