



South Sudan

Primary Mathematics 1

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.**

Each year comprises of a **Pupil's Book** and teacher's Guide.

The **Pupil's Books** provide:

- Full coverage of the national syllabus.
- A strong grounding in the basics of mathematics.
- 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.



All the courses in this primary series were developed by the Ministry of General Education and Instruction, Republic of South Sudan. The books have been designed to meet the primary school syllabus, and at the same time equipping the pupils with skills to fit in the modern day global society.

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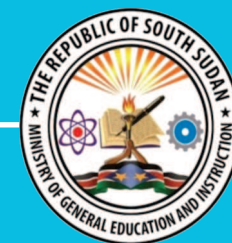
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South Sudan

Primary Mathematics 1

Pupil's Book



Primary Mathematics 1

Pupil's Book



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Mathematics

Pupil's Book 1

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FOREWORD

I am delighted to present to you this textbook, which is developed by the Ministry of General Education and Instruction based on the new South Sudan National Curriculum. The National Curriculum is a learner-centered curriculum that aims to meet the needs and aspirations of the new nation. In particular, it aims to develop (a) Good citizens; (b) successful lifelong learners; (c) creative, active and productive individuals; and (d) Environmentally responsible members of our society. This textbook, like many others, has been designed to contribute to achievement of these noble aims. It has been revised thoroughly by our Subject Panels, is deemed to be fit for the purpose and has been recommended to me for approval. Therefore, I hereby grant my approval. This textbook shall be used to facilitate learning for learners in all schools of the Republic of South Sudan, except international schools, with effect from 4th February, 2019.

I am deeply grateful to the staff of the Ministry of General Education and Instruction, especially Mr Michael Lopuke Lotyam Longolio, the Undersecretary of the Ministry, the staff of the Curriculum Development Centre, under the supervision of Mr Omot Okony Olok, the Director General for Quality Assurance and Standards, the Subject Panelists, the Curriculum Foundation (UK), under the able leadership of Dr Brian Male, for providing professional guidance throughout the process of the development of National Curriculum and school textbooks for the Republic of South Sudan since 2013. I wish to thank UNICEF South Sudan for managing the project funded by the Global Partnership in Education so well and funding the development of the National Curriculum and the new textbooks. I am equally grateful for the support provided by Mr Tony Calderbank, the former Country Director of the British Council, South Sudan; Sir Richard Arden, Senior Education Advisor of DfID, South Sudan. I thank Longhorn and Mountain Top publishers in Kenya for working closely with the Ministry, the Subject Panels, UNICEF and the Curriculum Foundation UK to write the new textbooks. Finally, I thank the former Ministers of Education, Hon. Joseph Ukel Abango and Hon. Dr John Gai Nyuot Yoh, for supporting me, in my previous role as the Undersecretary of the Ministry, to lead the Technical Committee to develop and complete the consultations on the new National Curriculum Framework by 29 November 2013.

The Ministry of General Education and Instruction, Republic of South Sudan, is most grateful to all these key stakeholders for their overwhelming support to the design and development of this historic South Sudan National Curriculum. This historic reform in South Sudan's education system is intended to benefit the people of South Sudan, especially the children and youth and the future generations. It shall enhance the quality of education in the country to promote peace, justice, liberty and prosperity for all. I urge all Teachers to put this textbook to good use.

May God bless South Sudan. May He help our Teachers to inspire, educate and transform the lives of all the children and youth of South Sudan.



Deng Deng Hoc Yai, (Hon.)

Minister of General Education and Instruction, Republic of South Sudan

TABLE OF CONTENT

UNIT 1: NUMBERS	1
1.1 Sorting, Grouping and Matching	2
1.2 Counting Numbers	18
1.3 Odd and even numbers	28
1.4 Place Value	32
1.5 Addition	43
1.6 Subtraction.....	52
1.7 Ordinal Numbers.....	58
UNIT 2: MEASUREMENT	68
2.1 Length	69
2.2 Mass.....	75
2.3 Capacity.....	81
2.4 Currency.....	85
2.5 Time	90
2.6 Days of the Week.....	94
2.7 Months of the year.....	97
UNIT 3: GEOMETRY	100
3.1 Lines	101
3.2 Shapes.....	104

Content Map

Knowledge and understanding	<ul style="list-style-type: none"> Count, read and write numbers from 0-99. Recognize even and odd numbers. Recognize ordinal numbers 1st, 2nd up to 10th.
Skills	<ul style="list-style-type: none"> Sort, match and arrange groups of objects. Add whole numbers up to two digits. Subtract whole numbers up to two digits
Attitudes	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Critical thinking: is enhanced through mathematical activities e.g matching, comparing and ordering numbers. Communication: through discussion, drawing and ordering objects and numbers; learners learn to cooperate.
Activities	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Whole class orientation. Groupwork.

1.1 SORTING, GROUPING AND MATCHING

Let us sing: Whole class.

Colours



Sorting, Grouping and Matching

Activity 1a: In groups



Collect from around the school compound.



Sorting, Matching and Grouping by Colour

Activity 1b: In pairs



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

Sorting, Matching and Grouping by Colour



Activity 2: 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.

Sorting, Matching and Grouping by Colour

Activity 3: In groups.



1)



2)



3)



4)



5)



In pairs:



Tell your partner your favourite colour.

Why do you like this colour more than any other?

Sorting, Matching and Grouping by Colour

Activity 4: In pairs.

What colour you think each object is?



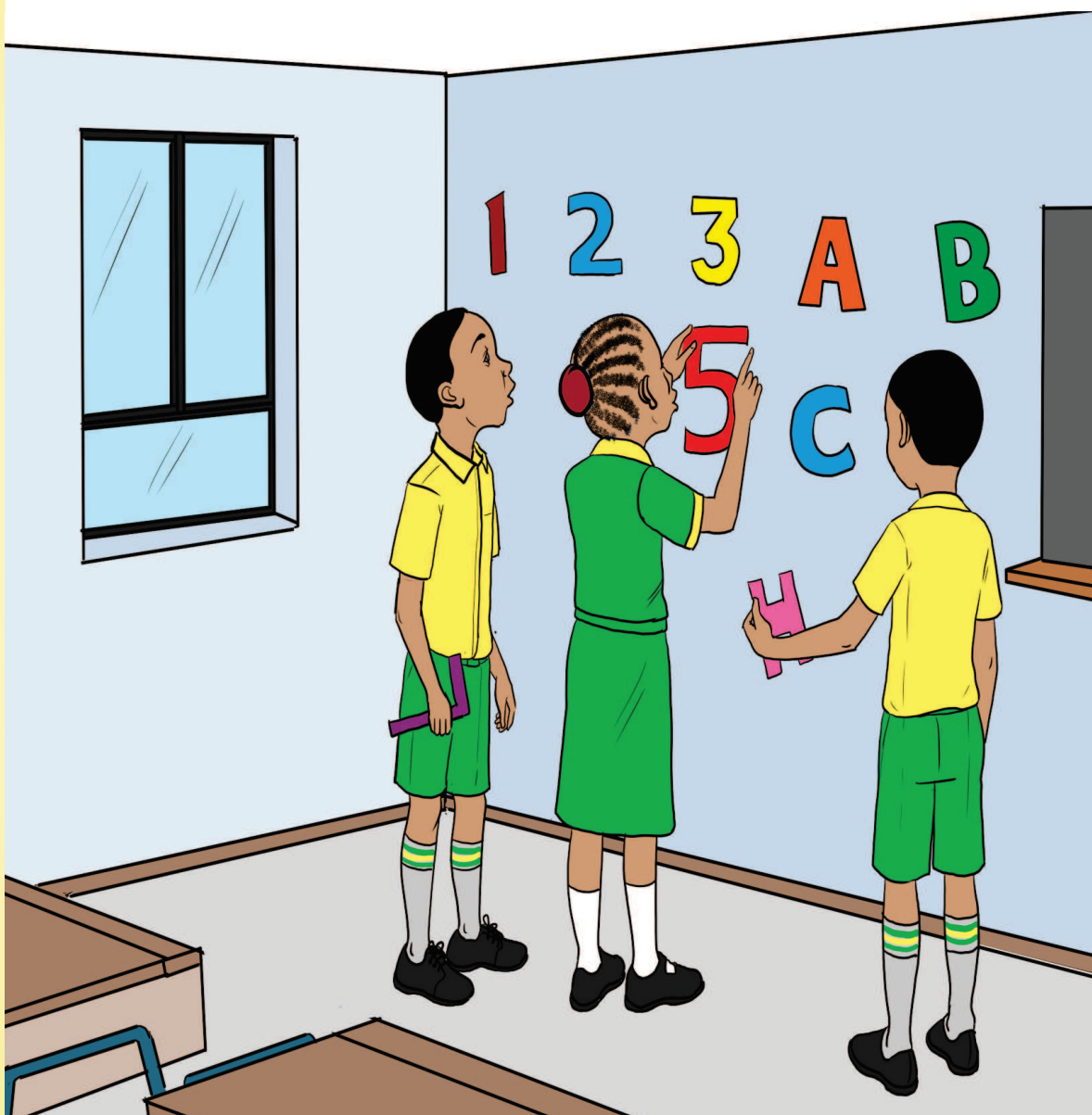
Individually



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

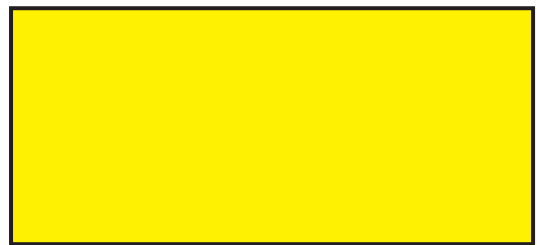
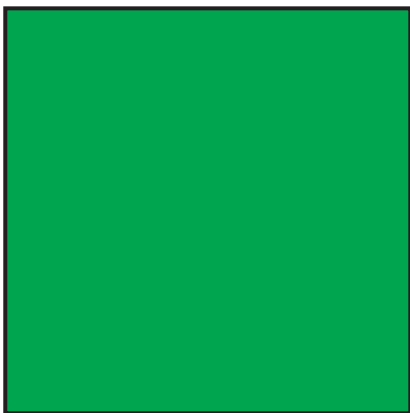
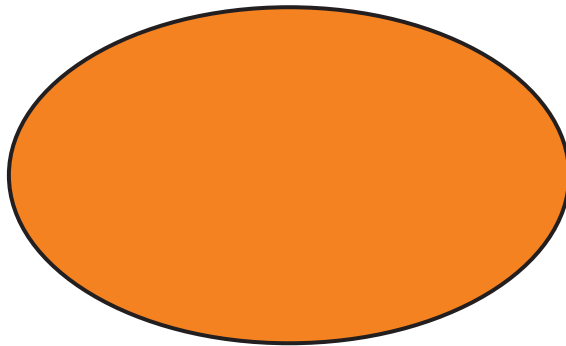
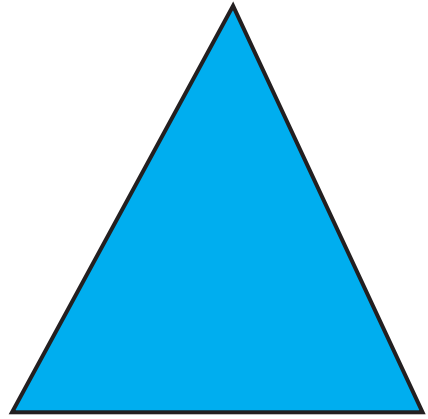
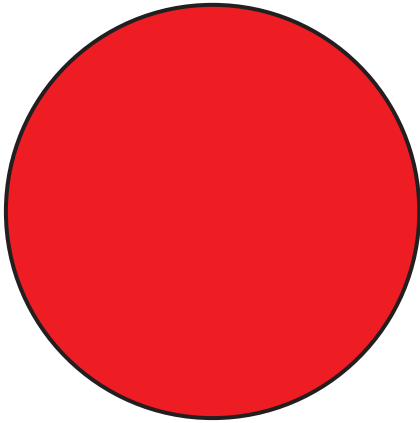
Sorting, Matching and Grouping by Colour

Activity 5: In groups.



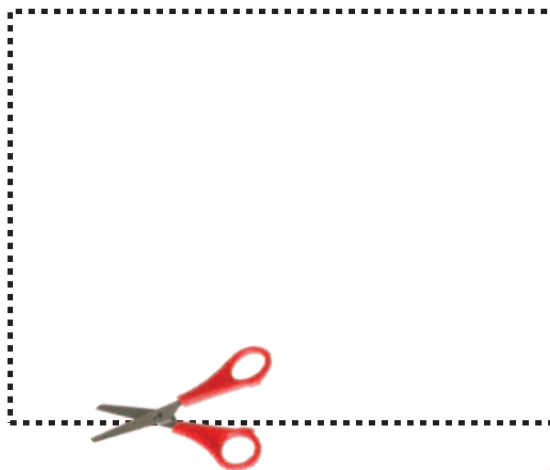
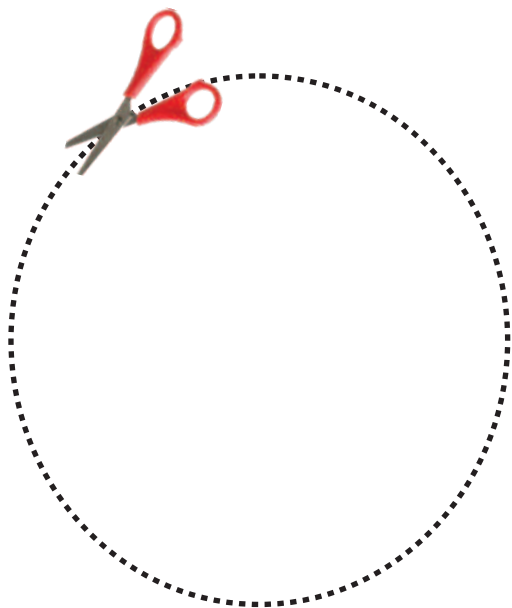
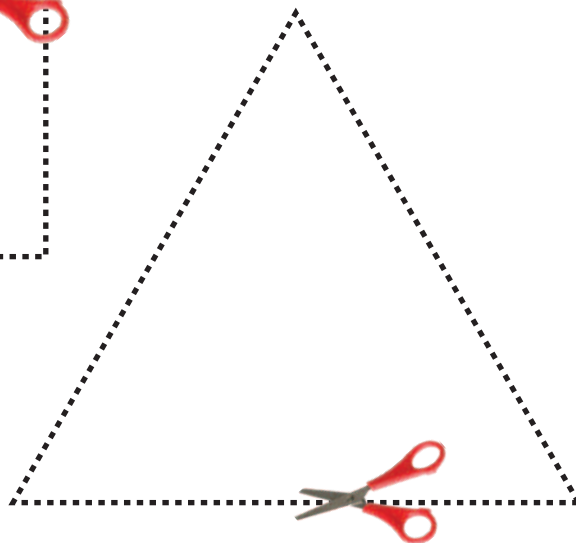
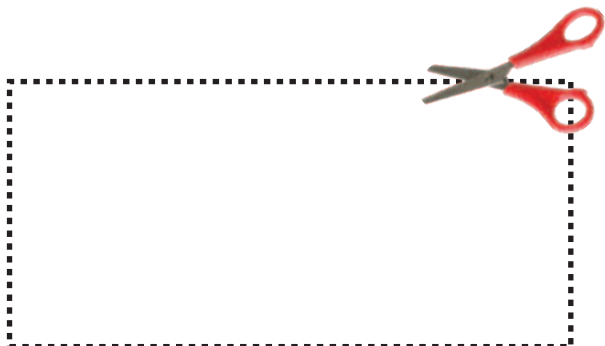
Say the colours

Sorting, Matching and Grouping by Shape



Sorting, Matching and Grouping by Shape

Activity 6a: In groups.

