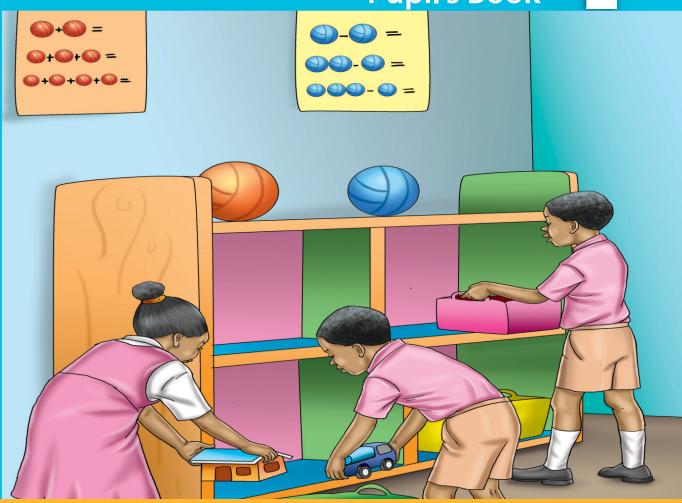


Primary Mathematics

Pupil's Book



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South Sudan



Mathematics

Pupil's Book 1



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UNIT 1 NUMBERS

Content Map

Knowledge and understanding	 Count, read and write numbers from 0-99. Recognize even and odd numbers. Recognize ordinal numbers 1st, 2nd up to 10th.
Skills	 Sort, match and arrange groups of objects. Add whole numbers up to two digits. Subtract whole numbers up to two digits
Attitudes	 Appreciate the activities in mathematics and use of mathematics in daily life situation. Be confident to investigate maths and to take responsibility for their own learning.
Competencies	 Critical thinking: is enhanced through mathematical activities e.g matching, compairing and ordering numbers. Communication: through discussion, drawing and ordering objects and numbers; learners learn to cooperate.
Activities	 Engage in a wide range of practical activities throughout the year to sort and match objects. Count using counters, read and write numbers in symbols and words from 0-99 Count and recognize shapes in the local environment. Investigate even and odd numbers . Perform addition and subtraction of whole numbers up to two digits numbers.
Class organization	Whole class orientation.Groupwork.

1.1 SORTING, GROUPING AND MATCHING



Sorting, Grouping and Matching

Activity 1a: In groups



Collect from around the school compound.



Activity 1b: In pairs





Imagine you are in the market above.
Tell your partner three items you would buy.
What colours would they be?



<mark>/ity 2:</mark> In pairs. 🔼



Discuss the colours of the above objects.

Are there other objects you know that have same colours? In turns, say the colour and your partner says the object.

Activity 3: In groups.













In pairs: Tell your partner your favourite colour.

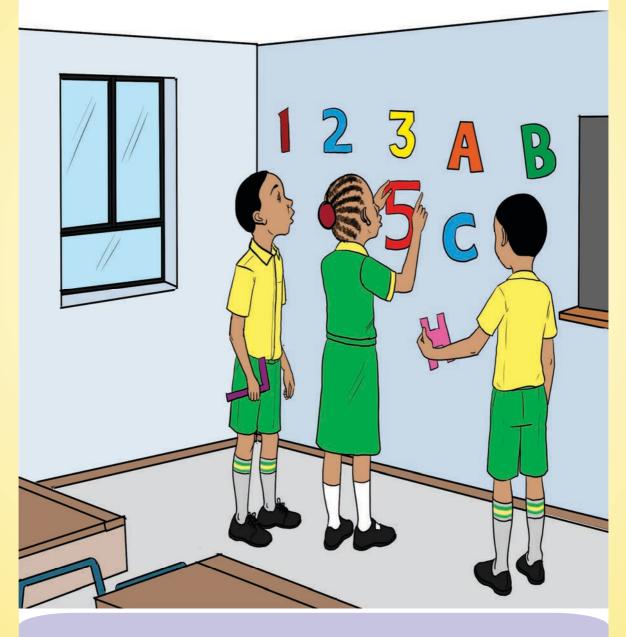
Why do you like this colour more than any other?



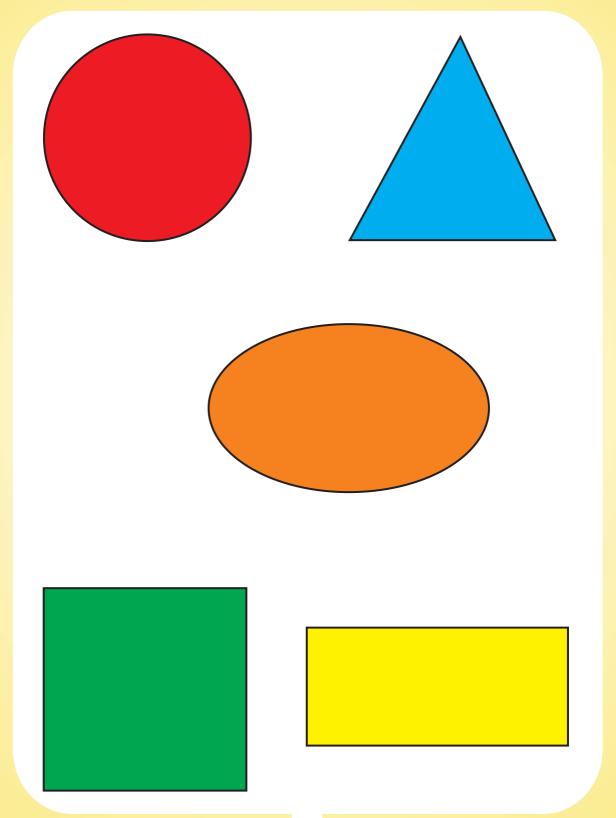
On a piece of paper, draw and colour the objects above as best as you can.

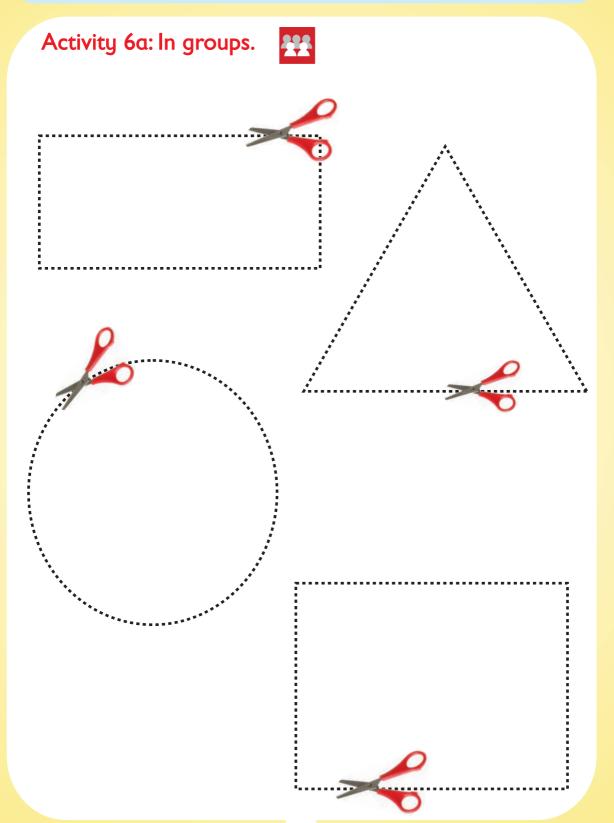
Activity 5: In groups.

