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# MATHEMATICS ACTIVITIES

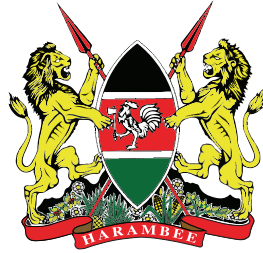
## PUPIL'S BOOK

2



**FOR LEARNERS WITH  
HEARING IMPAIRMENT**

Approved by  
Kenya Institute of  
Curriculum Development



# MATHEMATICS PUPIL'S BOOK 2

FOR LEARNERS WITH  
HEARING IMPAIRMENT





MINISTRY OF EDUCATION

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## 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,**  
**Ministry of Education**

## 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.



**Dr Belio R. Kipsang, CBS**

**Principal Secretary**

**State Department of Early Learning and Basic Education**

## Acknowledgements

This adapted pupil’s book for learners with special needs and disabilities has been adapted as a result of the generous financial support from the Global Partners in Education (GPE). The book was initially developed based on the 8-4-4 curriculum after a successful USAID/Kenya and DFID/Kenya funded pilot programme, the Primary Math and Reading Program (PRIMR). The book was reviewed in alignment with the Competency Based Curriculum and is approved by the Kenya Institute of Curriculum Development.

The Principal Secretary, State Department of Early Learning and Basic Education, Ministry of Education, Dr Belio Kipsang, and Dr Julius Jwan, were instrumental in tirelessly directing the technical efforts of the relevant directorates at MoE, the Kenya National Examinations Council (KNEC), Kenya Education Management Institute (KEMI), Kenya Institute of Special Education (KISE) and the Teacher’s Service Commission (TSC).

In a special way, we thank the Global Partnerships for Education (GPE) for funding the implementation of the PRIEDE Project, and World Bank for effective supervision. We also express our deepest appreciation to Ruth Charo, the Task Team Leader (World Bank), who provided invaluable guidance and support in the adaptation process of this book.

Special recognition to MoE Director General Elyas Abdi, PRIEDE Project National Coordinator Martha Ekirapa, and KICD Senior Deputy Director Jacqueline Onyango for their outstanding support to the team during the process of the adaptation of this book. Further, we acknowledge the role of the PRIEDE Project Component 1 Lead, Hellen Boruett, PRIEDE staff Juma Munyiri and Mr Joshua Kilundo for effective coordination of the whole process, and the crucial role of the relevant MoE Directorates: the Directorate of Quality Assurance and Standards, the Directorate of Primary Education, the Directorate of Special Needs Education, the Directorate of Field and other Services, CEMASTEIA, KNEC, and KICD, and the TSC for providing all the required technical support

More fundamentally, we wish to also recognise members of the multi- sectoral members of KICD Mathematics Panel and Early Grade Mathematics Technical Team for their invaluable commitment, support, immense individual contribution and sacrifice towards the completion of the adaptation of the content of this book.

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**Ministry of Education**

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1



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4



5



6



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9



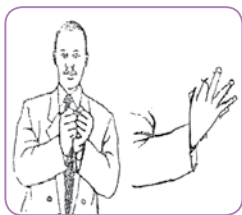
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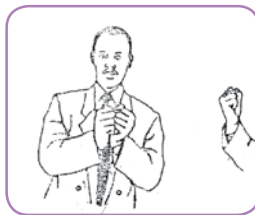
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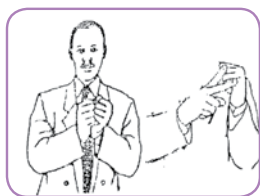
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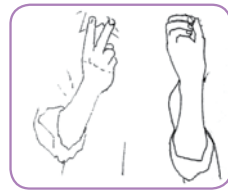
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19



20



30



40



50



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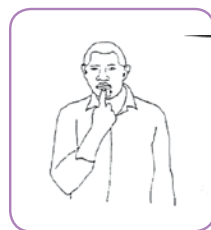
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# TERM I

# NUMBERS

## NUMBER CONCEPT

Week 1 Lesson 1

### Reading and signing numbers

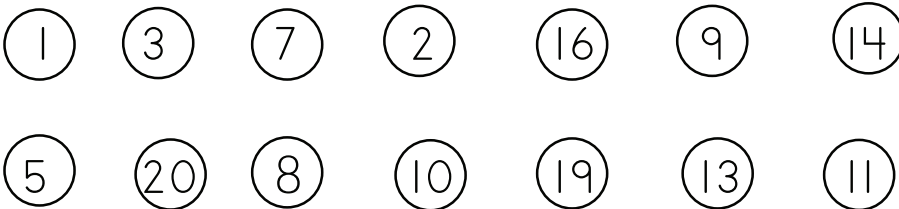
#### Activity

#### Read and sign the numbers



#### Work to do

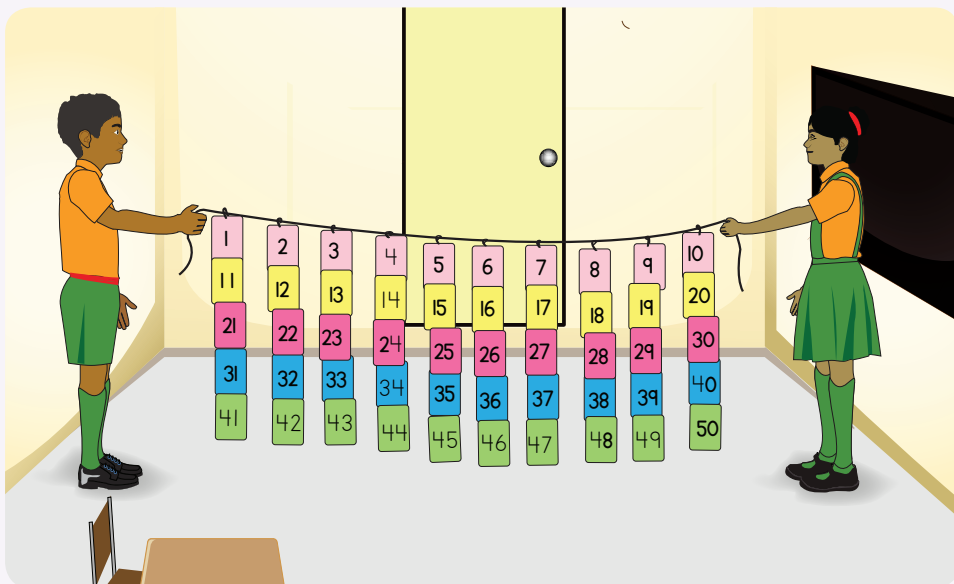
#### Read and sign the numbers



# Reading and signing numbers

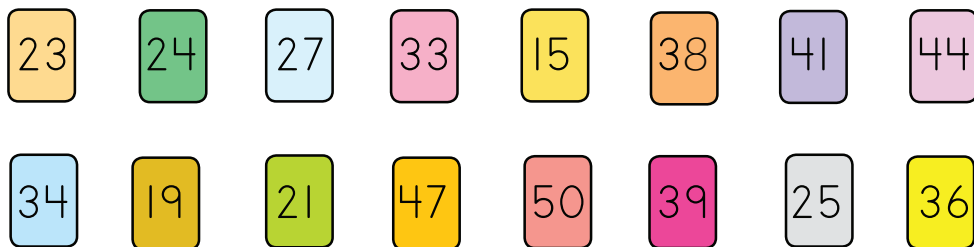
## Activity

### Read and sign the numbers



## Work to do



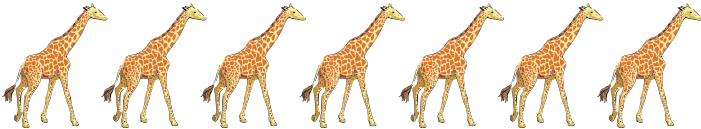


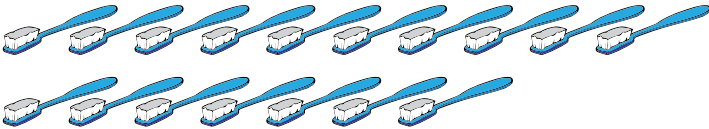

### Read and sign the numbers



## Numbers and objects



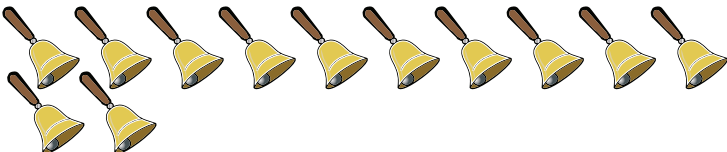
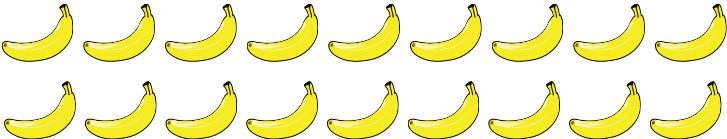
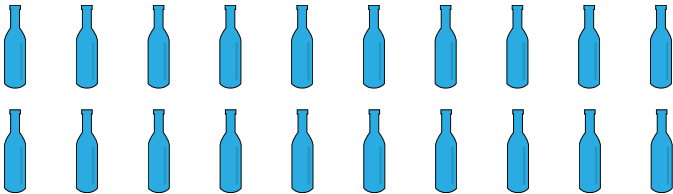
### Activity

How many?

Number	Objects
1	
3	
7	
10	
14	
17	
20	

## Work to do

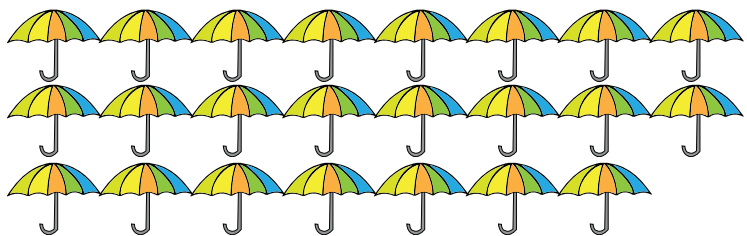
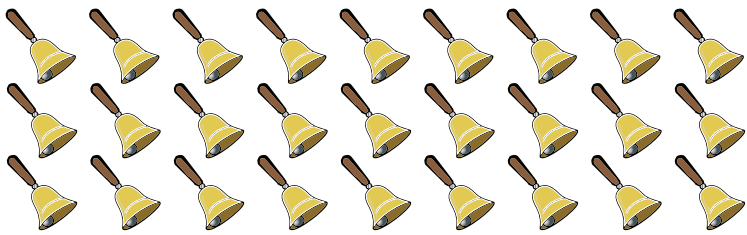
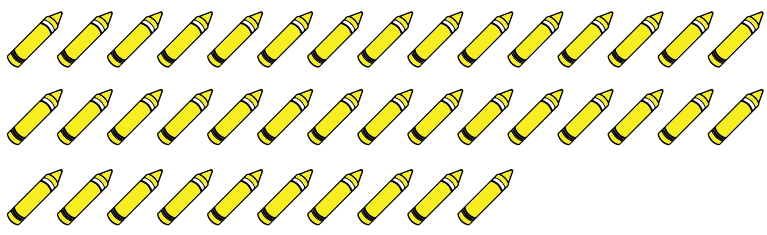


How many?

Number	Objects
4	
	
	
	
	

# Numbers using objects

## Activity




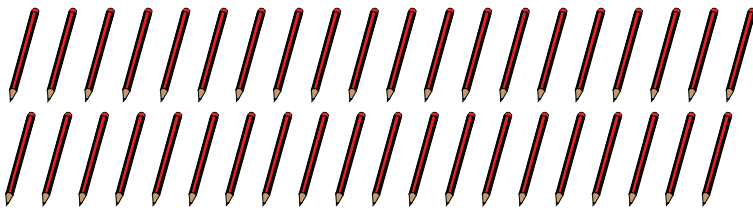
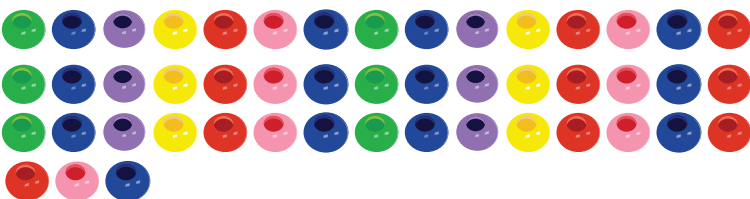
How many?

Number	Objects
23	
27	
40	
49	
50	



## Work to do

How many?

Number	Objects
25	
	
	
	
	

# NUMBERS

## WHOLE NUMBERS

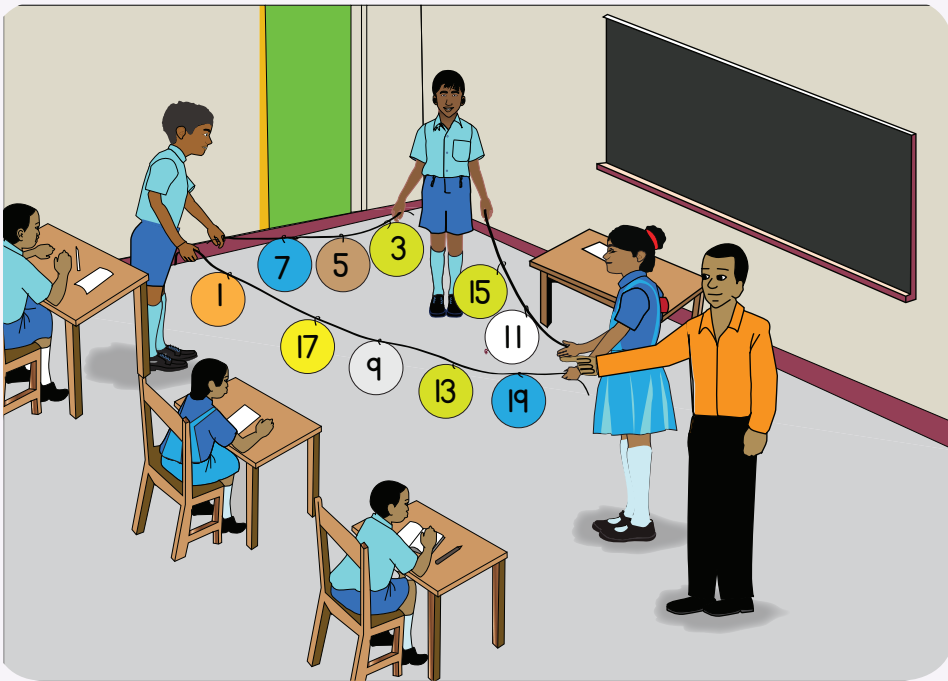
Week 1 Lesson 5

### Counting and signing

#### Activity

Count and sign forward by 2 from 1 to 19

Count and sign backwards by 2 from 19 to 1



#### Work to do

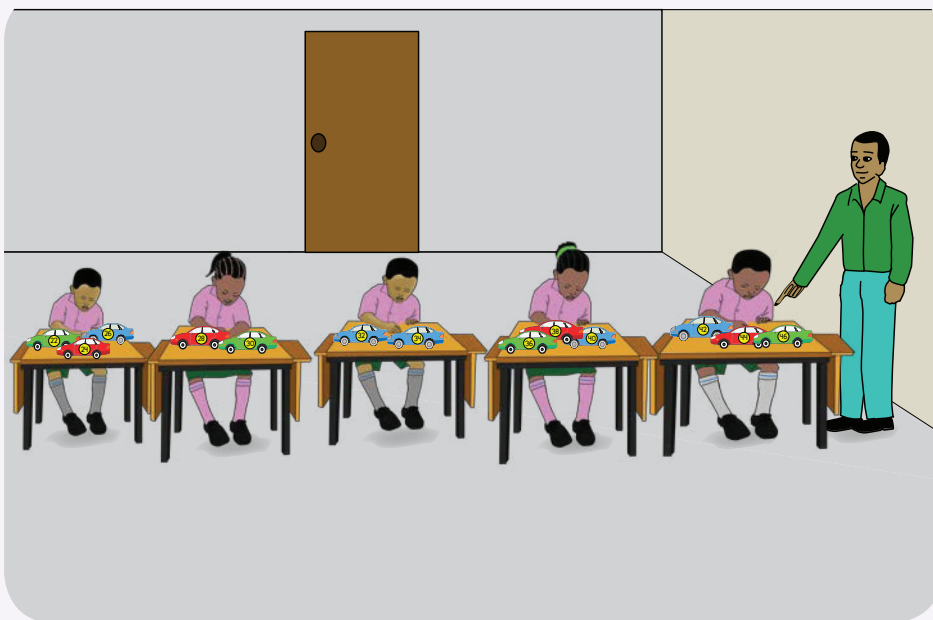
- ① Count and sign forward by 2 from 2 to 20
- ② Count and sign backwards by 2 from 20 to 2

## Counting and signing

### Activity

Count and sign forward by 2 from 2 to 50

Count and sign backwards by 2 from 50 to 2



### Work to do

- ❶ Count and sign forward by 2 from 1 to 49
- ❷ Count and sign backwards by 2 from 49 to 1

## Tens and Ones

### Activity

45 can be shown using a place value chart

Tens	Ones
4	5

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

### Work to do

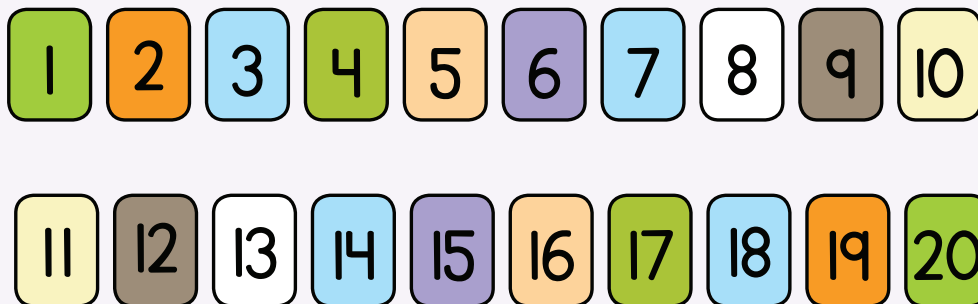
How many **tens** and **ones**?