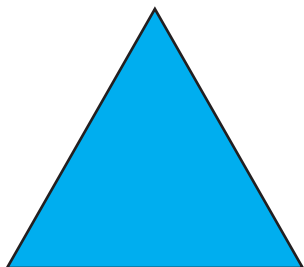
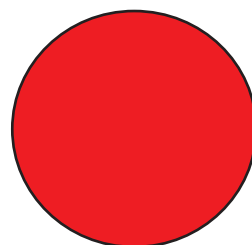
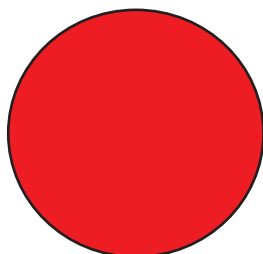
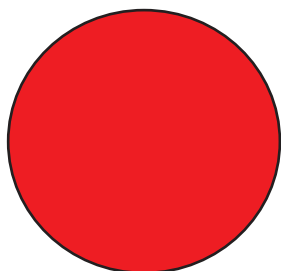
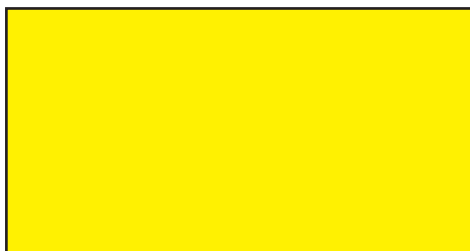
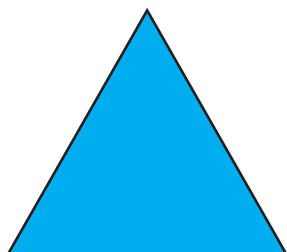


Sorting, Matching and Grouping by Shape

Activity 6b: In pairs.



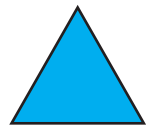
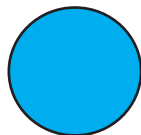
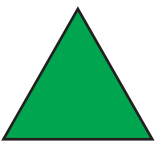
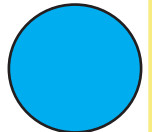
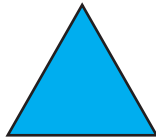
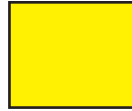
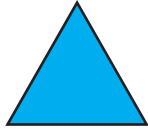
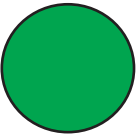
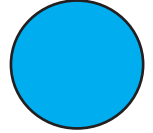
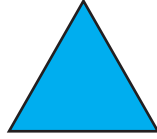
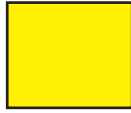
Choose a shape each from your cut outs.



Sorting, Matching and Grouping by Shape

Activity 7: In groups.

Which ones look the same as the green ones?

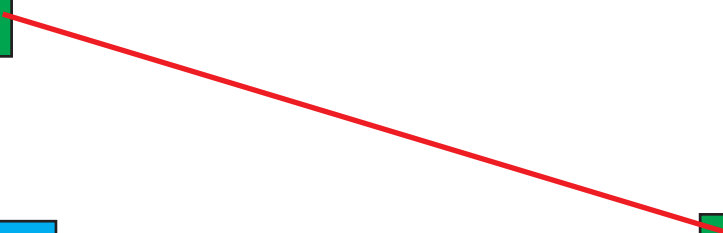
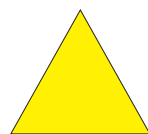
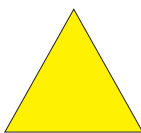
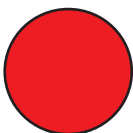
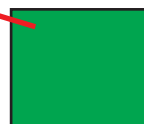
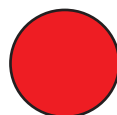


Sorting, Matching and Grouping by Shape

Activity 8a: Individually



Draw, colour and match these shapes.



Sorting, Matching and Grouping by Shape

Activity 8b: In groups



Discuss and list the different shapes you can see.



Sorting, Matching and Grouping by Size

Let us sing: Whole class.

Elephant, Elephant



Sorting, Matching and Grouping by Size

Activity 9: In groups.



1. Look at the pictures below.

Discuss which is the bigger one.



2. Collect stones from around the school compound.

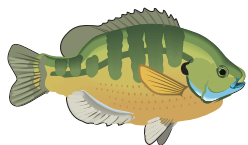


Sorting, Matching and Grouping by Size

Activity 10: In pairs.



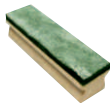
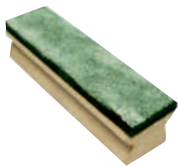
Look and say which is bigger. How do you say it?



Sorting, Matching and Grouping by Size

Activity 11: In pairs.

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



Sorting, Matching and Grouping according to Texture

rough



smooth



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



Counting Numbers

Activity 13: Whole class

Count loudly

1 2 3       10

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

Counting Numbers

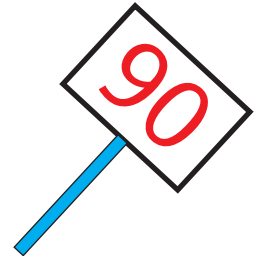
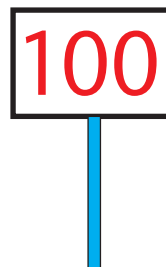
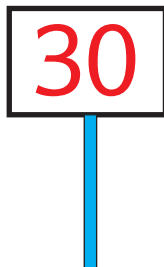
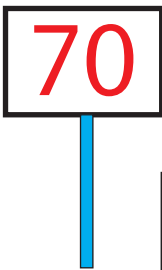
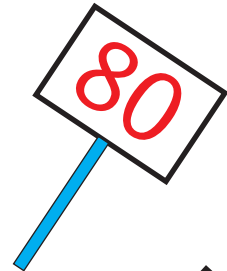
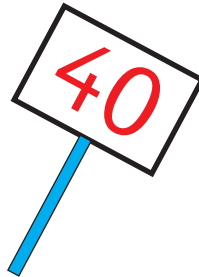
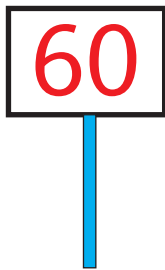
Activity 14: In pairs 

Your partner to say missing number.

1	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	
91		83			96		98		100

Counting Numbers

Activity 15a: In groups.


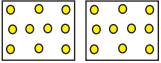
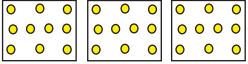
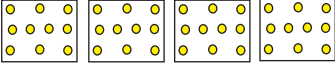
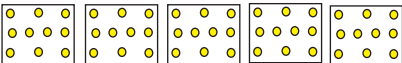
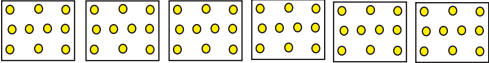
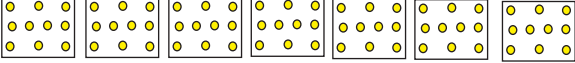
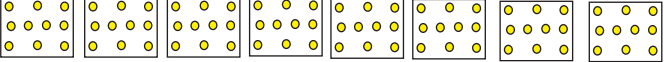
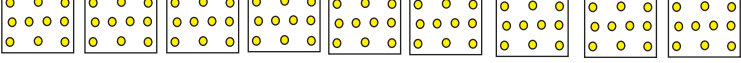
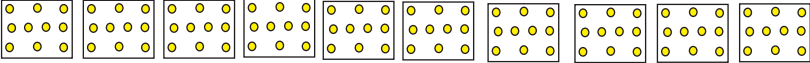


Counting Numbers

Activity 15b: Individually



Count the tens and read the numbers alongside.

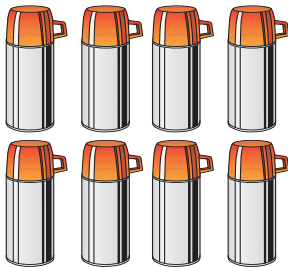
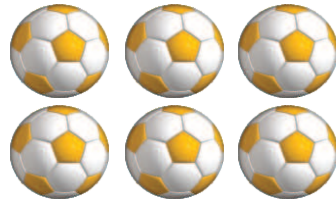
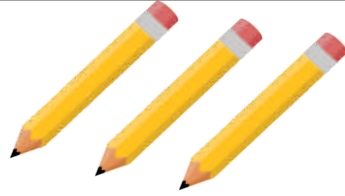
	10 Ten
	20 Twenty
	30 Thirty
	40 Forty
	50 Fifty
	60 Sixty
	70 Seventy
	80 Eighty
	90 Ninety
	100 Hundred

Counting Numbers

Activity 16: Individually



Count and write the answer in your exercise book.



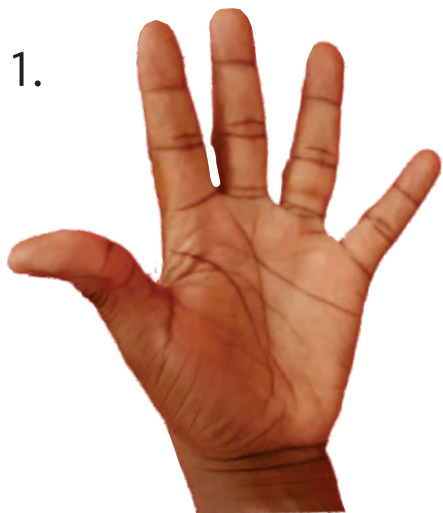
Counting Numbers

Activity 17: In pairs.



How many?

1.



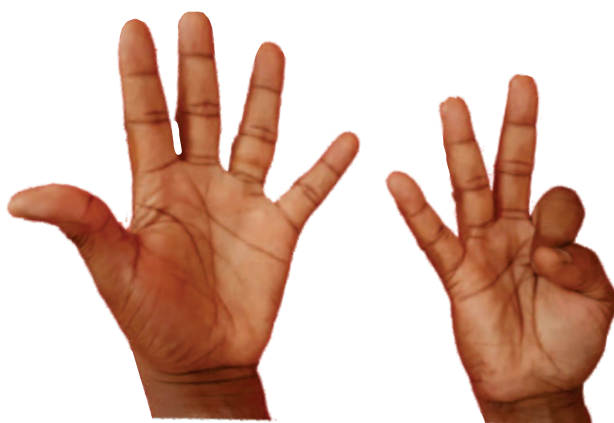
2.



3.



4.



Counting Numbers

Activity 18: Individually



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.

12	11
----	----

9.

56	68
----	----

10.

17	39
----	----

Which is the bigger number?

Why do you say it is the bigger number?

30	50
----	----

14	39
----	----

22	33
----	----

51	56
----	----

65	96
----	----

63	21
----	----

42	58
----	----

49	59
----	----

Counting Numbers

Activity 19: In pairs.



A. Discuss number comes **after** the one given?

- | | | | | | | | | | | | | | | | |
|-----|---|----|--|-----|---|----|--|-----|---|----|--|-----|---|----|--|
| 1. | <table border="1"><tr><td>12</td><td></td></tr></table> | 12 | | 2. | <table border="1"><tr><td>45</td><td></td></tr></table> | 45 | | 3. | <table border="1"><tr><td>55</td><td></td></tr></table> | 55 | | 4. | <table border="1"><tr><td>43</td><td></td></tr></table> | 43 | |
| 12 | | | | | | | | | | | | | | | |
| 45 | | | | | | | | | | | | | | | |
| 55 | | | | | | | | | | | | | | | |
| 43 | | | | | | | | | | | | | | | |
| 5. | <table border="1"><tr><td>62</td><td></td></tr></table> | 62 | | 6. | <table border="1"><tr><td>23</td><td></td></tr></table> | 23 | | 7. | <table border="1"><tr><td>80</td><td></td></tr></table> | 80 | | 8. | <table border="1"><tr><td>87</td><td></td></tr></table> | 87 | |
| 62 | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | | |
| 87 | | | | | | | | | | | | | | | |
| 9. | <table border="1"><tr><td>70</td><td></td></tr></table> | 70 | | 10. | <table border="1"><tr><td>63</td><td></td></tr></table> | 63 | | 11. | <table border="1"><tr><td>44</td><td></td></tr></table> | 44 | | 12. | <table border="1"><tr><td>65</td><td></td></tr></table> | 65 | |
| 70 | | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | | |
| 44 | | | | | | | | | | | | | | | |
| 65 | | | | | | | | | | | | | | | |
| 13. | <table border="1"><tr><td>14</td><td></td></tr></table> | 14 | | 14. | <table border="1"><tr><td>32</td><td></td></tr></table> | 32 | | 15. | <table border="1"><tr><td>39</td><td></td></tr></table> | 39 | | 16. | <table border="1"><tr><td>36</td><td></td></tr></table> | 36 | |
| 14 | | | | | | | | | | | | | | | |
| 32 | | | | | | | | | | | | | | | |
| 39 | | | | | | | | | | | | | | | |
| 36 | | | | | | | | | | | | | | | |
| 17. | <table border="1"><tr><td>26</td><td></td></tr></table> | 26 | | 18. | <table border="1"><tr><td>78</td><td></td></tr></table> | 78 | | 19. | <table border="1"><tr><td>16</td><td></td></tr></table> | 16 | | 20. | <table border="1"><tr><td>27</td><td></td></tr></table> | 27 | |
| 26 | | | | | | | | | | | | | | | |
| 78 | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | |
| 27 | | | | | | | | | | | | | | | |

B. Discuss number comes **before** the one given?

- | | | | | | | | | | | | | | | | |
|-----|---|--|----|-----|---|--|----|-----|---|--|----|-----|---|--|----|
| 1. | <table border="1"><tr><td></td><td>24</td></tr></table> | | 24 | 2. | <table border="1"><tr><td></td><td>95</td></tr></table> | | 95 | 3. | <table border="1"><tr><td></td><td>49</td></tr></table> | | 49 | 4. | <table border="1"><tr><td></td><td>85</td></tr></table> | | 85 |
| | 24 | | | | | | | | | | | | | | |
| | 95 | | | | | | | | | | | | | | |
| | 49 | | | | | | | | | | | | | | |
| | 85 | | | | | | | | | | | | | | |
| 5. | <table border="1"><tr><td></td><td>56</td></tr></table> | | 56 | 6. | <table border="1"><tr><td></td><td>82</td></tr></table> | | 82 | 7. | <table border="1"><tr><td></td><td>32</td></tr></table> | | 32 | 8. | <table border="1"><tr><td></td><td>36</td></tr></table> | | 36 |
| | 56 | | | | | | | | | | | | | | |
| | 82 | | | | | | | | | | | | | | |
| | 32 | | | | | | | | | | | | | | |
| | 36 | | | | | | | | | | | | | | |
| 9. | <table border="1"><tr><td></td><td>40</td></tr></table> | | 40 | 10. | <table border="1"><tr><td></td><td>61</td></tr></table> | | 61 | 11. | <table border="1"><tr><td></td><td>67</td></tr></table> | | 67 | 12. | <table border="1"><tr><td></td><td>15</td></tr></table> | | 15 |
| | 40 | | | | | | | | | | | | | | |
| | 61 | | | | | | | | | | | | | | |
| | 67 | | | | | | | | | | | | | | |
| | 15 | | | | | | | | | | | | | | |
| 13. | <table border="1"><tr><td></td><td>66</td></tr></table> | | 66 | 14. | <table border="1"><tr><td></td><td>13</td></tr></table> | | 13 | 15. | <table border="1"><tr><td></td><td>75</td></tr></table> | | 75 | 16. | <table border="1"><tr><td></td><td>27</td></tr></table> | | 27 |
| | 66 | | | | | | | | | | | | | | |
| | 13 | | | | | | | | | | | | | | |
| | 75 | | | | | | | | | | | | | | |
| | 27 | | | | | | | | | | | | | | |

Counting Numbers

C. Which number comes in between?

Count loudly.

1.

12		14
----	--	----

 2.

54		56
----	--	----

 3.

19		21
----	--	----

5.

26		28
----	--	----

 6.

67		69
----	--	----

 7.

61		63
----	--	----

9.

31		33
----	--	----

 10.

73		75
----	--	----

 11.






4		6
---	--	---

Activity 20: Individually.






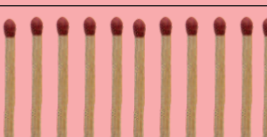
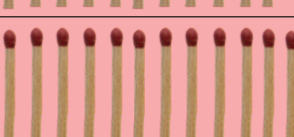
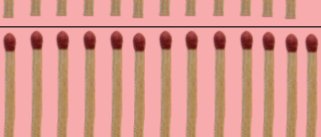
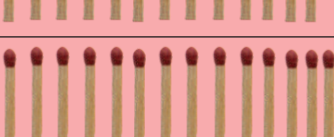
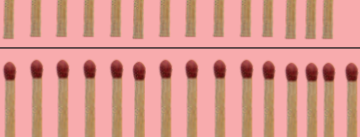


Writing numbers in words.

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

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

Counting Numbers

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

Counting Numbers

Activity 21: Individually.