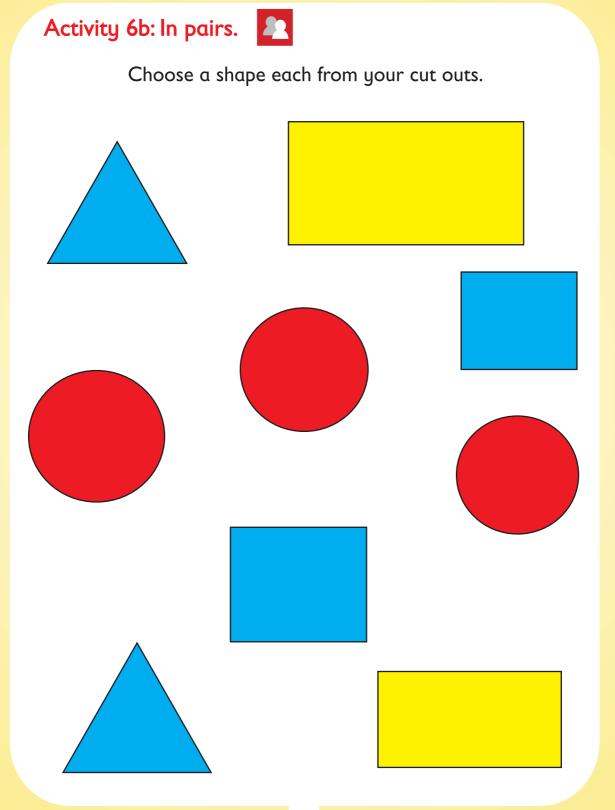




Say the colours

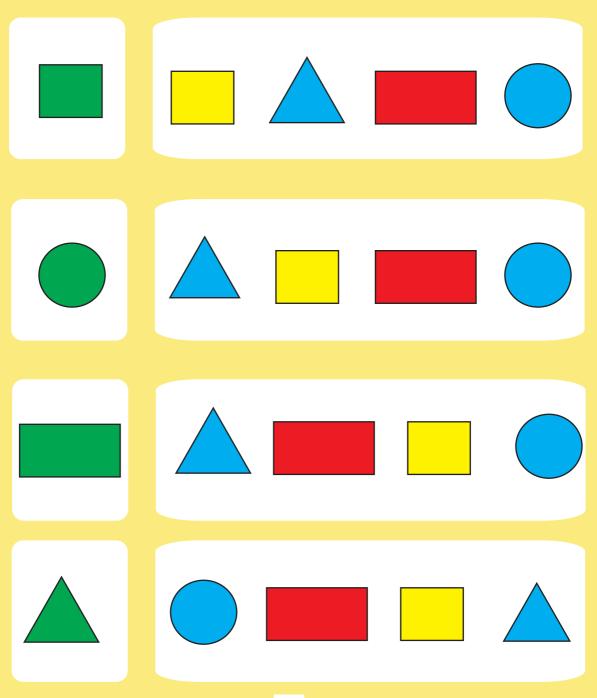


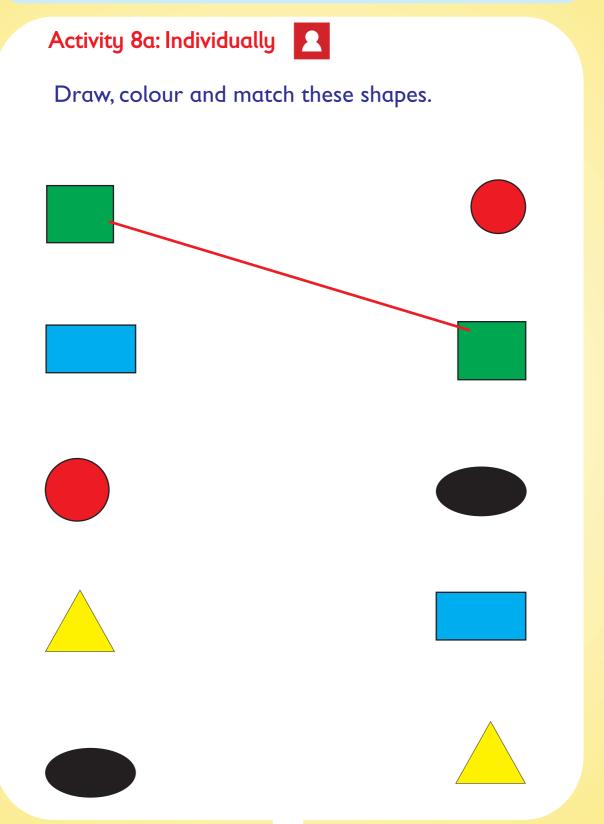




Activity 7: In groups.

Which ones look the same as the green ones?





Activity 8b: In groups

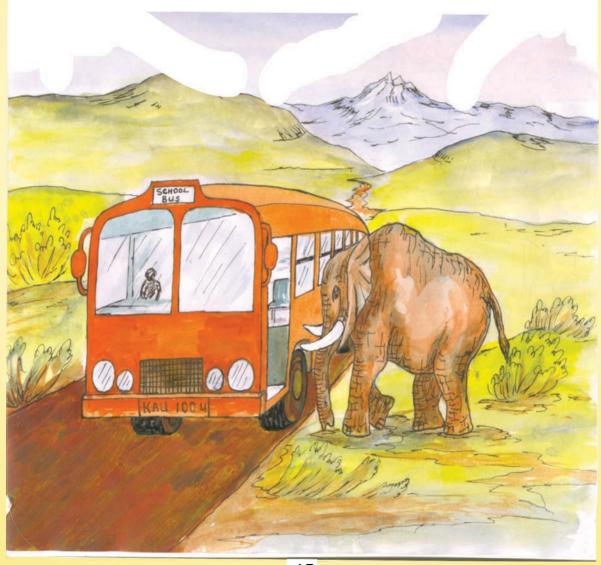


Discuss and list the different shapes you can see.



Let us sing: Whole class.

Elephant, Elephant



Activity 9: In groups.



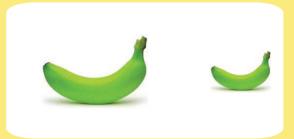
1. Look at the pictures below.

Discuss which is the bigger one.









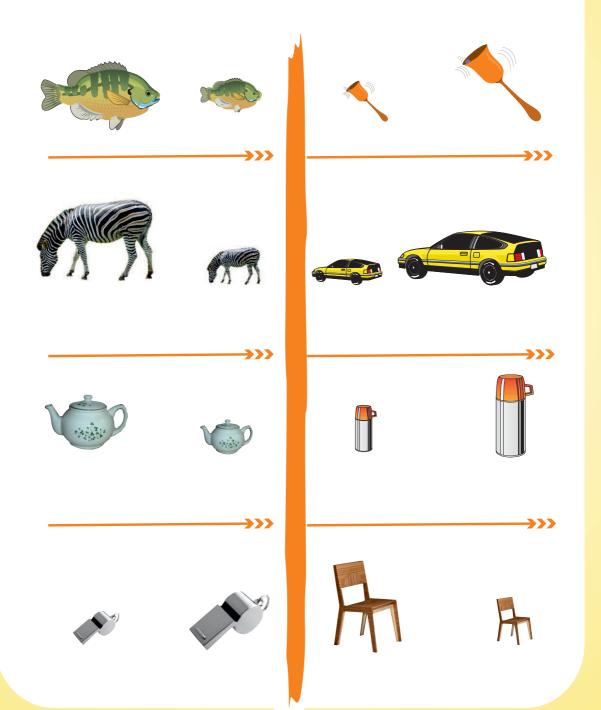
2. Collect stones from around the school compound.







Look and say which is bigger. How do you say it?



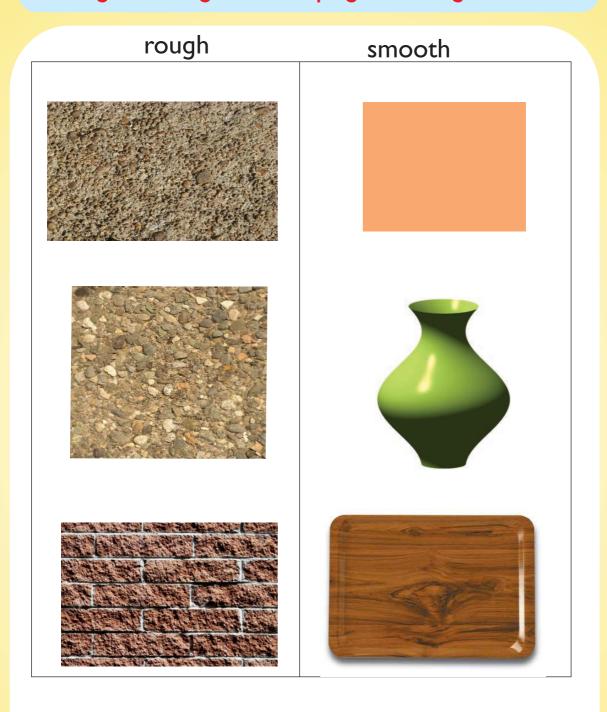




Look and say which is smaller. How do you say it?



Sorting, Matching and Grouping according to Texture



Activity 12: In groups.

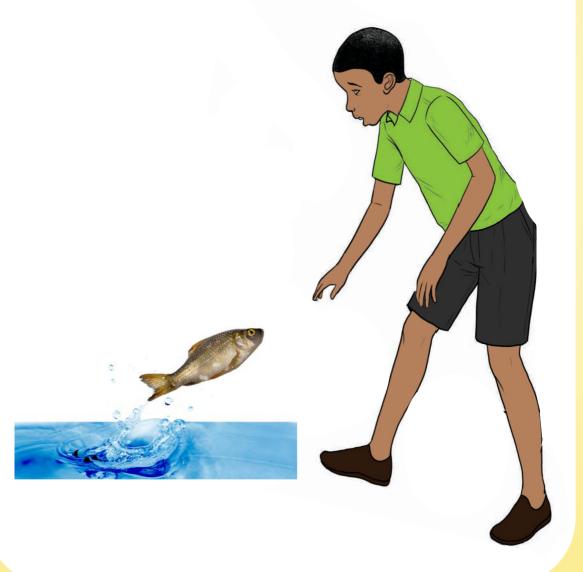


Look around the classroom and say "rough or smooth".

1.2 COUNTING NUMBERS

Let us sing: Whole class.

A Fish Alive



Activity 13:Whole class

Count loudly



11 12 13 14 15

21 22 28 29 30

31 32 39 40

47 48 49 50

58 59 60

61

71 72

81 90

99

Activity 14: In pairs

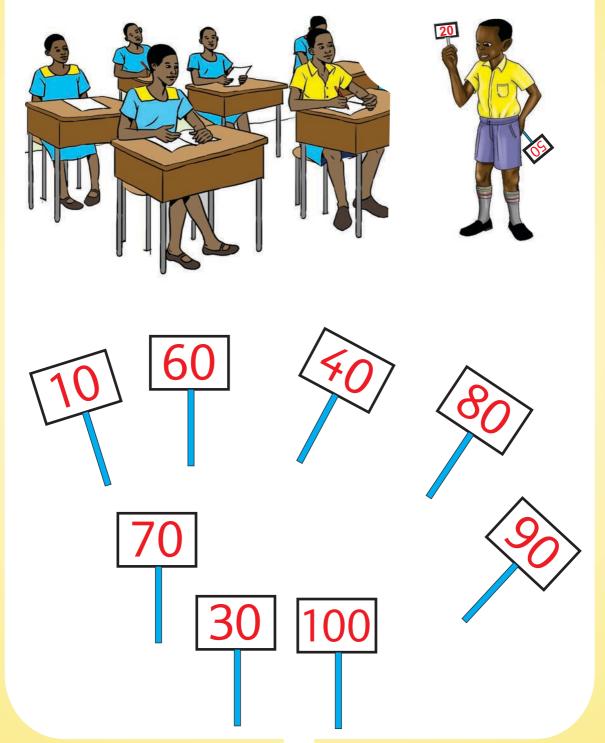


Your partner to say missing number.