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, signing and writing numbers

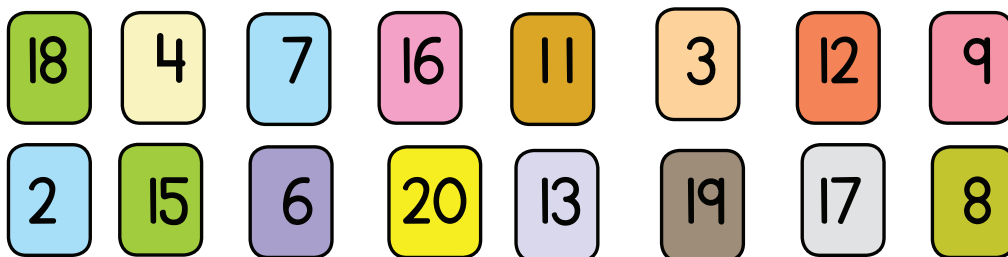
### Activity

Read, sign and write the numbers in symbols



### Work to do

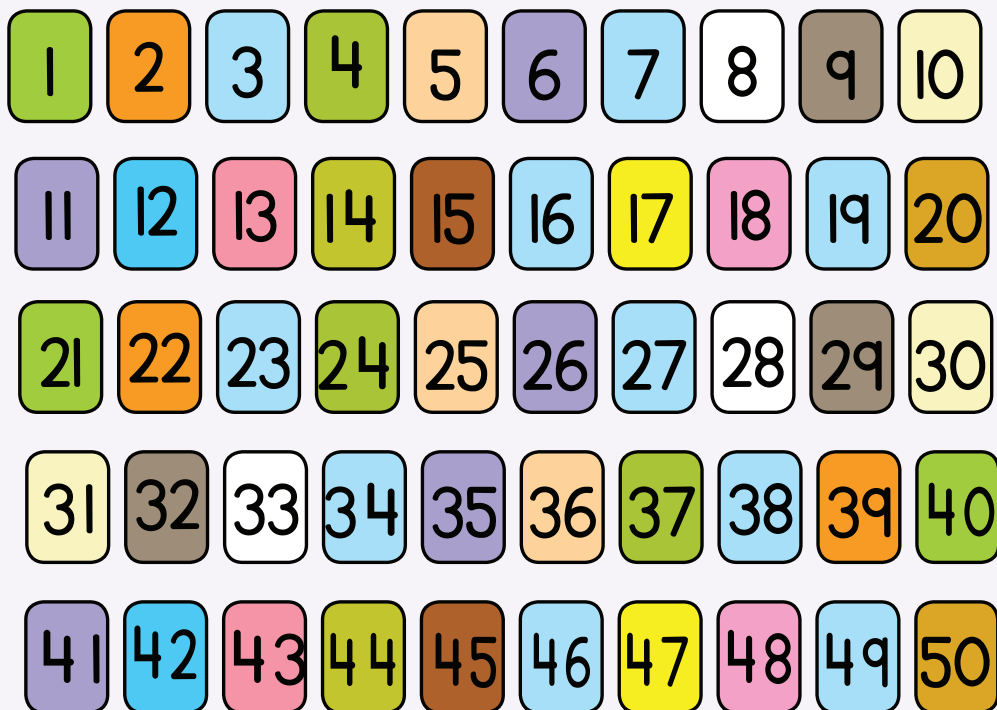
Read, sign and write the numbers in symbols



## Reading, signing and writing numbers

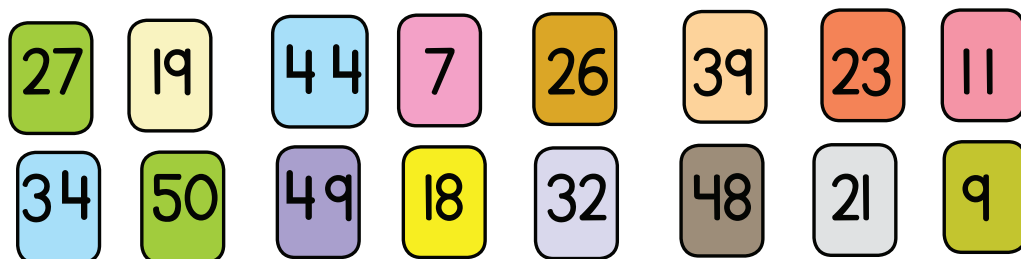
### Activity

Read, sign and write the numbers in symbols



### Work to do

Read, sign and write the numbers in symbols





## Numbers in words

### Activity

Read, sign, fingerspell and write the numbers in words

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

### Work to do

Read, sign, fingerspell 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, 18

### Activity 2

Write the next number

19, 17, 15, \_\_\_\_\_

Are the numbers increasing or decreasing?  
By how many?

Count backwards by 2 to get the next number

19, 17, 15, 13

## 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, 45

### Activity 2

Write the missing number

50, 45, 40, 35, 30, \_\_\_\_\_

Are the numbers increasing or decreasing?

By how many?

Count backwards by 5 to get the next number

50, 45, 40, 35, 30, 25

## 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

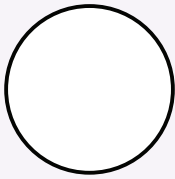
## FRACTIONS

Week 3 Lesson 3

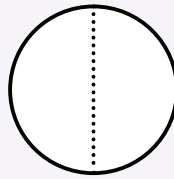
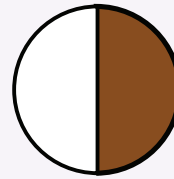
## A half as part of a whole

## Activity

Fold to make a half



A whole

Two equal  
parts

1 out of the 2  
parts is shaded.  
The shaded  
part is a **half**  
of a **whole**.

## Work to do

Make a half using circular paper cut-outs

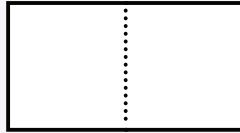
## A half as part of a whole

### Activity

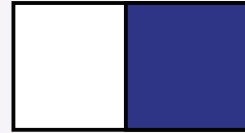
Fold to make a half



A whole



Two equal  
parts



1 out of the 2  
parts is shaded.

The shaded  
part is a **half**  
of a **whole**.

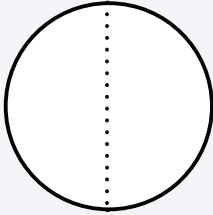
### Work to do

Make a half using rectangular paper cut-outs

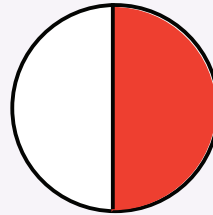
# A Half ( $\frac{1}{2}$ )

## Activity

A half as a symbol

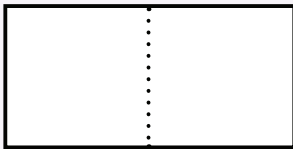


Two equal parts



1 out of the 2 parts is shaded .

This is  $\frac{1}{2}$



Two equal parts

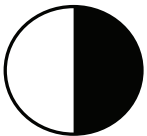


1 out of the 2 parts is shaded .

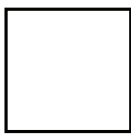
This is  $\frac{1}{2}$

## Work to do

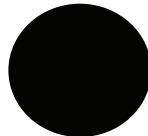
Write  $\frac{1}{2}$  where a half is shaded.



A



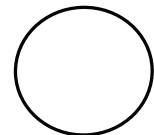
B



C



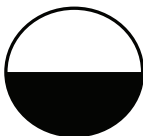
D



E



F



G



H

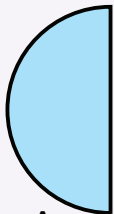


I

## Making a whole

### Activity

Match by colour to form a whole.



A



B



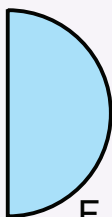
C



D



E



F



G



H

### Work to do

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

# NUMBERS

## ADDITION

Week 4 Lesson 2

### 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  $23 + 5 = \square$

Write as

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

Count on 5 steps from 23;

24, 25, 26, 27, 28

### Work to do

Add

1.  $14 + 3 = \square$

2.  $34 + 5 = \square$

3.  $7 + 21 = \square$

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

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

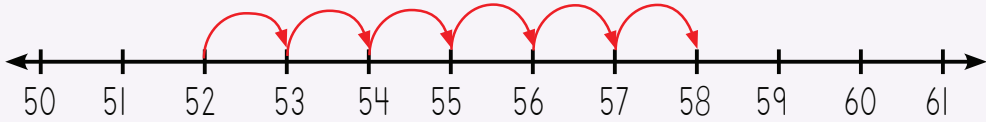


## Add

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

5. 
$$\begin{array}{r} 43 \\ + 5 \\ \hline \\ \hline \end{array}$$

6. 
$$\begin{array}{r} 75 \\ + 3 \\ \hline \\ \hline \end{array}$$

## Add

### Activity

What is  $3 + 2 + 4$ ?

$$\begin{aligned} 3 + 2 + 4 &= 5 + 4 \\ &= 9 \end{aligned}$$

- 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**.  $3 + 5 = 8$
- Add **2 tens** to **1 tens** to get **3 tens**.  $2 + 1 = 3$
- 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

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

- 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

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

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

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

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

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

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

## Number patterns

### Activity

Work out the missing number

6, 9, 12, \_\_\_\_, 18

There are 3 steps from 6 to 9

Then add 3 to every given 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, 15, 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

Week 5 Lesson 4

### Subtract

#### Activity

What is  $7 - 4$ ?

Count 4 steps backwards from 7 ;

6, 5, 4, 3

$$7 - 4 = 3$$

#### Work to do

1.  $4 - 2 = \square$

2.  $8 - 5 = \square$

3.  $5 - 1 = \square$

4.  $7 - 4 = \square$

5.  $9 - 3 = \square$

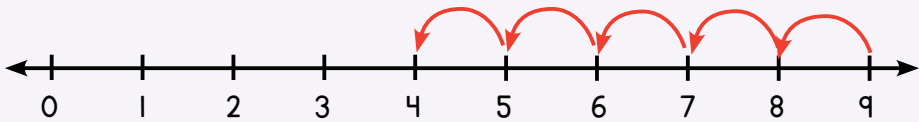
6.  $9 - 5 = \square$

## Subtract

## Activity

$$\begin{array}{r} \text{Subtract } 9 \\ - 5 \\ \hline \\ \hline \end{array}$$

- On the number line start at 9.
- Move 5 steps backwards to stop at 4.



$$\begin{array}{r} 9 \\ - 5 \\ \hline 4 \\ \hline \end{array}$$

## Work to do

## Subtract

$$\begin{array}{r} \text{1. } 7 \\ - 2 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \text{2. } 5 \\ - 3 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \text{3. } 9 \\ - 4 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \text{4. } 8 \\ - 1 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \text{5. } 9 \\ - 6 \\ \hline \\ \hline \end{array}$$

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



## Subtract

### Activity

What is  $13 - 8$ ?

$$13 - 8 = \square$$

$$13 - 8 = 13 - \underline{3} - \underline{5}$$

$$13 - 8 = 10 - 5 = 5$$

$$13 - 8 = 5$$

### Steps

- Identify the ones in 13 and underline the ones as 13
- Break apart 8 as 3 and 5
- Subtract 3 from 13 to get 10
- Subtract 5 from 10 to get 5

### Work to do

Subtract

1.  $12 - 6 = \square$

2.  $63 - 8 = \square$

3.  $35 - 9 = \square$

4.  $51 - 7 = \square$

5.  $24 - 5 = \square$

6.  $42 - 5 = \square$

## Subtract

### Activity

Subtract 58

$$\begin{array}{r} - 5 \\ \hline \end{array}$$

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. 
$$\begin{array}{r} 26 \\ - 4 \\ \hline \end{array}$$

2. 
$$\begin{array}{r} 39 \\ - 6 \\ \hline \end{array}$$

3. 
$$\begin{array}{r} 45 \\ - 2 \\ \hline \end{array}$$

4. 
$$\begin{array}{r} 78 \\ - 5 \\ \hline \end{array}$$

5. 
$$\begin{array}{r} 87 \\ - 3 \\ \hline \end{array}$$

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

## Add and subtract

### Activity

What is  $9 - 2$ ?

Write as  $9 - 2 = \square$

$$2 + \square = 9$$

$$2 + \boxed{7} = 9$$

$$9 - 2 = \boxed{7}$$

### 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.  $6 - 2 = \square$

$$2 + \square = 6$$

2.  $8 - 6 = \square$

$$6 + \square = 8$$

3.  $7 - 5 = \square$

$$5 + \square = 7$$

4.  $5 - 2 = \square$

$$2 + \square = 5$$

5.  $9 - 3 = \square$

$$3 + \square = 9$$

6.  $7 - 1 = \square$

$$1 + \square = 7$$

## Subtract

### Activity

Write the missing number in  $\square - 3 = 5$

Write as  $3 + 5 = \square$

$$3 + 5 = 8$$

- The missing number is 8.
- Write 8 in the box

$$\boxed{8} - 3 = 5$$

3, 5, 8 is a number family.

### Work to do

Write the missing number

1.  $\square - 4 = 3$

2.  $\square - 7 = 2$

3.  $\square - 1 = 4$

4.  $\square - 5 = 1$

5.  $\square - 3 = 5$

6.  $\square - 2 = 3$

## Subtract

### Activity

Write the missing number in  $8 - \square = 6$

Write  $8 - 6 = \square$

$$8 - 6 = 2$$

- The missing number is 2.
- Write 2 in the box

$$8 - 2 = 6$$

2, 6, 8 is a number family.

### Work to do

Write the missing number

1.  $8 - \square = 4$

2.  $5 - \square = 3$

3.  $9 - \square = 3$

4.  $7 - \square = 4$

5. Teacher Ann has 9 rubbers. She gives 4 rubbers to Tom. How many rubbers is she left with?
6. A woman 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 every given 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

Week 7 Lesson 2

### Repeated addition

#### Activity 1

Write as repeated addition

$$\begin{array}{c} \boxed{\text{triangle}} \\ 1 \end{array} \text{ and } \begin{array}{c} \boxed{\text{triangle}} \\ 1 \end{array} \text{ is } \begin{array}{c} \boxed{\text{triangle triangle}} \\ 2 \end{array}$$

$$1 + 1 = 2$$

#### Activity 2

Write as repeated addition

$$\begin{array}{c} \boxed{\text{triangle}} \\ \boxed{\text{triangle}} \\ 2 \end{array} \text{ and } \begin{array}{c} \boxed{\text{triangle}} \\ \boxed{\text{triangle}} \\ 2 \end{array} \text{ is } \begin{array}{c} \boxed{\text{triangle triangle}} \\ \boxed{\text{triangle triangle}} \\ 4 \end{array}$$

$$2 + 2 = 4$$

### Work to do

Write the missing number

1.  $\begin{array}{c} \boxed{\text{triangle triangle triangle}} \\ 3 \end{array} \text{ and } \begin{array}{c} \boxed{\text{triangle triangle triangle}} \\ \text{_____} \end{array} \text{ is } \begin{array}{c} \boxed{\text{triangle triangle triangle}} \\ \boxed{\text{triangle triangle triangle}} \\ \text{_____} \end{array}$ 

$$3 + \text{_____} = \text{_____}$$

2.  $\begin{array}{c} \boxed{\text{circle circle circle}} \\ \boxed{\text{circle circle}} \\ \text{_____} \end{array} \text{ and } \begin{array}{c} \boxed{\text{circle circle circle}} \\ \boxed{\text{circle circle}} \\ 5 \end{array} \text{ is } \begin{array}{c} \boxed{\text{circle circle circle circle circle}} \\ \boxed{\text{circle circle circle circle circle}} \\ \text{_____} \end{array}$ 

$$\text{_____} + 5 = \text{_____}$$

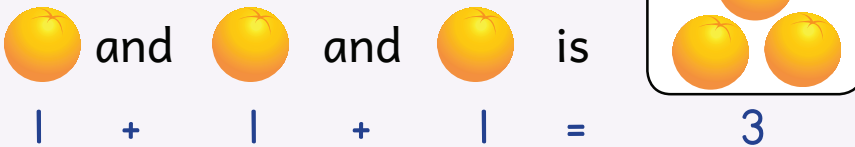
3.  $\begin{array}{c} \boxed{\text{circle circle}} \\ \boxed{\text{circle circle}} \\ \text{_____} \end{array} \text{ and } \begin{array}{c} \boxed{\text{circle circle}} \\ \boxed{\text{circle circle}} \\ \text{_____} \end{array} \text{ is } \begin{array}{c} \boxed{\text{circle circle circle circle}} \\ \boxed{\text{circle circle circle circle}} \\ \text{_____} \end{array}$ 

$$\text{_____} + \text{_____} = \text{_____}$$

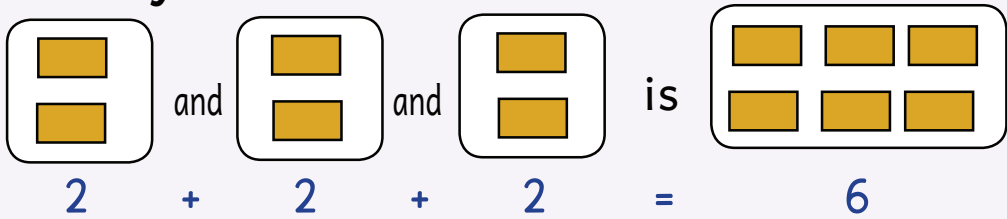
## Repeated addition

### Activity 1

Write as addition

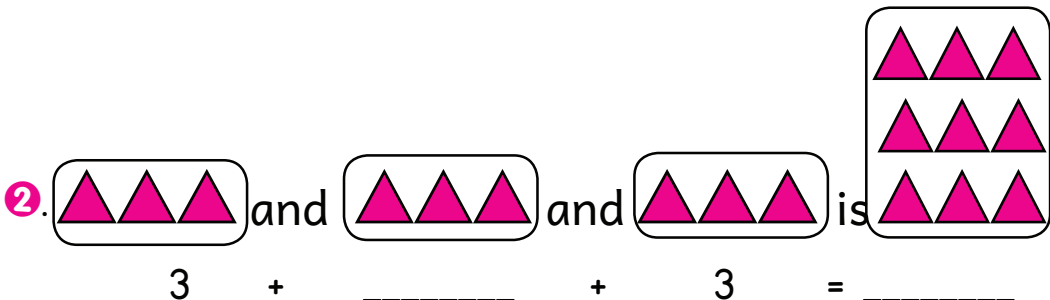
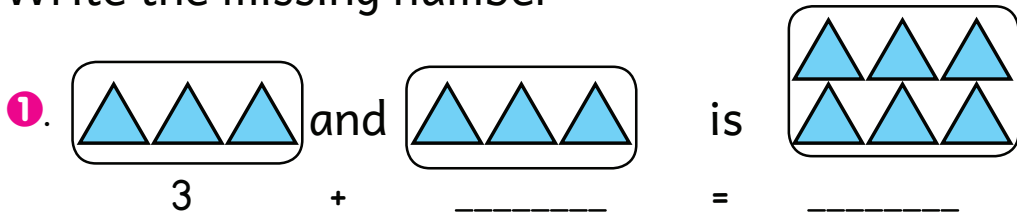


