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**Numeracy  
lesson plans**  
Primary 2

**Term 2**  
Involving pupils in  
their learning

**Weeks**  
11—15

Type of lesson plans/  
Grade

Term/  
Learning theme

# Numeracy lesson plans Primary 2 Term 2 ▶ Involving pupils in their learning

This is the third  
in a series of six  
numeracy lesson  
plan publications,  
designed to be  
used throughout  
the three academic  
school terms.



## Introduction

Teacher training remains a key element in improving schools and increasing learning outcomes. Where teachers are not supported, there may be high rates of teacher absenteeism, pupil drop out and apathy from parents. Jigawa State Ministry of Education, Science and Technology and the State Universal Basic Education Board (SUBEB) are working with the UK Department for International Development (DFID) and Education Sector Support Programme in Nigeria (ESSPIN) to increase the capacity of teachers and school heads to be effective and accountable.

Following the 2010 Teacher Development Needs Assessment, we collectively embarked on a series of reforms to strengthen teacher quality and school leadership. This work has focused on how to make teaching child-centred, and the organisational structures needed to improve service delivery.

These lesson plans are not designed to replace professional teachers' preparations. They address gaps in linking theory and practice and focus on improving pupils' literacy and numeracy through a step-by-step guide for teachers, while ensuring children that become active learners. Alongside the plans, new structures and processes ensure that teachers are continuously supported by both the State School Improvement Team (SSIT) and the LGEA-based school support officers (SSOs).

I am confident that with correct implementation and targeted support, these lesson plans will raise standards and improve the quality of teaching and learning outcomes.

The Ministry of Education, Science and Technology appreciates all those who have worked hard to produce these lesson plans and train our teachers to use them. Specifically, I offer thanks to DFID for its ongoing support through the ESSPIN programme.

**Professor Haruna Wakili**  
Honourable Commissioner,  
Ministry of Education,  
Science and Technology,  
Jigawa State

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**Numeracy  
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Primary 2**

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Involving pupils in  
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**Weeks  
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# Introduction

## ▶ Involving pupils in their learning

**Learning must be an active process on the part of the learner.**

### **How children learn**

These lesson plans provide you with a variety of techniques to make learning faster, fun and more effective. The plans use activities that reflect the way in which pupils naturally learn, and attempt to bring the joy back into learning for children.

Every individual in your class responds to activities differently and learns their own way, but generally children learn best when they:

Have objects to see and hold.

Take part in the lesson.

Can talk to each other to share ideas and learning.

Practise what they have learned individually, in pairs and in groups.

Are given activities that challenge them and make them think.

Receive encouragement and praise.

Realise that making mistakes is an important part of the learning process.

This third set of lesson plans contains lots of activities to encourage learning through different methods.

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**Numeracy  
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# Introduction

## ▶ Essential low-cost or free teaching aids

### Counters

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Ask the pupils to help you collect together as many bottle tops, small sticks and small stones as they can. Put them into jars to keep in the classroom and use to help with counting.

## Shapes

Ask the pupils to help you collect different shapes from around the local area, eg:

Boxes are cuboids.

Tubes and pipes are cylinders.

Balls are spheres.

## Money

Make sets of coins and notes by cutting them out of a cardboard carton and writing the correct amounts on them.

## Hundred square

A Hundred square can be used to:

Find number patterns.

Identify odd and even numbers.

Help with counting.

Help with addition.

Help pupils see the relationship between addition and multiplication.

Help pupils see the relationship between the multiplication tables.

Hundred squares have lots of patterns. Here are examples of some of them.

Vertical patterns (down):

The numbers rise in Tens eg: 1, 11, 21, 31, etc.

Each line is either all odd or all even.

Horizontal patterns (across): Each line follows the pattern odd, even, odd, even.

The Hundred square below shows patterns when counting in twos (**bold**), fives (**thicker frame**) and Tens (**white boxes**).

Hundred square

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



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**Weeks  
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# Introduction

## ▶ Songs, rhymes and games for the term

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### **The time song**

60 seconds make 1 minute /  
60 minutes make 1 hour /  
24 hours make one day.

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### **The clock rhyme**

Tick tock, tick tock goes  
the clock /  
I know the time, it's \_  
o'clock.

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### **Months of the year rhyme**

30 days has September,  
April, June and November /  
All the rest have 31,  
except February alone – 28,  
and 29 in each leap year.

### Time of the day rhyme

At 6 o'clock I get out of bed  
and say good morning,  
good morning to you /  
At 8 o'clock I go to school,  
and say good morning,  
good morning to you /  
At 10 o'clock we have  
a break and say good  
morning, good morning  
to you /  
At 2 o'clock we go back  
home in the afternoon,  
in the afternoon /  
At 5 o'clock we help in  
the house in the afternoon,  
in the afternoon /  
At 7 o'clock we eat  
our dinner in the evening,  
in the evening /  
At 9 o'clock we go to bed  
and sleep all night.

### Days of the week song

There is no school on  
Saturday  
There is no school on  
Sunday /  
Only on Monday, Tuesday,  
Wednesday, Thursday and  
Friday /  
There is no school on  
Saturday,  
There is no school on  
Sunday /  
So work hard and don't  
be late.

### Days of the week rhyme

On Monday I walk  
to school /  
On Tuesday I run  
to school /  
On Wednesday I jump  
to school /  
On Thursday I skip  
to school /  
On Friday I walk, run,  
jump and skip to school /  
On Saturday I stay  
at home /  
And on Sunday I stay  
at home.

### What's the time, Mr Lion?

One pupil stands with their  
face against the wall so they  
can't see the other pupils.

The other pupils stand  
behind and chant:  
'What's the time, Mr Lion?'

The pupil pretending to be  
the lion turns around to look  
at the others and shouts a  
time, eg: 'it's 10 o'clock'.

The others have to stand  
absolutely still and not  
move.

The 'lion' then turns around  
and shouts a different time.

This continues until the lion  
shouts 'dinner time' and  
chases the rest of the pupils  
to try and catch them.

Play the game once  
or twice.

### What's in the bag?

Put a selection of shapes in  
a bag.

Ask a pupil to come out  
and feel a shape inside the  
bag, describing what they  
feel to the rest of the class,  
without using the name of  
the shape.

Ask the rest of the class  
to guess the name of the  
shape they are using.