	2		4		6		8		10
		13		15		17		19	
	22		24		26		28		30
31			34		36		38		
		43		45				49	
51		53			56		58		60
	62		64			67		69	
71			74		76		78		
81		83		85		87		89	
q		83			96		98		100

Activity 15a: In groups.





Activity 15b: Individually



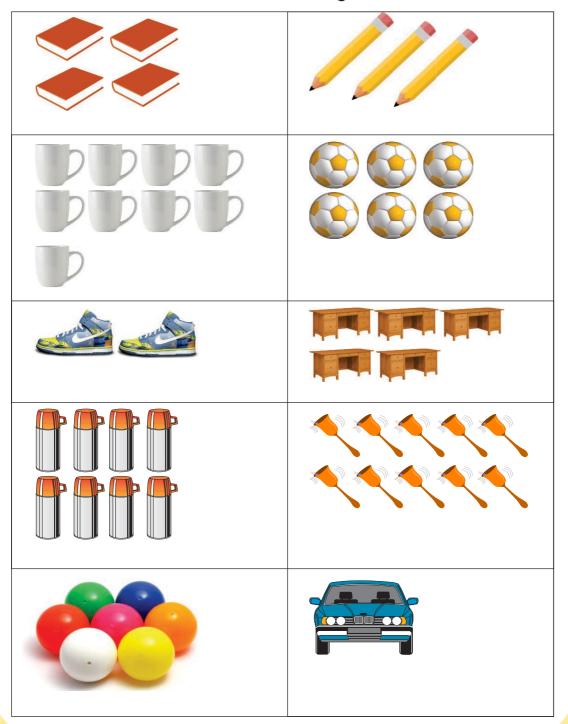
Count the tens and read the numbers alongside.

0 0 0 0 0 0 0 0 0 0	IO Ten
	20 Twenty
	30 Thirty
	40 Forty
	50 Fiffy
	60 Sixty
	70 Seventy
	80 Eighty
	90 Ninety
	100 Hundred

Activity 16: Individually



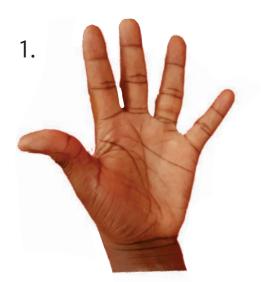
Count and write the answer in your exercise book.

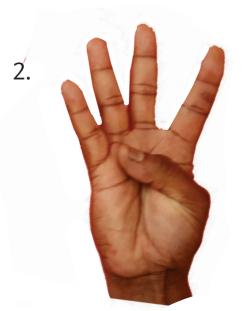


Activity 17: In pairs.

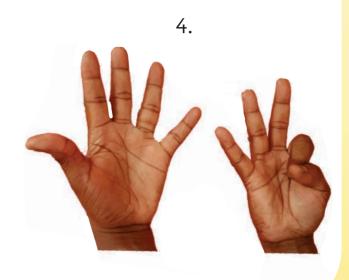


How many?









Activity 18: Individually

2

Which is the smaller number?
Why do you say it is the smaller number?

- 1. 78 50
- 2. 53 96
- 3. 23 16
- 4. 58 61
- 5. 99 42
- 6. 76 79
- 7. | 15 | 33
- 8. | | | | | | | | |
- 9. 56 68
- 10. | 17 | 39

Which is the bigger number? Why do you say it is the bigger number?

30 50



22 | 33

51 56

65 96

63 21

42 58

49 59

Activity 19: In pairs.



A. Discuss number comes after the one given?

B. Discuss number comes before the one given?

C. Which number comes in between? Count loudly.

Activity 20: Idividually.



Writing numbers in words.

Look at the following table. Count loudly and say the number.

Object	Numeral	Words
	I	One
	2	Two
	3	Three
	4	Four
IIII	5	Five

Object	Numeral	Words
	6	Six
	7	Seven
	8	Eight
	q	Nine
	10	Ten
		Eleven
	12	Twelve
	13	Thirteen
	14	Fourteen
	15	Fifteen

Activity 21: Individually.



In an exercise book, write the number in words or the numeral.

1.

a) 20

b) 35

256

d) 22

e) 83

f) 43

2.

a) Ninety-nine

h) Fifty four

b) Seventy-seven

i) Ninety seven

Sixty five

j) Sixty

d) Ninety one

k) Seventy

e) Forty two

D) Twelve

f) Seventy six

m) Eighty six

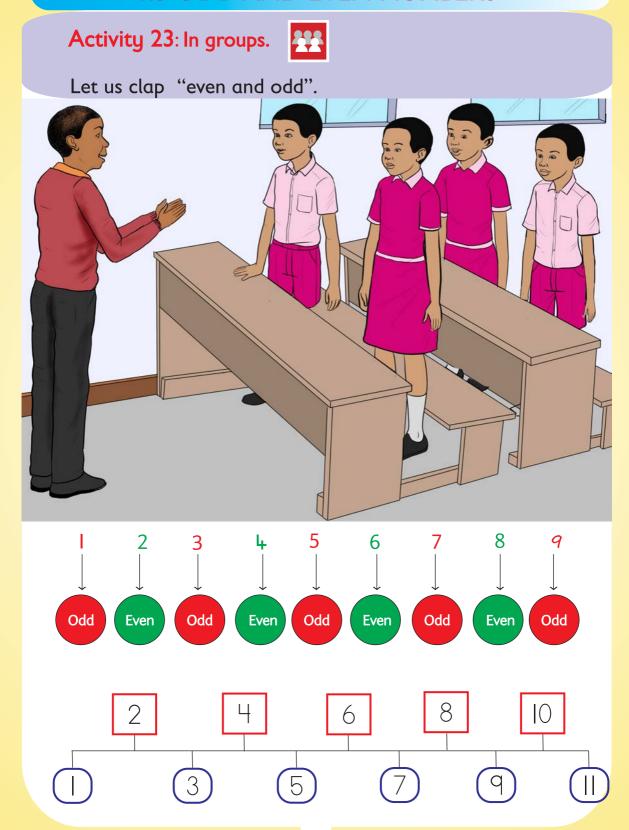
g) Forty nine

n) Thirty four

Activity 22: Whole class game

One of you says a number and another writes the number in words on the blackboard.

1.3 ODD AND EVEN NUMBERS

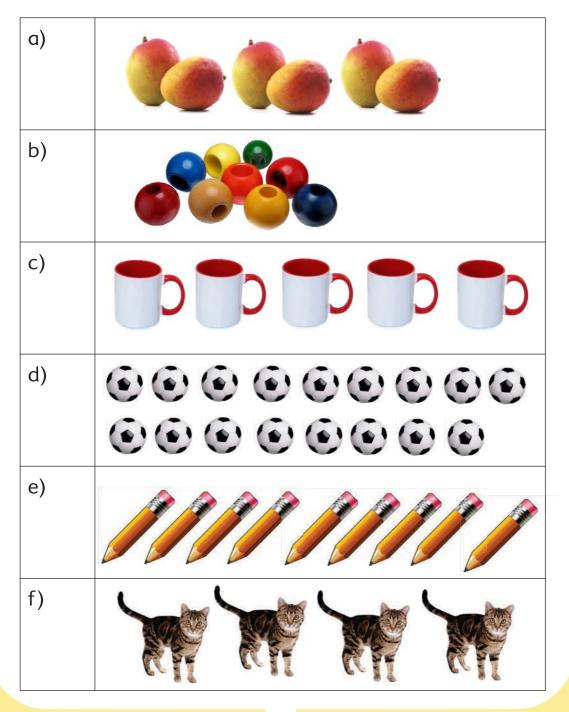


Odd and Even Numbers

Activity 24: In pairs:



Odd or even? Tell your partner why you think so.



Odd and Even Numbers

Activity 25a: Individually



Count in 2s.

	2	3	4	5	6	7	8	q	10
	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30

Count in 5s.

	2	3	4	5	6	7	8	9	
	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

Activity 25b: In groups.



Orally count in two's and five's. Take turns as you count.

Odd and Even Numbers

Activity 26: Individually.

2

Copy these numbers in your exercise book.

Circle all the even numbers and cross out all the odd numbers.

*	2	3	4	5	6	7	8	q	10
	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	62	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	

1.4 PLACEVALUE

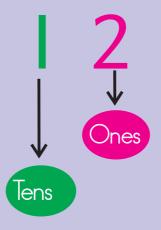


Activity 27: Whole class.

Who is on the ones side?

Place value is where a digit is in a number.

For example: 12



We can also know the value of a number by arranging it in groups of 10.

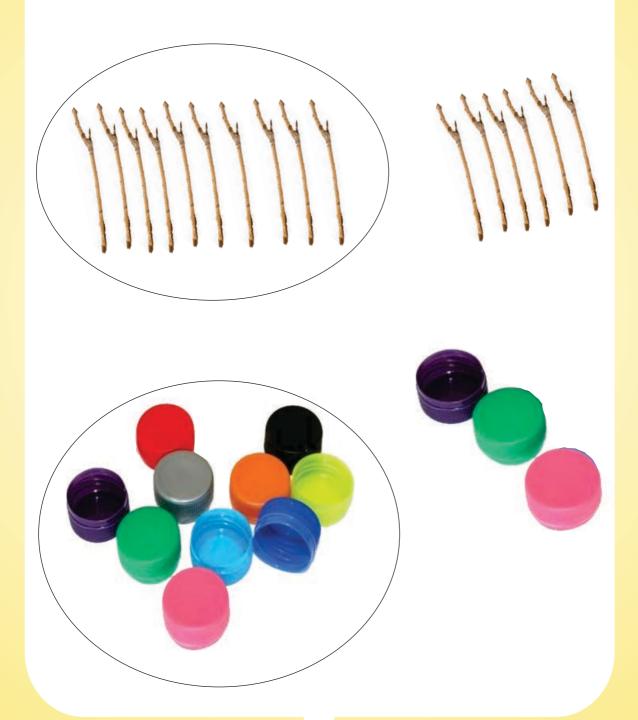
For example:

I ten + I ten = 2 tens, 0 is ones.