### Activity 2

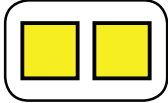
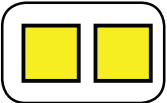
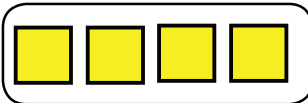


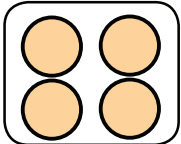
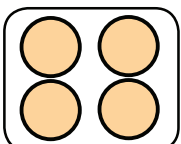
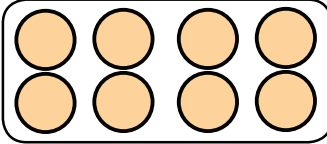
## Work to do

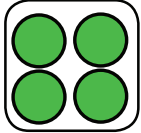
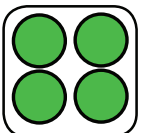
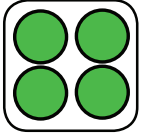
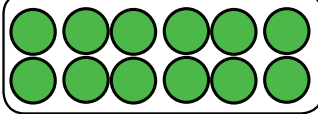
Write the missing number

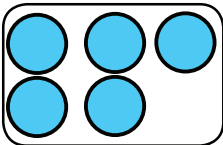
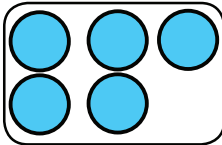
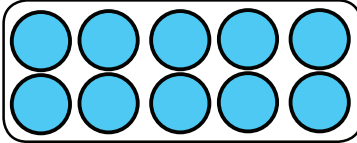




3.  and  is   
 2 + \_\_\_\_\_ = 4

4.  and  is   
 \_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_





5.  and  and  is   
 4 + \_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_


6.  and  is   
 \_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_

# Repeated addition

## Activity

Write as addition

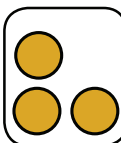
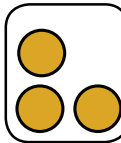
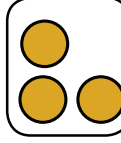
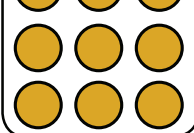
 and 
  and 
  and 
 

is 

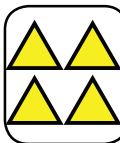
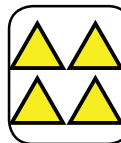
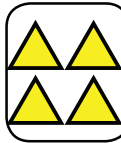
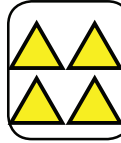
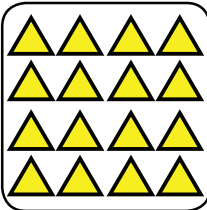
2 + 2 + 2 + 2 = 8

## Work to do

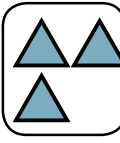
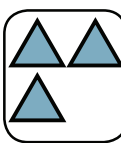
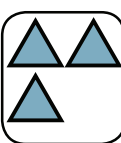
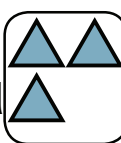
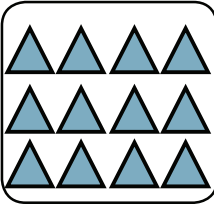
Write the missing number

1.  and  and  is 

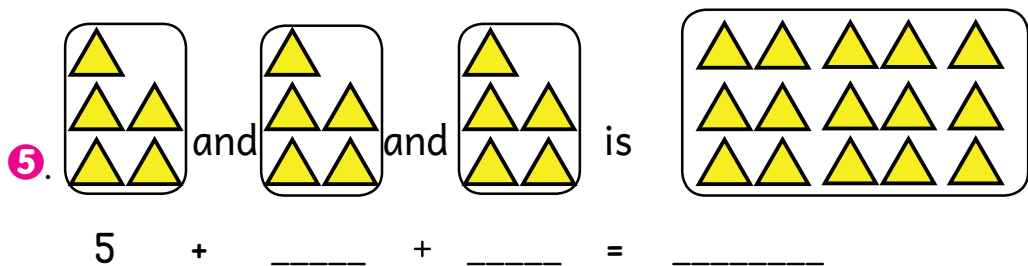
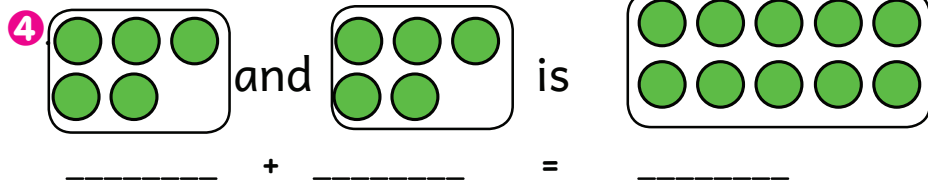
\_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_

2.  and  and  and  is 

4 + \_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_

3.  and  and  and  is 

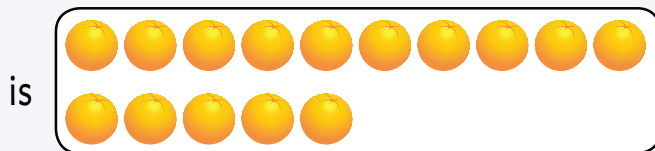
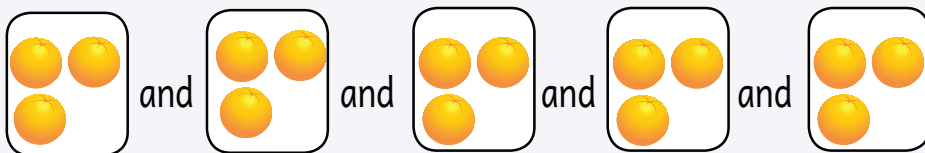
\_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_ + 3 = \_\_\_\_\_



## Repeated addition

### Activity 1

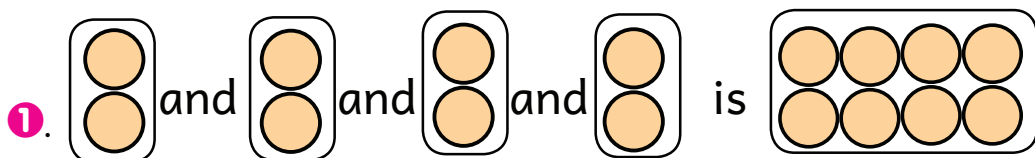
Write as addition



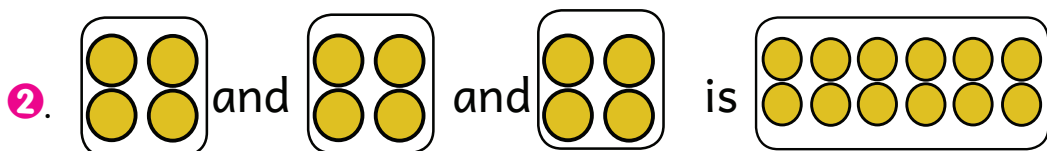
$$3 + 3 + 3 + 3 + 3 = 15$$

### Work to do

Write the missing number

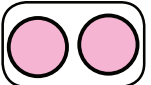
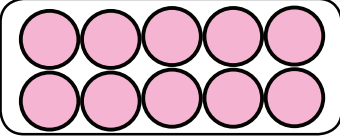


$$\underline{\quad} + 2 + \underline{\quad} + \underline{\quad} = \underline{\quad}$$

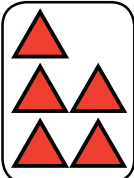
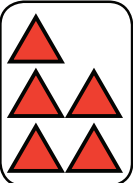
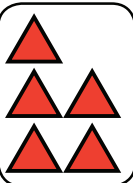
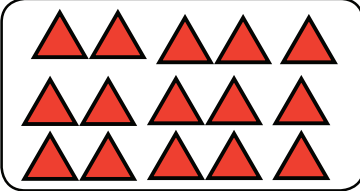


$$4 + \underline{\quad} + \underline{\quad} = \underline{\quad}$$

3.  and  and  and  and

 is 

$$2 + \underline{\hspace{1cm}} + \underline{\hspace{1cm}} + \underline{\hspace{1cm}} + \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$

4.  and  and  is 

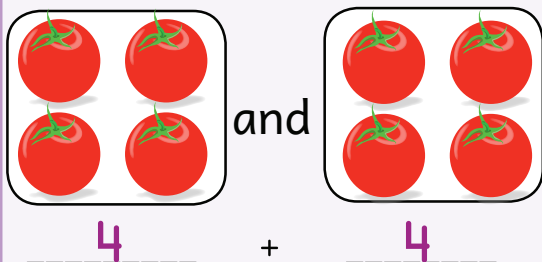
$$\underline{\hspace{1cm}} + \underline{\hspace{1cm}} + \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$

# Multiplication 'X' Sign



## Activity 1

Write using the 'X' sign



There are 2 groups each with 4 objects.

4 + 4 is the same as  $2 \times 4$

## Activity 2

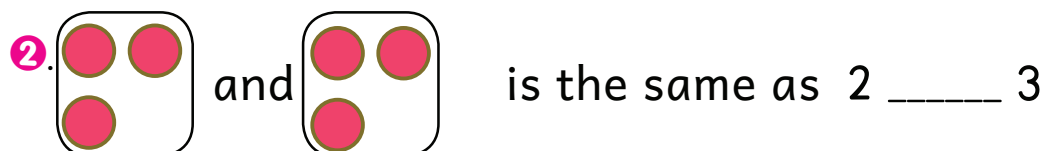
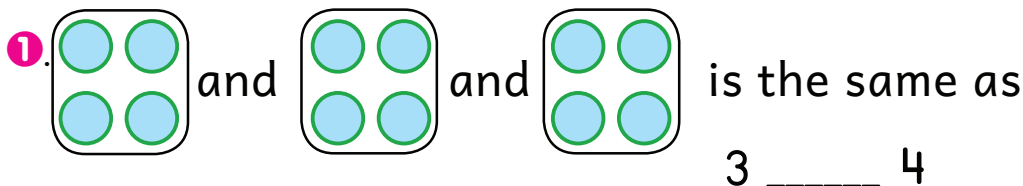


There are 3 groups each with 2 objects

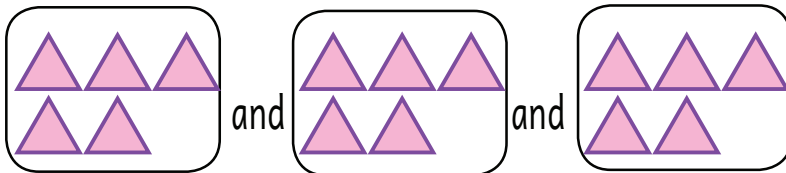
This is the same as  $3 \times 2$ .

## Work to do

Write the sign 'X' or the missing number

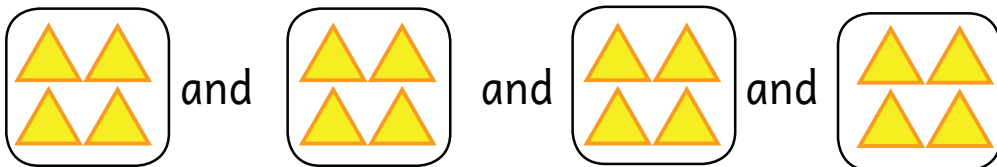


3.



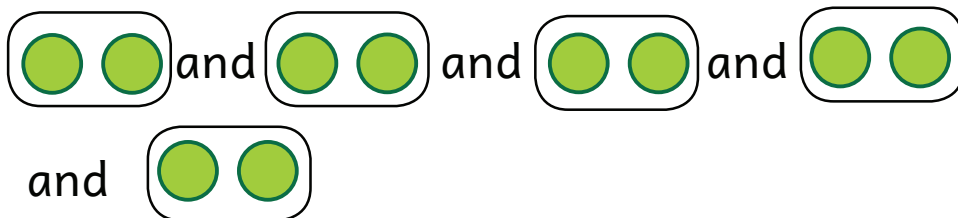
is the same as 3 \_\_\_\_

4.



is the same as \_\_\_\_ × \_\_\_\_

5.

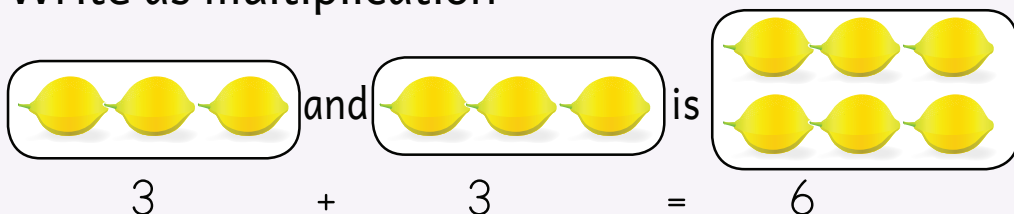


is the same as \_\_\_\_

## Multiplication

### Activity 1

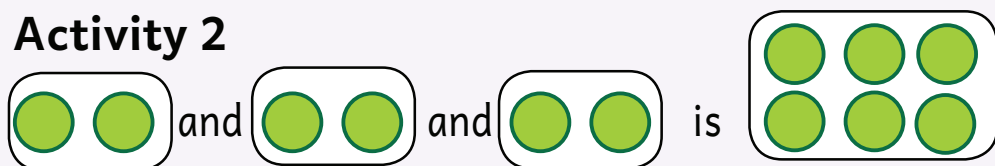
Write as multiplication



There are 2 groups with 3 objects each.  
This is same as  $2 \times 3$ .

Write  $3 + 3$  as  $2 \times 3 = 6$

### Activity 2



There are 3 groups with 2 objects each.

This is same as  $3 \times 2$

$2 + 2 + 2$  is  $3 \times 2 = 6$

## Work to do

Write as multiplication

1.  $4 + 4 + 4 = 12$

2.  $5 + 5 = 10$

3.  $2 + 2 + 2 + 2 = 8$

4.  $3 + 3 + 3 + 3 = 12$

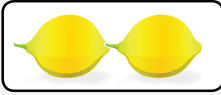
5.  $4 + 4 + 4 + 4 + 4 = 20$



## Multiplying by 1

### Activity 1

Multiply by 1

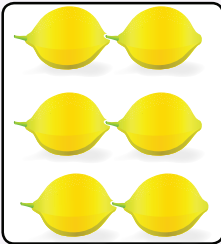


This is 1 group with 2 objects

This is written as  $1 \times 2 = 2$

### Activity 2

Multiply by 1



This is 1 group with 6 objects

This is written as  $1 \times 6 = 6$

## Work to do

Multiply

1.  $1 \times 3 = \square$

2.  $1 \times 4 = \square$

3.  $1 \times 5 = \square$

4.  $1 \times 6 = \square$

5.  $1 \times 7 = \square$

6.  $1 \times 8 = \square$

7.  $1 \times 9 = \square$

# MEASUREMENT

## LENGTH

Week 8 Lesson 4

### Measuring length

#### Activity

What is the length of the teacher's table ?



The length of the teacher's table is \_\_\_\_\_ pencils

### Work to do

	Measure	Number of pencils
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

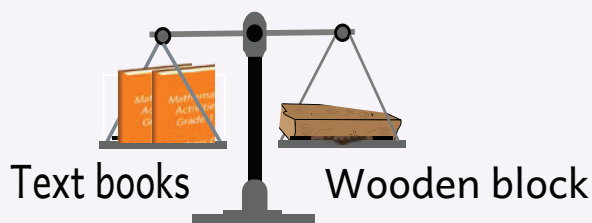
## MASS

Week 9 Lesson 1

## Measuring mass

**Activity**

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



The mass of the wooden block is \_\_\_\_ text books

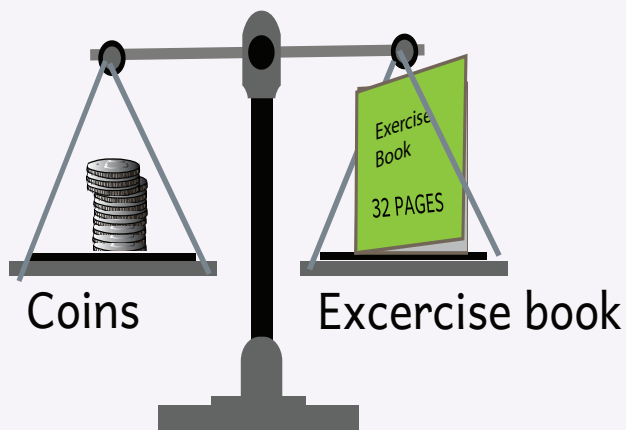
**Work to do**

	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

Week 9 Lesson 3

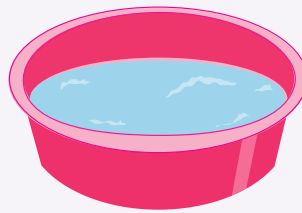
### Measuring capacity

#### Activity

How many cups full of water will fill the basin?