Ask the pupil to take the  
shape out of the bag and see  
if the class was correct.

Repeat.



Week  
11  
Numbers 0—999



**Words/phrases**

**more than  
less than  
three-digit numbers  
o'clock**

**Assessment**

**During the lesson, walk round the classroom and ask questions to see if the pupils clearly understand what you have taught them. If not, help them to understand by explaining the idea to them again, or asking other pupils to help them. You may need to use some different examples of the idea.**

Lesson  
title

# Counting from 0—999

15  
minutes

Song

## Learning outcomes

**By the end of the lesson, most pupils will be able to:**

Sequence the days of the week.

Count from 0—999.

## Teaching aids

### Before the lesson:

Have ready a number square with numbers 101—200.

Collect together enough counters for everyone in the class to have about 20 each.

Have ready a set of number cards from 0—9.

Read Macmillan New Primary Mathematics 2, page 6.

## Daily practice

### Whole class teaching

Sing the 'Days of the week' song twice with the pupils.

Ask the pupils if any of them have a day of the week they like the best.

If they do, ask them why they like that day.

Ask the question again and see if another pupil has a different answer.

10  
minutes

## Introduction

### Whole class teaching

Write '100' on the chalkboard and ask individual pupils to tell you anything they know about it.

Ask each group to look at the number square you have prepared.

25  
minutes

Macmillan  
New Primary  
Mathematics 2

## Main activity

### Whole class teaching

Place the number cards face down on your table, giving one pupil the number 1 card to hold.

Ask two pupils to come out and pick a card, then stand together with the third pupil to make a number between 100 and 200.

Ask if anyone can read that number to the rest of the class.

Ask each pupil to find that number on the number square you have drawn.

Repeat with different numbers and continue playing the game until 10 numbers have been identified on the number square.

### Individual task

Ask all the pupils to complete the number table in Macmillan New Primary Mathematics 2, page 6.

10  
minutes

## Plenary

### Whole class teaching

Bring out nine pupils and give each pupil a number card to hold so the rest of the class can see them.

Ask these nine pupils to stand in groups of three and make three, three-digit numbers together.

Ask the class to help the pupils stand in order, from the smallest to the largest number.

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**Week 11**  
Numbers 0—999  
Day 2

Lesson  
title

# Counting from 0—200

15  
minutes

Rhyme

## Learning outcomes

### By the end of the lesson, most pupils will be able to:

Identify some events and activities that always take place at a particular time of the year.

Use 0—9 number cards to make two- and three-digit numbers.

## Teaching aids

### Before the lesson:

Write a list of the months of the year on the chalkboard.

Read Macmillan New Primary Mathematics 2, page 7.

Have ready 10 bundles of Ten for each pair.

Have ready a set of number cards 0—9 for each pair.

## Daily practice

### Whole class teaching

Say the 'Months of the year' rhyme.

Ask the pupils if they can tell you months in the last year which have significant events for them or for everybody, eg: a religious celebration in October, brother's wedding in March.

Ask them to come and underline that month on the list on the chalkboard.

10  
minutes

## Introduction

### Whole class teaching

Ask three pupils to come out and pick a number card from your table and show it to the class.

Ask them to stand together to make a three-digit number.

Ask the pupils to put up their hand if they can read the number.

Repeat five times.

25  
minutes

Macmillan  
New Primary  
Mathematics 2

## Main activity

### Pair task

Give each pair a set of number cards from 0—9.

Explain that in the same way as you have bundles of Ten you can also have bundles of 100.

Give each pair 10 bundles of Ten and ask them to use them to answer the following question:  
'How many bundles of Ten are in 100?' (10)

Ask pupils to look at Macmillan New Primary Mathematics 2, page 7, Exercise 1 and talk them through it.

Ask them to complete the exercise using number cards.

10  
minutes

## Plenary

### Pair task

Ask one member of each pair to choose a number between 0 and 200 without saying which number they have chosen.

Tell the other pupil in the pair they have to ask questions to find out what number the pupil is holding, eg:  
'Is it more than 10?'  
'Is it less than 100?'

Continue until each pupil has had two turns.



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Primary 2

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their learning

**Week 11**  
**Numbers 0—999**  
Day 3

Lesson  
title

# 'More than' and 'less than'

15  
minutes

Rhyme

## Learning outcomes

**By the end of the lesson, most pupils will be able to:**

Identify some events and activities which always take place at a particular time of the year.

Order numbers from 0—999 using the terms 'more than' and 'less than'.

## Teaching aids

**Before the lesson:**

Have a set of Hundreds, Tens and Units and place value cards for each pair.

Have ready 15 number cards, each with a number between 0 and 999 written on them.

Have ready a set of number cards from 0—9 for each pair.

## Daily practice

**Group task**

Say the 'Months of the year' rhyme with the pupils.

Ask them if they can work out how many days there are altogether in June and July. Tell them they can write it down in their exercise books to help them.

Ask if they can work out how many days there are altogether in January and September without using pencil and paper.

Ask them to explain how they worked out the answer.

10  
minutes

## Introduction

### Pair task

Give out a set of place value cards to pairs of pupils.

Call out the number 169 and ask each pair to make that number using their place value cards.

Ask pupils questions to help them understand the value of each digit. Ask:

‘How many is the 1 worth?’  
(100)

‘How many is the 9 worth?’  
(9)

‘How many is the 6 worth?’  
(60)

Repeat for different numbers, up to 999.

25  
minutes

## Main activity

### Pair task

Ask the pupils to tell you what the terms ‘more than’ and ‘less than’ mean.

Ask each pair to write down, as fast as they can, 10 numbers which are ‘more than’ 100 and 10 numbers that are ‘less than’ 100.

Write five pairs of numbers between 100 and 999 on the chalkboard.

Ask each pair to answer the following question for each pair of numbers: ‘Which number is more than the other?’

10  
minutes

## Plenary

### Whole class teaching

Put a pile of number cards on the table and ask a pupil to come out, pick one and hold it up for everyone to see.

Ask the rest of the pupils to guess the answer to the following question: ‘Will the next card be more than or less than this one?’

When the guess has been made, ask that pupil to pick the next card from the pile and check. If they have guessed correctly they can stay. If they haven’t guessed correctly, ask them to choose another pupil to come out and choose the next card.

Continue until you have a row of about eight cards.