Activity 28: In groups.



Collect different items from the school compound.



Activity 29: In pairs 2





lone



2 ones



3 ones







6 ones



7 ones



8 ones





Activity 30: In pairs



Collect safe objects like stones and use them to count. Count the balls and read their values.

Objects	Objects	Tens	Ones	Number
				 Eleven
			2	12 Twelve
			3	13 Thirteen
	@@@@		4	14 Fourteen

Objects	Objects	Tens	Ones	Number
		2	0	20 Twenty

Activity 31: In pairs



Say how many tens, and how many ones.

21 2 tens and I one twenty-one

23 2 tens and 3 ones twenty-three

37 3 tens and 7 ones thirty-seven

25 2 tens and 5 ones twenty-five

75

48

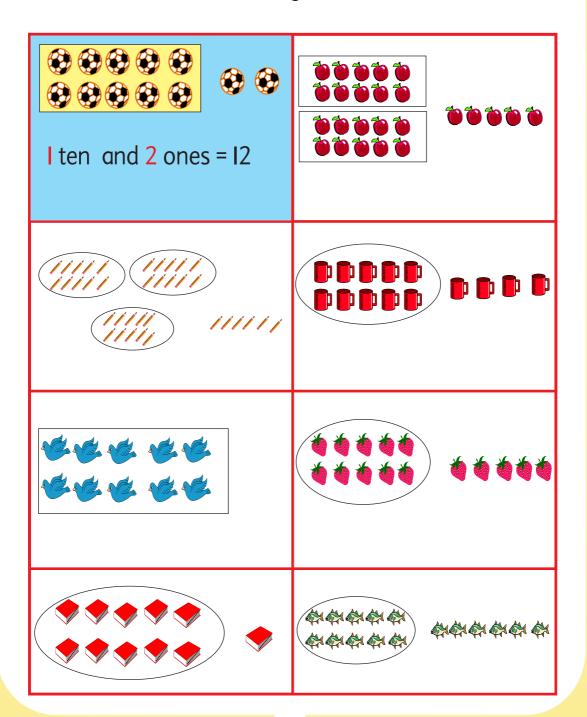
38

Activity 32: Individually



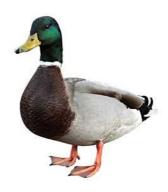
How many tens and how many ones?

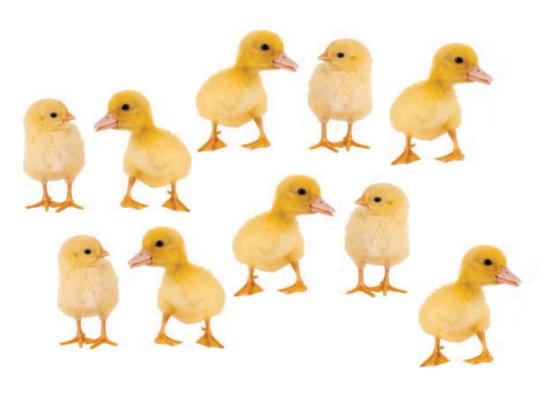
You can write the answer in your exercise book.



Activity 33: Let us sing: Whole class.

Ten Little Ducks





Ascending and Descending order.

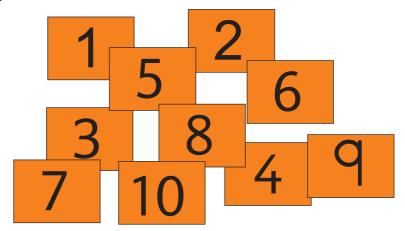
Activity 34: In groups



What do yo notice?



Arrange them.



Ascending order

2 3 4 5 6 7 8 9

Descending order

Activity 35: Individually



Ascending order

Numbers	Smallest	Biggest	Ascending order
713, 15, 4, 8	4	15	4, 7, 8, 13, 15
1, 14, 6, 18, 5			
9, 7,10,16,12			
3, 11, 19, 6			
2, 10, 18, 5, 1			

Descending order.

Numbers	Smallest	Biggest	Descending order
1 18, 3, 12, 16		18	18, 16, 12, 3, 1
4, 6, 19, 10, 15			
14, 1, 18, 7,19			
8, 13, 5, 12, 17			
712, 4, 11, 16			

1.5 ADDITION

Addition is putting together two or more things or numbers.

Addition is calculating the total of two or more numbers or amounts.

Activity 36: In groups



Deng, Taban, Kiden and Nyandeng.





Collect sticks from the school compound.





Activity 37: Individually



In your exercise book, add by putting together these items.

Put together



Activity 38: In pairs.













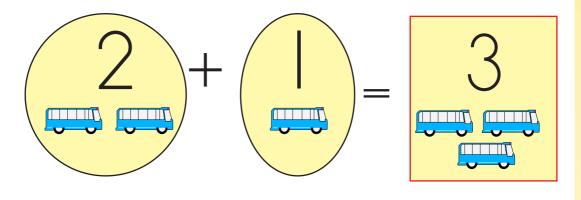


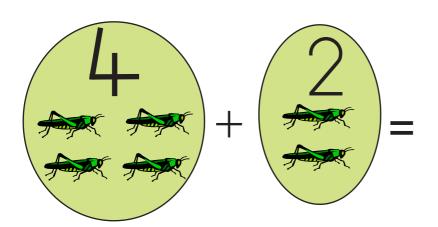
Do this in turns and with different number of fingers.

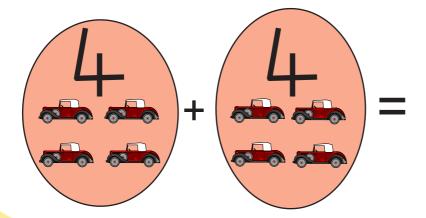
Activity 39: Individually

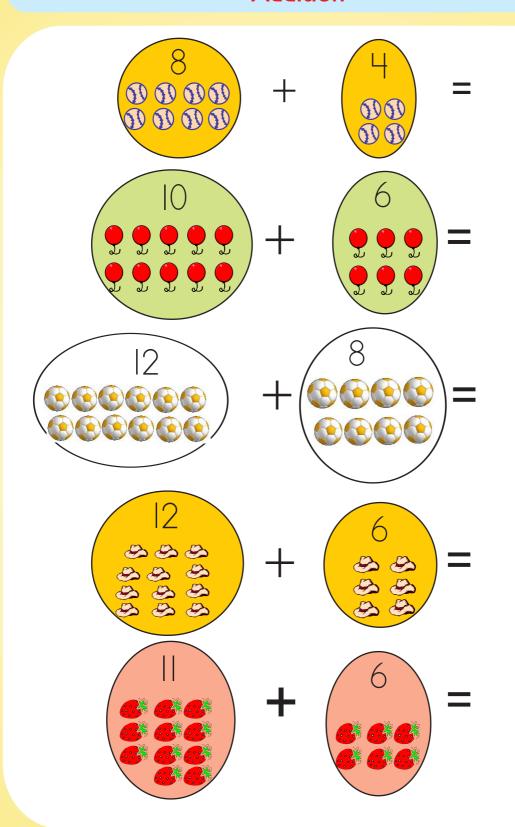












Activity 40: In groups.



Collect safe object from the school compound and use them to add.

Activity 41: Individually.

a)
$$2 + 2$$

c)
$$|6 + |0|$$

d)
$$12 + 25$$

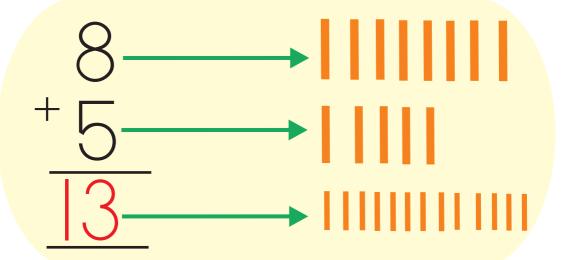
e)
$$16 + 3$$

$$9) 22 + 6$$

i)
$$12 + 7$$

Activity 42: Individually.





Activity 43: Individually



What do you add to make sum total of the number in green? Write in your exercise book.

$$2. |8 = 9 +$$

$$3. |7 = 9 + \underline{}$$

$$9. \quad |6 = 9 +$$

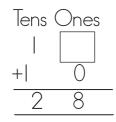
$$4.12 = 8 +$$

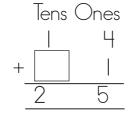
$$|0.| + 6 +$$

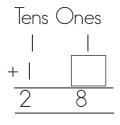
$$|2. || = +5$$

Copy the sums below in your exercise book and fill in the boxes.

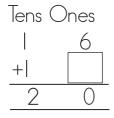
Tens Ones







Tens Ones



1.6 SUBTRACTION/TAKE AWAY

Subtraction is taking one number or amount away from another number.

Activity 44: In groups 232





Activity 45: In groups.



Practice take away using your fingers.



Subtraction/ Take away

Activity 46: Individually.



Do these sums in your exercise book.

Take away

$$5 - 3 = 2$$

0000000

000000000

Subtraction/Take away

Activity 47: Individually.

2

Collect safe object from the school compound and use them to subtract.

Example:

(With regrouping)

Work out these numbers in your exercise book.

Subtraction without regrouping

$$3 - 2 =$$

$$14 - 2 =$$

$$18 - 5 =$$

$$15 - 12 =$$

$$18 - 6 =$$

$$23 - 13 =$$

$$17 - 6 =$$

$$15 - 10 =$$

$$15 - 10 =$$

Subtraction with regrouping

$$32 - 25 =$$

$$14 - 7 =$$

$$10 - 3 =$$

$$|8 - 9| =$$

$$10 - 3 =$$

$$|3 - 9| =$$

Subtraction/Take away

Activity 48: Individually.