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

1.

a) 20

b) 35

c) 56

d) 22

e) 83

f) 43

2.

a) Ninety-nine

h) Fifty four

b) Seventy-seven

i) Ninety seven

c) Sixty five

j) Sixty

d) Ninety one

k) Seventy

e) Forty two

l) Twelve

f) Seventy six

m) Eighty six

g) Forty nine

n) Thirty four

Activity 22: Whole class game

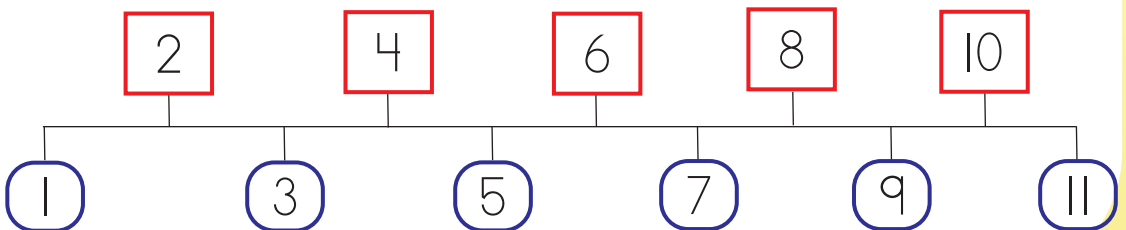
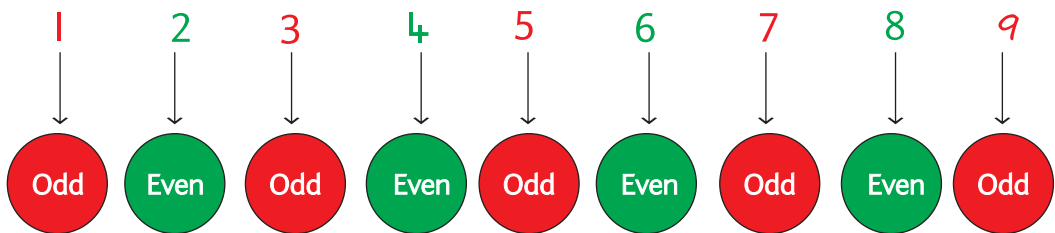
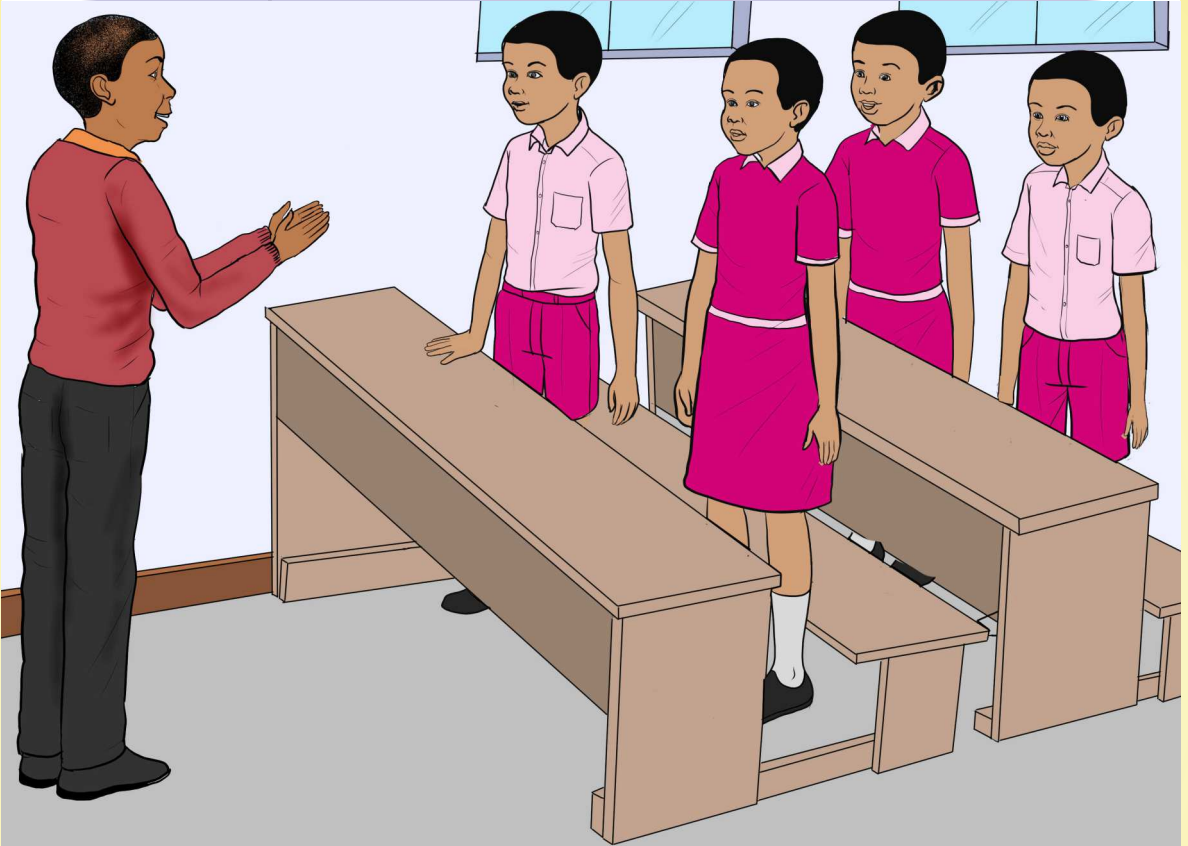
One of you says a number and another writes the number in words on the blackboard.

1.3 ODD AND EVEN NUMBERS

Activity 23: In groups.







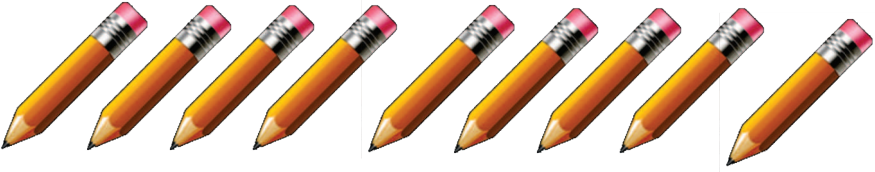

Let us clap “even and odd”.



Odd and Even Numbers

Activity 24: In pairs:

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

a)	
b)	
c)	
d)	
e)	
f)	

Odd and Even Numbers

Activity 25a: Individually



Count in 2s.

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

Count in 5s.

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

Activity 25b: In groups.



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

Odd and Even Numbers

Activity 26: Individually.



Copy these numbers in your exercise book.

Circle all the even numbers and cross out all the odd 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	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 PLACE VALUE



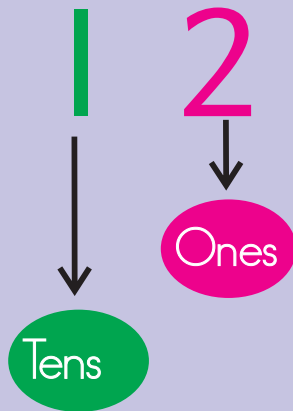
Activity 27: Whole class.

Who is on the ones side?

Place Value

Place value is where a digit is in a number.

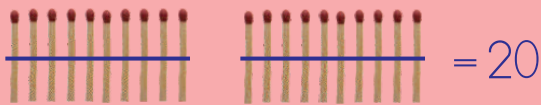
For example: 12



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

For example:

20

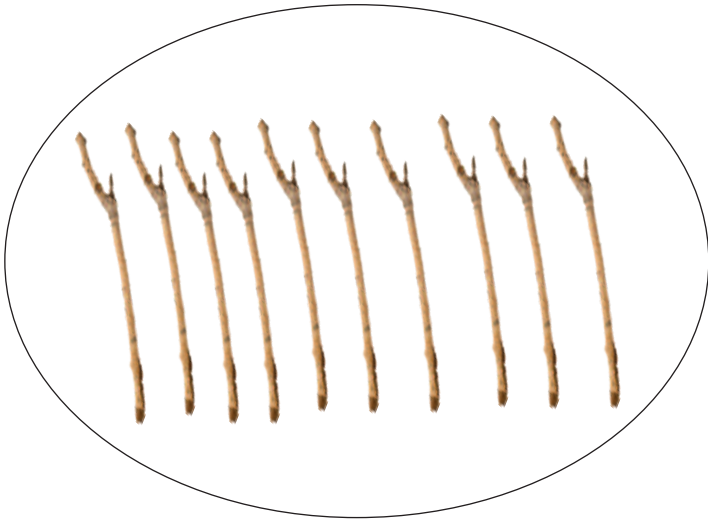


1 ten + 1 ten = 2 tens, 0 is ones.

Place Value

Activity 28: In groups.

Collect different items from the school compound.



Place Value

Activity 29: In pairs 



1 one



2 ones



3 ones



4 ones



5 ones



6 ones



7 ones



8 ones



9 ones

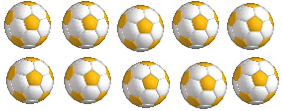

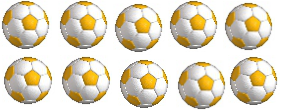

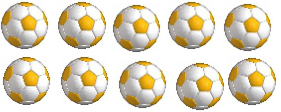







1 ten

Place Value

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
				11 Eleven
			2	12 Twelve
			3	13 Thirteen
			4	14 Fourteen

Objects	Objects	Tens	Ones	Number
		2	0	20 Twenty

Place Value

Activity 31: In pairs

Say how many tens, and how many ones.

21	2 tens and 1 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

60

50

75

92

48

67

38

73


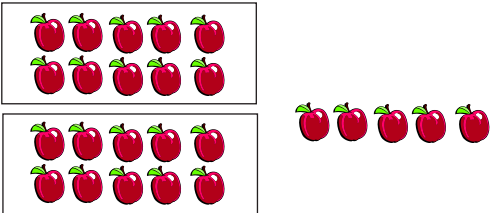
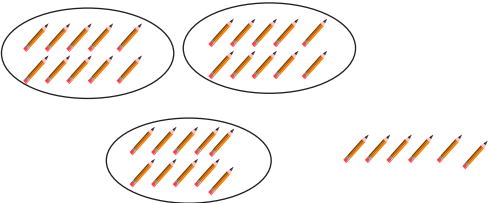
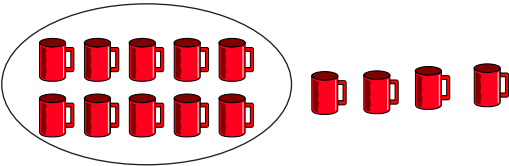
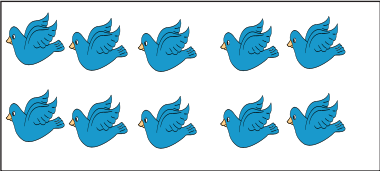
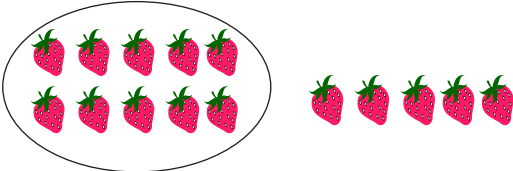
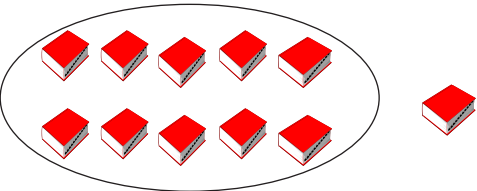
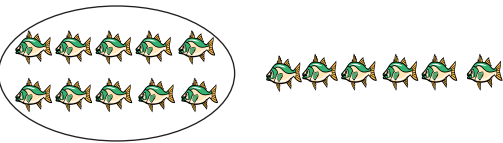
Place Value

Activity 32: Individually



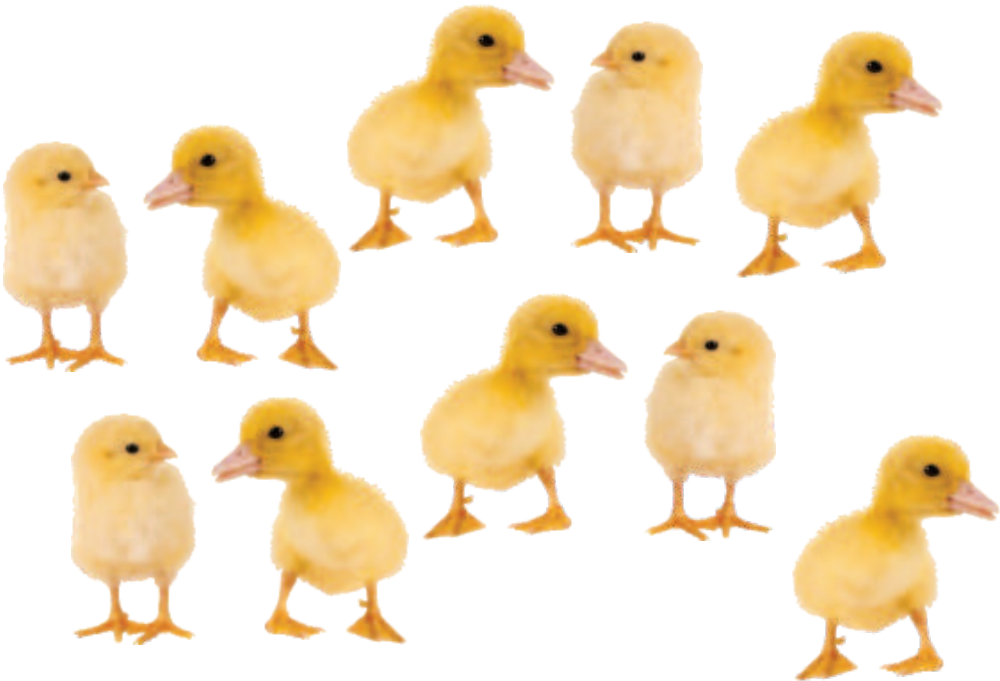
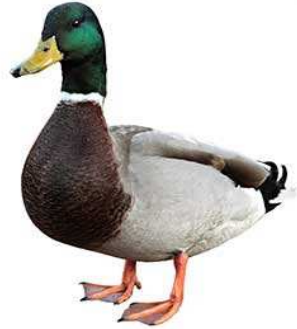
How many tens and how many ones?

You can write the answer in your exercise book.

 <p>1 ten and 2 ones = 12</p>	
	
	
	

Activity 33: Let us sing: Whole class.

Ten Little Ducks



Place Value

Ascending and Descending order.

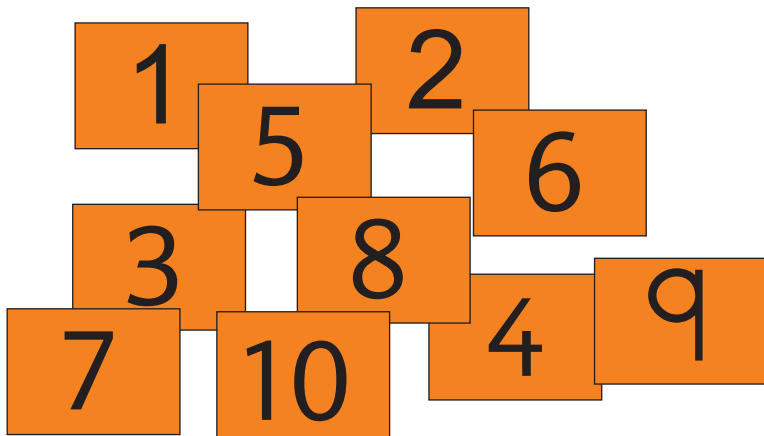
Activity 34: In groups



What do you notice?



Arrange them.



Ascending order

1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---

Descending order

9	8	7	6	5	4	3	2	1
---	---	---	---	---	---	---	---	---

Place Value

Activity 35: Individually



Ascending order

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

Descending order.

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




Addition

Activity 37: Individually





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

Put together

 $+$  $=$ 4

 $+$  $=$

 $+$  $=$

 $+$  $=$

Addition

Activity 38: In pairs.



$$5 + 3 = 8$$



$$4 + 2 = 6$$

Do this in turns and with different number of fingers.

Addition

Activity 39: Individually



Do these sums in your exercise book.