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Primary 2

**Term 2**  
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**Week 11**  
Numbers 0—999  
Day 4

Lesson  
title

# How many more than?

15  
minutes

Game

## Learning outcomes

**By the end of the lesson, most  
pupils will be able to:**

Say different times.

Use a number line to answer the  
question 'How many more than?'

## Teaching aids

**Before the lesson:**

Read through the lesson carefully  
and make sure you understand it.

## Daily practice

**Whole class teaching**

Play 'What's the time, Mr Lion?'  
from the introductory section.

10  
minutes

## Introduction

### Whole class teaching

Say 10 numbers from 0—999 and ask the pupils to say a number that is 'more than' each number.

25  
minutes

## Main activity

### Group task

Show the pupils how to write a number line between two given numbers, eg: 150 and 157

150 152 153 154 155 156 157  
| | | | | | |  
|\_|\_|\_|\_|\_|\_|\_|

Ask them to copy this number line into their exercise book.

Ask each pupil to draw the jumps between the two numbers.

Ask pupils to tell you the number of jumps they made.

When they have given you the answer, explain that 157 is 7 more than 150.

Ask each group of pupils to draw a number line for each of the following pairs of numbers:  
143 and 156  
270 and 281  
520 and 527

Ask each group to draw the jumps between the two numbers and answer the question, 'How many jumps between the numbers?'

Ask a pupil from each group to give an answer using the expression 'more than' as above, eg: '156 is 13 more than 143'.

10  
minutes

## Plenary

### Pair task

Ask pupils to tell the answers to their partner using the phrase 'more than'.

### Individual task

Ask the pupils to draw number lines in their exercise books between:  
92 and 106  
399 and 408  
114 and 115  
199 and 203  
549 and 553  
324 and 329  
678 and 679

Ask them to count the number of jumps between each pair and answer the question, 'How many more than?'

**Numeracy  
lesson plans**  
Primary 2

**Term 2**  
Involving pupils in  
their learning

**Week 11**  
Numbers 0—999  
Day 5

Lesson  
title

# How many less than?

15  
minutes

Rhyme

## Learning outcomes

**By the end of the lesson, most  
pupils will be able to:**

Use the term 'o'clock' to describe  
different times of the day.

Use a number line to answer the  
question 'How many less than?'

## Teaching aids

**Before the lesson:**

Read through the lesson plan  
carefully and make sure you  
understand it.

## Daily practice

**Whole class teaching**

Teach the pupils the 'Time of the  
day' rhyme.

Ask them to make up their own  
lines which are relevant to them,  
eg: at 7 o'clock I...

10  
minutes

## Introduction

### Whole class teaching

Say 10 numbers from 1—999 and ask the pupils to tell you a number that is 'less than' each number.

25  
minutes

## Main activity

### Whole class teaching

Remind the pupils how to write a number line between two given numbers, eg: 54 and 66.

In their exercise books, ask them to draw the number of jumps between this pair of numbers starting from the largest number and jumping back to the lowest number.

Ask them to tell you the number of jumps they made.

When they have given you the answer, explain that 54 is 12 'less than' 66.

### Group

Ask pupils to work in groups and write a number line for each pair of numbers below.

Ask the groups to draw the jumps between the two numbers and answer the question, 'How many jumps between the two numbers?':  
116 and 112  
527 and 520  
700 and 693

Ask a pupil from each group to give an answer using the expression 'less than' as above, eg: 112 is 4 less than 116.

### Pair task

Write the pairs of numbers below on the chalkboard.

Ask pupils to draw a number line, and answer the question 'How many less than?' for each sum.:  
115 is 99  
305 is 295  
117 is 103  
177 is 159  
263 is 249  
929 is 925  
911 is 892.

10  
minutes

## Plenary

### Pair task

Ask pupils to tell their answers to their partner using the phrase 'less than'.



Week  
12  
Money



**Words/phrases**

**note  
coin  
Naira  
Kobo  
price  
cost  
most  
least  
item  
dice  
bank  
market  
buy  
sell**

**How many altogether?**

**Assessment**

**During the lesson, walk round the classroom and ask questions to see if the pupils clearly understand what you have taught them. If not, help them to understand by explaining the idea to them again, or asking other pupils to help them. You may need to use some different examples of the idea.**



**Numeracy  
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**Week 12**  
**Money**  
Day 1

Lesson  
title

# Reviewing money

15  
minutes

## Learning outcomes

**By the end of the lesson, most pupils will be able to:**

Count from 0—999.

Say how many smaller value notes make up a larger value note.

## Teaching aids

**Before the lesson:**

Have ready a selection of Nigerian coins and notes for each group.

## Daily practice

**Whole class teaching**

Ask pupils to stand in a circle.

Ask each pupil to say a number between 200 and 300.

Count around the circle from that number until you reach 300.

Repeat using different start and end numbers.

10  
minutes

## Introduction

### Whole class teaching

Ask the pupils to tell you anything they know about money and record their ideas on the chalkboard.

Show various coins and notes to pupils and allow them to handle them.

Ask pupils to identify the amount written on each coin and note.

Ask pupils to identify symbols on the coins and notes that stand for Kobo and Naira.

Ask if they can remember how many Kobo there are in one Naira.

25  
minutes

## Main activity

### Group task

Give each group a selection of coins.

Ask them to work out as many different ways as they can to make N1 using their selection of coins.

Remind the groups that they can use each coin more than once.

Ask each person in the group to record their answers by drawing and labelling the coins in their exercise books, eg:

$$\text{N1} = \begin{array}{ccc} \textcircled{25\text{K}} & \textcircled{25\text{K}} & \\ \textcircled{10\text{K}} & \textcircled{10\text{K}} & \textcircled{10\text{K}} \\ \textcircled{10\text{K}} & \textcircled{10\text{K}} & \end{array}$$

10  
minutes

## Plenary

### Whole class teaching

Ask each group to share their ideas with the rest of the class.

Lesson  
title

# Naira and Kobo

15  
minutes

## Learning outcomes

**By the end of the lesson, most pupils will be able to:**

Order numbers from 0—200.

Explain the relationship between Naira and Kobo.

## Teaching aids

### Before the lesson:

Have ready a blank number card for each pupil.

Have ready a selection of Nigerian coins and notes.

## Daily practice

### Whole class teaching

Give a blank card to each pupil and ask them to write a number between 5 and 999 on it.