Do these sums in your exercise book.

Activity 49: In groups



Solve a question written on the board in groups. One of you from a group to solve on the board.

Subtraction/ Take away

Activity 50: Individually.

2

$$\frac{-2}{0}$$

$$-\frac{5}{2}$$
 0000

Subtraction/ Take away

Activity 51: Individually.

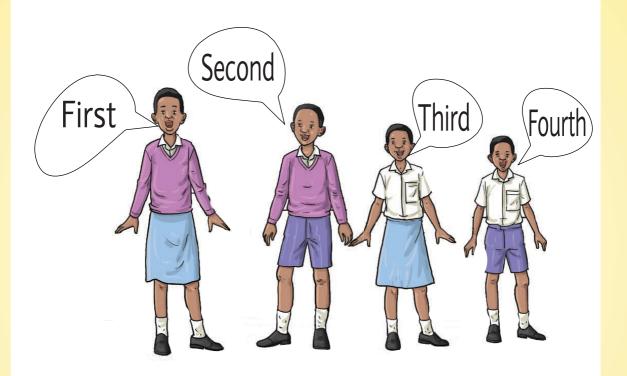
Work out in your exercise book.

$$-2 = 5$$

1.7 ORDINAL NUMBERS

Activity 52: Ind groups.





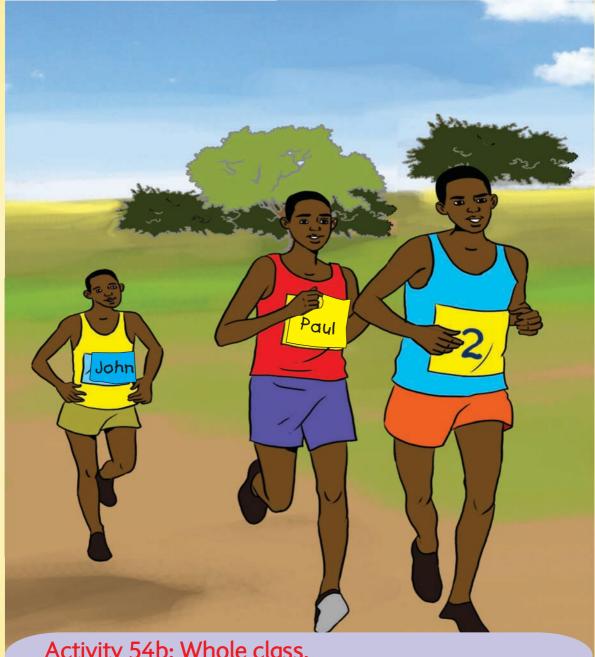
Activity 53: Whole class.

Discuss and say who was first, second and third to get into the classroom today. Why do you say he or she was the first?

Ordinal Numbers

Activity 54a: In groups.





Activity 54b: Whole class.

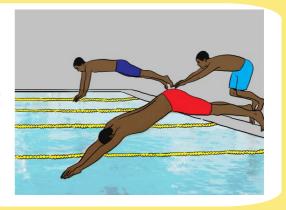
Compete in the field and record who was 1st, second third etc.

Ordinal Numbers

Activity 55: In pairs.



Who do you think will touch the water first? Why do you think so?



Look at the red dot. Which position is it in?

First











1st

Second











Third

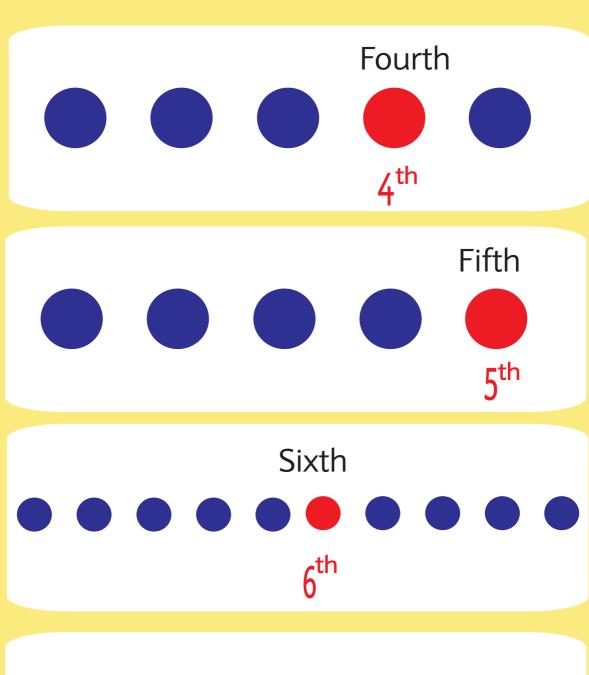


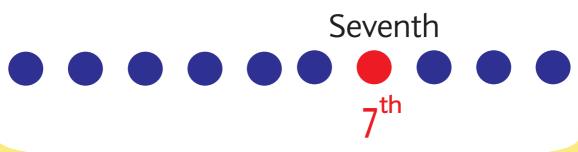


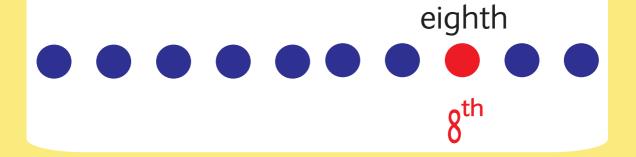


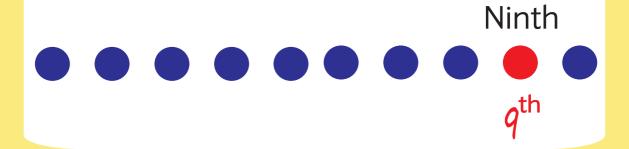


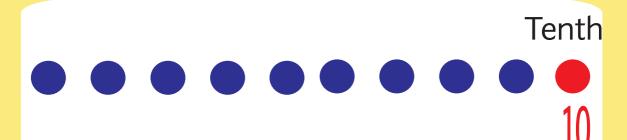


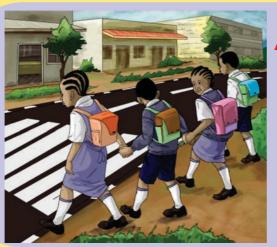












Activity 56: In groups 244



Who do you think will be first to step on to the road? Why do you say so?

Who will be the second?

Ordinal Numbers

Activity 57: In groups.



Look at the pictures and discuss position.

1 st	first	
2 nd	second	2
3 rd	third	
4 th	fourth	040
5 th	fifth	050
6 th	sixth	6
7 th	seventh	
8 th	eighth	8
9 th	ninth	
10 th	tenth	10

Ordinal Numbers

Activity 58: In groups.



Draw and colour the ordinal numbers.

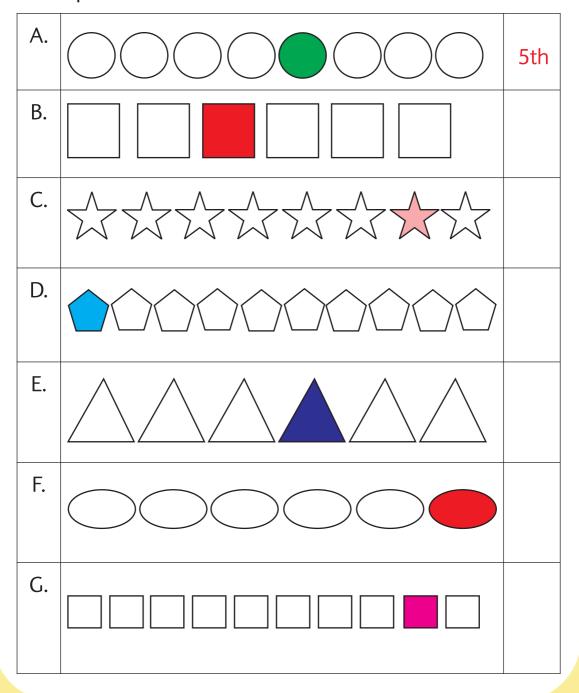
8th	
2nd	
6th	
7th	
3rd	
5th	
10th	

Ordinal Numbers

Activity 59: In groups.

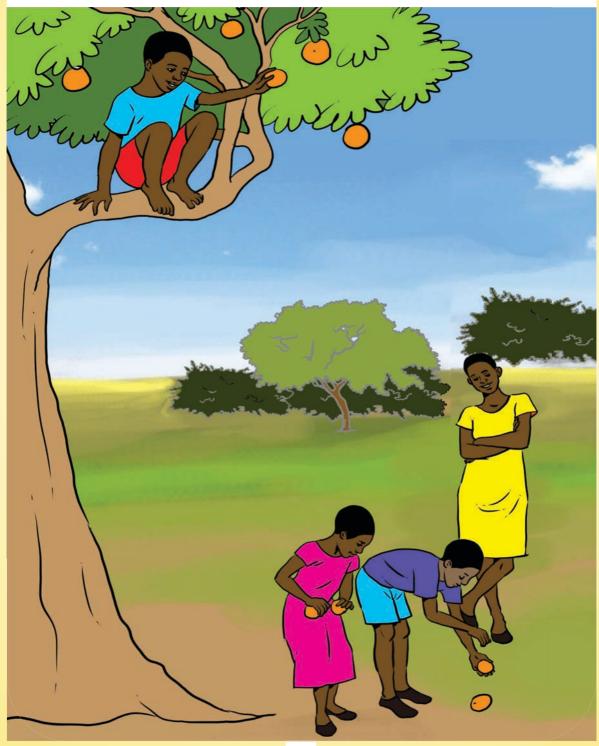


Look at the coloured pictures. Say which position the shape is in.