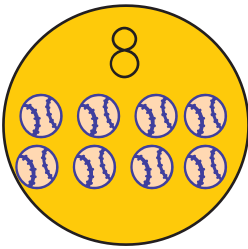
Add

$$\begin{array}{c} 2 \\ \text{Bus} \quad \text{Bus} \end{array} + \begin{array}{c} 1 \\ \text{Bus} \end{array} = \begin{array}{c} 3 \\ \text{Bus} \quad \text{Bus} \\ \text{Bus} \end{array}$$

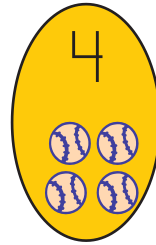
$$\begin{array}{c} 4 \\ \text{Grasshopper} \quad \text{Grasshopper} \\ \text{Grasshopper} \quad \text{Grasshopper} \end{array} + \begin{array}{c} 2 \\ \text{Grasshopper} \\ \text{Grasshopper} \end{array} =$$

$$\begin{array}{c} 4 \\ \text{Car} \quad \text{Car} \\ \text{Car} \quad \text{Car} \end{array} + \begin{array}{c} 4 \\ \text{Car} \quad \text{Car} \\ \text{Car} \quad \text{Car} \end{array} =$$

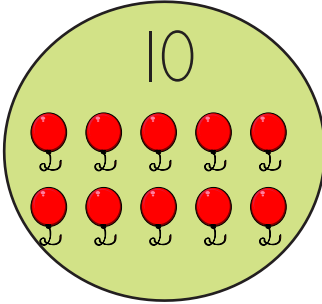
Addition



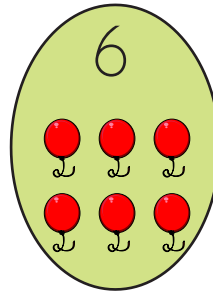
+



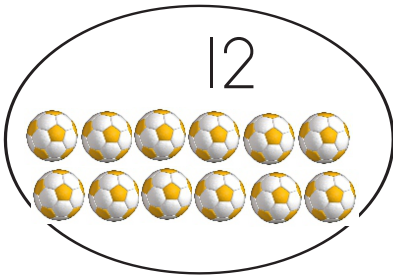
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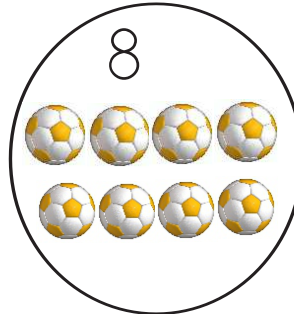
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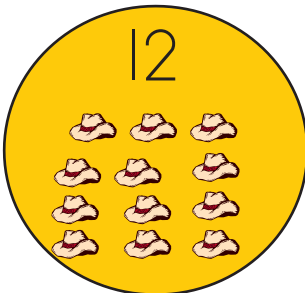
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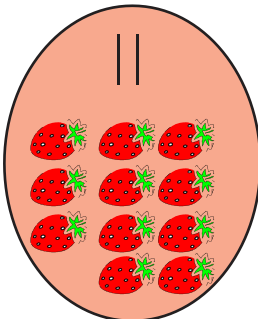
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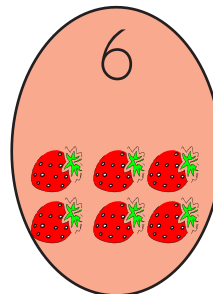
+



=



+



=

Addition

Activity 40: In groups.



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

Do these sums in your exercise book.

$$1 + 2 = 3$$



$$3 + 4 =$$



$$10 + 12 =$$



$$15 + 5 =$$



Addition

Activity 41: Individually.



Do these sums in your exercise book.

a) $2 + 2$

b) $16 + 13$

c) $16 + 10$

d) $12 + 25$

e) $16 + 3$

f) $22 + 14$

g) $22 + 6$

h) $23 + 11$

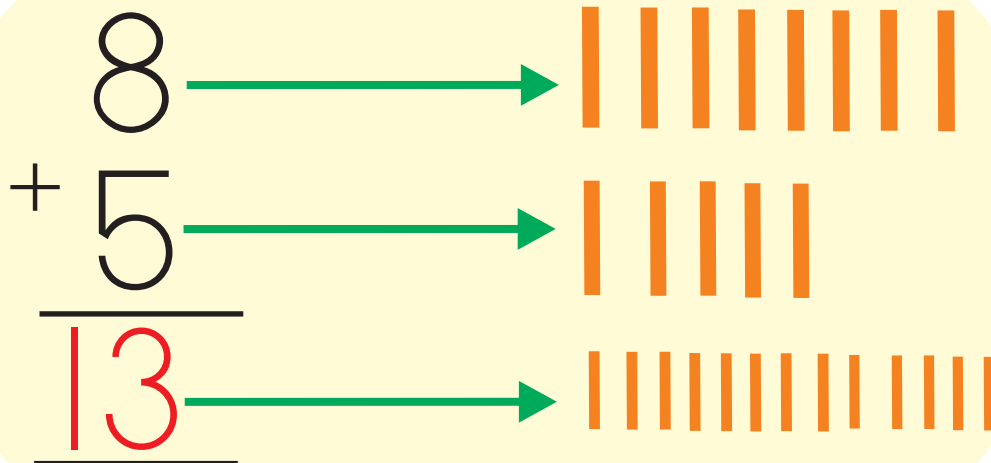
i) $12 + 7$

j) $23 + 13$

Addition

Activity 42: Individually.

Do these sums in your exercise book.



$$\begin{array}{r} 13 \\ + 3 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ + 4 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 25 \\ + 3 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ + 6 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ + 0 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ + 4 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 20 \\ + 0 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ + 8 \\ \hline \\ \hline \end{array}$$

Addition

Activity 43: Individually



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

1. 9 = 4 + _____

7. 5 = _____ + 1

2. 18 = 9 + _____

8. 13 = _____ + 7

3. 17 = 9 + _____

9. 16 = 9 + _____

4. 12 = 8 + _____

10. 14 = 6 + _____

5. 10 = _____ + 6

11. 15 = _____ + 8

6. 7 = _____ + 4

12. 11 = _____ + 5

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

Tens	Ones
2	7
+ 1	<input type="text"/>
3	7

Tens	Ones
1	<input type="text"/>
+ 1	0
2	8

Tens	Ones
<input type="text"/>	4
+ <input type="text"/>	1
2	5

Tens	Ones
1	<input type="text"/>
+ 1	<input type="text"/>
2	8

Tens	Ones
2	1
+ <input type="text"/>	4
3	5

Tens	Ones
1	6
+ 1	<input type="text"/>
2	0

Tens	Ones
<input type="text"/>	3
+ <input type="text"/>	2
3	5

Tens	Ones
<input type="text"/>	<input type="text"/>
+ <input type="text"/>	<input type="text"/>
3	2

1.6 SUBTRACTION/TAKE AWAY

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

Activity 44: In groups



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

$$6 - 2 = 4$$

000000

$$5 - 3 = 2$$

00000

$$5 - 2 =$$

00000

$$3 - 3 =$$

000

$$3 - 1 =$$

000

$$6 - 3 =$$

000000

$$8 - 4 =$$

00000000

$$10 - 5 =$$

0000000000

Subtraction/ Take away

Activity 47: Individually.



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

Example:

a) $90 - 10 = 80$
(Without regrouping)

$$\begin{array}{r} \text{a) } 90 \\ - 10 \\ \hline 80 \end{array}$$

b) $188 - 69 = 119$
(With regrouping)

$$\begin{array}{r} \text{b) } 188 \\ - 69 \\ \hline 119 \end{array}$$

Work out these numbers in your exercise book.

Subtraction without regrouping

$3 - 2 =$	$17 - 4 =$	$16 - 12 =$
$6 - 3 =$	$16 - 6 =$	$15 - 10 =$
$14 - 2 =$	$18 - 6 =$	$18 - 8 =$
$18 - 5 =$	$23 - 13 =$	$20 - 10 =$
$15 - 12 =$	$17 - 6 =$	$15 - 10 =$

Subtraction with regrouping

$11 - 5 =$	$13 - 6 =$	$10 - 8 =$
$16 - 4 =$	$18 - 9 =$	$16 - 7 =$
$32 - 25 =$	$13 - 5 =$	$10 - 3 =$
$14 - 7 =$	$17 - 9 =$	$13 - 9 =$
$10 - 3 =$	$13 - 9 =$	$11 - 7 =$

Subtraction/ Take away

Activity 48: Individually.



Do these sums in your exercise book.

$$\begin{array}{r} 7 \\ - 4 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ - 6 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 13 \\ - 10 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 13 \\ - 3 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ - 1 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 27 \\ - 16 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ - 3 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 15 \\ - 1 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 23 \\ - 20 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ - 11 \\ \hline \\ \hline \end{array}$$

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

$$\begin{array}{r} 18 \\ - 0 \\ \hline \\ \hline \end{array}$$

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.



Do these sums in your exercise book.

$$\begin{array}{r} -3 \\ 2 \\ \hline 1 \end{array} \quad \text{000}$$

$$\begin{array}{r} -5 \\ 2 \\ \hline 3 \end{array} \quad \text{000000}$$

$$\begin{array}{r} -2 \\ 2 \\ \hline 0 \end{array} \quad \text{00}$$

$$\begin{array}{r} -4 \\ 3 \\ \hline \end{array} \quad \text{0000}$$

$$\begin{array}{r} -5 \\ 0 \\ \hline \end{array} \quad \text{000000}$$

$$\begin{array}{r} -6 \\ 4 \\ \hline \end{array} \quad \text{0000000}$$

$$\begin{array}{r} -5 \\ 2 \\ \hline \end{array} \quad \text{0000}$$

$$\begin{array}{r} -3 \\ 0 \\ \hline \end{array} \quad \text{000}$$

$$\begin{array}{r} -6 \\ 1 \\ \hline \end{array} \quad \text{0000000}$$

$$\begin{array}{r} -3 \\ 1 \\ \hline \end{array} \quad \text{000}$$

$$\begin{array}{r} -8 \\ 4 \\ \hline \end{array} \quad \text{000000000}$$

$$\begin{array}{r} -6 \\ 5 \\ \hline \end{array} \quad \text{0000000}$$

Subtraction/ Take away

Activity 51: Individually.



Work out in your exercise book.

1. $6 - \underline{\quad} = 4$

2. $\underline{\quad} - 3 = 6$

3. $7 - 1 = \underline{\quad}$

4. $\underline{\quad} - 5 = 3$

5. $9 - \underline{\quad} = 3$

6. $8 - 6 = \underline{\quad}$

7. $5 - \underline{\quad} = 0$

8. $\underline{\quad} - 3 = 1$

9. $\underline{\quad} - 4 = 4$

10. $\underline{\quad} - 2 = 5$

11. $10 - 1 = \underline{\quad}$

12. $10 - \underline{\quad} = 4$

13. $18 - \underline{\quad} = 10$

14. $\underline{\quad} = 3 = 13$

15. $17 - \underline{\quad} = 3$

16. $\underline{\quad} - 14 = 4$

17. $15 - 12 = \underline{\quad}$

18. $13 - 2 = \underline{\quad}$

19. $20 - \underline{\quad} = 4$

20. $12 - 7 = \underline{\quad}$

21.
$$\begin{array}{r} 28 \\ - 1 \square \\ \hline \hline \end{array}$$

22.
$$\begin{array}{r} 39 \\ - 1 \square \\ \hline \hline \end{array}$$

23.
$$\begin{array}{r} 3 \square \\ - 18 \\ \hline \hline \end{array}$$

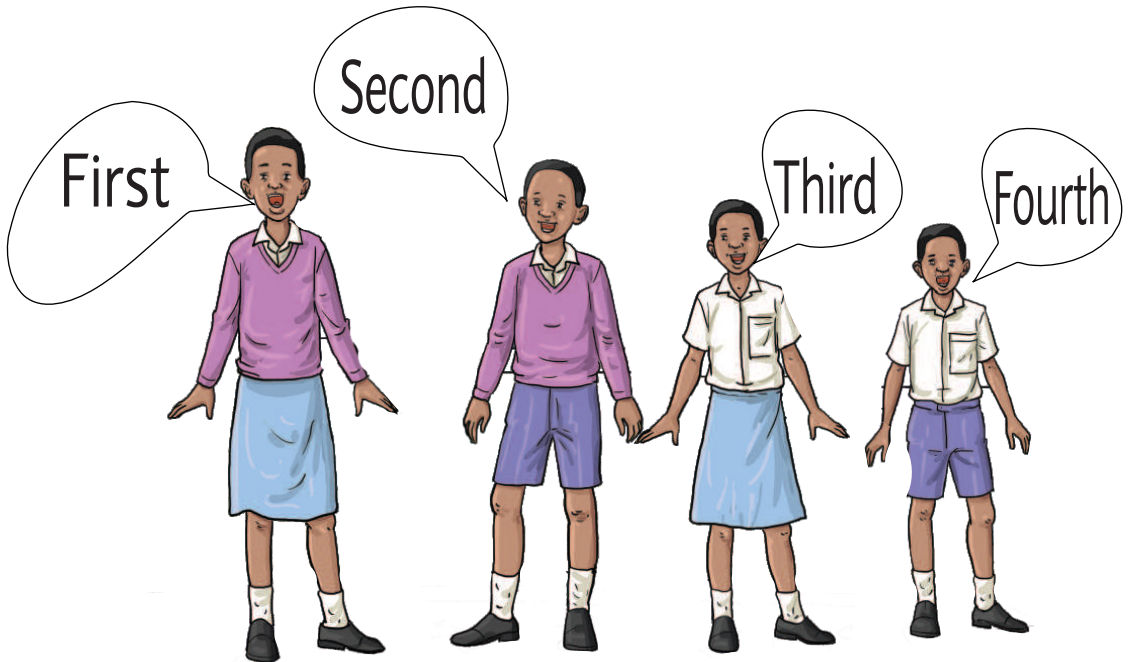
24.
$$\begin{array}{r} 15 \\ - \square \\ \hline \hline \end{array}$$

25.
$$\begin{array}{r} 1 \square \\ - 16 \\ \hline \hline \end{array}$$

26.
$$\begin{array}{r} 39 \\ - 1 \square \\ \hline \hline \end{array}$$

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.

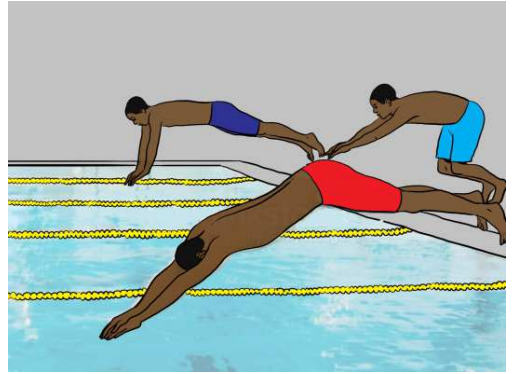
Compete in the field and record who was 1st, second third etc.