Cup



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	

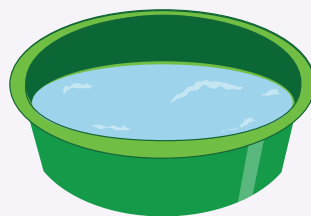
## Measuring capacity

### Activity

How many bottles full of water will fill the basin?



Bottle



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	

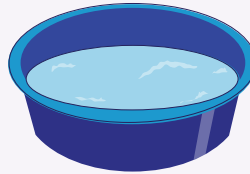
## Measuring capacity

### Activity

How many tins of water will fill the basin?



Tin



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

Week 10 Lesson 1

### 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, sign, fingerspell 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

Fill an activity for each month.

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

# Days in a month

## Activity

How many days are in each month?

2018

January 2018						
S	M	T	W	T	F	S
	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			

February 2018						
S	M	T	W	T	F	S
				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			

March 2018						
S	M	T	W	T	F	S
				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

April 2018						
S	M	T	W	T	F	S
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					

May 2018						
S	M	T	W	T	F	S
		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		

June 2018						
S	M	T	W	T	F	S
					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

July 2018						
S	M	T	W	T	F	S
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				

August 2018						
S	M	T	W	T	F	S
			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	

September 2018						
S	M	T	W	T	F	S
						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						

October 2018						
S	M	T	W	T	F	S
	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			

November 2018						
S	M	T	W	T	F	S
				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	

December 2018						
S	M	T	W	T	F	S
						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					

## Work to do

❶. Which months have 28 days? \_\_\_\_\_

❷. Which months have 30 days?

\_\_\_\_\_

❸. Which months have 31 days?

\_\_\_\_\_

\_\_\_\_\_

## Measuring time

### Activity

How much time?

Count the number of claps/drum beats as you sign and 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/drum beats to sing the first stanza of the national anthem.

The number of claps/drum beats is the time taken to sing.

### Work to do

Sign as you sing the first stanza of the national anthem

Count how many?	Number
1. Claps	
2. Taps	
3. Drum beats	

# MEASUREMENT

## MONEY

Week 10 Lesson 5

### Coins and notes

#### Activity 1

How much?



10 shilling coin

#### Activity 2

How much?



50 shilling note.

### Work to do

How much?

1



\_\_\_\_\_ shillings.

2



\_\_\_\_\_ shillings

3



\_\_\_\_\_ shilling.

4



\_\_\_\_\_ shillings.

5



\_\_\_\_\_ shilling note.

## Coins and notes

### Activity 1

How much?



40 shilling coin.

### Activity 2

How much?



100 shilling 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



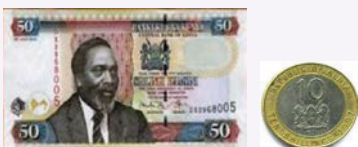
\_\_\_\_\_shillings.



# 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.



# GEOMETRY

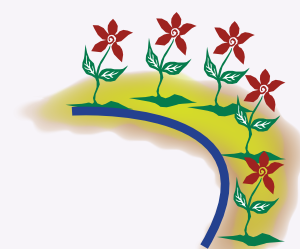
## LINES

Week 11 Lesson 4

### Straight and curved lines

#### Activity

Identify straight and curved lines



#### Work to do

1. Name places with curved lines

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2. Name places with straight lines

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## GEOMETRY

## SHAPES

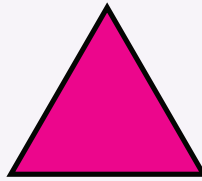
## Triangles, Circles and Rectangles

## Activity

Which shape?



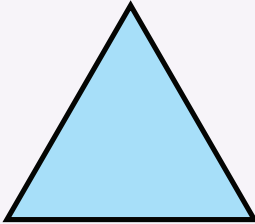
A



B



C



D



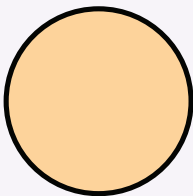
E



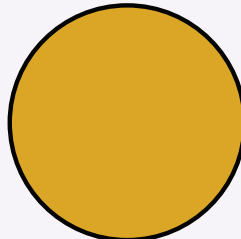
F



G



H



I



J

Triangles are A, B, and D

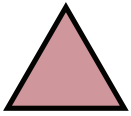
Circles are E, G, H and I

Rectangles are C, F and J



## Work to do

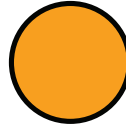
Which shape?



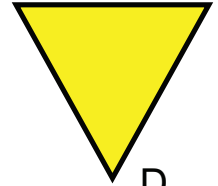
A



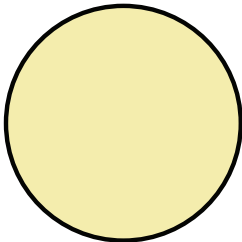
B



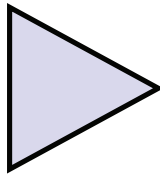
C



D



E



F



G



H



I

1. Triangles are? \_\_\_\_\_

2. Circles are? \_\_\_\_\_

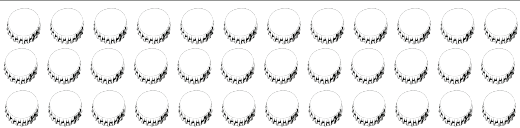
3. Rectangles are ? \_\_\_\_\_

# I can do I

1. Read and sign the numbers

16   23   48   35   7   44   29   34   2   50

2. How many?


Number	Objects
_____	

3 Count and sign forward by 2 from 3 to 47

4 Count and sign backward by 2 from 48 to 2

5 23 is \_\_\_\_\_ tens and \_\_\_\_\_ ones

6 Fill in

Number	Objects
6	_____
_____	

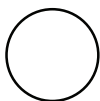
7 Fill in the missing number

3, 8, 13, 18, \_\_\_\_\_

8 Fill in the missing number

19, 17, 15, 13, \_\_\_\_\_

9 Which is a half?



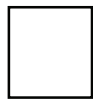
A



B



C



D

10.  $15 + 3 = \square$

11.  $82 + 7 = \square$

12.  $20 + 27 = \square$

13.  $3 + 4 + 2 = \square$

14. Write the missing number 5, 8, 11, \_\_\_\_\_, \_\_\_\_\_

15.  $13 - 8 = \square$

16.  $33 - 5 = \square$

17.  $68$

$$\begin{array}{r} - 3 \\ \hline \\ \hline \end{array}$$

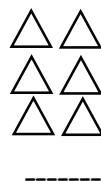
18.  $\square - 6 = 3$

19.  $7 - \square = 2$

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

Write as addition

21.  $\triangle \triangle$  and  $\triangle \triangle$  and  $\triangle \triangle$  is  
 \_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_ =



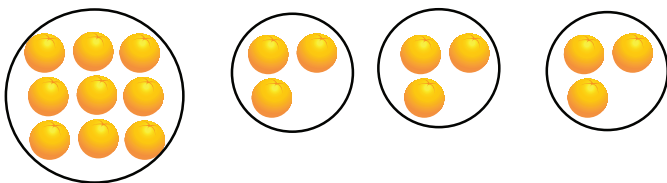
22.  $\circ \circ$  and  $\circ \circ$  is  $\circ \circ \circ \circ$   
 \_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_

23.  $\circ \circ$  and  $\circ \circ$  and  $\circ \circ$  is  $\circ \circ \circ \circ \circ$   
 \_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_

24. ○○ and ○○ and ○○ and ○○ is 

\_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_

25 Share 9 oranges among 3 pupils



Each pupil gets \_\_\_\_\_ oranges

26  $\square \div 2 = 4$

27  $18 \div 3 = \square$

28  $12 \div \square = 3$

29  $24 \div \square = 8$

30  $21 \div 3 = \square$

31  $15 \div \square = 3$

32 Which is **shorter**, **longer** or **same as**?

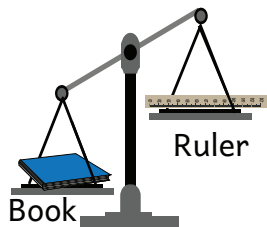


A is \_\_\_\_\_ B

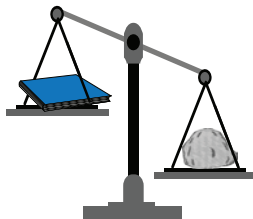
D is \_\_\_\_\_ C

B is \_\_\_\_\_ C

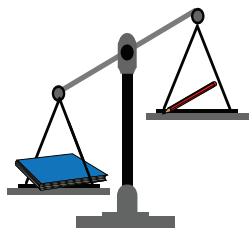
33 Write **heavier than**, **lighter than** or **same as**



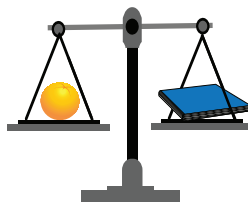
The book is \_\_\_\_\_ the ruler



The book is \_\_\_\_\_ the stone



The book is \_\_\_\_\_ the pencil



The book is \_\_\_\_\_ the orange

34 Which **holds more**?



Basin



Tin

35 Which **holds less**



Kettle



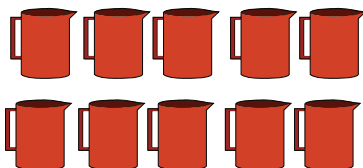
Cup

36 Which **holds more**, **holds less**, **holds same as**



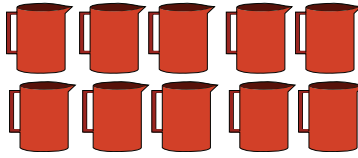
Jerrycan

fills





fills



Sufuria

The jerrycan \_\_\_\_\_ sufuria

37 Write the time



38 Write the time 6 o'clock in the digital clock face.

	:	
--	---	--

39 Look at the calendar. 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		

May 8 \_\_\_\_\_

May 12 \_\_\_\_\_

May 23 \_\_\_\_\_

May 31 \_\_\_\_\_

May 29 \_\_\_\_\_



#### 40 Write need or want

Item	Need or want
Dress	
Food	
Toy	
Ball	

#### 41 How much?



\_\_\_\_\_ five shilling coins



\_\_\_\_\_ ten shilling coins



\_\_\_\_\_ 50 shilling notes.

#### 42. Which is a straight line?

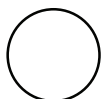


A



B

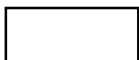
#### 43. Which is a triangle?



A



B



C



# TERM 2



# NUMBERS

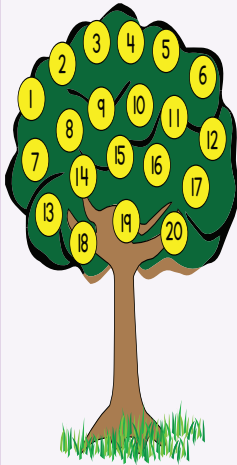
## NUMBER CONCEPT

Week 1 Lesson 1

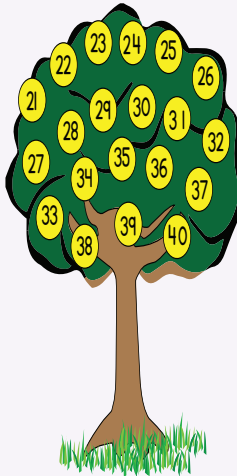
### Reading and signing numbers

#### Activity

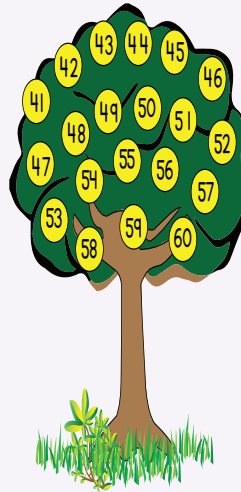
Read and sign the numbers



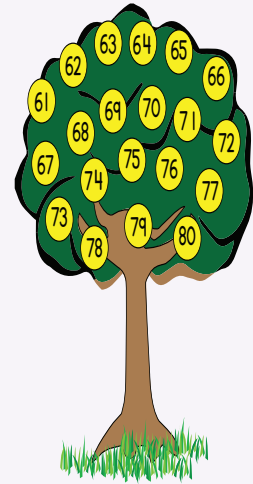
A



B



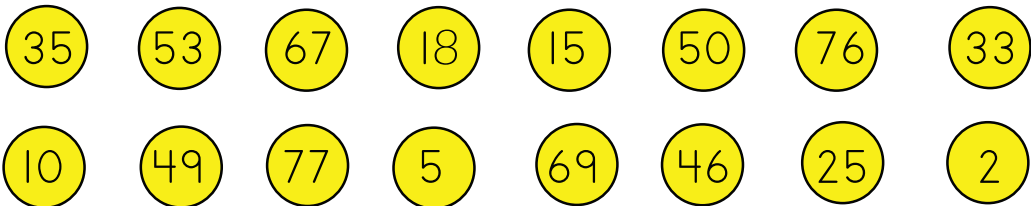
C



D

### Work to do

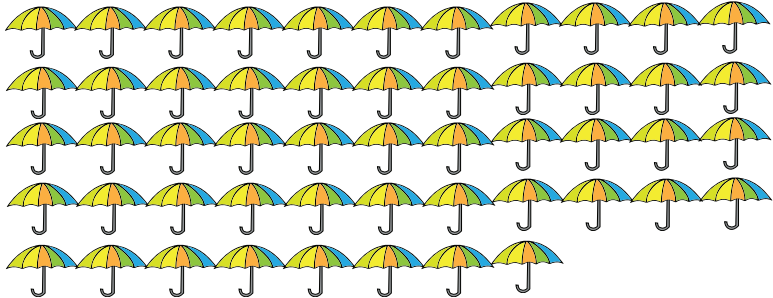

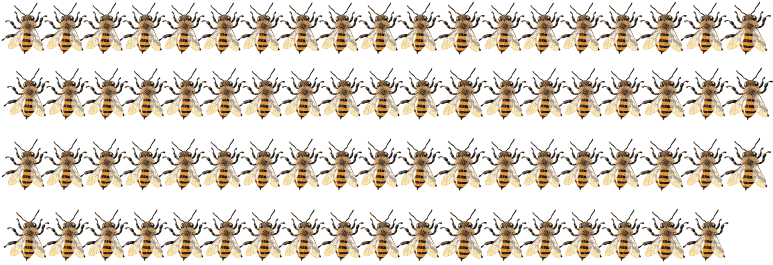
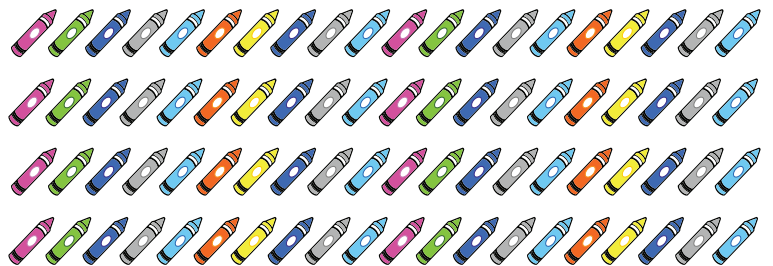
Which tree has ?



# Numbers and objects



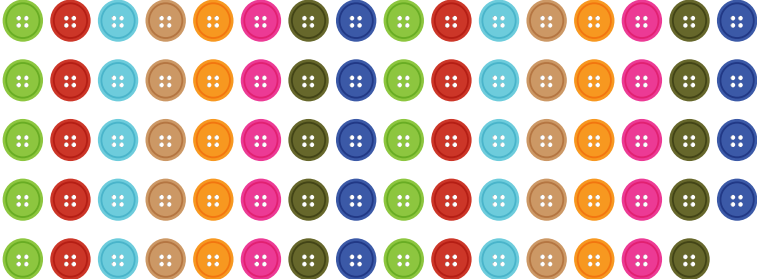
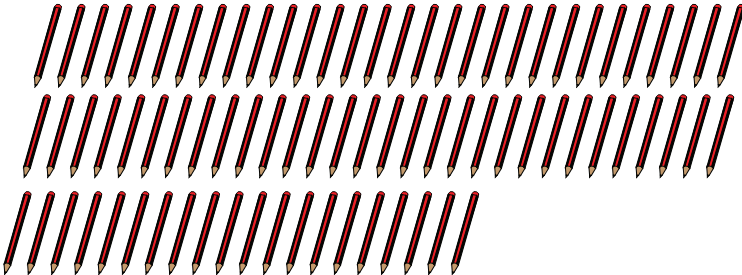
## Activity

How many?

Number	Objects
52	
61	
75	
80	

## Work to do

How many?