Achal, Poni, Wani and Lado.



Let us discuss







UNIT 2 MEASUREMENT

Content Map

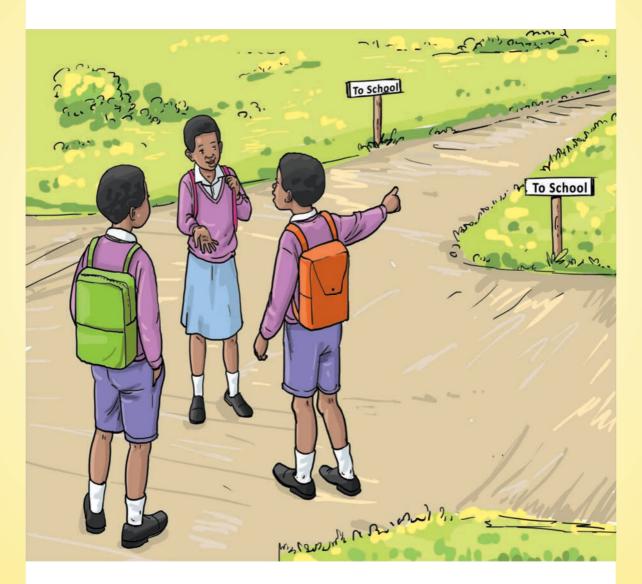
17	
Knowledge	Know the days of the week and the months of the
and	year.
understanding	Recognize the common notes in local currency.
Skills	 Estimate and compare length, capacity, and weights using arbitrary units. Solve simple problems related to money. Tell the time on the clock face in hours and half hours.
Attitudes	 Appreciate and value their local currency. Value the importance of time. Cooperation and teamwork. Confidence to investigate using maths and to take responsibility of their own learning.
Competencies	 Critical thinking: ability is developed in making judgement, for example when using different objects and containers to estimate weight and capacity. Communication: discussion and practical activities for example in mini shopping activity and telling time.
Activities	 Estimate and compare length, capacity and weight using a variety of containers and objects of different sizes and lengths. Measure objects to understand arbitrary units (hand span, strides, length of the foot). Work in groups to investigate the use of local currency as a medium of buying and selling. Solve simple problems involving money. Know time of the day, days of the week and months of the year.
Class	Whole class orientation
organization	Groupwork
or garnzadon	Oroupwork

2.1 LENGTH

Activity 1: In groups ******



Estimate how long it takes to walk from your home to school. Who takes more time to reach school from their home?



Why do you take longer to reach school than your partner?

In small groups, walk to the following places, Headteacher's office, toilet block and school gate.



How many steps did you take to reach?



















Activity 3: In groups.

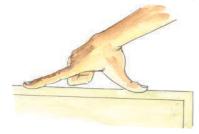
Discuss these pictures. Use the words, taller than, shorter than.





Activity 4: In groups.





1. Measure the length of your desk.



2. Count the number of steps it will take you to walk round the play field.

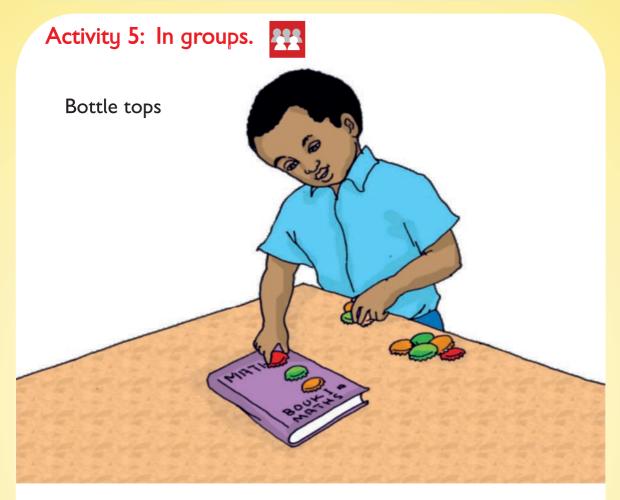
3. Count the length of the teacher's table using your arm.

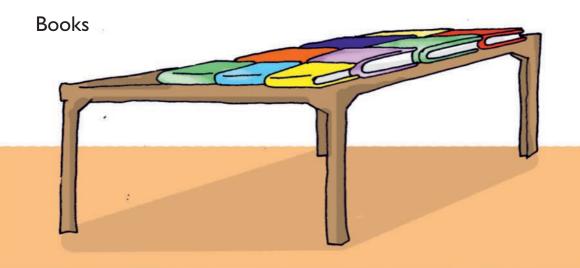


4. Use your feet to count the length of one wall of your classroom.

Compare the results of the group next to yours. Are they the same?

Why do you think you have differences?





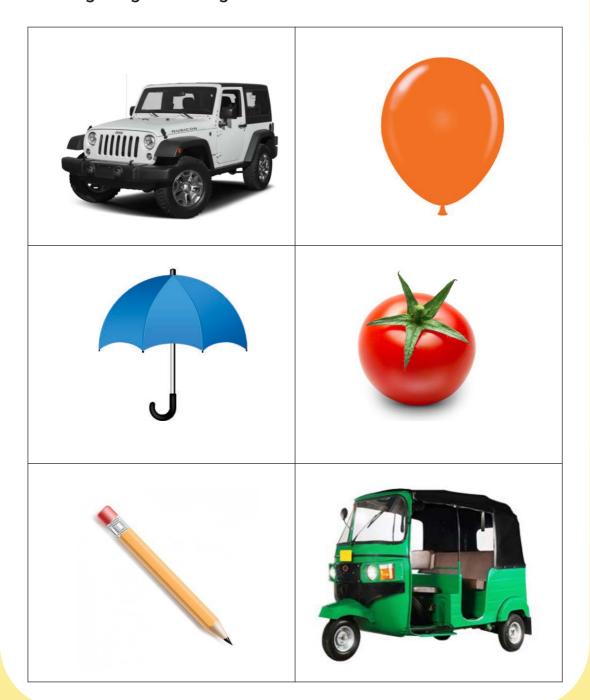
2.2 MASS

Activity 6: In groups.



Can you lift these things?

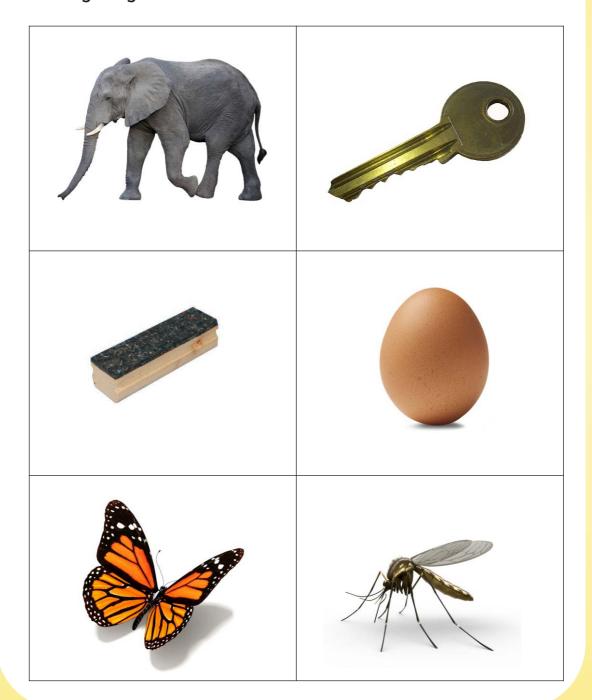
Why do you think you can lift some and not others?



Activity 7: In groups.



Do you think it is heavy or light? Why do you think so?







Activity 8: In groups and Whole class.



Visit shops or market that are near you and ask them what they use to weigh things.

Each group to present to the rest of the class.

Activity 9: In groups.



Who do you think is heavier? Kenyi in blue dress or Nyandeng in green dress? Why do you say so?



In pairs, say who is heavier between the two of you. Why do you say so?

Activity 10: In groups.



Which one can you lift?

Why do you think you are not able to lift some of them?













Activity 11: In groups



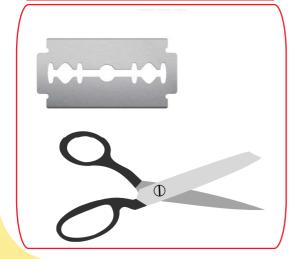
Which one would you say is heavier?

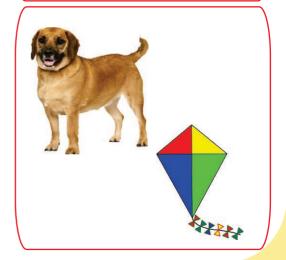






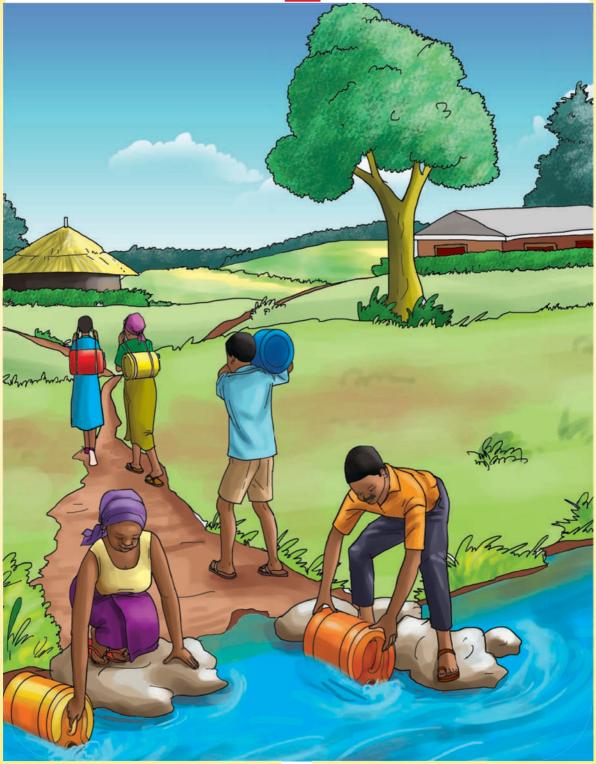






2.3 CAPACITY





Capacity

Activity 13: In groups.