Choose five pupils to come out and hold up their numbers.

Tell these pupils to stand in order, according to number size.

Ask the rest of the class to check they are correct.

Tell another set of pupils to come out and repeat the activity.

Tell all the pupils to stand in groups of five with their number cards.

Ask them to put their numbers in the correct order, from the highest to the lowest number.

10  
minutes

## Introduction

### Whole class teaching

Give each pupil a Naira note of value up to N100.

Select the pupil holding N20 to stand in front of the chalkboard, holding their note so the rest of the class can see.

Ask the rest of the class to hold up their notes.

Ask someone to point out notes which make up N20, eg: N10 and N10.

Bring the pupils holding those notes to the front and ask them to stand in a line.

25  
minutes

## Main activity

### Group task

Ask pupils to put all their notes in the middle of the table and pick one out.

Ask them to identify as many ways as they can of making that amount from Naira notes.

Ask them each to record their answers in their exercise books.

10  
minutes

## Plenary

### Whole class teaching

Ask each group how many answers they found.

Ask each group to tell the rest of the class one of the sums they made.

# Values of coins to N1

## Learning outcomes

**By the end of the lesson, most pupils will be able to:**

Read three-digit numbers and say the place value of each number.

Add two amounts of money.

## Teaching aids

### Before the lesson:

Collect a set of place value cards for each group.

Collect as many dice as you can for the pupils to use.

Set up a bank in the classroom where there is a large selection of Naira money cards, up to N100.

Read Macmillan New Primary Mathematics 2, page 80, Exercise 4 and make sure you understand the task.

## Daily practice

### Group task

Give each group a set of place value cards.

Ask each member of the group to take it in turns to make a number using the place value cards.

Ask the rest of the group to tell them what that number is and how many Hundreds, Tens and Units it has in it.

Ask them to ask each other questions, eg:  
'How many is each digit worth?'

10  
minutes

## Introduction

### Whole class teaching

Show the pupils where the bank in the classroom is located and ask them what they know about banks.

Write their ideas on the chalkboard.

Explain that they are going to play a game where one person in each group will have to visit the bank to collect money.

Write the chart below on the chalkboard.

Dice value chart



= N5



= N10



= N10



= N20



= N20



= N50

25  
minutes

Game

Macmillan  
New Primary  
Mathematics 2

10  
minutes

## Main activity

### Group task

Give each group a dice and tell them to take turns to throw it.

When it lands, tell that pupil to look at the chart on the chalkboard and say how much it is worth.

Ask them to go to the 'bank' and collect those notes.

Repeat with the next person in the group and continue until everyone has had two turns going to the bank.

Ask each pupil to add together their two notes and say how much money they have.

The pupil with the most money is the winner.

### Individual task

Ask pupils to complete Macmillan New Primary Mathematics 2, page 80, Exercise 4, questions 1—5.

## Plenary

### Pair task

Ask each pair to compare their answers and help each other work out the correct answer if necessary.

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**Term 2  
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their learning**

**Week 12  
Money  
Day 4**

Lesson  
title

# Shopping

15  
minutes

Macmillan  
New Primary  
Mathematics 2

## Learning outcomes

**By the end of the lesson, most pupils will be able to:**

Identify Hundreds, Tens and Units in a number.

Find the cost of two objects.

## Teaching aids

**Before the lesson:**

Read Macmillan New Primary Mathematics 2, page 10, Exercise 1.

Have ready a set of place value cards for each pair.

Collect a selection of items to make a market in the classroom. Put a label on each item with a price below N100 which can be bought with one note, eg: pencil = N10, packet of sweets = N20.

Make a set of Naira note money cards N5, N10, N20, N50, N100, for each group.

## Daily practice

**Whole class teaching**

Read out the numbers in Macmillan New Primary Mathematics 2, page 10, Exercise 1 and ask the pairs to use their place value cards to make them.

After each number, ask pupils to tell you how many Hundreds, Tens and Units are in that number.

10  
minutes

## Introduction

### Whole class teaching

Show examples of Naira notes to the pupils.

Ask them to choose one note and say what they might buy for that amount.

Show them two notes and ask, 'Which note is worth more than the other?'

Ask them, 'How much are these two notes worth altogether?'

Repeat with a different pair of notes.

25  
minutes

## Main activity

### Group task

Explain that you have set up a market and that each item has a price label.

Give each group a set of money cards.

Ask two pupils to come out, choose an item each and hold up the labels for the pupils to see.

Ask each group to pick out the Naira they will need to buy each item.

Ask them to add the two amounts together and answer the following question, 'How much would these two items cost altogether?'

10  
minutes

## Plenary

### Whole class teaching

Ask one or two groups to come out and explain how they answered the question.



**Numeracy  
lesson plans  
Primary 2**

**Term 2  
Involving pupils in  
their learning**

**Week 12  
Money  
Day 5**

Lesson  
title

# Shopping

15  
minutes

Macmillan  
New Primary  
Mathematics 2

## Learning outcomes

### By the end of the lesson, most pupils will be able to:

Answer the question 'Which number is more than?'

Identify notes needed to pay for an item.

## Teaching aids

### Before the lesson:

Have ready a set of place value cards for each pupil.

Read Macmillan New Primary Mathematics 2, page 3, Exercise 3.

Re-label the items in the market so that it will take two notes to pay for them, eg: pencil N15, packet of sweets N40.

Have money cards ready in the bank and write the dice throw values from Day 3 on the chalkboard.

## Daily practice

### Individual task

Ask the pupils to complete Macmillan New Primary Mathematics 2, page 3, Exercise 3, using their place value cards.

Ask the pupils to show their work to the person sitting next to them and see if they have the same answers.

10  
minutes

## Introduction

### Group task

Ask two pupils to shop in the market and one pupil to be the market seller.

Give the shopper some money cards to buy one item.

Ask the rest of the class to help them work out which notes they need to pay for that item.

Repeat this process five times with different shoppers and sellers.

25  
minutes

Game

## Main activity

### Pair task

Play the 'Bank' game as on Day 3, this time continuing until the first person in the group gets N100.

While they are doing this ask different pairs of pupils to come out in turn and shop in the market.

Ask them to buy one item and work out what notes they need to pay for it.

If they are very confident with this, ask them to buy two items, work out how much altogether, then give the correct amount to the market seller.