Number	Objects
57	
	
	
	

## NUMBERS

## WHOLE NUMBERS

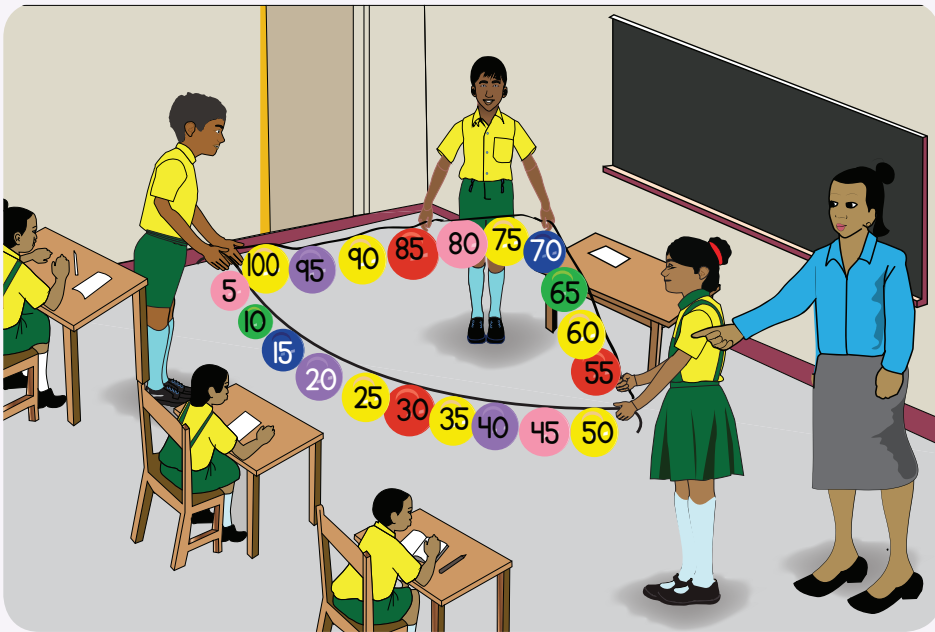
Week 1 Lesson 3

## Counting and signing

## Activity

Count and sign forward by 5 from 5 to 100

Count and sign backwards by 5 from 100 to 5



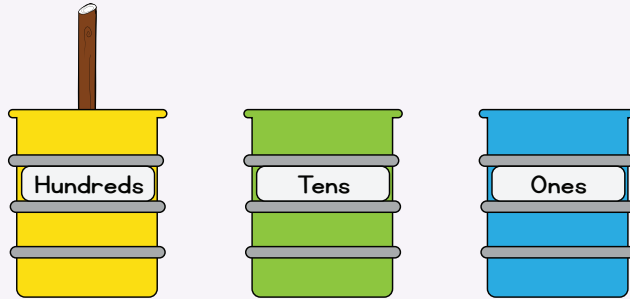
## Work to do

- ❶. Count and sign forward by 5 from 10 to 100.
- ❷. Count and sign backwards by 5 from 100 to 10.

## Hundreds, Tens and Ones

### Activity

100 can be shown using number tins



1 hundreds

0 tens

0 ones

100 is **1** hundreds **0** tens and **0** ones

### Work to do

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

❶. 23 is 0 hundreds 2 tens and 3 ones

❷. 36 is \_\_\_\_ hundreds \_\_\_\_ tens and \_\_\_\_ ones

❸. 77 is \_\_\_\_ hundreds \_\_\_\_ tens and \_\_\_\_ ones

❹. 100 is \_\_\_\_ hundreds \_\_\_\_ tens and \_\_\_\_ ones

## Reading, signing and writing numbers

### Activity

Read, sign 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, sign and write the numbers in symbols

73	46	74	29	65	55	38	14
62	60	53	80	77	52	43	6



## Reading, signing, fingerspelling and writing numbers

### Activity

Read, sign, fingerspell 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, sign, fingerspell 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, 31, 33, \_\_\_\_\_, 37

Are the numbers decreasing or increasing?

By how many?

Count and sign forward by 2 to get the next number

27, 29, 31, 33, 35, 37

### Activity 2

Write the missing number

46, 44, 42, 40, \_\_\_\_\_, 36

Are the numbers increasing or decreasing?

By how many?

Count and sign backwards by 2 to get the next number

46, 44, 42, 40, 38, 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, 11, \_\_\_\_\_, 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 and sign 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 and sign backwards 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

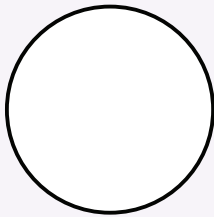
## NUMBERS

## FRACTIONS

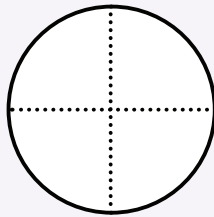
## A quarter

## Activity

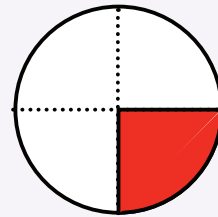
Fold to make a quarter



A whole



Four equal parts



1 out of the 4 parts is shaded.

The shaded part is a **quarter** of a whole

## Work to do

Make a quarter using circular paper cut-outs.

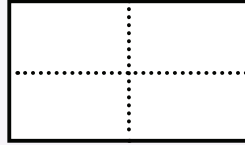
## A quarter

### Activity

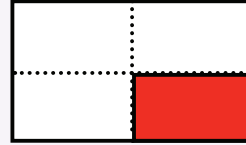
Fold to make a quarter



A whole



Four equal  
parts



1 out of the 4 parts  
is shaded.

The shaded part  
is a **quarter** of  
a **whole**

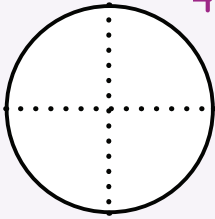
### Work to do

Make a quarter using rectangular paper cut-outs.

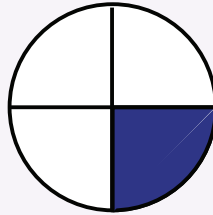
# A Quarter ( $\frac{1}{4}$ )

## Activity

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

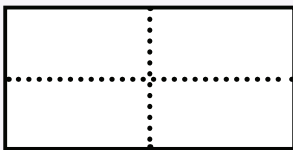


Four equal parts



1 out of the 4 parts is shaded

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



Four equal parts

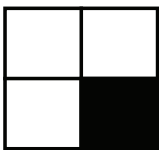


1 out of the 4 parts is shaded

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

## Work to do

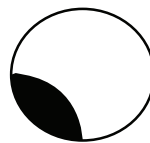
Write  $\frac{1}{4}$  where a quarter is shaded



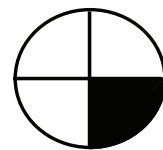
A



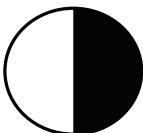
B



C



D



E



F



G

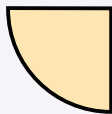
## Making a whole

### Activity

Match by colour to make a whole.



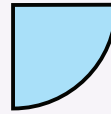
A



B



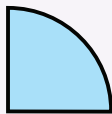
C



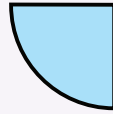
D



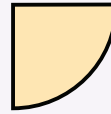
E



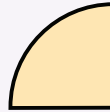
F



G



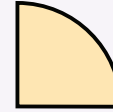
H



I



J



K



L

### Work to do

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

# NUMBERS

## ADDITION

Week 3 Lesson 3

### Add

#### Activity

What is  $14 + 8$ ?

$$\begin{aligned} 14 + 8 &= 14 + 6 + 2 \\ &= 20 + 2 \\ &= 22 \end{aligned}$$

$$14 + 8 = 22$$

#### Steps

- Underline the ones in the first number which is 14.
- 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.  $19 + 5 = \square$

2.  $15 + 8 = \square$

3.  $27 + 6 = \square$

4.  $38 + 9 = \square$

5.  $13 + 9 = \square$

6.  $37 + 5 = \square$



# Add

## Activity

$$\begin{array}{r} \text{Add } 28 \\ + 9 \\ \hline \\ \hline \end{array}$$

## Steps

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

Tens	Ones
1 2	8
+	9
3	7

- Add 8 **ones** to 9 **ones** to get 17 **ones**.
- Regroup by separating 17 **ones** as 1 **tens** and 7 **ones**
- Write 7 in the **ones** place
- Take the 1 **tens** to the **tens** place
- Add the **tens** as 1 + 2 = 3 **tens**
- Write 3 in the **tens** place

## Work to do

Add

$$\begin{array}{r} \text{1. } 28 \\ + 8 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \text{2. } 22 \\ + 9 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \text{3. } 37 \\ + 6 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \text{4. } 15 \\ + 5 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \text{5. } 34 \\ + 7 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \text{6. } 33 \\ + 9 \\ \hline \\ \hline \end{array}$$

## Add

## Activity

What is  $68 + 5$ ?

$$68 + 5 = 68 + 2 + 3$$

$$= 70 + 3$$

$$= 73$$

$$68 + 5 = 73$$

## 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
① 4	6
+	9
5	5

- Add **6 ones** to **4 ones** to get **10 ones**.
- Regroup by separating **10 ones** as **1 tens** and **0 ones**.
- Write **0** in the **ones** place.
- Take the **1 tens** to the **tens** place.
- Add **tens** as **1 + 4 = 5 tens**.
- Write **5** in the **tens** place.

## Work to do

Add

①. 
$$\begin{array}{r} 42 \\ + 8 \\ \hline \\ \hline \end{array}$$

②. 
$$\begin{array}{r} 86 \\ + 9 \\ \hline \\ \hline \end{array}$$

③. 
$$\begin{array}{r} 59 \\ + 7 \\ \hline \\ \hline \end{array}$$

- ④. Amina has 18 books. Jane has 7 books. How many books do they have altogether?
- ⑤. Peter has 8 fish. He bought 33 more fish. How many fish does he have altogether?

## Add

### Activity

What is  $7 + 5 + 3$ ?

$$7 + 5 + 3 = \boxed{\phantom{00}}$$

$$7 + 3 = 10$$

$$10 + 5 = 15$$

$$7 + 5 + 3 = 15$$

### Steps

- Add 3 to 7 to get 10.
- Add 5 to 10 to get 15

### Work to do

Add

①.  $4 + 6 + 5 = \boxed{\phantom{00}}$

②.  $3 + 8 + 4 = \boxed{\phantom{00}}$

③.  $9 + 4 + 1 = \boxed{\phantom{00}}$

④.  $7 + 5 + 2 = \boxed{\phantom{00}}$

⑤.  $6 + 8 + 2 = \boxed{\phantom{00}}$

⑥.  $3 + 9 + 7 = \boxed{\phantom{00}}$

## Add

### Activity

What is  $64 + 23$ ?

$$64 + 23 = \boxed{\phantom{00}}$$

$$64 + 23 = 87$$

### 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

❶.  $35 + 23 = \boxed{\phantom{00}}$

❸.  $16 + 43 = \boxed{\phantom{00}}$

❷.  $65 + 31 = \boxed{\phantom{00}}$

❹.  $75 + 12 = \boxed{\phantom{00}}$

- ❺. A man had 76 sheep. He bought 22 more sheep. How many sheep does he have altogether?
- ❻. 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  $18 + 27$ ?

$18 + 27 = \square$

## Steps

- Add **8 ones** to **7 ones** to get **15 ones**.
- Regroup **15** by separating **ones** as **1 tens** and **5 ones**.
- Add **tens** as  $1 + 1 + 2 = 4$  **tens**.
- Write **5** as **ones** and **4** as **tens**.

$18 + 27 = 45$

## Work to do

Add

①.  $17 + 23 = \square$

③.  $18 + 34 = \square$

②.  $22 + 19 = \square$

④.  $16 + 18 = \square$

⑤. A tailor had 28 shirts. He made 22 more shirts. How many shirts 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

$$\begin{array}{r} \text{Add} \quad 31 \\ + \quad 19 \\ \hline \\ \hline \end{array}$$

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

Tens	Ones
1 3	1
+ 1	9
5	0

## Steps

- Add **1 ones** to **9 ones** to get **10 ones**.
- Regroup by separating **10 ones** as **1 tens** and **0 ones**.
- Write **0** in the **ones** place.
- Take the **1 tens** to the **tens** place.
- Add **tens** as **1 + 3 + 1 = 5 tens**.
- Write **5** in the **tens** place.

## Work to do

Add

1. $\begin{array}{r} 13 \\ + 19 \\ \hline \\ \hline \end{array}$	2. $\begin{array}{r} 24 \\ + 17 \\ \hline \\ \hline \end{array}$	3. $\begin{array}{r} 36 \\ + 14 \\ \hline \\ \hline \end{array}$	4. $\begin{array}{r} 28 \\ + 15 \\ \hline \\ \hline \end{array}$
--	--	--	--

- Mary has 25 bananas. She buys 19 more bananas. How many bananas does she have altogether?
- A farmer 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 every given 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, 25, 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

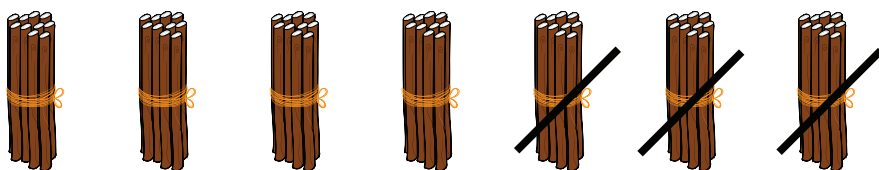
Week 5 Lesson 2

### 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.  $30 - 10 = \square$

3.  $70 - 40 = \square$

2.  $50 - 20 = \square$

4.  $90 - 50 = \square$

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

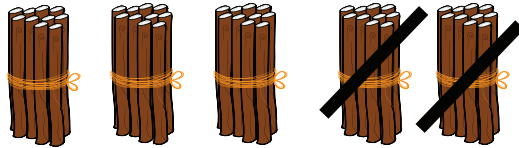
6. A shopkeeper had 80 packets of milk. She sold 30 packets. How many packets of milk was she left with?

## Subtract

## Activity

Work out

$$\begin{array}{r} 50 \\ - 20 \\ \hline \\ \\ 50 \\ - 20 \\ \hline 30 \end{array}$$



- First subtract the ones  $0 - 0 = 0$  ones
- Then the tens
- 5 tens take away 2 tens is 3 tens  
3 tens is 30

## Work to do

1.  $\begin{array}{r} 50 \\ - 30 \\ \hline \\ \hline \end{array}$

2.  $\begin{array}{r} 40 \\ - 10 \\ \hline \\ \hline \end{array}$

3.  $\begin{array}{r} 60 \\ - 20 \\ \hline \\ \hline \end{array}$

4.  $\begin{array}{r} 90 \\ - 40 \\ \hline \\ \hline \end{array}$

5. Salim had 50 fish. He sold 40 fish. How many fish was he left with?
6. Lucy made 30 chapati. She sold 20 chapati. How many chapati were left?

## Add and Subtract

### Activity

Use addition and subtraction

$$7 + 8 = 15$$

With addition, we write

$$7 + 8 = 15 \quad \text{and} \quad 8 + 7 = 15$$

With subtraction, we write

$$15 - 8 = 7 \quad \text{and} \quad 15 - 7 = 8$$

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

### Work to do

①.  $9 + 5 = 14$   
 $14 - \square = 9$

$$5 + 9 = \square$$

$$14 - 9 = \square$$

②.  $6 + 8 = \square$   
 $14 - 6 = \square$

$$8 + 6 = \square$$

$$14 - 8 = \square$$

③.  $8 + 5 = 13$   
 $13 - 5 = \square$

$$5 + 8 = \square$$

$$13 - 8 = \square$$

④.  $12 + 3 = \square$   
 $15 - 3 = \square$

$$3 + 12 = \square$$

$$15 - 12 = \square$$

## Subtract

### Activity

Write the missing number

$$13 - \square = 5$$

- 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.  $77 - \square = 71$

2.  $68 - \square = 63$

3.  $29 - \square = 25$

4.  $57 - \square = 54$

5.  $89 - \square = 81$

6.  $95 - \square = 93$

## Subtract

### Activity

Write the missing number

$- 4 = 6$

- To get the missing number add the two given numbers as

$4 + 6 = 10$

- The missing number is 10

$- 4 = 6$

### Work to do

Write the missing number

1.  - 6 = 21

2.  - 7 = 32

3.  - 3 = 44

4.  - 5 = 42

5.  - 2 = 95

6.  - 4 = 81

## Subtract

### Activity

Write the missing number

$$59 - \square = 34$$

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

$$59 - 34 = 25$$

$$59 - \boxed{25} = 34$$

- The missing number is **25**

### Work to do

Write the missing number

1.  $34 - \square = 23$

2.  $66 - \square = 32$

3.  $87 - \square = 45$

4.  $28 - \square = 16$

5.  $25 - \square = 14$

6.  $98 - \square = 64$

## Number Patterns

### Activity

Write the missing number in the pattern.

39, 37, 35 \_\_\_\_\_

There are 2 steps from 39 to 37.