1. How many glasses will fill the bucket?

2. How many full cups do you get from a full jug?





3. How many small buckets will fill the big bucket?

Do this at home.

- 1. How many cups fill a big bottle?
- 2. How many cups fill a small bottle?
- 3. How many cups fill a jug?

Share your finding with the class and compare with others findings.

Which one do you think you will need more to fill the big bucket?
The glasses or the jug?
Why do you think this is so?

Capacity

Activity 14: In groups.















Capacity

Activity 15: In groups.



Which one can hold more? Why do you say so?



2.4 CURRENCY

Activity 16: In groups.



What is happening in these pictures?









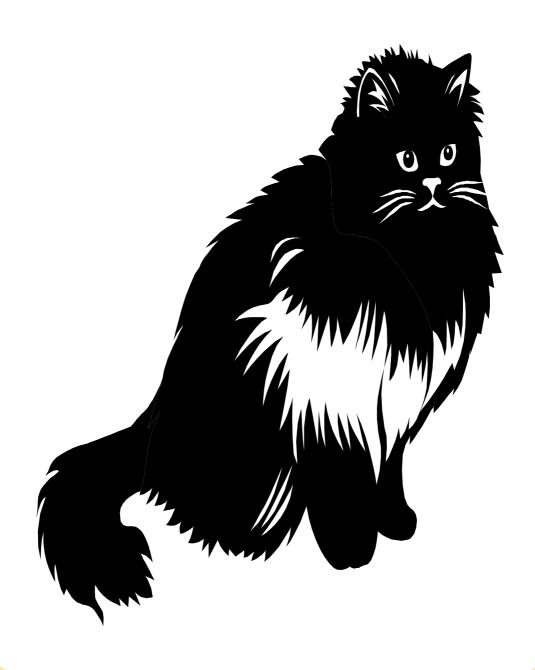
Activity 17: In groups.



Discuss what is happening in the picture. What do you think Kenyi and Taban are saying?

Let us sing: Whole class

Grandmother Pussycat



Activity 18: In groups.



How much?













Activity 19: In groups.







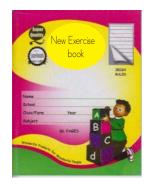
















Activity 20: Individually

















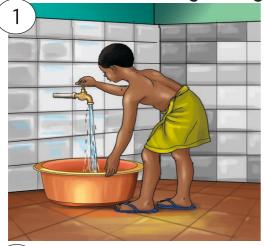
20 SSP



2.5 TIME

Activity 21: In groups.

What time do you think it is? Why do say so?













Activity 22: In groups 👯

What time of the day do you do these activities?

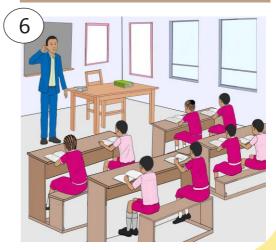








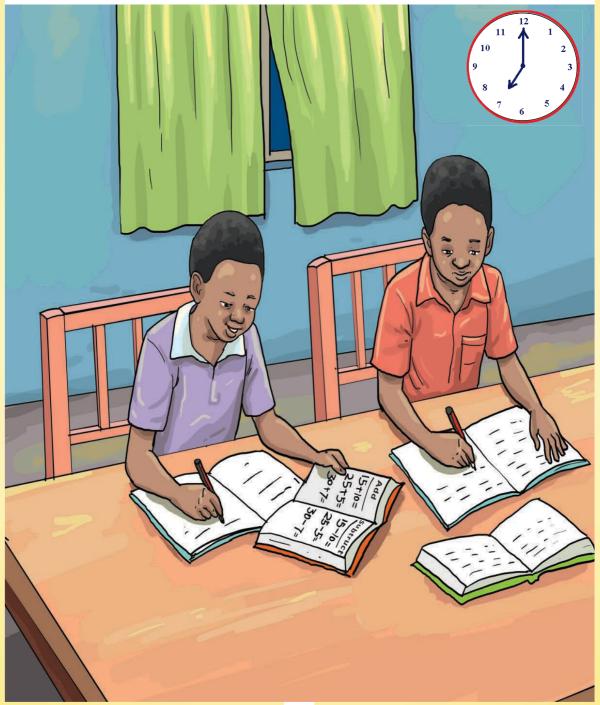




Activity 23: In groups



What is the time?

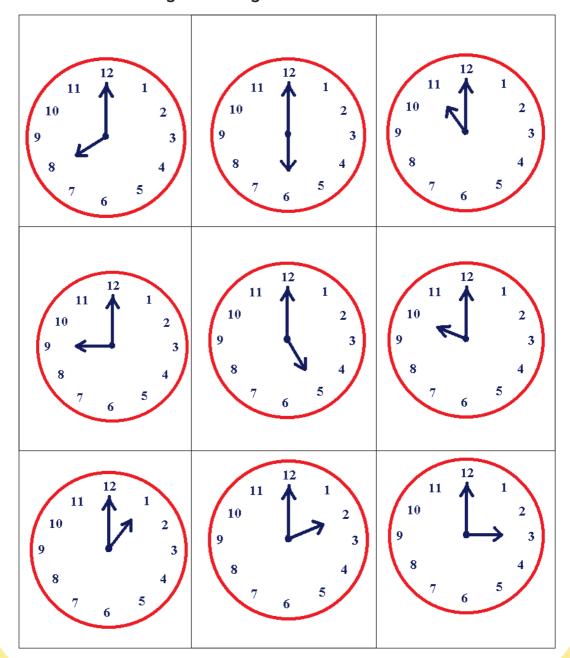


Activity 24: In groups.

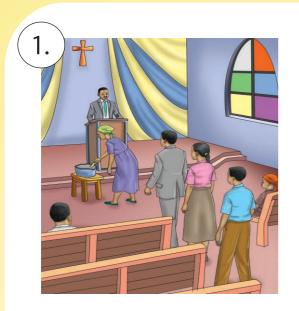


Look at the clocks below.

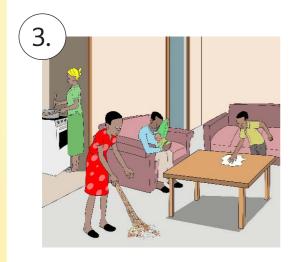
Each group to present to the class what they normally do at these times.

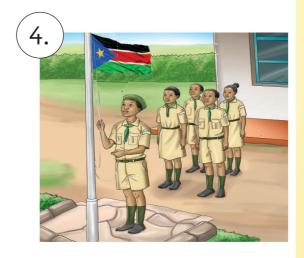


2.6 DAYS OF THE WEEK









Activity 25: In groups



Which day of the week do you think it is in each of these pictures?
Why do you think so?

Days of the week

Activity 26: In groups 👯



Sunday

Monday

Tuesday

Wednesday

Thursday

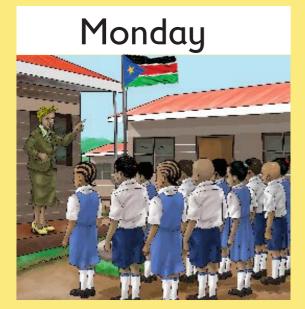
Friday

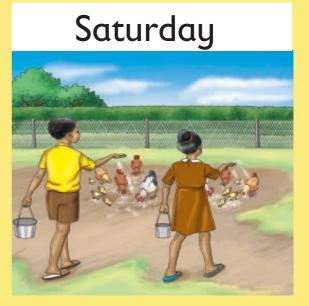
Saturday

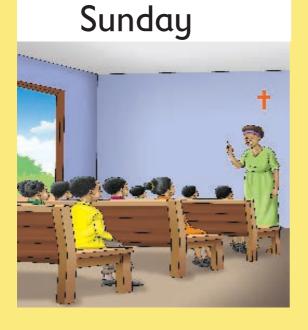
Days of the week

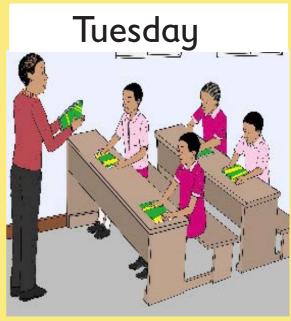
Activity 27: In groups and in turns.











2.7 MONTHS OF THE YEAR

Activity 28: In pairs.



January

1st

July

7th

February

2nd

August

8th

March

3rd

September

9th

April

4th

October

10th

May

5th

November

11th

June

6th

December

12th



UNIT 3 GEOMETRY

Content Map

Knowledge and understanding	Recognize simple geometric shapes.
Skills	 Observe shapes and patterns. Draw geometrical lines and shapes. Make patterns and model of triangular and square based pyramids. Group objects with similar characteristics.
Attitudes	 Appreciate the use of lines and patterns in daily life situation. Have the confidence to investigate maths and to make responsibility for their own learning.
Competencies	 Critical thinking: grouping and sorting by property. Communication: describe shapes to the class. Co-operation: work in groups to make models.
Activities	 Recognize simple geometrical shapes and discuss their properties. Look for shapes in their immediate environment and observe and draw the shapes they see. Count sides and angles, and sort by these properties. Investigate some irregular shapes. Distinguish straight and curved lines. Observe the shapes made when lines meet and intersect. Explore the ways 2-D shapes can fit together to make new shapes and patterns. Investigate 3-D shapes and make models using clay.
Class organization	Whole class orientation Groupwork

3.1 LINES

Activity 1: In groups of five. Lines



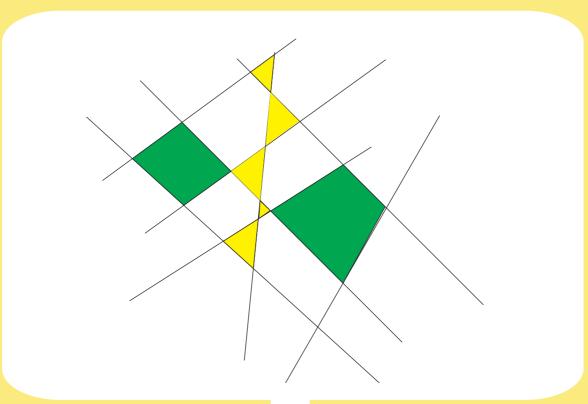




Lines

Draw and colour





3.2 SHAPES

Activity 4: In groups.