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



2nd



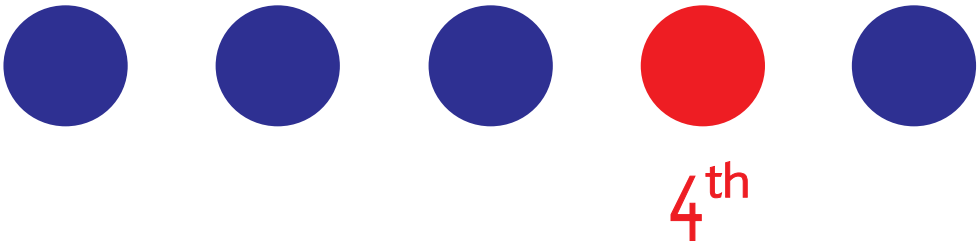
Third



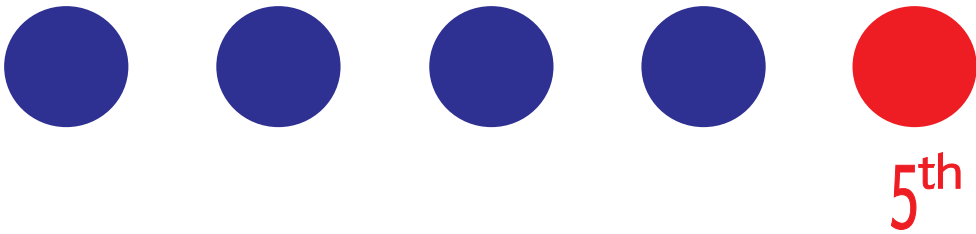
3rd



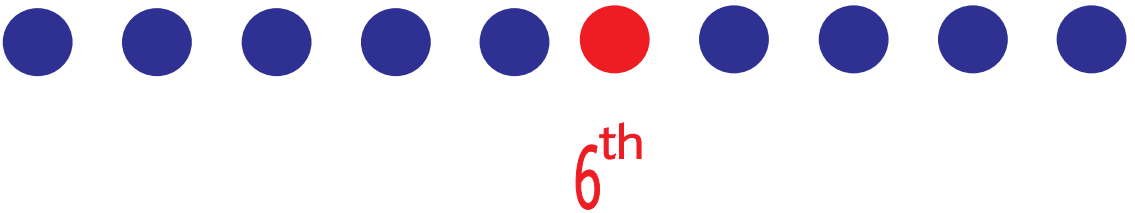
Fourth



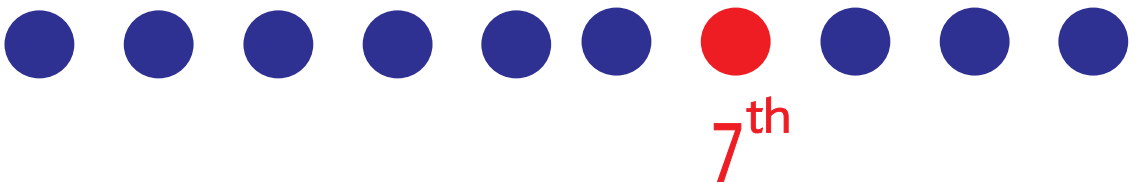
Fifth



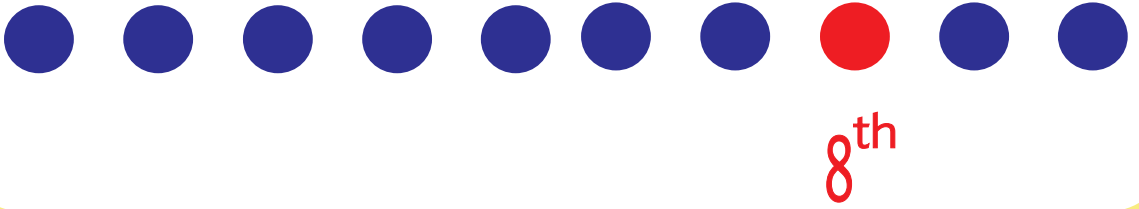
Sixth



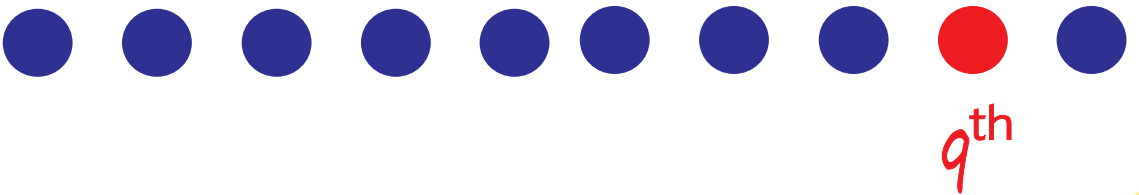
Seventh



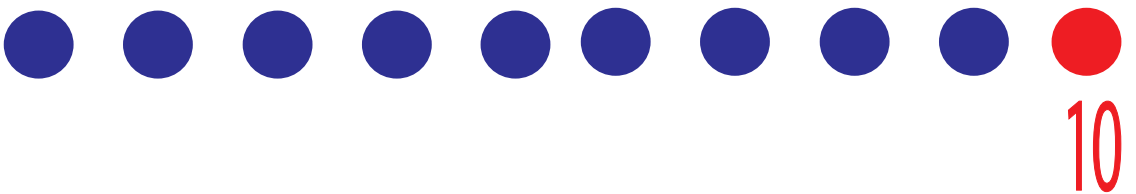
eightth



Ninth



Tenth



Activity 56: In groups



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.

1st

first



2nd

second



3rd

third



4th

fourth



5th

fifth



6th

sixth



7th

seventh



8th

eighth



9th

ninth



10th

tenth



Ordinal Numbers

Activity 58 : In groups.



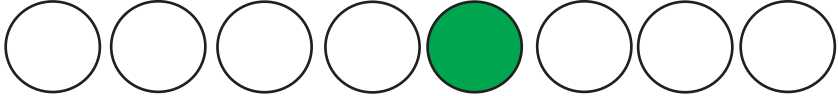
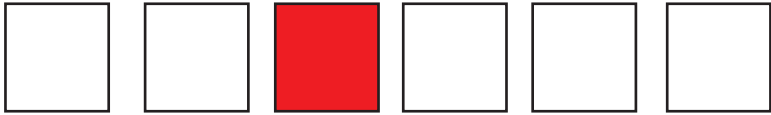


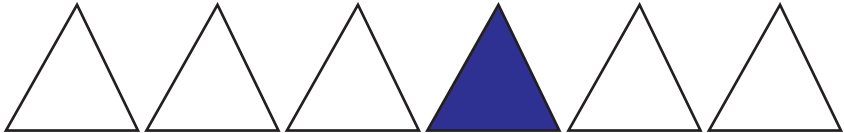
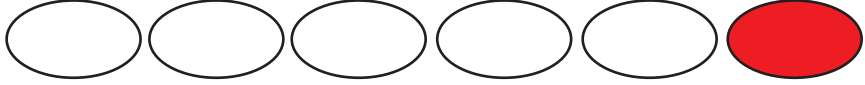

Draw and colour the ordinal numbers.

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

Ordinal Numbers

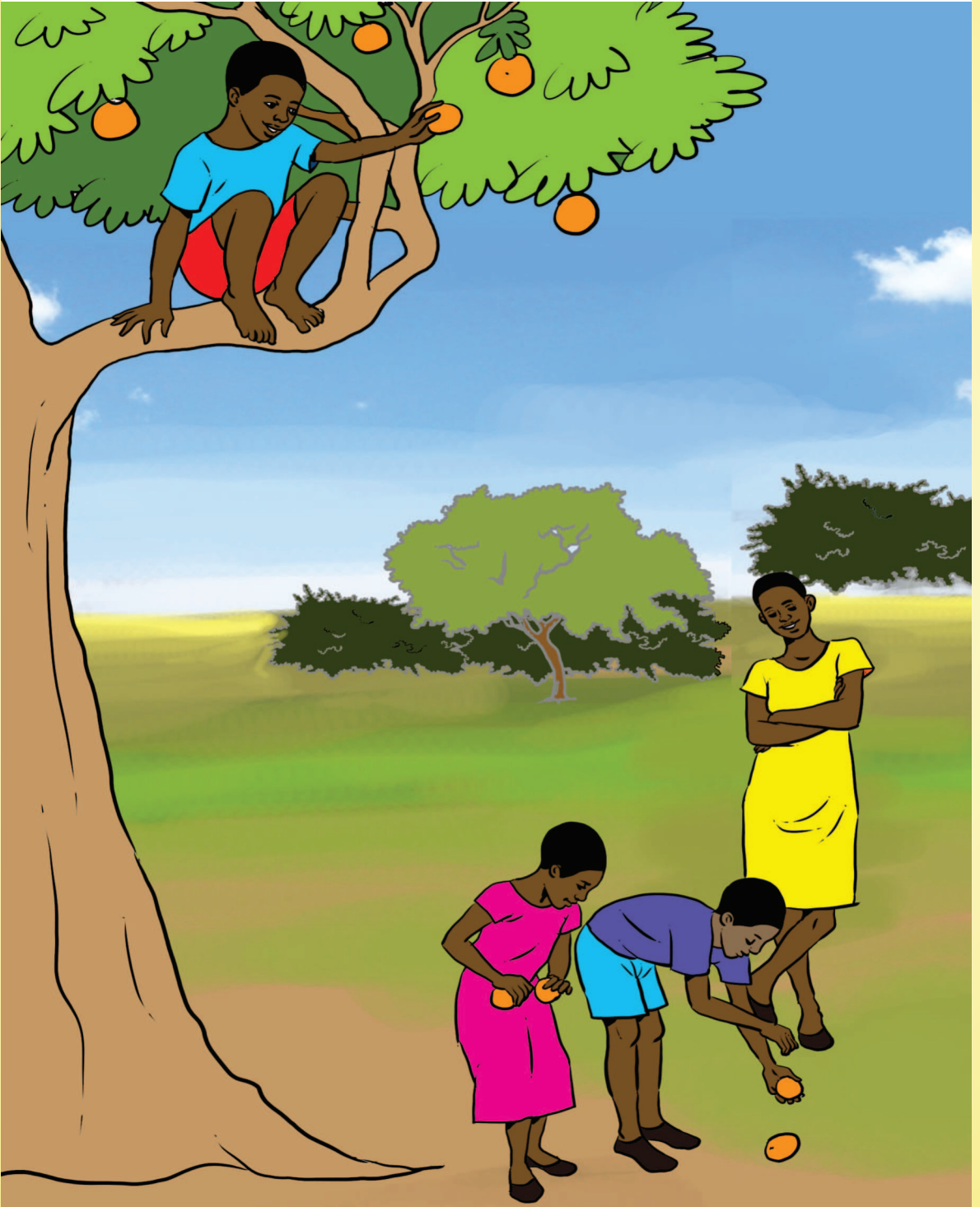
Activity 59: In groups.

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

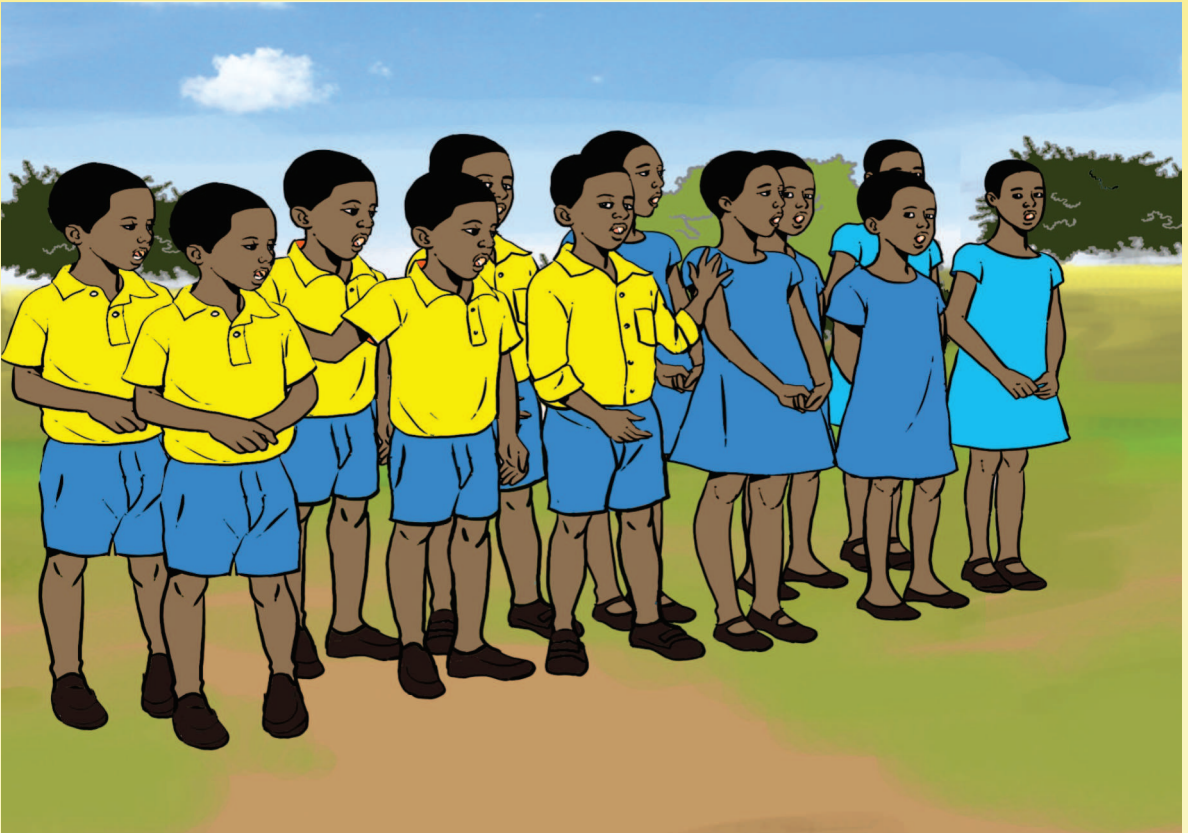
A.		5th
B.		
C.		
D.		
E.		
F.		
G.		



Achal, Poni, Wani and Lado.



Let us discuss



UNIT 2 MEASUREMENT

Content Map

Knowledge and understanding	<ul style="list-style-type: none">• Know the days of the week and the months of the year.• Recognize the common notes in local currency.
Skills	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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 organization	Whole class orientation Groupwork

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?

Length

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



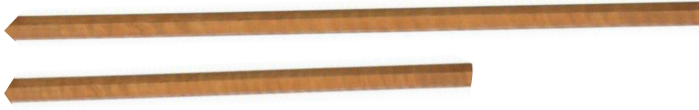
How many steps did you take to reach?

Length

Activity 2: Individually.



Which is longer?



Length

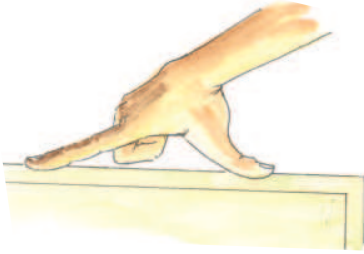
Activity 3: In groups.

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



Length

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?

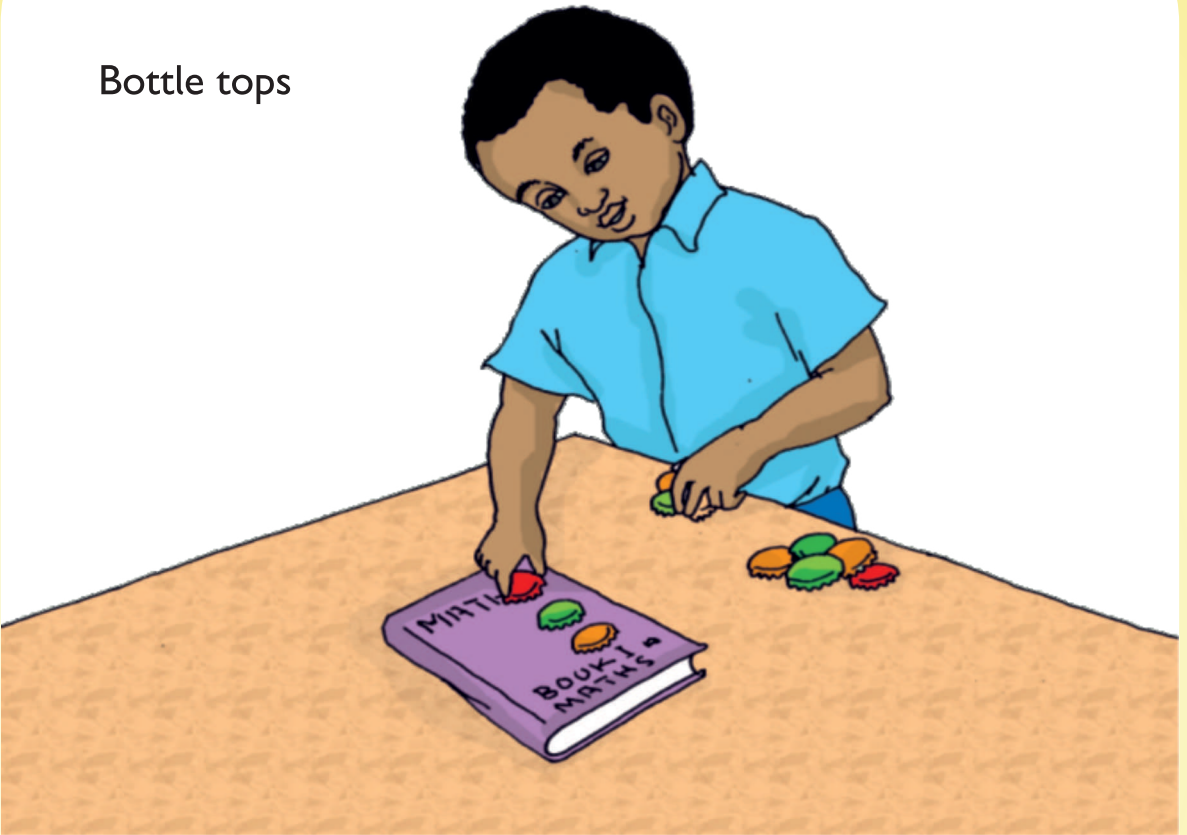
Why do you think you have differences?