Therefore subtract 2 from every given 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

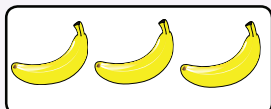
## MULTIPLICATION

Week 6 Lesson 4

## Multiply

## Activity

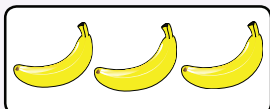
Multiply by 2



3

and

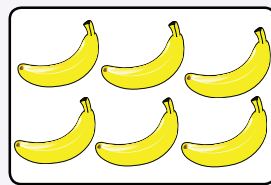
+



3

is

=



6

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

Write  $3 + 3 = 6$  as  $2 \times 3 = 6$

## Work to do

Multiply

1.  $2 \times 1 =$

2.  $2 \times 2 =$

3.  $2 \times 3 =$

4.  $2 \times 4 =$

5.  $2 \times 5 =$

6.  $2 \times 6 =$

7.  $2 \times 7 =$

8.  $2 \times 8 =$

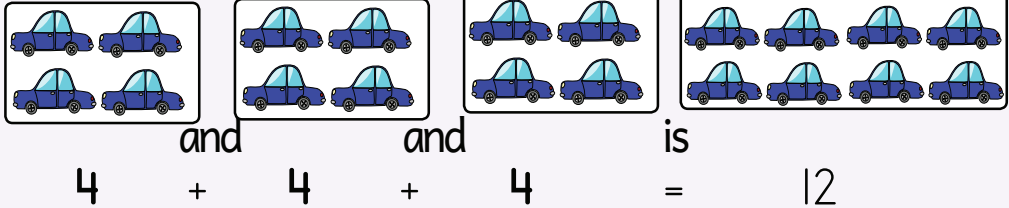
9.  $2 \times 9 =$



## Multiply

### Activity

Multiply by 3



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

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

### Work to do

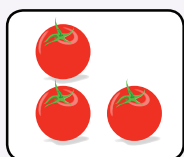
Multiply

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.  $3 \times 9 =$

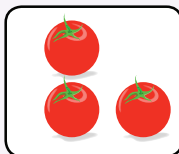
# Multiply

## Activity

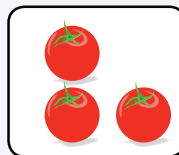
Multiply by 4



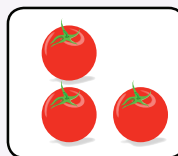
and



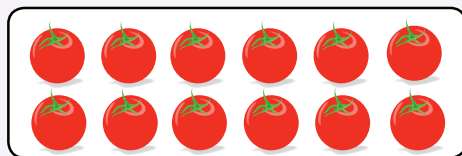
and



and



is



$$3 + 3 + 3 + 3 = 12$$

$$4 \times 3 = 12$$

## Work to do

Multiply

1.  $4 \times 1 =$

2.  $4 \times 2 =$

3.  $4 \times 3 =$

4.  $4 \times 4 =$

5.  $4 \times 6 =$

6.  $4 \times 7 =$

7.  $4 \times 8 =$

8.  $4 \times 9 =$

# NUMBERS

## DIVISION

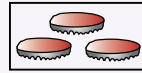
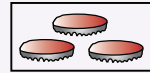
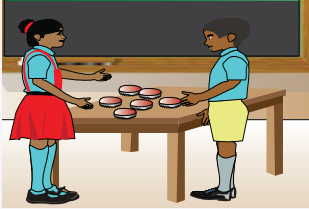
Week 7 Lesson 2

### Equal sharing

#### Activity

Share equally 6 bottle tops between 2 pupils.

Pick one at a time



Bottle tops

Each pupil gets 3 bottle tops

#### Work to do

How many each?

- 1 Share 8 oranges equally between 2 pupils.



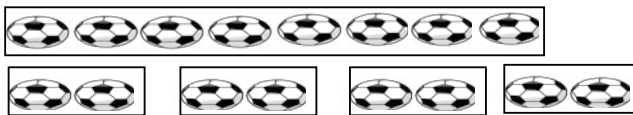
Each pupil gets  oranges

- 2 Share 6 seeds equally between 2 pupils.



Each pupil gets  seeds

- 3 Share 8 balls equally among 4 pupils



Each pupil gets  balls

- 4 Share 15 small stones equally among 5 pupils



Each pupil gets  stones

## Equal grouping

### Activity 1

How many groups?

Pick 3 items at a time



There are 4 groups

### Work to do

How many groups?

1 Pick 2 at a time




2 Pick 3 at a time




3 Pick 5 at a time




4 Pick 4 at a time



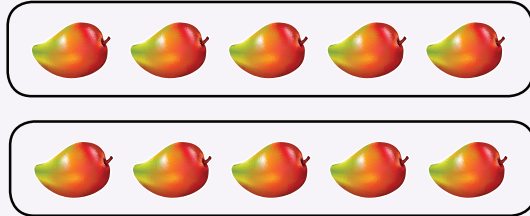
# Division '÷' sign



## Activity 1



Share equally



This is  $10 \div 2$

## Activity 2




Put into 3 equal groups

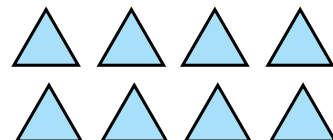


This is  $6 \div 3$

## Work to do

- ① Share equally among 3 pupils   
This is  $6 \div 3$

- ② Put into 2 equal groups  
This is  $8 \div 2$



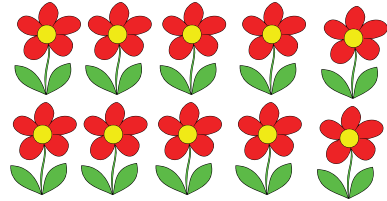
3 Share equally between 2 pupils

4 \_\_\_\_\_ 2



4 Put into 5 equal groups

10 \_\_\_\_\_ 5






5 Share equally among 3 pupils

\_\_\_\_\_ ÷ 3



# Division

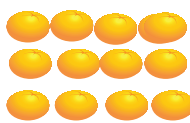

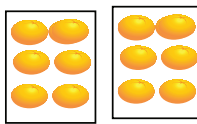
## Activity 1


 Share equally
 
 each gets
 

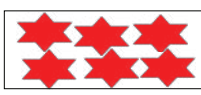

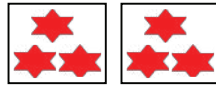
÷  =

## Work to do

### 1 Write


 Share equally
 
 each gets
 



÷  =


 Share equally
 
 each gets
 

÷  =


 Put into 2 equal groups, each group has?
 

÷  =


 Put into 5 equal groups,
 

Each group has \_\_\_\_\_

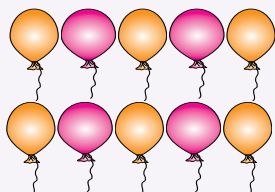
÷  =

## Divide

### Activity 1

Divide by 2

$$10 \div 2 = \square$$



share equally



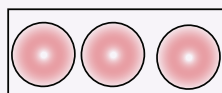
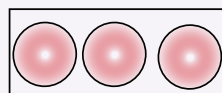
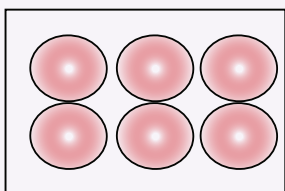
10 shared equally between 2 is 5

$$10 \div 2 = 5$$

### Activity 2

Divide by 3

$$6 \div 3 = \square$$



6 put into groups of 3 is 2

$$6 \div 3 = 2$$

## Work to do

Divide

1  $6 \div 2 = \square$

2  $9 \div 3 = \square$

3  $8 \div 2 = \square$

4  $10 \div 2 = \square$



## MEASUREMENT

## LENGTH

Week 8 Lesson 2

## Measuring length

## Activity

Measure the length of the chalkboard



The length of the chalkboard is \_\_\_\_\_ sticks

## Work to do

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

## Measuring length

### Activity

Measure the classroom wall using a 1-metre stick



The classroom wall is \_\_\_\_ 1-metre sticks.

The classroom wall is \_\_\_\_ metres.

### Work to do

Measure	Number of 1-metre 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

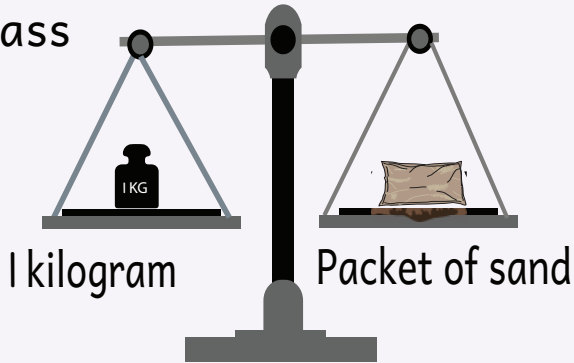
Week 8 Lesson 4

### Measuring mass

#### Activity

Measure mass

g



The mass of the sand is 1 kilogram.

We write kilogram as **kg**.

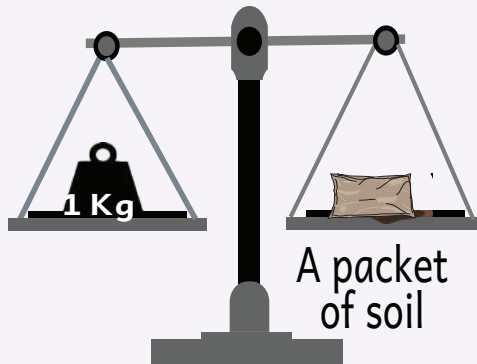
#### Work to do

Write things measured in kilograms.

## 1 kilogram mass

### Activity

Use a beam balance, make a 1 - kg mass of soil.



### Work to do

Using a beam balance, make 1 kg mass of:

- ❶ Seeds
- ❷ Stones
- ❸ Sand

# MEASUREMENT

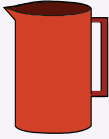
## CAPACITY

Week 9 Lesson 1

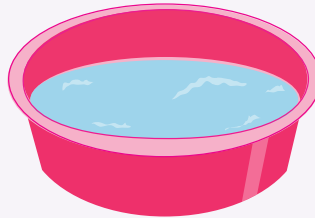
### Measuring capacity

#### Activity

How many jugs full of water will fill the basin?



Jug



Basin

\_\_\_\_\_ jugs full of water fill the basin.

### Work to do

How many jugs full of water will fill ?	Number of jugs
❶ A bucket	
❷ A jerrycan	
❸ A sufuria	

## Measuring capacity

### Activity 1

How many jugs full of water will fill the bucket?



Jug



Bucket

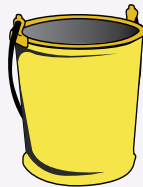
\_\_\_ jugs of water fill a bucket

### Activity 2

How many tins full of water will fill the bucket?



1 litre tin



Bucket

\_\_\_ tins full of water will fill the bucket

### Work to do

How many?

\_\_\_\_\_



1litre tin

fill the



Bucket

\_\_\_\_\_



Bowl

fill the



Bucket

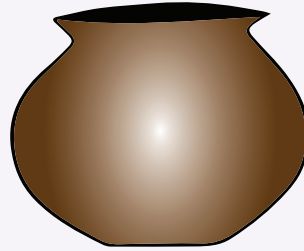
## Measuring capacity

### Activity

How many litres does the pot hold?



1 - litre tin

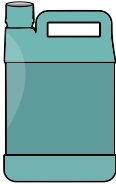
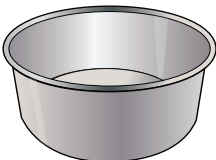



Pot

The pot is filled by \_\_\_\_\_ 1 litre tins.

The pot is \_\_\_\_\_ litres

### Work to do

How many will fill?	Number of 1-litre tins	Capacity in litres
		
		
		

## MEASUREMENT

## TIME

Week 9 Lesson 4

## Measuring time

## Activity

How much time?

Count and sign 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

Sign as you sing the first stanza of the National Anthem.

Count how many	Number
① Foot thumps	
② Nods	
③ Drum beats	





## Measuring time

### Activity

Count and sign 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

Sign and sing a familiar song and count the number of nods.

## A clock face

### Activity

What is in the picture?



This is a clock face. It has two hands.  
The long hand is called **minute hand**.  
The short hand is called **hour hand**.  
The clock face has numbers **1** to **12**.

### Work to do

Draw a Clock face.

Show the **hour hand** and **minute hand**

Show the **numbers 1** to **12**

## Reading, signing and telling time

### Activity 1

Read and sign the time



The time is 6 o'clock

### Activity 2

Read and sign the time



The time is 3 o'clock

### Work to do

Read and sign the time

Clock	Time
<p>1</p>	
<p>2</p>	
<p>3</p>	

# MEASUREMENT

## MONEY

Week 10 Lesson 3

### Buying and selling

#### Activity

Buy and sell



#### Work to do

How much?

Item	Price
① Milk	
② Exercise book	
③ Bread	
④ Pencil	

## Change

**Activity 1**  
How many?



5 shilling coin



**5** one shilling coins



10 shilling coin = **2**  
five shilling coins

**Activity 2**

How many?



10 shilling coin = **10** one shilling coins



## Work to do

How many?

**1**



\_\_\_\_\_ five shilling coins

**2**



\_\_\_\_\_ twenty shilling coins

**3**



\_\_\_\_\_ ten shilling coins

**4**



\_\_\_\_\_ five shilling 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
❶ Radio	
❷ Ball	
❸ Food	
❹ Car	
❺ House	
❻ Dress	

## Spending and saving

### Activity

How much saving?

Susan



Sh. 55

Job



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 home. Amina paid Sh. 30 to school. Juma paid Sh. 20 to the same school. How much money did Juma save?

# GEOMETRY

## LINES

Week 11 Lesson 2

### Making straight lines

#### Activity

Make straight lines



#### Work to do

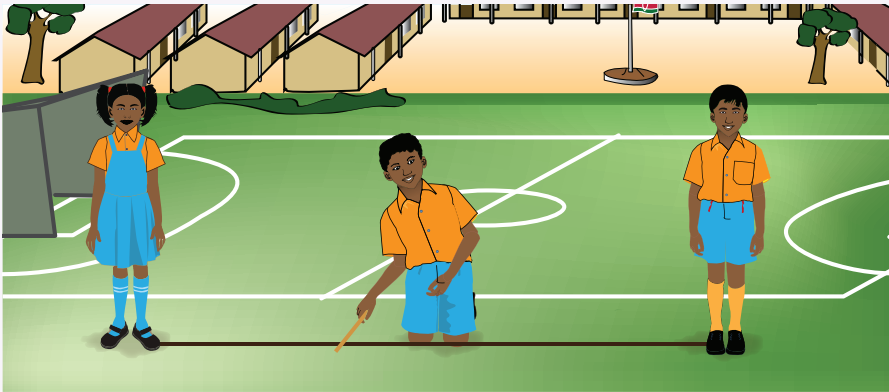
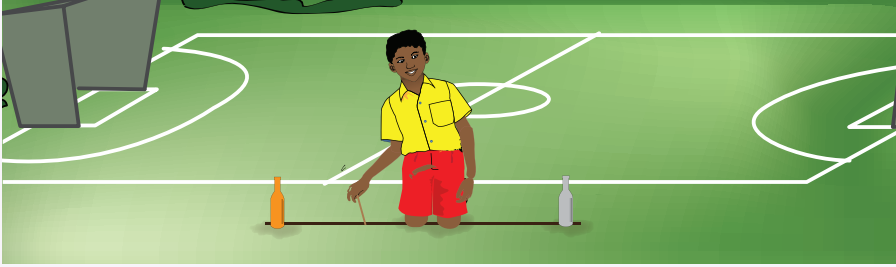
Use plasticine or clay to make straight lines



## Drawing straight lines

### Activity

Draw straight lines



These are straight lines

### Work to do

Draw straight lines

# GEOMETRY

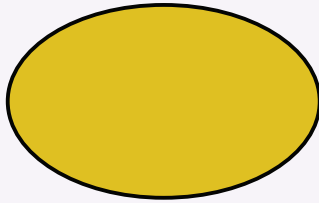
## SHAPES

Week 11 Lesson 4

### Ovals

#### Activity

Sign and name the shape.



This is an **Oval**.

#### Work to do

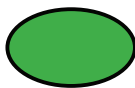
Which is oval?



A



B



C



D



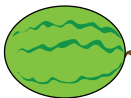
E



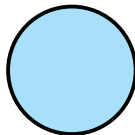
F



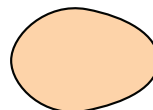
G



H



I



J



K

Oval shapes are \_\_\_\_\_

\_\_\_\_\_

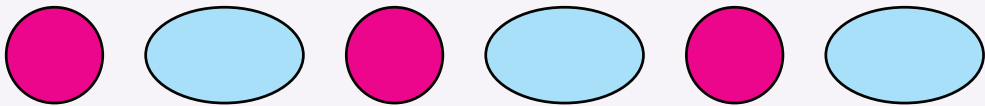
## Making patterns

### Activity

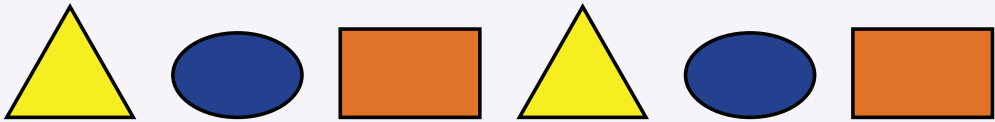
Make patterns



The pattern is Rectangle/Circle/Rectangle/Circle..



The pattern is Circle/Oval/Circle/Oval .....



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

### Work to do

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

# I can do 2

1. Read and sign the numbers

13

6

31

29

58


17

67

46

25

2. How many?


Number	Objects
_____	

3 Count and sign forward by 5 from 41 to 99

4 Count and sign backwards by 5 from 100 to 5

5 100 is \_\_\_\_\_ hundreds \_\_\_\_\_ tens and \_\_\_\_\_ ones

6 Fill in

Number	Objects
11	_____
_____	

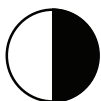
7 Fill in the missing number

64, 69, 74, 79, \_\_\_\_\_

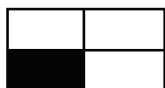
8 Fill in the missing number

83, 81, 79, 77, \_\_\_\_\_

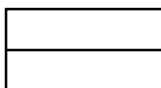
9 Which is a quarter?