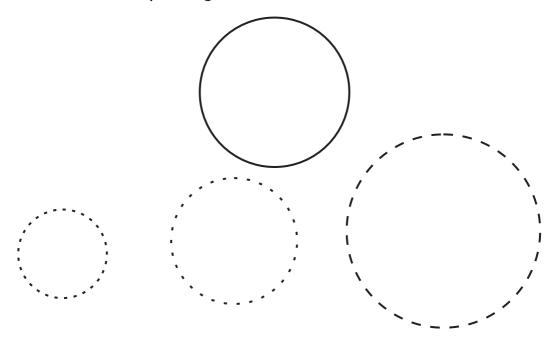


Geometrical shapes

Activity 5: Individually.

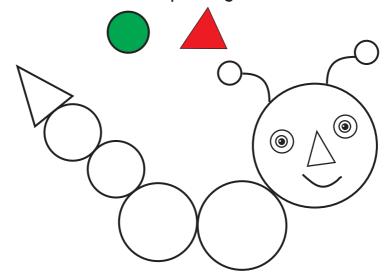


Draw these shapes in your exercise book.



Activity 6: Individually.

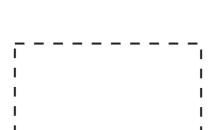


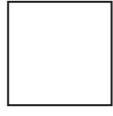


Activity 7: Individually.

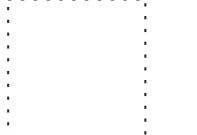


Draw these shapes in your exercise book.





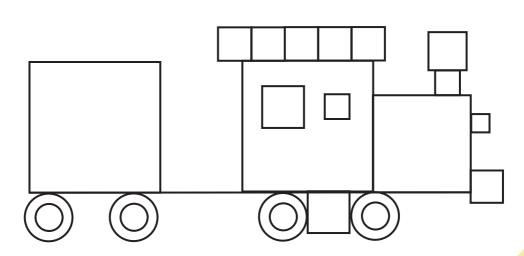








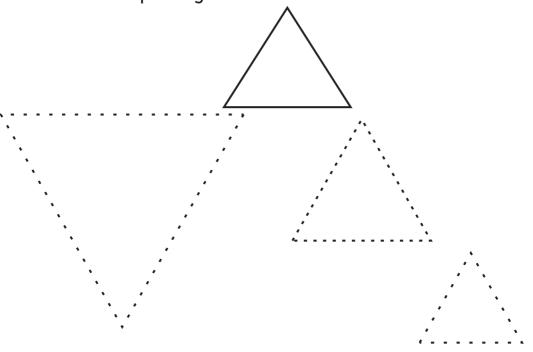


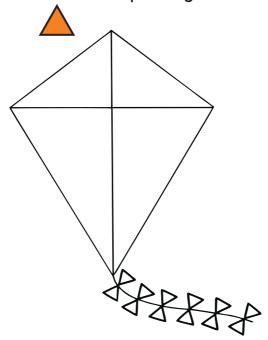


Activity 8: Individually.



Draw these shapes in your exercise book.

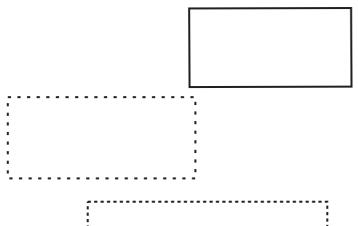


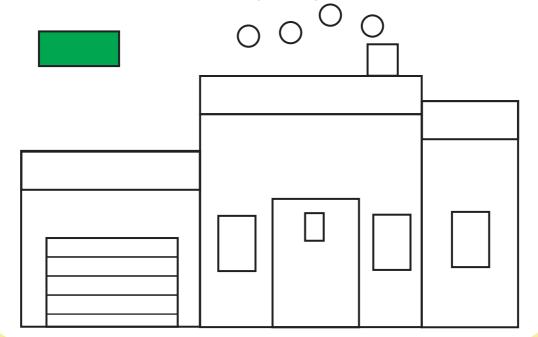


Activity 9: Individually.



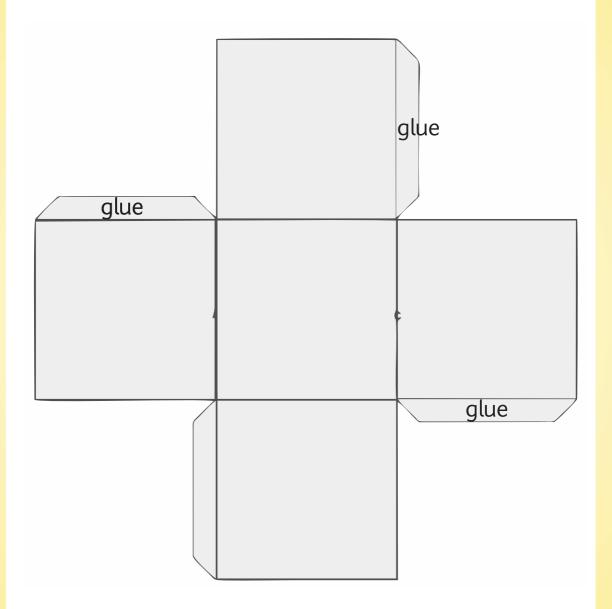
Draw these shapes in your exercise book.





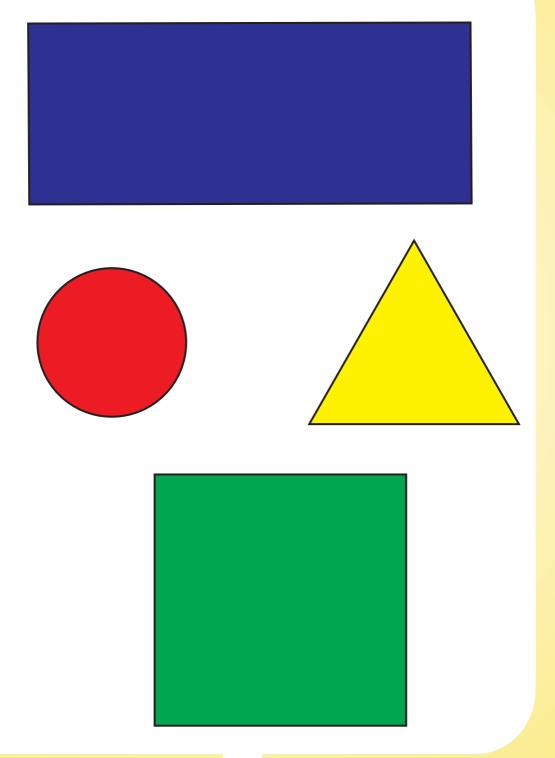
Activity 10: In groups.

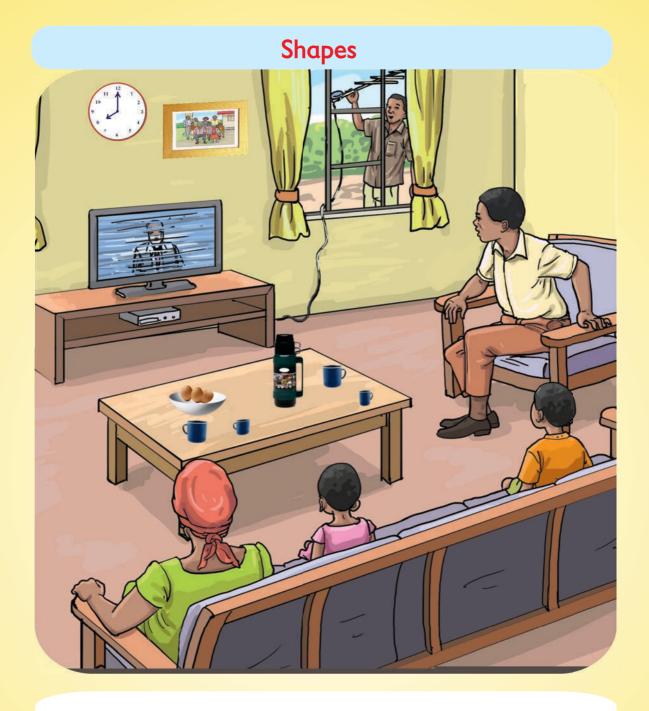




Activity 11: In groups.







Activity 12: In groups.



How many different shapes can you see in the picture?

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Primary Mathematics has been written and developed by Ministry of General Education and Instruction, Government of South Sudan in conjunction with Subjects experts. This course book provides a fun and practical approach to the subject of mathematics, and at the same time imparting life long skills to the pupils.

The book comprehensively covers the Primary 1 syllabus as developed by Ministry of General Education and Instruction.

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- Full coverage of the national syllabus.
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- Clear presentation and explanation of learning points.
- A wide variety of practice exercises, often showing how mathematics can be applied to real-life situations.
- It provides opportunities for collaboration through group work activities.
- Stimulating illustrations.



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