Length

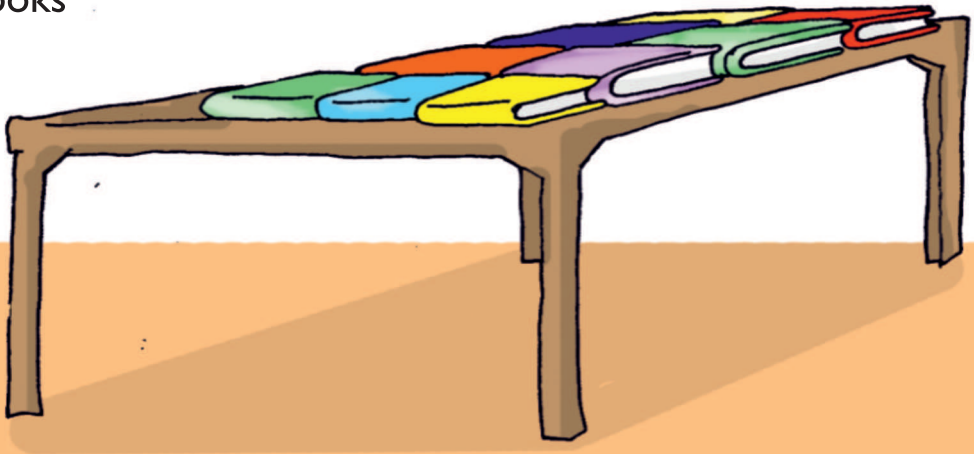
Activity 5: In groups.



Bottle tops



Books



2.2 MASS

Activity 6: In groups.



Can you lift these things?

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



Mass

Activity 7: In groups.



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



Mass



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.

Mass

Activity 9: In groups.



Who do you think is heavier?
Kenji 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?

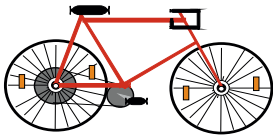
Mass

Activity 10: In groups.



Which one can you lift?

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

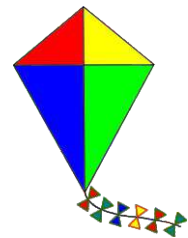
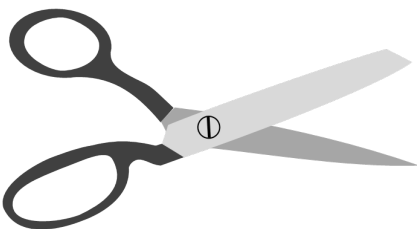
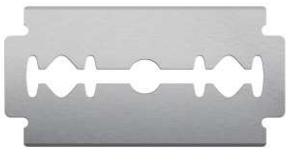


Mass

Activity 11: In groups



Which one would you say is heavier?



2.3 CAPACITY

Activity 12: In groups.



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?

1.



2.



3.



4.



5.



6.



2.4 CURRENCY

Activity 16: In groups.



What is happening in these pictures?

1



2



3



Currency



Activity 17: In groups.

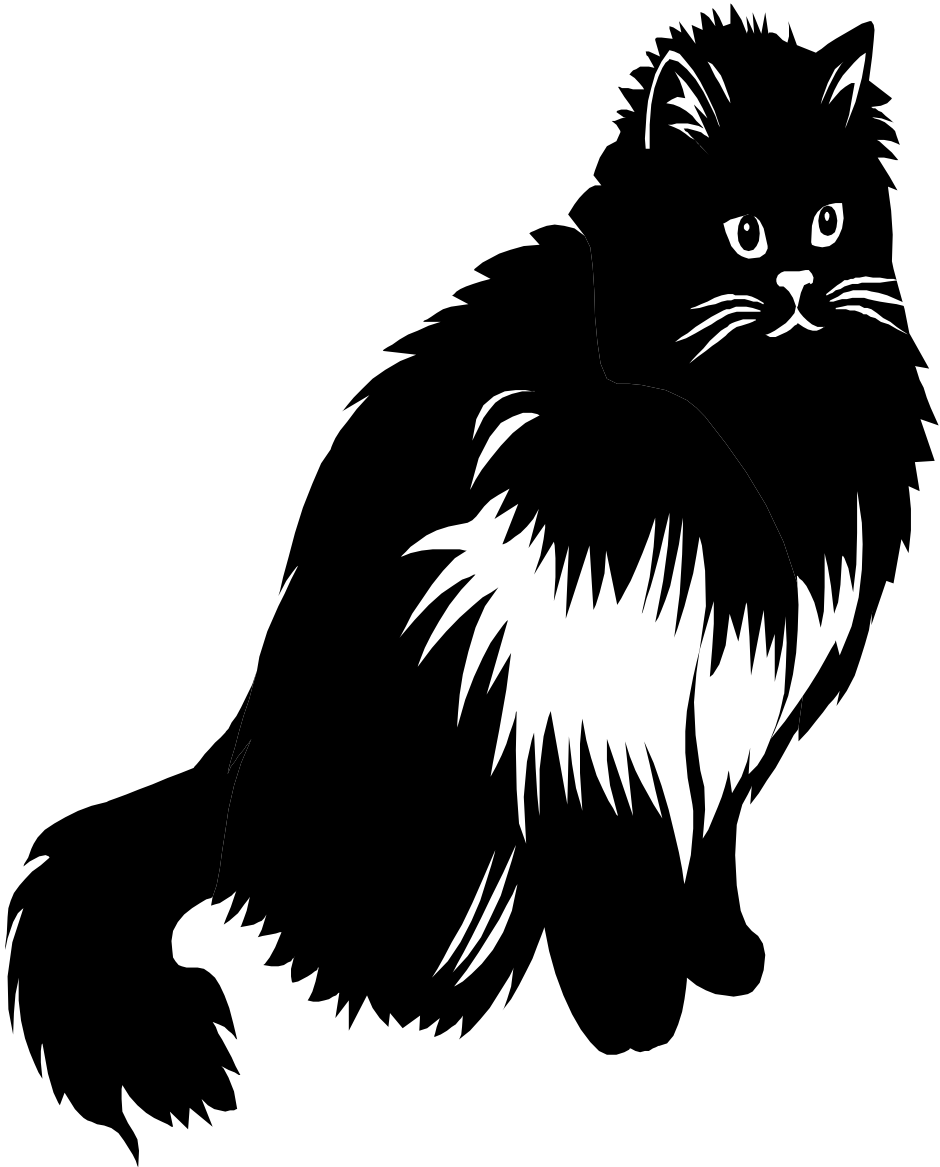


Discuss what is happening in the picture.
What do you think Kenyi and Taban are saying?

Currency

Let us sing: Whole class

Grandmother Pussycat



Currency

Activity 18: In groups.



How much?



Currency

Activity 19: In groups.



Currency

Activity 20: Individually



25 SSP



15 SSP



30 SSP



10 SSP



20 SSP



10 SSP



40 SSP



50 SSP

2.5 TIME

Activity 21: In groups.

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

1



2



3



4



5



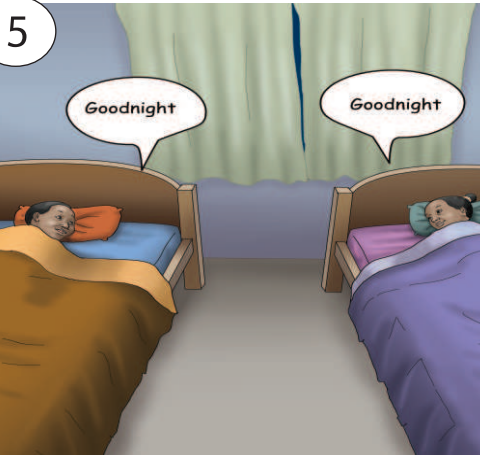
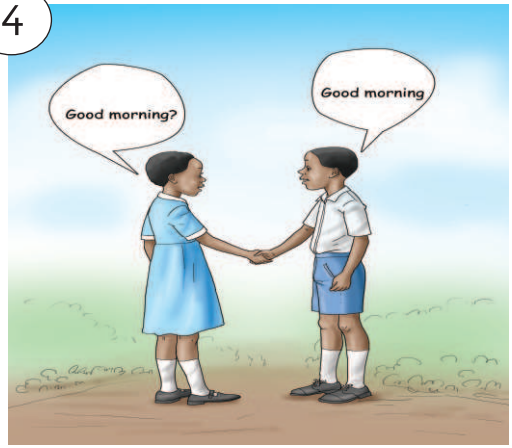
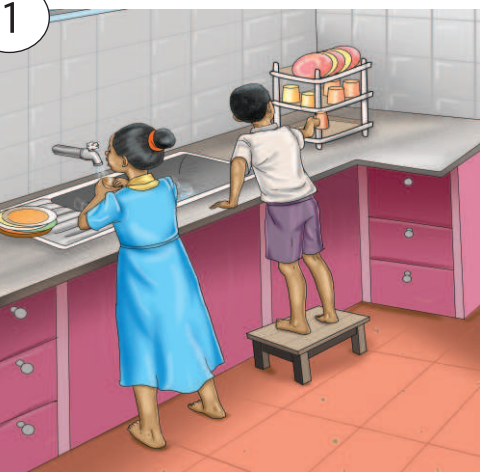
6



Time

Activity 22: In groups

What time of the day do you do these activities?

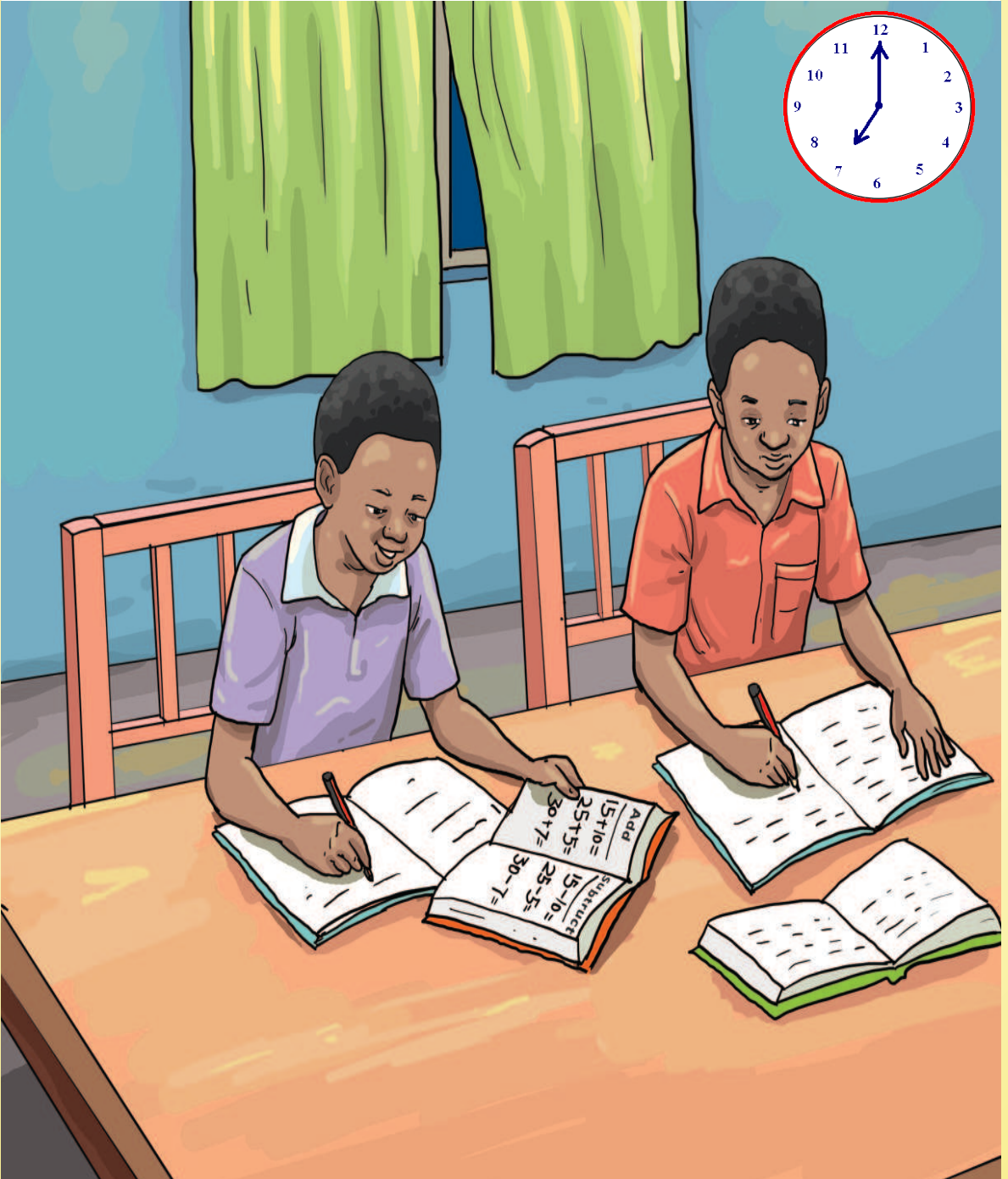


Time

Activity 23: In groups



What is the time?



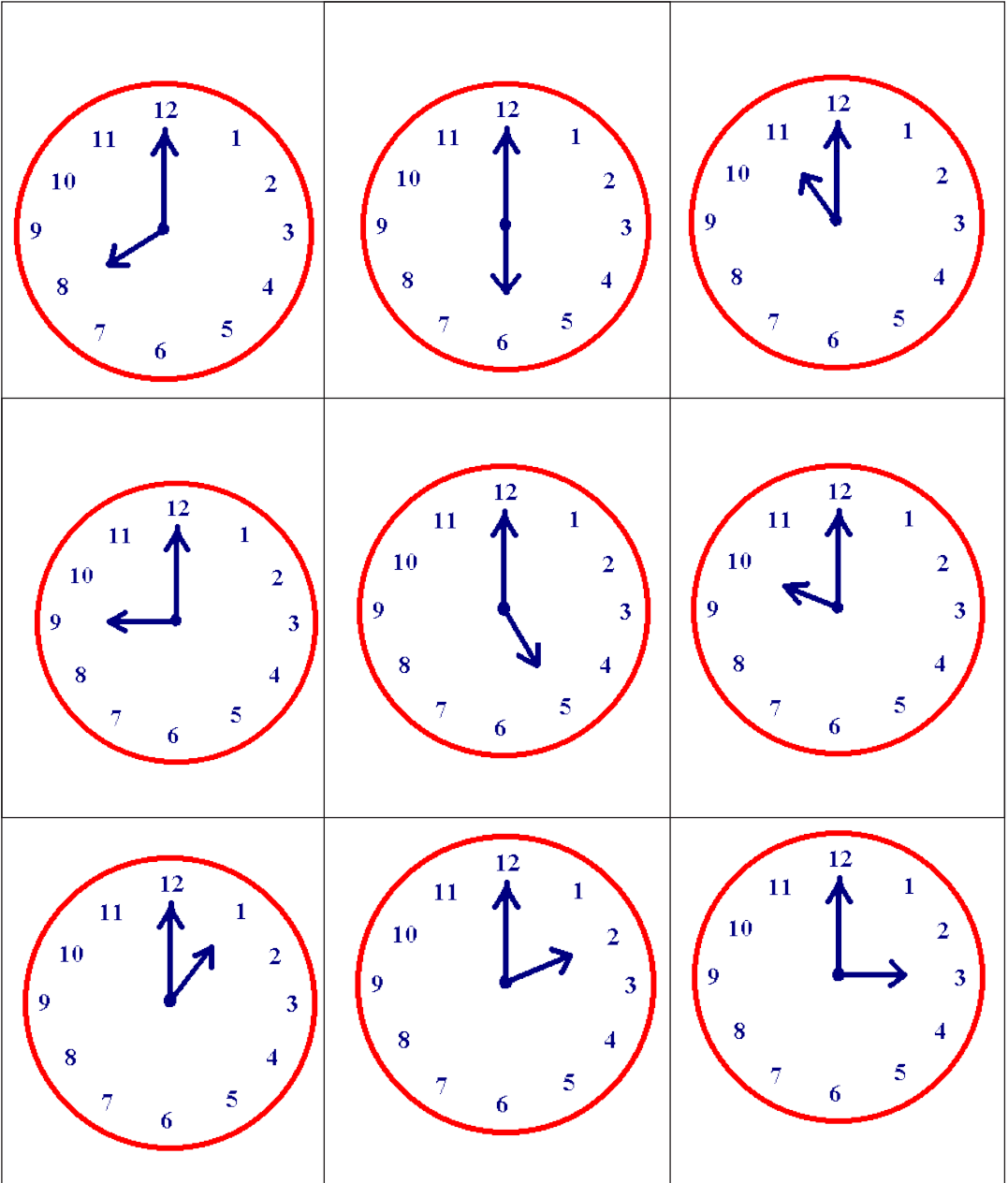
Time

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

1.