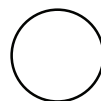
A



B



C



D

10.  $17 + 14 = \square$  11.  $16 + 19 = \square$  12.  $28$   
 $\quad \quad \quad + 29$   
 $\quad \quad \quad \underline{\quad}$   
 $\quad \quad \quad \underline{\quad}$

14. Daniel planted 19 flowers last week. He planted 24 flowers this week. How many flowers has he planted altogether?

15 Write the missing numbers  
 13, 17, 21, 25, \_\_\_\_\_, \_\_\_\_\_

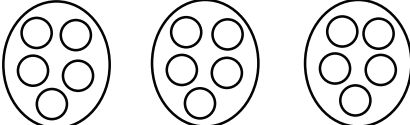
16.  $70 - 50 = \square$


17. Complete the number family

$4 + 8 = \square$        $8 + 4 = \square$   
 $12 - 4 = \square$        $12 + 8 = \square$

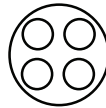
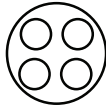
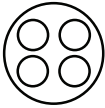
18.  $\square - 5 = 8$       19.  $19 - \square = 12$

20. Fill in the missing numbers in the pattern  
 70, 68, 66, \_\_\_\_\_, \_\_\_\_\_

21   $= 3 \times 5 = \underline{\quad}$

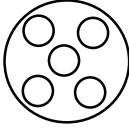
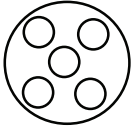
22   $= 3 \times 3 = \underline{\quad}$

23



$$= 3 \times 4 = \text{-----}$$

24



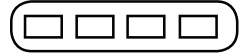
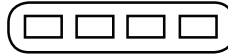
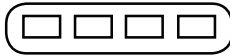
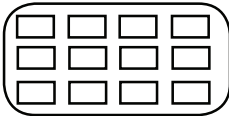
$$= 2 \times 5 = \text{-----}$$

25



$$= 4 \times 2 = \text{-----}$$

26 Share 12 books among 3 pupils



Each pupil gets \_\_\_\_\_ books

$$\square \div 2 = 4$$

$$18 \div 3 = \square$$

$$12 \div \square = 3$$

$$24 \div \square = 8$$

$$21 \div 3 = \square$$

$$\square \div 5 = 3$$

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

A 

B 

C 

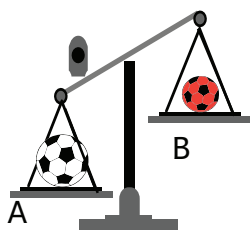
D 

A is \_\_\_\_\_ B

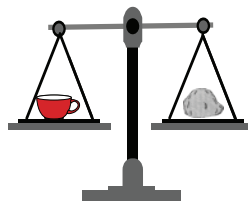
D is \_\_\_\_\_ A

B is \_\_\_\_\_ C

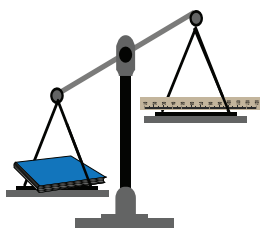
28 Write **heavier than**, **lighter than** or **same as**



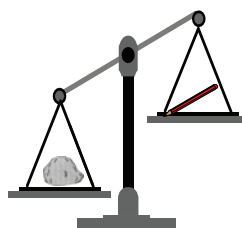
Ball A is \_\_\_\_\_ ball B



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

Item	Need or want
Water	
Food	
Phone	
Bicycle	

### 31 How many?



\_\_\_\_\_ one shilling coins



\_\_\_\_\_ five shilling coins



\_\_\_\_\_ 50 shilling notes.

### 32 Draw a straight line

### 33 Complete the pattern







# TERM 3

## NUMBERS

## NUMBER CONCEPT

Week 1 Lesson 1

## Reading and signing 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


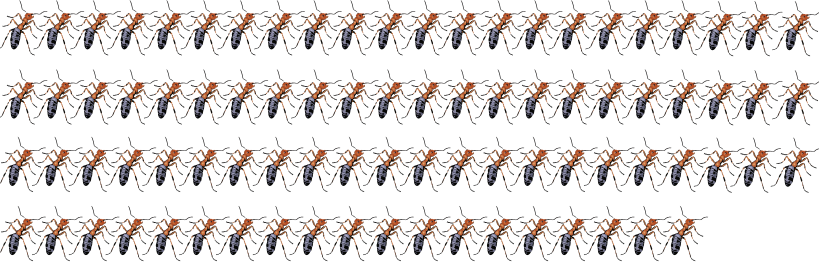
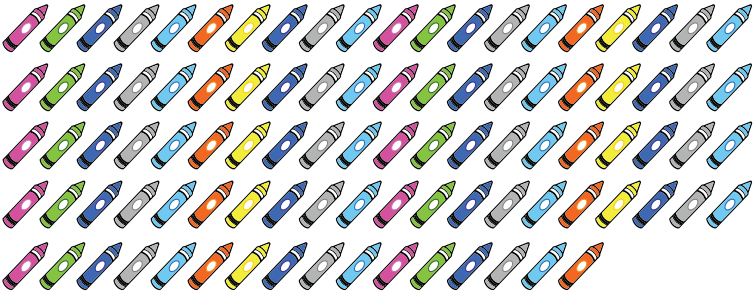
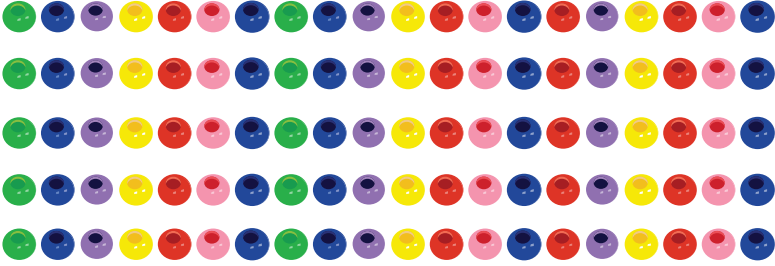
Read and sign the numbers

9	82	94	87	31	76	100	93
85	91	47	58	29	66	15	6

# Numbers using objects

## Activity

How many?

Number	Objects
77	
85	
96	
100	



Work to do

How many?

Number	Objects
68	

## NUMBERS

## WHOLE NUMBERS

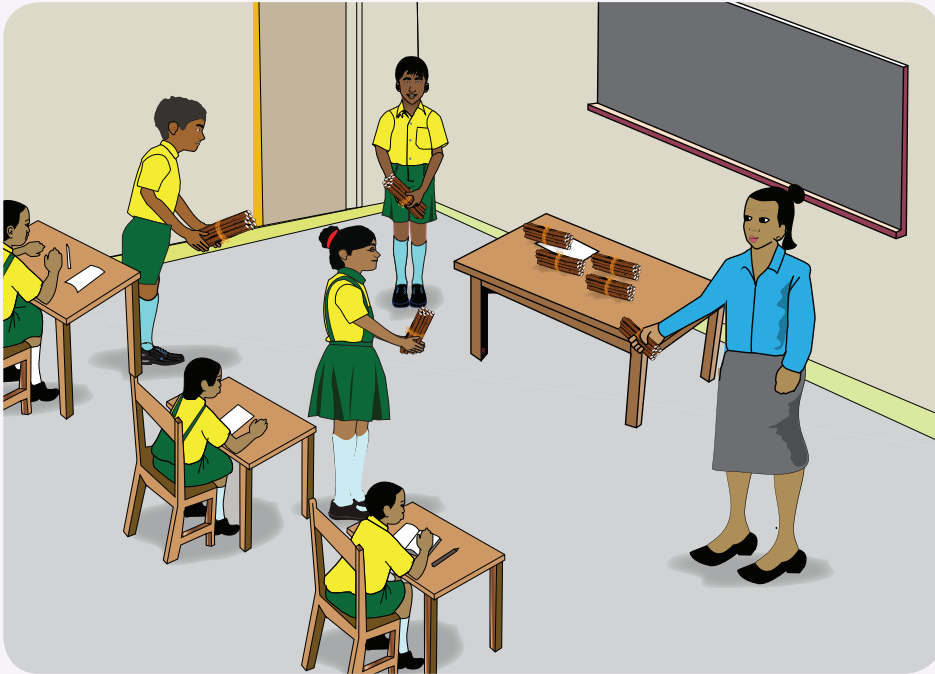
Week 1 Lesson 3

## Counting and signing

**Activity**

Count and sign forward by 10 from 10 to 100

Count and sign backwards by 10 from 100 to 10

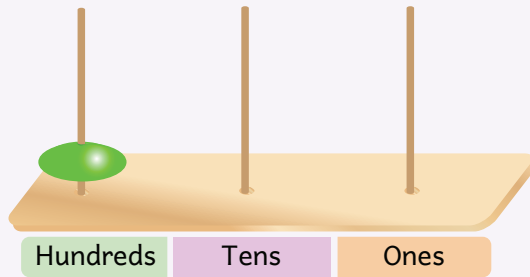
**Work to do**

- ❶. Count and sign forward by 10 from 11 to 99.
- ❷. Count and sign backwards by 10 from 99 to 11.

## Hundreds, Tens and Ones

### Activity

100 can be shown using abacus



1 hundreds

0 tens

0 ones

### Work to do

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

❶. 58 is 0 hundreds 5 tens 8 ones

❷. 81 is \_\_\_\_ hundreds \_\_\_\_ tens \_\_\_\_ ones

❸. 97 is \_\_\_\_ hundreds \_\_\_\_ tens \_\_\_\_ ones

❹. 100 is \_\_\_\_ hundreds \_\_\_\_ tens \_\_\_\_ ones

## Reading, signing and writing numbers

### Activity

Read, sign 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, sign and write the numbers in symbols

90	67	31	54	88	47	100	51
91	42	85	24	19	76	50	43

## Reading, signing, fingerspelling and writing numbers

### Activity

Read, sign, fingerspell 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, 85, 87

### Activity 2

Write the missing number

92, 90, 88, 86, \_\_\_\_\_, 82

Are the numbers increasing or decreasing?

By how many?

Count backwards by 2 to get the next number

92, 90, 88, 86, 84, 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 backwards 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

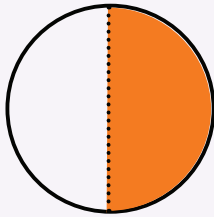
## FRACTIONS

## A half and a quarter

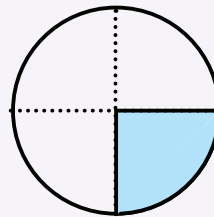
**Activity**

Which is bigger?

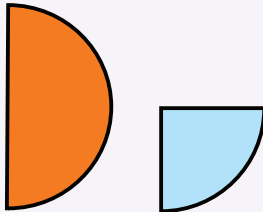
Which is smaller?



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.

- ❶. Which is bigger?
- ❷. Which is smaller?

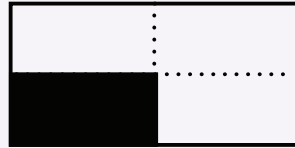
## A half and a quarter

### 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

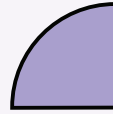
Match by colour to make a half.



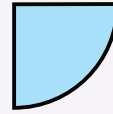
A



B



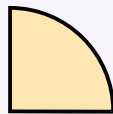
C



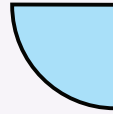
D



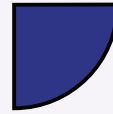
E



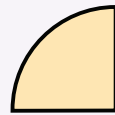
F



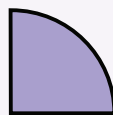
G



H



I



J



K



L

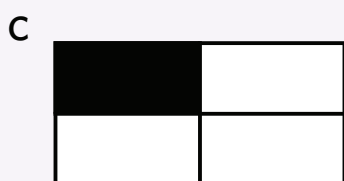
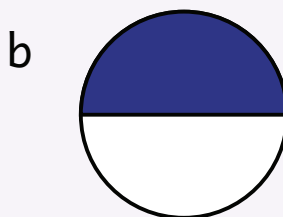
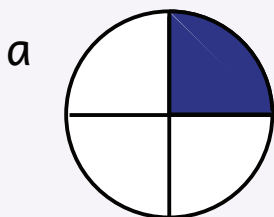
### Work to do

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

$\frac{1}{2}$  and  $\frac{1}{4}$

### Activity

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



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

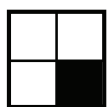
b is  $\frac{1}{2}$

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

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

### Work to do

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



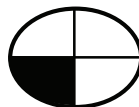
\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_

## NUMBERS

## ADDITION

Week 3 Lesson 3

## Add

## Activity

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

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.  $\begin{array}{r} 47 \\ + 32 \\ \hline \end{array}$       2.  $\begin{array}{r} 53 \\ + 25 \\ \hline \end{array}$       3.  $\begin{array}{r} 62 \\ + 16 \\ \hline \end{array}$       4.  $\begin{array}{r} 71 \\ + 23 \\ \hline \end{array}$

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  $38 + 25$  ?

$$38 + 25 = \square$$

### Steps

- Add **8 ones** to **5 ones** to get **13 ones**.
- Regroup by separating **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**.

$$38 + 25 = \boxed{63}$$

### Work to do

Add

❶.  $26 + 39 = \square$

❷.  $53 + 37 = \square$

❸.  $45 + 18 = \square$

❹.  $76 + 19 = \square$

- ❺. Chalo planted 71 flowers on Monday. On Tuesday he planted 28 more flowers. How many flowers did he plant altogether?
- ❻. Grade two class has 56 girls and 37 boys. How many pupils are there altogether?



## Add

### Activity

$$\begin{array}{r} \text{Add} \quad 69 \\ + 24 \\ \hline \\ \hline \end{array}$$

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

Tens	Ones
① 6	9
+ 2	4
9	3

### Steps

- Add 9 ones to 4 ones to get 13 ones.
- Regroup by separating 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. $\begin{array}{r} 73 \\ + 19 \\ \hline \\ \hline \end{array}$	②. $\begin{array}{r} 37 \\ + 56 \\ \hline \\ \hline \end{array}$	③. $\begin{array}{r} 45 \\ + 38 \\ \hline \\ \hline \end{array}$	④. $\begin{array}{r} 63 \\ + 27 \\ \hline \\ \hline \end{array}$
--	--	--	--

- ⑤. My mother had 53 bags of maize. She bought 37 more bags of maize. How many bags of maize does she have altogether?
- ⑥. Our school has 37 tables. It was given 24 more tables. How many tables are in the school altogether?

## 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 every given 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. Sam read 6 pages of a story book on Sunday. He read 9 pages on Monday. He read 12 pages on Tuesday. Using the pattern, how many pages will he read on Wednesday?

## NUMBERS

## SUBTRACTION

Week 4 Lesson 2

## Subtract

## Activity

What is  $37 - 14$ ?

$37 - 14 = \square$

$37 - 14 = \boxed{23}$

## 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**.
- Write 2 as **tens**.

## Work to do

Subtract

1.  $27 - 16 = \square$

2.  $39 - 14 = \square$

3.  $45 - 13 = \square$

4.  $35 - 23 = \square$

5.  $94 - 50 = \square$

6.  $56 - 32 = \square$

# Subtract

## Activity

$$\begin{array}{r} \text{Subtract } 57 \\ - 26 \\ \hline \\ \hline \end{array}$$

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

$$\begin{array}{r} \text{1. } 49 \\ - 27 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \text{2. } 39 \\ - 21 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \text{3. } 77 \\ - 23 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \text{4. } 69 \\ - 61 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \text{5. } 86 \\ - 43 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \text{6. } 98 \\ - 36 \\ \hline \\ \hline \end{array}$$

## Add and Subtract

### Activity

Use addition and subtraction

$$25 + 34 = 59 \text{ and } 34 + 25 = 59$$

With subtraction, we write

$$59 - 25 = 34 \text{ and } 59 - 34 = 25$$

The numbers 25, 34 and 59 make a number family

### Work to do

Write the Missing numbers

$$\begin{array}{l} \text{1. } 32 + 13 = 45 \\ 45 - \square = 13 \end{array}$$

$$\begin{array}{l} 13 + 32 = \square \\ 45 - 13 = \square \end{array}$$

$$\begin{array}{l} \text{2. } 21 + 18 = \square \\ \square - 21 = 18 \end{array}$$

$$\begin{array}{l} 18 + 21 = \square \\ 39 - 18 = \square \end{array}$$

$$\begin{array}{l} \text{3. } 46 + 33 = \square \\ 79 - \square = 46 \end{array}$$

$$\begin{array}{l} 33 + 46 = \square \\ 79 - \square = 33 \end{array}$$

$$\begin{array}{l} \text{4. } 57 + 42 = 99 \\ \square - 57 = 42 \end{array}$$

$$\begin{array}{l} 42 + 57 = \square \\ 99 - \square = 57 \end{array}$$

## Subtract

### Activity

Write the missing number

$$\boxed{\phantom{00}} - 35 = 42$$

### Steps

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

$$\boxed{77} - 35 = 42$$

- The missing number is 77

## Work to do

Write the Missing numbers

1.  $\boxed{\phantom{00}} - 16 = 52$

2.  $\boxed{\phantom{00}} - 22 = 33$

3.  $\boxed{\phantom{00}} - 15 = 61$

4.  $\boxed{\phantom{00}} - 23 = 63$

5.  $\boxed{\phantom{00}} - 14 = 74$

6.  $\boxed{\phantom{00}} - 11 = 12$

## Number Patterns

### Activity

Write the missing number.

79, 76, 73, \_\_\_\_

There are 3 steps from 79 to 76.