10  
minutes

Song

## Plenary

### Whole class teaching

Sing a counting song.



Week  
13  
Shapes



**Words/phrases**

**more than  
cube  
cuboid  
cylinder  
sphere  
pyramid  
square  
rectangle  
triangle  
circle  
corners  
faces  
edges  
environment**

**Assessment**

**During the lesson, walk round the classroom and ask questions to see if the pupils clearly understand what you have taught them. If not, help them to understand by explaining the idea to them again, or asking other pupils to help them. You may need to use some different examples of the idea.**

**Numeracy  
lesson plans  
Primary 2**

**Term 2**  
Involving pupils in  
their learning

**Week 13**  
**Shapes**  
Day 1

Lesson  
title

# Shapes in the environment

15  
minutes

Macmillan  
New Primary  
Mathematics 2

## Learning outcomes

**By the end of the lesson, most  
pupils will be able to:**

Recognise Nigerian coins and  
notes.

Identify cubes, cuboids, cylinders  
and spheres.

## Teaching aids

**Before the lesson:**

Collect examples of three-  
dimensional shapes (3D), eg: cubes,  
cuboids, spheres and cylinders.

## Daily practice

**Pair task**

Ask the pupils to look at the  
examples of Naira notes  
in Macmillan New Primary  
Mathematics 2, page 70.

Ask them to choose three Naira  
notes from the picture.

Ask them to say how much these  
notes are worth altogether and  
suggest something they could buy  
with that amount of money.

Ask each pair to share their ideas  
with the class.

10  
minutes

## Introduction

### Whole class teaching

Show the pupils the selection of 3D shapes you collected and ask them to identify them.

Take the pupils around the school compound to find as many cubes, cuboids, cylinders and spheres as they can. Don't forget to look at the shapes of buildings, furniture, doors, etc.

25  
minutes

## Main activity

### Individual task

Ask pupils to draw in their exercise books at least five objects that they have seen.

10  
minutes

## Plenary

### Pair task

Ask the pupils to look at each others' drawings and try to guess the names of the shapes their friend has drawn.

# Sorting shapes

## Learning outcomes

### By the end of the lesson, most pupils will be able to:

Use the term 'more than' to place numbers in order.

Sort 3D shapes according to different criteria.

## Teaching aids

### Before the lesson:

Ask pupils to bring in as many different shaped 3D objects as possible, eg: cylinder, cube, cuboid, sphere, pyramid.

Read Macmillan New Primary Mathematics 2, pages 121—122 and make sure that you understand the ideas.

Have ready one set of 1—15 number cards.

## Daily practice

### Whole class teaching

Ask 15 pupils to stand in a straight line, one in front of the other, each holding a number card.

Ask a pupil to stand in front of a number from 5—8.

Ask the pupil to move five steps forward.

Ask the rest of the class which number they stopped at.

Ask them to say what happened using the term 'more than', eg: 12 is 5 more than 7.

Ask other pupils to do the same, starting from different numbers.

10  
minutes

## Introduction

### Whole class teaching

Put the 3D shapes on a table at the front of the classroom.

Ask the pupils to say where they found them and what they are used for.

25  
minutes

## Main activity

### Group task

Share the various shapes around the groups. They should have about 5—10 shapes each.

Tell the pupils to sort them according to something they have in common, eg: colour, number of sides, etc.

Ask each group to explain how they have sorted them.

Macmillan  
New Primary  
Mathematics 2

### Individual task

Ask the pupils to complete the exercises in Macmillan New Primary Mathematics 2, pages 121—122 in their exercise books.

10  
minutes

## Plenary

### Whole class teaching

Put shapes into a bag without the pupils seeing you do this.

Ask pupils to come out, feel the bag and guess what shapes are inside.



**Numeracy  
lesson plans**  
Primary 2

**Term 2**  
Involving pupils in  
their learning

**Week 13**  
**Shapes**  
Day 3

Lesson  
title

# Sorting shapes

15  
minutes

Game

## Learning outcomes

**By the end of the lesson, most pupils will be able to:**

Add two amounts of money together.

Identify the faces of shapes.

## Teaching aids

**Before the lesson:**

Write the information for the 'Bank' game from Week 12, Day 3 on the chalkboard and collect dice and money cards.

Put 10 shapes on to the table and cover them with a cloth.

Bring in enough cardboard boxes (with the tops closed), for one between six pupils.

Collect crayons, glue, sticky tape, scissors and old bits of coloured paper and string that the pupils can use to decorate the boxes.

## Daily practice

**Whole class teaching**

Ask the pupils to play the 'Bank' game that you played in Week 12, Day 3.

10  
minutes

## Introduction

### Whole class teaching

Explain to the pupils that you are going to remove the cloth and they have 30 seconds to remember everything they can see on the table.

Take the cloth away, give the pupils 30 seconds to look at the objects, then put the cloth back so the objects are hidden.

Ask each pupil to tell the person sitting next to them which objects they can remember.

Uncover the shapes again, then ask the pupils to put up their hands and tell you how many they remembered.

25  
minutes

## Main activity

### Group task

Tell the pupils that the flat part of the shape is called the **face**.

Give each pupil a shape and ask them to count the faces on their shape.

Explain that you are going to help them remember that the flat part is called a face.

Put the pupils in groups of six and give each group a cardboard box.

Ask each pupil to draw a face on one side of the box (so there are six faces altogether).

10  
minutes

## Plenary

### Whole class teaching

Ask the pupils to show their boxes with the faces on to the rest of the class.

Lesson  
title

# Counting edges and faces

15  
minutes

Macmillan  
New Primary  
Mathematics 2

## Learning outcomes

**By the end of the lesson, most pupils will be able to:**

Count the number of faces and edges on each shape.

Record findings in a simple table.

## Teaching aids

### Before the lesson:

Read Macmillan New Primary Mathematics 2, page 80, Exercise 3, questions 5—12 and make sure you understand the task.

Draw the table on the right on the chalkboard.

## Daily practice

### Individual task

Ask pupils to complete Macmillan New Primary Mathematics 2, page 80, Exercise 3, questions 5—12, using a number line to help them.

Shape	Square	Circle	Rectangle	Triangle
Cuboid	2		4	
Cylinder				
Pyramid				
Cube				

10  
minutes

## Introduction

### Whole class teaching

Ask the pupils if they can remember what the flat part of a shape is called.