2.



3.



4.



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.



Monday



Saturday



Sunday



Tuesday



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

Time

Activity 29: In pairs



Make the cards.

June

May

July

October

February

September

November

April

March

December

August

January

Content Map

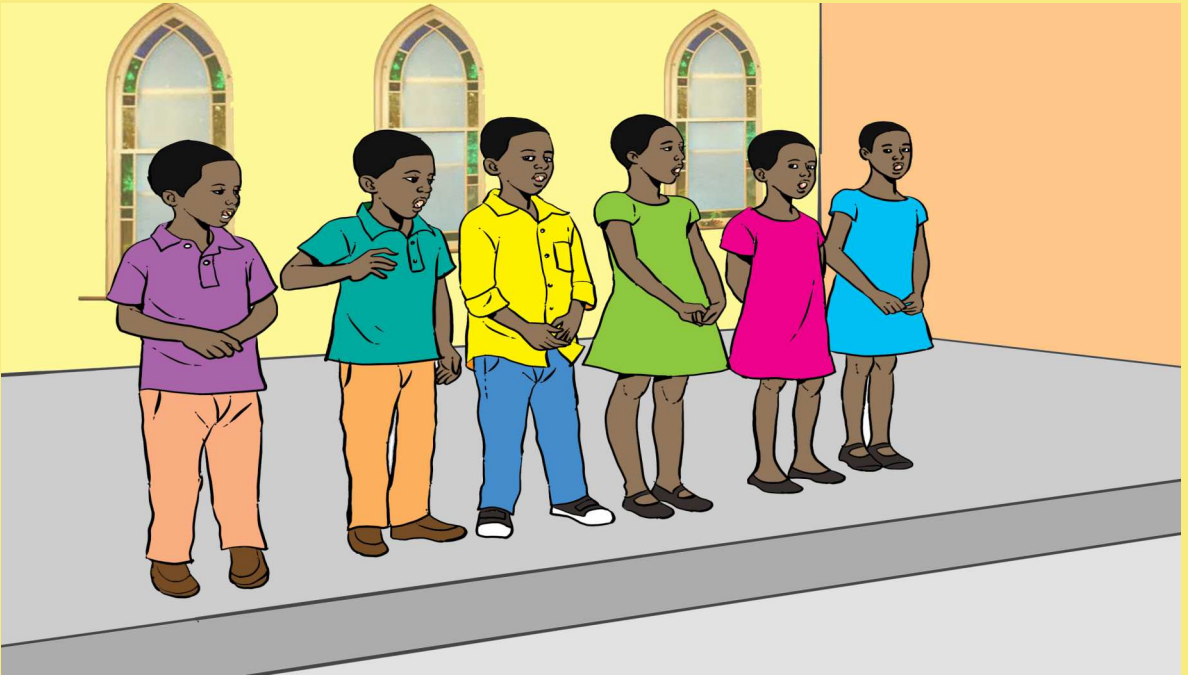
Knowledge and understanding	<ul style="list-style-type: none"> Recognize simple geometric shapes.
Skills	<ul style="list-style-type: none"> Observe shapes and patterns. Draw geometrical lines and shapes. Make patterns and model of triangular and square based pyramids. Group objects with similar characteristics.
Attitudes	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Critical thinking: grouping and sorting by property. Communication: describe shapes to the class. Co-operation: work in groups to make models.
Activities	<ul style="list-style-type: none"> 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	<p>Whole class orientation Groupwork</p>

3.1 LINES

Activity 1: In groups of five.

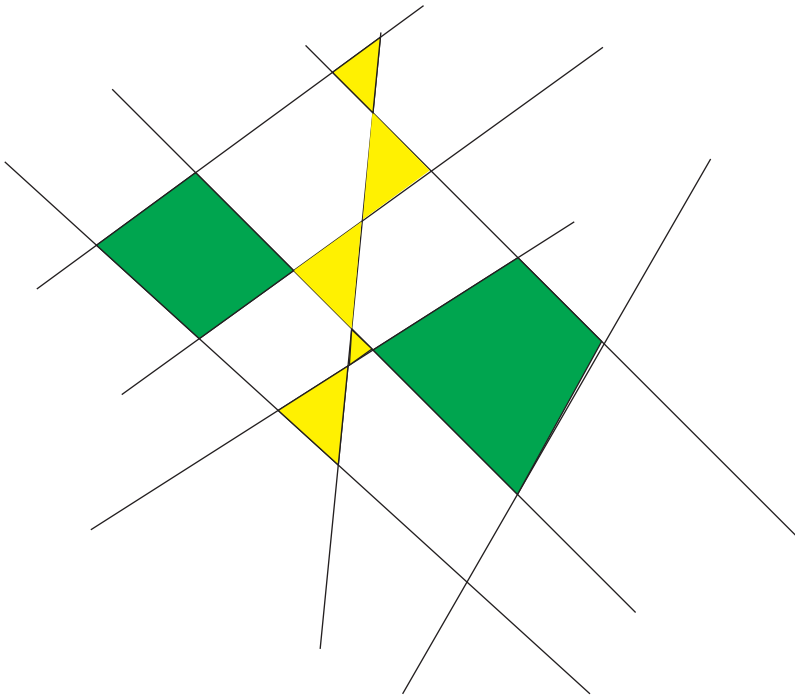
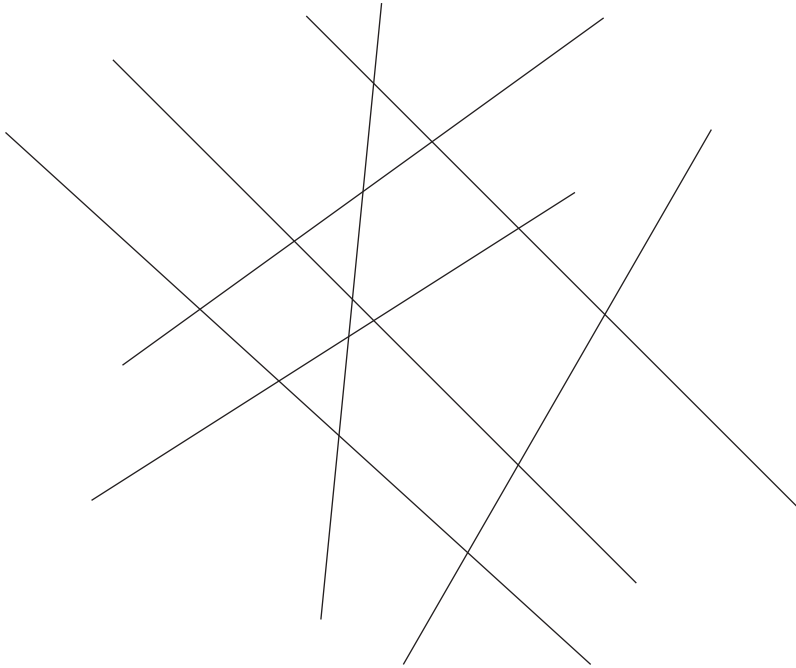


Lines



Lines

Draw and colour



3.2 SHAPES

Activity 4: In groups.

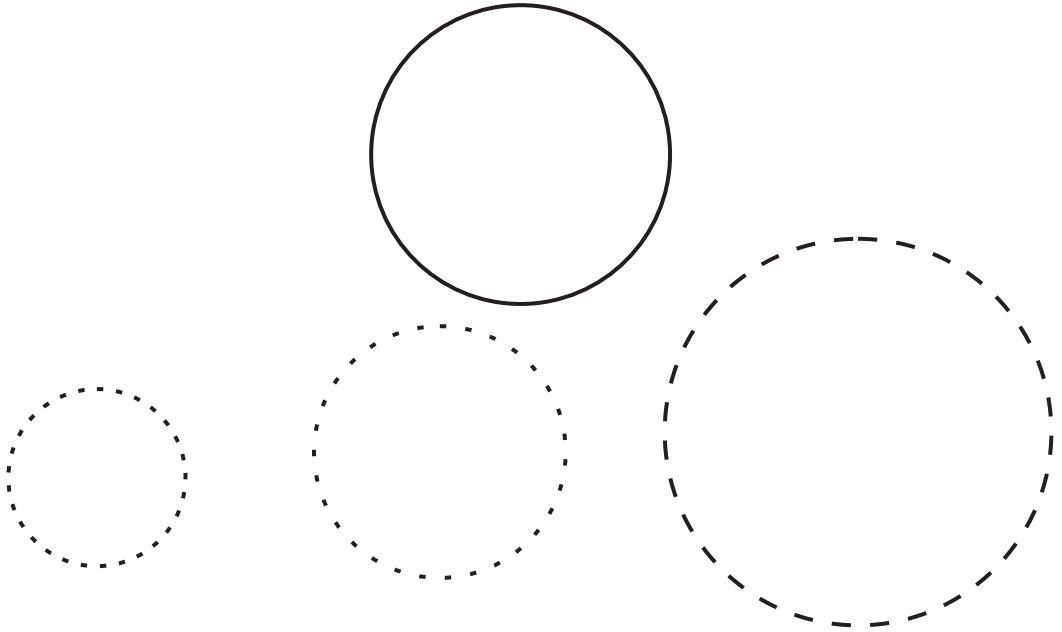


Geometrical shapes

Activity 5: Individually.



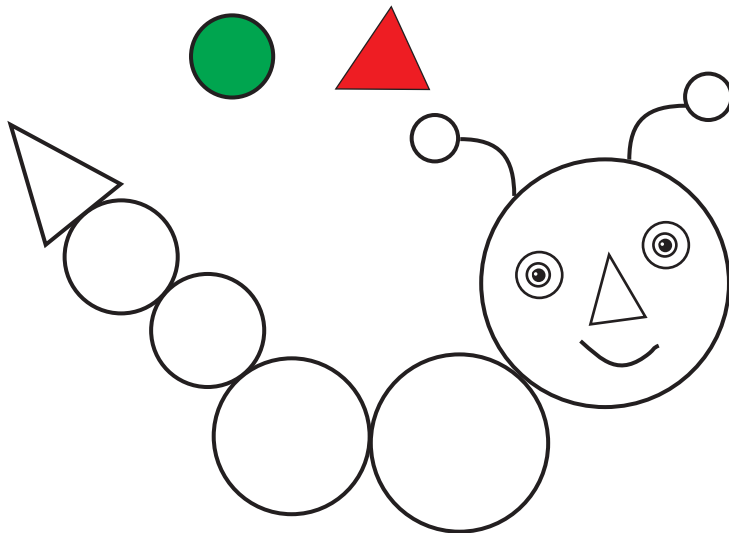
Draw these shapes in your exercise book.



Activity 6: Individually.



Draw and colour these shapes in your exercise book.

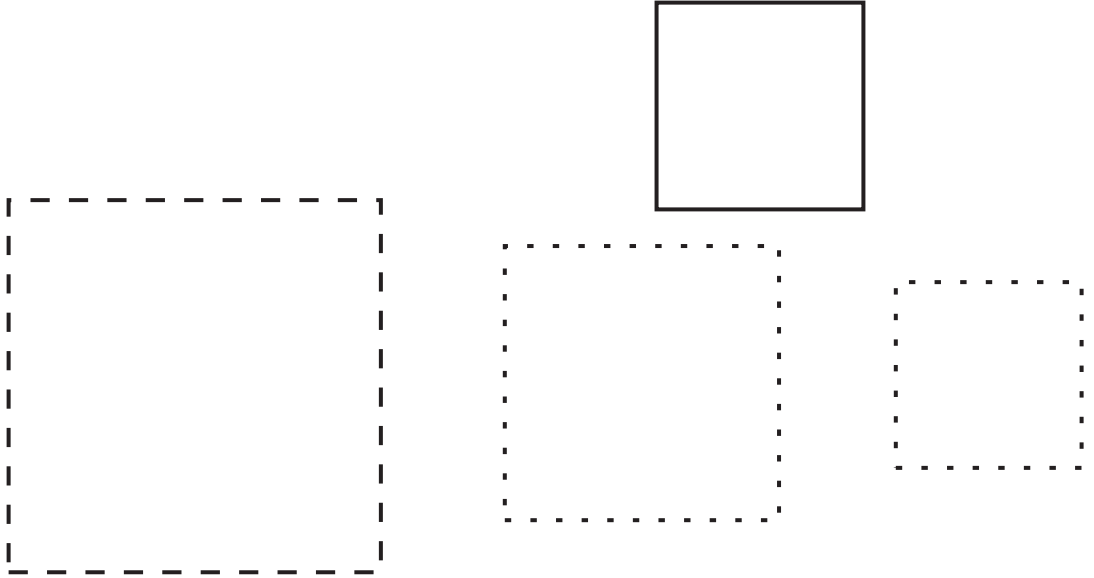


Shapes

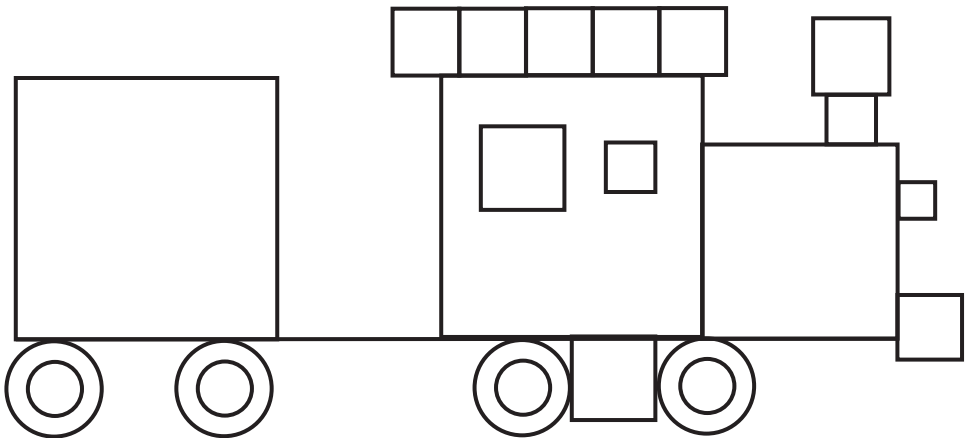
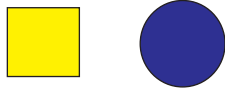
Activity 7: Individually.



Draw these shapes in your exercise book.



Draw and colour these shapes in your exercise book.

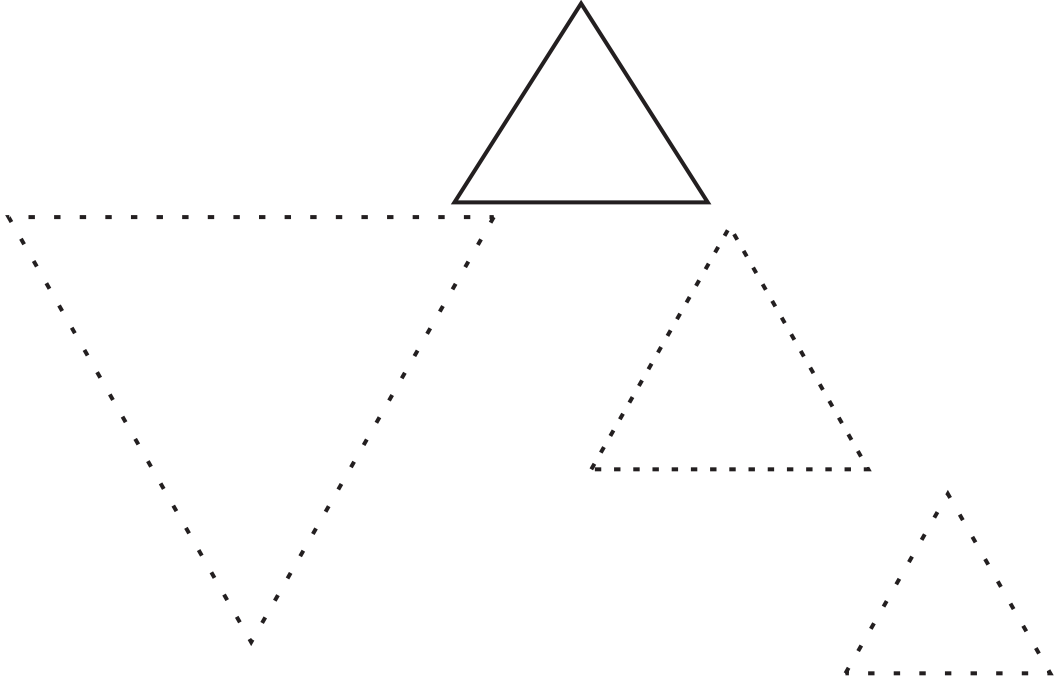


Shapes

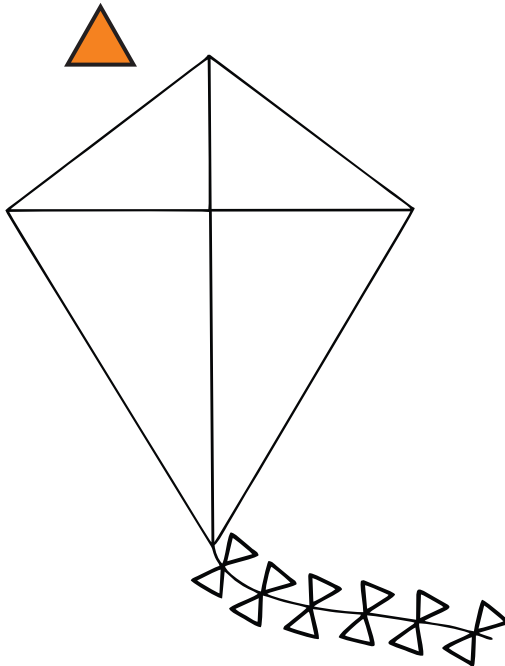
Activity 8: Individually.