Subtract 3 from every given 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

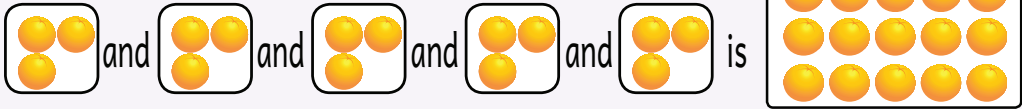
## MULTIPLICATION

## Week 5 Lesson 2

## 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  $5 \times 3 = 15$ 

## Work to do

Multiply

1.  $5 \times 1 =$

2.  $5 \times 2 =$

3.  $5 \times 3 =$

4.  $5 \times 4 =$

5.  $5 \times 5 =$

6.  $5 \times 6 =$

7.  $5 \times 7 =$

8.  $5 \times 8 =$

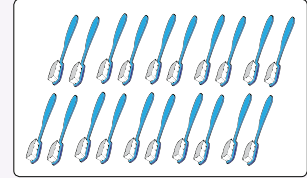
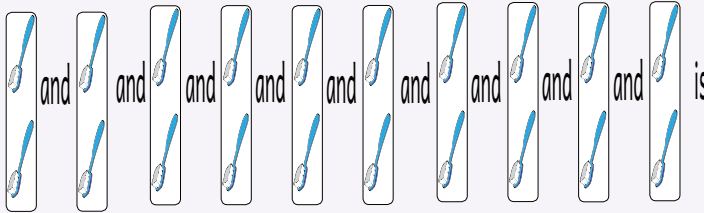
9.  $5 \times 9 =$



## 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.  $10 \times 1 = \square$

2.  $10 \times 2 = \square$

3.  $10 \times 3 = \square$

4.  $10 \times 4 = \square$

5.  $10 \times 5 = \square$

6.  $10 \times 6 = \square$

7.  $10 \times 7 = \square$

8.  $10 \times 8 = \square$

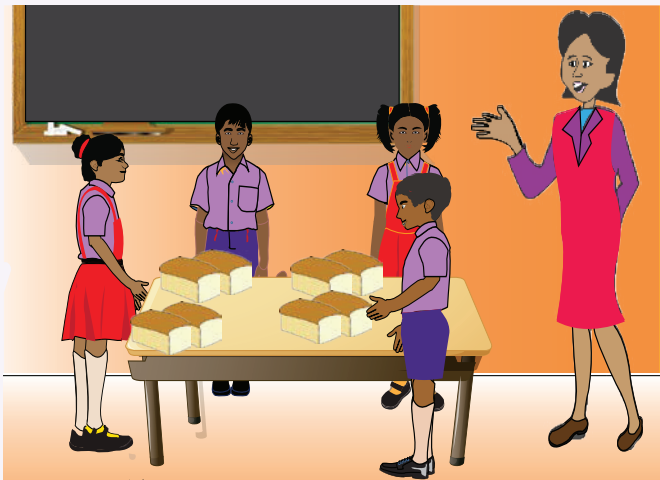
9.  $10 \times 9 = \square$

## Divide

## Activity 1

Divide

$$8 \div 4 = \square$$



$$8 \div 4 = 2$$

## Work to do

Divide

$$1 \quad 4 \div 2 = \square$$

$$2 \quad 9 \div 3 = \square$$

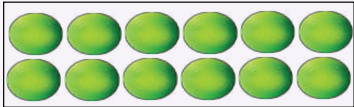
$$3 \quad 8 \div 2 = \square$$

$$4 \quad 10 \div 5 = \square$$

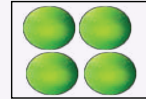
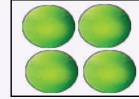
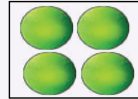
## Divide

### Activity 1

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



Share  
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?

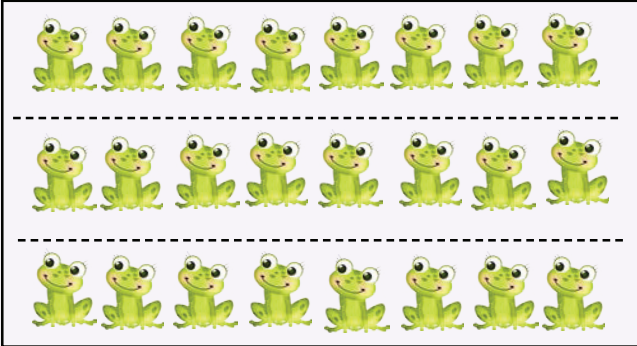
④ A pupil put 12 exercise books in equal groups of 4. How many groups are there?

## Divide

### Activity 1

Divide

$$24 \div 3 = \square$$



$$24 \div 3 = 8$$

### Work to do

❶  $21 \div 3 = \square$

❷  $24 \div 2 = \square$

❸  $15 \div 5 = \square$

❹  $20 \div 4 = \square$

❺ The teacher shared 15 exercise books equally among 3 pupils. How many did each pupil get ?

❻ A boy has 25 marbles. He wants to share equally among 5 friends. How many does each get?

## MEASUREMENT

## LENGTH

Week 6 Lesson 2

## Measuring length

**Activity**

Make a 1-metre stick using a metre rule



Measure the length of the chalkboard using a 1 - metre stick.

The length of the chalkboard is \_\_\_\_ 1 - metre sticks.

The length of the chalkboard is \_\_\_\_ metres

**Work to do**

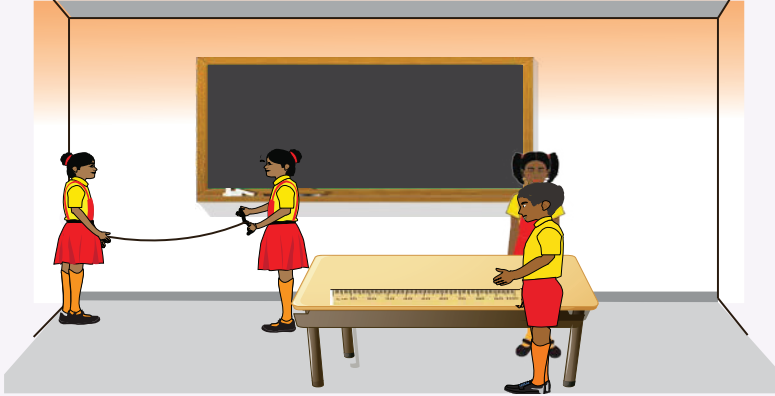
Use your 1-metre stick to measure,

Use a 1-metre stick to measure;	Number of 1-metre sticks	Metres
① Length of classroom window		
② Length of the longer side of the classroom		

## Measuring length

### Activity

Make a 1-metre string using a metre rule



Measure the length of the longer side of the classroom.

The length of the longer side of the classroom is \_\_\_\_ 1 - metre strings.

The length of the longer side of the classroom is \_\_\_\_ metres.

### Work to do

Use a 1-metre string to measure;	Number of 1-metre strings	Metres
① Length of the teacher's table		
② Length of the shorter side of the classroom		

## MEASUREMENT

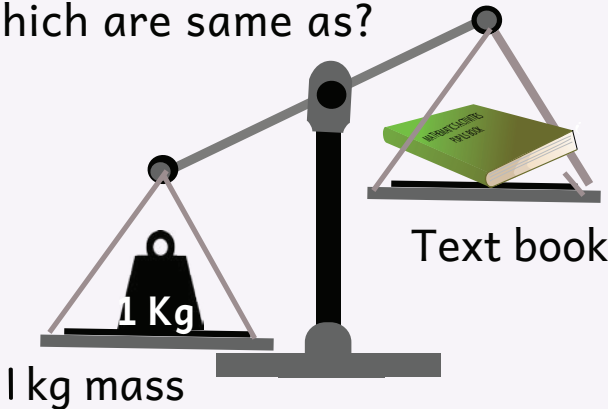
## MASS

Week 6 Lesson 4

## 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

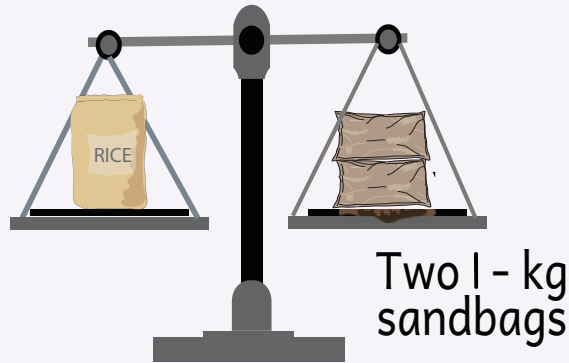
Write **heavier than**, **lighter than** or **same as**;

- 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 1 kg sand bag to measure



The mass of rice is equal to two 1 kg mass of sandbags.

The mass of rice is 2 kgs.

### Work to do

Use 1 kg sandbag to measure	Mass in kg
❶ Potatoes	
❷ A box of chalk	
❸ Bean seeds	



# MEASUREMENT

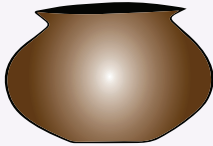
## CAPACITY

Week 7 Lesson 1

### Measuring capacity

#### Activity

How many litres can the pot hold?



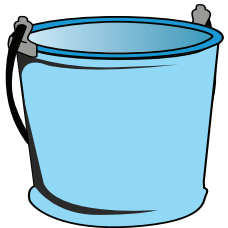
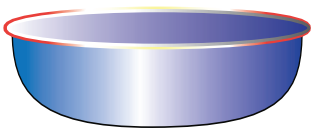
Pot



1 - litre tin

\_\_\_ 1-litre tins of water fill the pot.  
The pot holds \_\_\_\_ litres.

### Work to do

Use 1 - litre tin to fill	Number of 1 - litre tins	Number of litres
		
		

## Measuring capacity

### Activity

How many litres can the jerrycan hold?



Jerrycan






1 - Litre tin

\_\_\_ 1-litre tins fill a jerrycan.

The jerrycan is \_\_\_ litres.

### Work to do

Use 1 - litre tin to fill	Number of 1 -litre tins	Number of litres
		
		
		

## MEASUREMENT

## TIME

Week 7 Lesson 3

## Reading, signing and telling time

**Activity**

What is the time?



The time is 11 o'clock



The time is 6 o'clock

**Work to do**

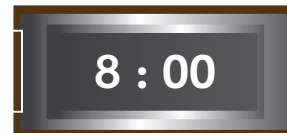
What is the time?

1



\_\_\_ o'clock

2



\_\_\_ o'clock

3



\_\_\_ o'clock

4



\_\_\_ o'clock

5



\_\_\_ o'clock

6



\_\_\_ o'clock

## Reading, signing and telling time

### Activity

What is the time?



The time is 12 o'clock

### Work to do

Write the time

Clock	Time
<p>1</p>	
<p>2</p>	
<p>3</p>	

# MEASUREMENT

## MONEY

Week 7 Lesson 5

### 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

1. Tailor
2. Pencil
3. Rubber
4. Cook
5. Transport
6. Bread

## Change

### Activity 1

How many?

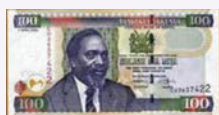


is



50 shilling note is two 20 shilling coins and one 10 shilling coin.

### Activity 2



is



100 shilling note is one 50 shilling note, two 20 shilling coins and one 10 shilling coin.

## Work to do

How many?

1



is \_\_\_\_ 50 shilling notes.

2



is \_\_\_\_ 50 shilling note, \_\_\_\_ 10 shilling coins.

3



is \_\_\_\_ 10 shilling coins, two 5 shilling coins.

4



is \_\_\_\_ 20 shilling coins.

## GEOMETRY

## LINES

Week 8 Lesson 2

## Curved lines

**Activity**

Make curved lines

**Work to do**

Use plasticine or clay to make curved lines

## Drawing curved lines

### Activity

Draw curved lines



### Work to do

1. Write letters of the alphabet with curved formation
2. Write numbers with curved formation



## GEOMETRY

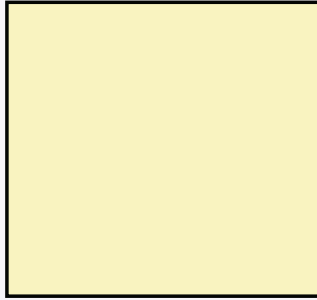
## SHAPES

Week 8 Lesson 4

## Squares

## Activity

Sign and name the shape

This is a **square** .

## Work to do

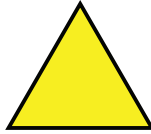
Which are squares?



A



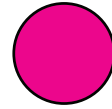
B



C



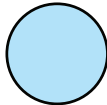
D



E



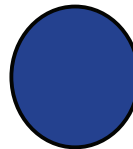
F



G



H



I



J



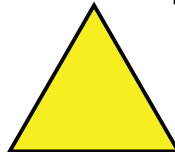
K



L



M



N



O

Squares are \_\_\_\_\_

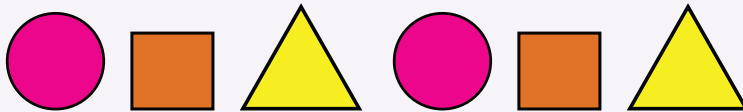
## Making patterns

### 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

# I can do 3

1. Read and sign the numbers

90

84

99

11

50

32


40

63

79

53

2. How many?

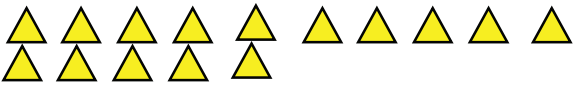
Number	Objects
_____	

3 Count and sign forward by 10 from 11 to 99

4 Count and sign backwards by 10 from 100 to 10

5 84 is \_\_\_\_\_ hundreds \_\_\_\_\_ tens \_\_\_\_\_ ones

6 Fill in

Number	Objects
_____	
18	_____

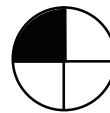
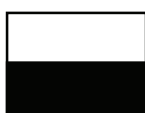
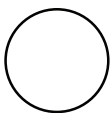
7 Fill in the missing number

34, 44, 54, 64, \_\_\_\_\_

8 Fill in the missing number

97, 95, 93, 91, \_\_\_\_\_

9 Write  $\frac{1}{2}$  or  $\frac{1}{4}$  ?



10.  $38 + 27 = \square$

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

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

13. Wafula has 35 goats, his friend has 25 goats. How many goats do they have altogether?

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

15.  $52 - 31 = \square$

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

17. Complete the number family

$9 + 6 = \square$

$6 + 9 = \square$

$15 - 9 = \square$

$15 - 6 = \square$

18. Fill in the missing number  $\square - 15 = 27$

19. Write the missing numbers

8, 12, 16, 20, \_\_\_\_\_, \_\_\_\_\_.

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

21.  $2 \times 3 = \square$

22.  $1 \times 4 = \square$

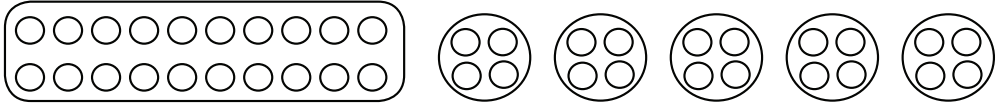
23.  $4 \times 3 = \square$

24.  $3 \times 5 = \square$

25.  $2 \times 4 = \square$

26.  $5 \times 2 = \square$

27 Share 20 books among 5 pupils



28 Divide

$$9 \div \square = 3$$

$$14 \div 7 = \square$$

$$10 \div \square = 2$$

$$18 \div 3 = \square$$

$$12 \div 4 = \square$$

$$12 \div 2 = \square$$

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

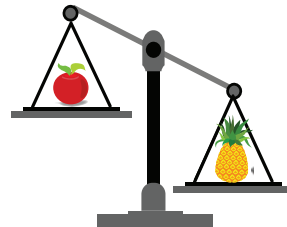
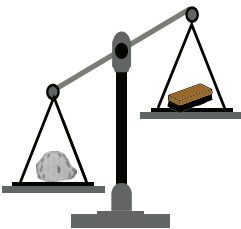


A is \_\_\_\_\_ D

B is \_\_\_\_\_ C

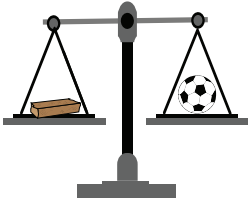
D is \_\_\_\_\_ B

30 Write **heavier than** or **lighter than**.

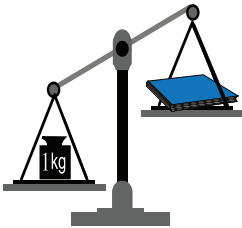


The stone is \_\_\_\_\_ the duster    The apple is \_\_\_\_\_ the pineapple

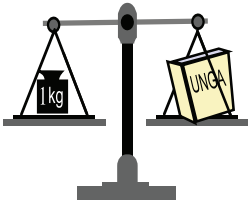
31 Which is **heavier than**, **lighter than** or **same as**



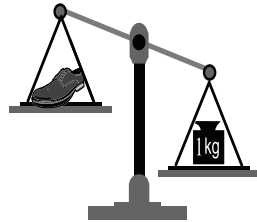
The block of wood is \_\_\_\_\_ as the ball



The 1 kg mass is \_\_\_\_\_ the book.



The 1 kg mass is \_\_\_\_\_  
the unga.



The shoe is \_\_\_\_\_  
the 1 kg mass.

32 Which holds more?



Glass



Spoon

33 Which holds less?



Basin



Tin

34 Which holds **more than**, **less than** or **same as**?



fills



fills



Bucket A holds \_\_\_\_\_ as bucket B

35 Write the time



36 Write the time 2 o'clock in the 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			

October 5 \_\_\_\_\_

October 11 \_\_\_\_\_

October 14 \_\_\_\_\_

October 20 \_\_\_\_\_

October 31 \_\_\_\_\_

38 Write good or service

Item	Good or service
Tailor	
Bread	
Transport	
Rubber	

39 How many?



\_\_\_\_\_ ten shilling coins



\_\_\_\_\_ five shilling coins



\_\_\_\_\_ 20 shilling notes, \_\_\_\_\_ 10 shillings

40 Draw a curved line

41 Complete the pattern





## **MATHEMATICS ACTIVITIES**

### **PUPIL'S BOOK 2**

This book is for use by learners with Hearing Impairment 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), Kenya Primary Education Development Project (PRIEDE), Centre for Mathematics Science and Technology Education in Africa (CEMASTE) and Teachers Service Commission (TSC) .



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