Show them one of their boxes from the previous day and ask them what shape the face is (it should be a square or rectangle).

25  
minutes

## Main activity

### Whole class teaching

Show the pupils how to complete the table below, helping them to count the different shapes of the faces on each 3D shape.

### Pair task

Ask the pupils to count the number of edges on each shape and draw their own table in their exercise book to record their answers.

10  
minutes

## Plenary

### Whole class teaching

Ask the pupils to say how many edges they found on each shape.

Shape	Square	Circle	Rectangle	Triangle
Cuboid				
Cylinder				
Pyramid				
Cube				

# Faces of shapes

## Learning outcomes

**By the end of the lesson, most pupils will be able to:**

Add and take away money, using the correct notes.

Count the number of corners, faces and edges on each shape.

## Teaching aids

**Before the lesson:**

Read Macmillan New Primary Mathematics 2, pages 121—122.

Collect 10 items from the previous week's shopping corner and label them with a price.

## Daily practice

**Whole class teaching**

Sit the class in a circle, give one pupil three or four Naira notes and spread the rest in the middle of the circle.

Ask that pupil to count the money and say, eg:

'I have 25 Naira, I'm going to take away a N5 note, so I'm going to give you N20'.

Ask them to put the note they have taken away into the middle of the circle and pass the notes they have left to the next pupil.

Ask the next pupil to do the same thing but change the amount they add or take away.

If they want to add, they should take the note from the middle of the circle so they can hand the correct amount to the next person.

Continue until it has gone all the way around the circle.

10  
minutes

## Introduction

### Whole class teaching

Ask one of the pupils to come out to the front and think of a shape, but not tell anyone which one they are thinking of.

Tell the other pupils that they are going to ask questions to find out which shape the pupil is thinking of but they:

Can only ask questions for which the answer is 'yes' or 'no'.

Can't have a direct guess until three questions have been asked.

25  
minutes

Macmillan  
New Primary  
Mathematics 2

## Main activity

### Individual task

Look at Macmillan New Primary Mathematics 2, pages 121—122 with the pupils and talk about the shapes.

Ask the pupils to draw 3—4 shapes from the textbook in their exercise books.

10  
minutes

Game

## Plenary

### Whole class teaching

Play 'What's in the bag'.

Week  
14  
How many more  
than?





**Words/phrases**

**cube  
cuboid  
cylinder  
sphere  
pyramid  
square  
rectangle  
triangle  
circle  
corners  
faces  
edges  
environment**

**How many more than?**

**What number comes after...?**

**What number comes before...?**

**Assessment**

**During the lesson, walk round the classroom and ask questions to see if the pupils clearly understand what you have taught them. If not, help them to understand by explaining the idea to them again, or asking other pupils to help them. You may need to use some different examples of the idea.**



Lesson  
title

# Using a number line

15  
minutes

## Learning outcomes

### By the end of the lesson, most pupils will be able to:

Classify objects according to shape  
and size.

Explain how to add together two-  
digit numbers.

## Teaching aids

### Before the lesson:

Remind yourself how to add  
two-digit numbers together using  
a number line.

## Daily practice

### Group task

Tell pupils to go around the school  
grounds and draw as many different  
shaped objects as they can find.

Ask the pupils to label the different  
shapes they have drawn.

Tell them to group the shapes so  
that each object in the group has  
something the same about them.

Ask the pupils to count the total  
number of the objects in each  
group, and explain how they  
sorted them.

10  
minutes

## Introduction

### Pair task

Ask the pupils to look at their number line and take it in turns to ask each other questions about numbers from 20—30, eg:

‘What number comes after...?’

‘What number comes before...?’

Choose a number on the number line and ask the pupils to try and guess your number by asking you questions in the same way.

25  
minutes

## Main activity

### Group task

Ask the pupils if they can remember how to add 35 and 23 together using a number line.

Ask them:

‘Which number do we work with first?’

‘What do we do with this number?’

‘What do we do with the smallest number?’

‘When we have expanded it, what do we do with it?’

10  
minutes

## Plenary

### Whole class teaching

Ask the pupils if they notice anything about the answers.

Tell the groups to add the following numbers together by drawing a number line, reminding them to start with the largest number:

$$35 + 25$$

$$15 + 15$$

$$25 + 15$$

$$12 + 38$$

$$17 + 33$$

Lesson  
title

# Using a number line

15  
minutes

## Learning outcomes

**By the end of the lesson, most pupils will be able to:**

Recognise and name 3D shapes.

Use a number line to answer the question 'How many more than?'

## Teaching aids

**Before the lesson:**

Put 10 2D and 3D shapes on to a table and cover them with a cloth.

Draw a number line on the chalkboard from 60—80.

## Daily practice

**Whole class teaching**

Explain to the pupils that you are going to remove the cloth and they have 30 seconds to remember everything on the table.

Take the cloth away, give the pupils 30 seconds to look at the objects, then put the cloth back so the objects are hidden again.

Ask each pupil to tell the person sitting next to them which objects they can remember.

Uncover the shapes again, then ask the pupils to put up their hands and tell you how many they remembered.

Ask one or two pupils to tell you how they remembered the objects.

Make it fun!

10  
minutes

## Introduction

### Whole class teaching

Circle a number on the number line on the chalkboard.

Ask each pupil to say any number on the number line that is 'more than' the number you circled.

Ask,  
'How many more than?'

25  
minutes

## Main activity

### Pair task

Ask the following questions in turn for the pupils to work on in pairs.  
How many more than:

6 is 19  
3 is 12  
9 is 17  
8 is 18  
6 is 15  
1 is 12

Stop after each question and check that pupils are using the correct method.

10  
minutes

## Plenary

### Whole class teaching

Tell the class that you are thinking of a number between 1 and 100.

Tell them to ask you questions to help them guess what that number is, eg: 'Is it less than 50?'

Show them how to work out the answer using a number line, eg:

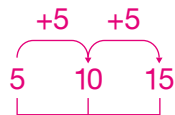
'How many more than 5 is 15?'

First, jump to the nearest 10.

Then jump to 15 and count the number of jumps you made.

Finally add the two jumps together and answer the question:

$$5 + 5 = 10$$



15 is 10 more than 5.