Draw these shapes in your exercise book.



Draw and colour these shapes in your exercise book.

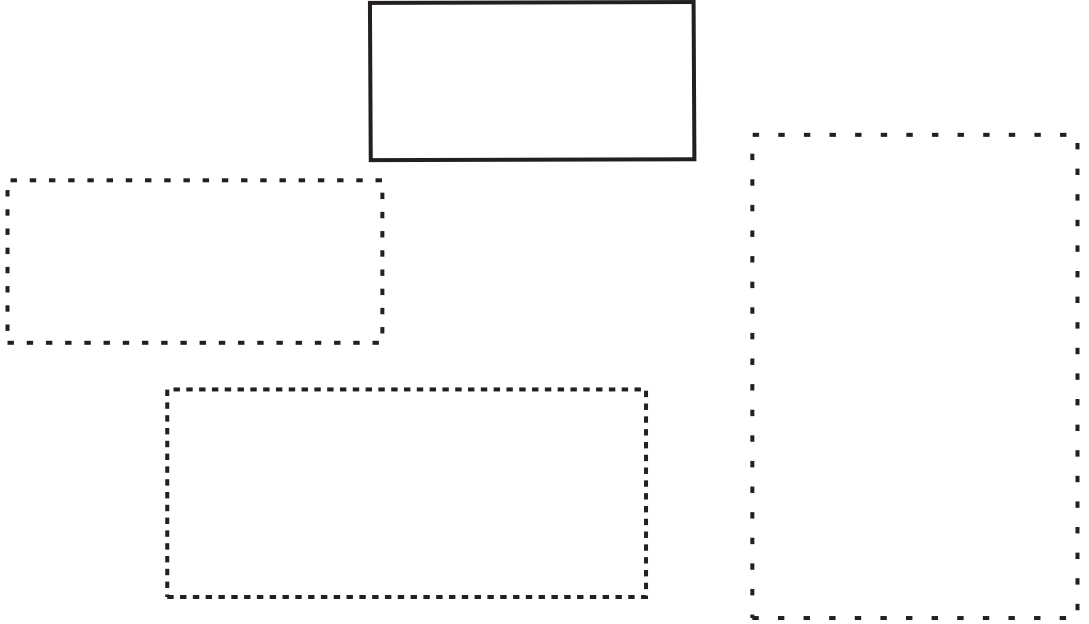


Shapes

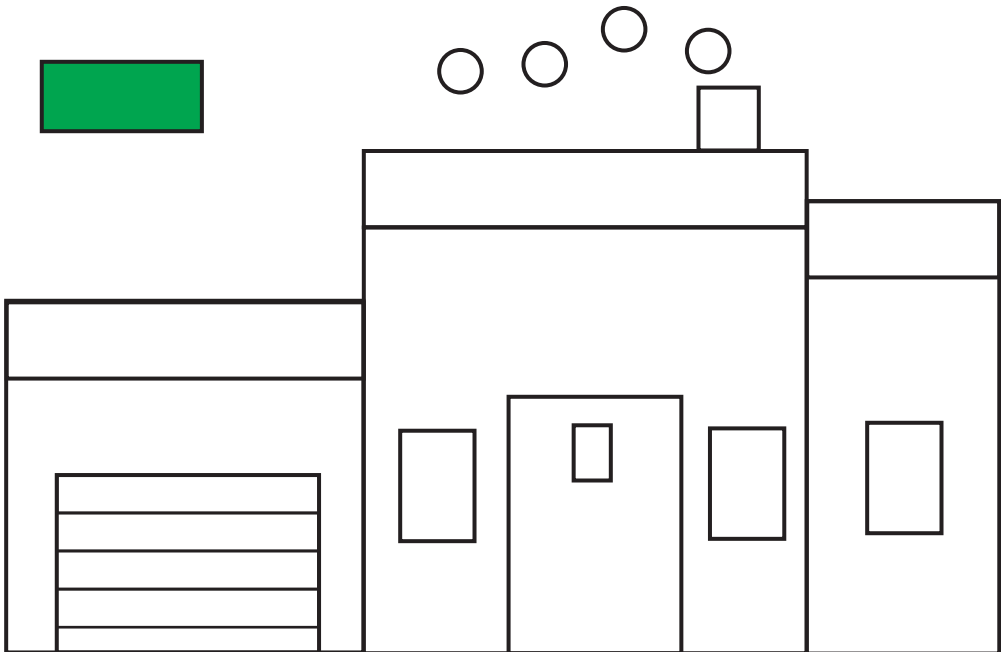
Activity 9: Individually.



Draw these shapes in your exercise book.

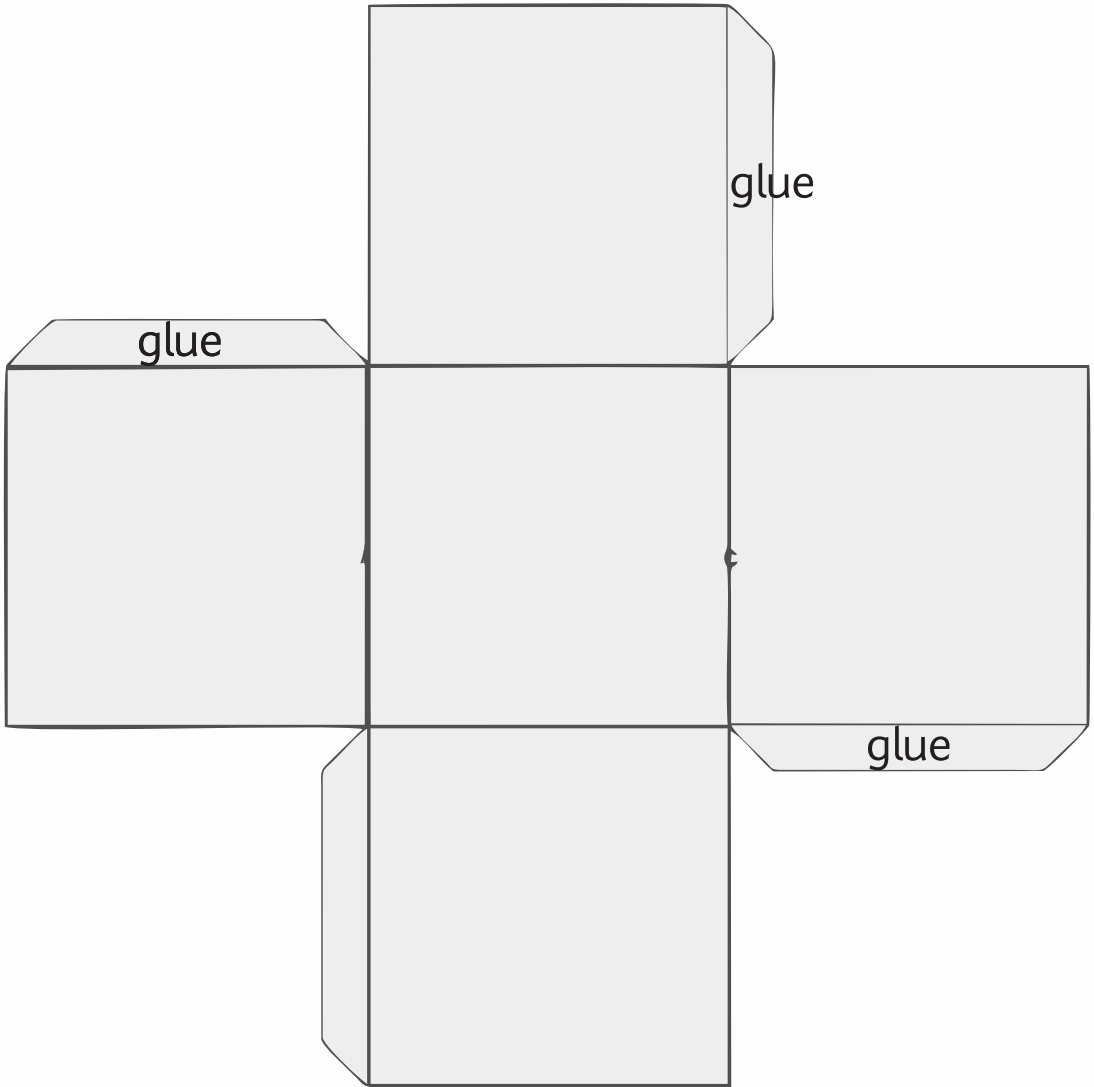


Draw and colour these shapes in your exercise book.



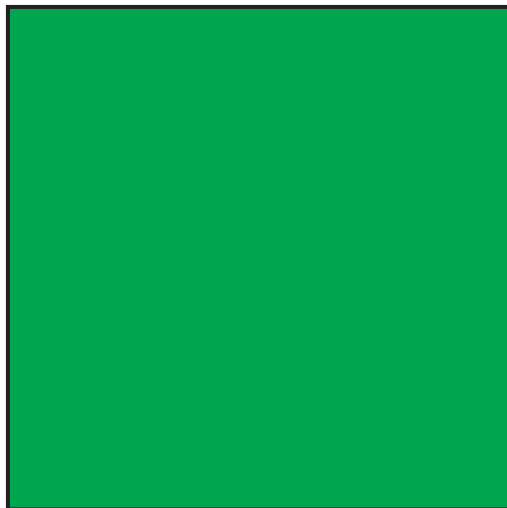
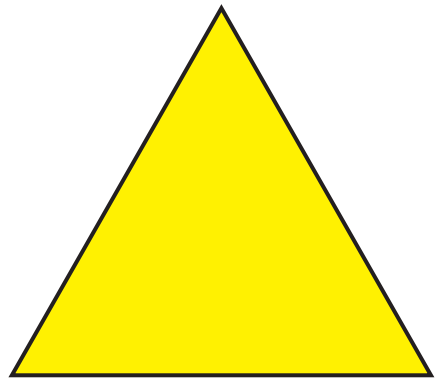
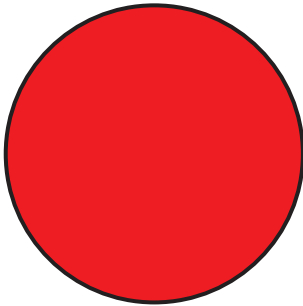
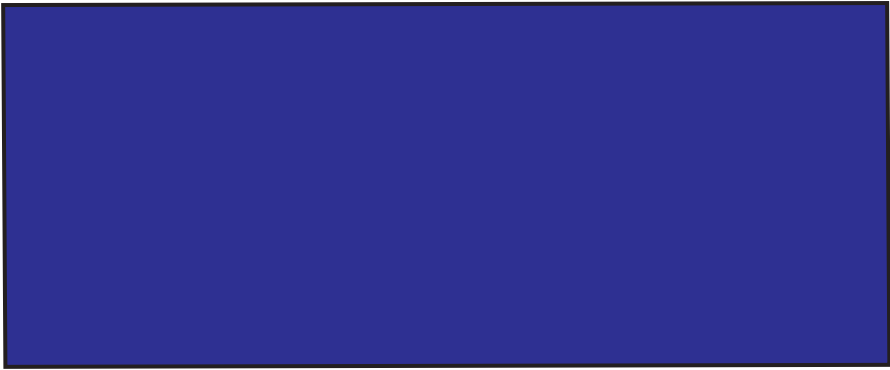
Shapes

Activity 10: In groups.

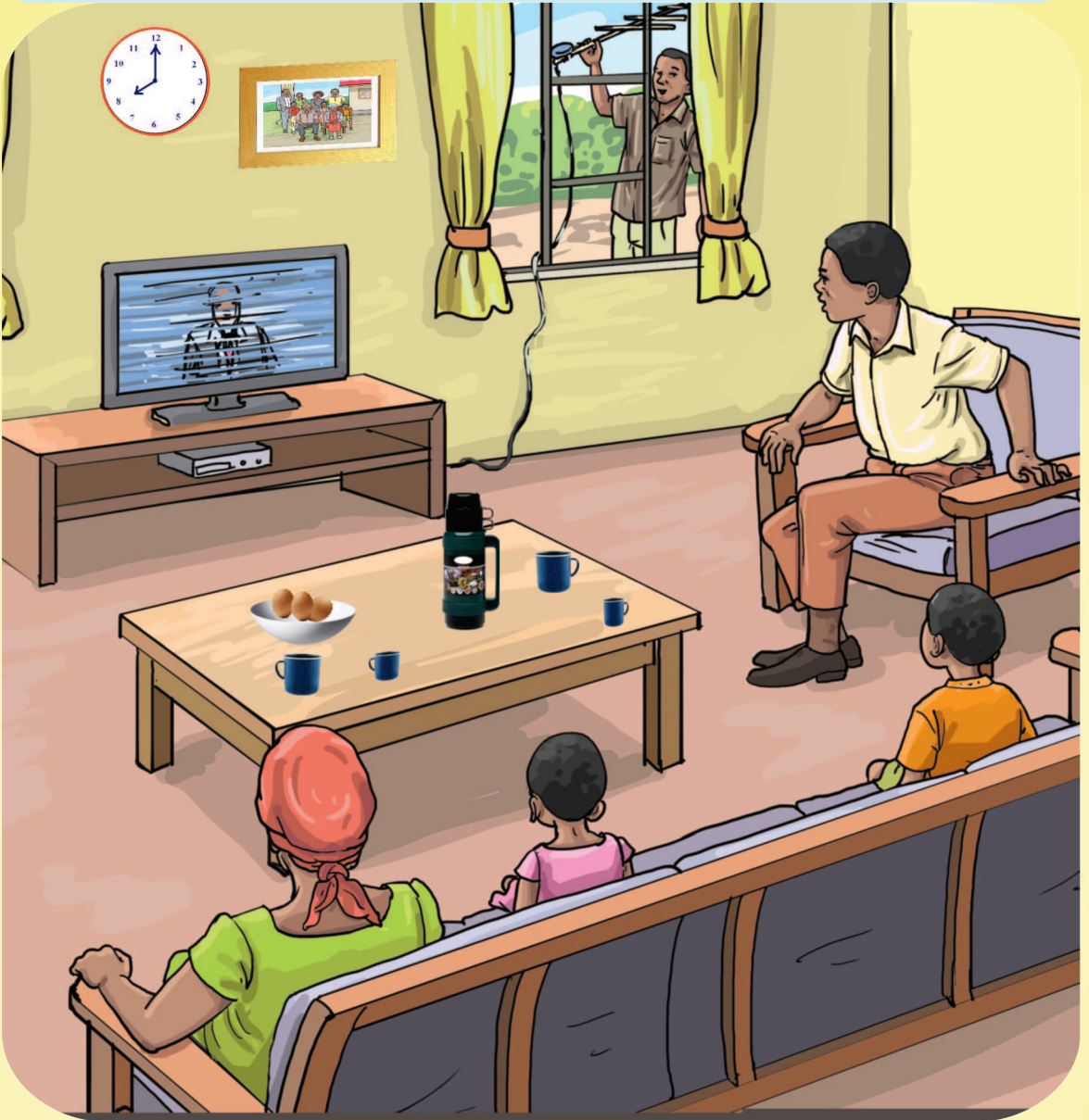


Shapes

Activity 11: In groups.



Shapes



Activity 12: In groups.

How many different shapes can you see in the picture?