**Numeracy  
lesson plans**  
Primary 2

**Term 2**  
Involving pupils in  
their learning

**Week 14**  
**How many more  
than?**  
Day 3

Lesson  
title

# How many more than?

15  
minutes

Song

Game

## Learning outcomes

**By the end of the lesson, most  
pupils will be able to:**

Name cubes, cuboids, cylinders  
and spheres.

Use a number line to answer the  
question, 'How many more than?'

## Teaching aids

**Before the lesson:**

Have ready a set of number cards  
0—20 for each pair.

Collect a selection of 2D and 3D  
shapes and put them in a bag on  
your table.

## Daily practice

**Whole class teaching**

Sing some number songs.

Play 'What's in the bag?' with a  
selection of 2D and 3D shapes.

10  
minutes

## Introduction

### Whole class teaching

Ask a pupil to come out, pick a card, read the number and say it aloud to the class without showing it.

Tell the class to write the number in their exercise books.

Ask another pupil to come and pick another number.

Tell the pupils to write it in their exercise books.

25  
minutes

## Main activity

### Pair task

Give a set of number cards to each pair.

Ask the pupils to use the number cards to repeat the whole class activity.

Ask them to record the method in their exercise books.

10  
minutes

## Plenary

### Whole class teaching

Bring out four pupils to stand in pairs.

Give each pupil in the pair a number card from 0—5 to hold, so that the rest of the class can see them.

Ask the class to add each pair of numbers together without writing it down and say the answer.

Ask them to explain how they did the sum.

Lesson  
title

# How many more than?

15  
minutes

## Learning outcomes

**By the end of the lesson, most  
pupils will be able to:**

Explain the features of cubes,  
cuboids, cylinders and spheres.

Answer the question, 'How many  
more than?'

## Teaching aids

**Before the lesson:**

Draw a number line on the  
chalkboard, from 15—24.

## Daily practice

**Whole class teaching**

Tell the pupils to stand in a circle  
and you stand in the middle.

Ask the pupils to walk around in  
a circle.

Make a simple statement  
which describes a shape, eg:  
'The shape I am thinking about  
has four corners.'

Ask the pupils to continue walking  
and put up their hand if they can  
guess the shape you are describing.

Ask the pupil who guesses correctly  
to come into the middle to describe  
a shape for the others to guess.

10  
minutes

## Introduction

### Whole class teaching

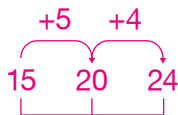
Show the pupils the quick way to answer the question, 'How many more than 15 is 24?'

Using the number line on the chalkboard, start at 15 and jump to the nearest 10.

Jump to the next number and count how many jumps you have made.

Add the number of jumps together:  $5 + 4 = 9$ .

Answer the question: 24 is 9 more than 15.



25  
minutes

## Main activity

### Pair task

Give the pupils the following pairs of numbers and ask them to use the above method to answer the question, 'How many more than?':

- 25 and 17
- 24 and 16
- 13 and 22
- 15 and 22
- 18 and 15
- 19 and 21

10  
minutes

## Plenary

### Pair task

Ask the pupils to compare answers with each other and help each other if they got anything wrong.



Lesson  
title

# How many more than?

15  
minutes

## Learning outcomes

### By the end of the lesson, most pupils will be able to:

Identify triangles, rectangles,  
squares and circles in  
common shapes.

Use a number line to answer the  
question, 'How many more than?'

## Teaching aids

### Before the lesson:

Collect a selection of different  
shaped objects.

## Daily practice

### Whole class teaching

Put the different shaped objects on  
your table.

Ask one pupil to come out and pick  
out an object which has a square,  
rectangle, triangle or circle as one  
of its faces and ask the rest of the  
pupils which shape they can see.

Repeat this activity four times, with  
other pupils.

10  
minutes

## Introduction

### Group task

Give each group a number between 0 and 30 and ask them to make up three questions using that number which start, 'How many more than?'

Tell them not to work out the answer at this stage.

Write their questions on the chalkboard.

25  
minutes

## Main activity

### Individual task

Ask the pupils to answer the questions on the chalkboard in their exercise books, drawing number lines to help them.

Ask pupils to explain how they completed the sum.

10  
minutes

## Plenary

### Pair task

Ask the pupils to say something that they have learned during this week.

A hand is shown holding a bottle cap over a wooden surface. Several other bottle caps are scattered on the surface. The image is overlaid with a semi-transparent pink rectangle containing text.

Week  
15  
Fractions

## Words/phrases

half  
quarter  
equal parts  
fold  
vertical  
horizontal  
diagonal  
less than  
more than  
How many are there in...?  
Which number is less than?  
Which number is more than?

## Assessment

During the lesson, walk round the classroom and ask questions to see if the pupils clearly understand what you have taught them. If not, help them to understand by explaining the idea to them again, or asking other pupils to help them. You may need to use some different examples of the idea.

# Halving numbers

## Learning outcomes

**By the end of the lesson, most pupils will be able to:**

Count forwards in twos, fives and Tens using a Hundred square.

Identify one half of different numbers of objects.

## Teaching aids

**Before the lesson:**

Collect enough counters for each pair to have 20.

Find the Hundred square in Macmillan New Primary Mathematics 2, page 22 and look at the pattern of the numbers on it. Use the Hundred square at the start of this booklet to help you.

## Daily practice

**Whole class teaching**

Ask the pupils to find the Hundred square in Macmillan New Primary Mathematics 2, page 22.

Tell them to count in twos following the numbers on the Hundred square with their fingers.

Repeat the process to count forwards in Tens, twos and fives.

Ask questions about the numbers, encouraging all the pupils to find the answer on their Hundred square before putting their hands up, eg:  
'Which number is 2 more than 6?'  
'Which number is 10 more than 40?'  
'Which number is 5 more than 20?'  
'Which number is 2 less than 56?'  
'Which number is 5 less than 95?'

10  
minutes

## Introduction

### Whole class teaching

Bring 20 pupils out to the front and count them.

Ask them to divide themselves into two equal groups and count the size of each group.

Explain to them that you have divided the number by **half**.

Repeat three times with different numbers of pupils, eg: 6, 10, 8.

Ask the pupils to predict the number that will be in each group before you divide them in half.

25  
minutes

## Main activity

### Pair task

Give each pair 20 counters and ask them to count them.

Ask them to divide the counters into two equal piles and tell you how many are in each pile.

Explain to them that they have divided one pile of counters in half, which can be written as

$$\frac{1}{2} \text{ of } 20 = 10$$

ie: they have divided one pile of 20 counters into two equal piles of 10.

Give the class the following to do in pairs, using the counters:

$$\frac{1}{2} \text{ of } 4 =$$

$$\frac{1}{2} \text{ of } 6 =$$

Ask one or two pairs to explain how they worked out their answer.

Give them the following to complete in their exercise books:

$$\frac{1}{2} \text{ of } 8 =$$

$$\frac{1}{2} \text{ of } 10 =$$

$$\frac{1}{2} \text{ of } 12 =$$

$$\frac{1}{2} \text{ of } 14 =$$

$$\frac{1}{2} \text{ of } 16 =$$

10  
minutes

## Plenary

### Whole class teaching

Ask the pupils if they notice any pattern in their answers, ie: the numbers should get larger in ones, they are all even numbers.

# Halving objects

## Learning outcomes

**By the end of the lesson, most pupils will be able to:**

Use a Hundred square to count in twos and fives from different starting points.

Identify half of a shape and label it.

Write the term  $\frac{1}{2}$

## Teaching aids

**Before the lesson:**

Find one orange and something to cut it with.

Find some bananas, enough for one between six pupils.

Cut squares of paper out of newspaper.

Collect some counters.

Read Macmillan New Primary Mathematics 2, page 28, Exercise 3.

## Daily practice

**Whole class teaching**

Ask the pupils to find the Hundred square in Macmillan New Primary Mathematics 2, page 22.

Ask them to count in twos following the numbers on the Hundred square with their fingers.

Ask them to count in twos starting from the number 1 and in fives starting from the number 3.

Tell the pupils to count backwards aloud in Tens, twos and fives, starting from 100.

Ask them if they can notice anything about the way the numbers are arranged on the Hundred square.

Tell them to look, horizontally (across), vertically (down) and diagonally.

10  
minutes

## Introduction

### Whole class teaching

Cut an orange into two equal parts.

Ask pupils to compare the size of each part and tell you what the difference is (the pieces are the same size).

Explain to them that you have cut one whole orange into two equal parts and each part is one half of the orange.

25  
minutes

## Main activity

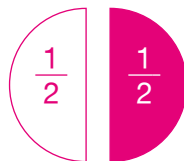
### Individual task

Give out a banana to each group of pupils.

Tell them to cut it into two equal parts and then draw it in their exercise books, labelling each part  $\frac{1}{2}$

Ask the pupils to draw a circle and divide it into two equal parts.

Tell them to colour half of the circle, then draw and label both sides, eg:



Macmillan  
New Primary  
Mathematics 2

10  
minutes

## Plenary

### Pair task

Ask the pupils to share their work with each other and check that they have labelled the parts correctly.



**Numeracy  
lesson plans  
Primary 2**

**Term 2  
Involving pupils in  
their learning**

**Week 15  
Fractions  
Day 3**

Lesson  
title

# Quarters

15  
minutes

Macmillan  
New Primary  
Mathematics 2

## Learning outcomes

**By the end of the lesson, most pupils will be able to:**

Find patterns of numbers in a Hundred square.

Identify a quarter of a shape.

## Teaching aids

**Before the lesson:**

Draw a Hundred square on the chalkboard.

Collect enough round plates for each group to have one to draw around to make circles.

Find newspaper for each group to make squares and circles with.

Read Macmillan New Primary Mathematics 2, page 29.

## Daily practice

**Whole class teaching**

Ask the pupils to turn to the Hundred square in Macmillan New Primary Mathematics 2, page 22.

Tell them to count in Tens, putting counters on the numbers as they go.

Ask one pupil to come out and colour those numbers on the Hundred square.

Repeat this (without removing the counters they used for counting in Tens), but this time counting in fives. Ask the pupils if they can see where there are two counters on one square.

Ask if anyone can explain this.

10  
minutes

## Introduction

### Whole class teaching

Ask the pupils to fold a piece of square paper into four equal parts.

Explain that each of these parts is called a **quarter**.

Ask them to write 'one quarter' in words on each part of the paper.

Explain that one quarter is written as  $\frac{1}{4}$

- 1 one whole
- divided into
- 4 four equal parts

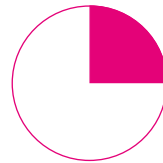
25  
minutes

## Main activity

### Group task

Give each group a round plate and ask them to draw around it to make a circle, then divide it into four equal parts.

Ask them to colour one quarter of the circle they have drawn, eg:



Macmillan  
New Primary  
Mathematics 2

### Individual task

Ask the class to complete Macmillan New Primary Mathematics 2, page 29 in their exercise books, drawing the shapes, colouring in and labelling the fractions.

10  
minutes

## Plenary

### Pair task

Ask the pupils to show each other the shapes they have coloured and check that they have each coloured one quarter.

**Numeracy  
lesson plans  
Primary 2**

**Term 2**  
Involving pupils in  
their learning

**Week 15**  
**Fractions**  
Day 4

Lesson  
title

# Finding quarters of a group of objects

15  
minutes

Macmillan  
New Primary  
Mathematics 2

## Learning outcomes

**By the end of the lesson, most pupils will be able to:**

Use a Hundred square to count in fours.

Identify a quarter of a shape.

## Teaching aids

### Before the lesson:

Collect counters or stones for the whole class.

Read Macmillan New Primary Mathematics 2, page 30, Exercise 1.

Find newspaper to make circles and squares.

Have ready a round plate to draw around to make a circle.

## Daily practice

### Whole class teaching

Ask each pupil to find the Hundred square in Macmillan New Primary Mathematics 2, page 22.

Tell them to count in fours, up to 100, putting a counter on each number as they say it.

Tell them to repeat the activity, this time counting in twos.

Ask them if there are any numbers where they have two counters on one number.

Ask if anyone can explain this.

10  
minutes

## Introduction

### Group task

Give each group a piece of newspaper and a round plate.

Tell them to draw around the plate to make a circle.

Ask them to divide the circle into four equal parts and label each part  $\frac{1}{4}$

25  
minutes

## Main activity

### Group task

Give each group 20 counters and ask them to make four equal piles of counters, putting one pile in each part of the circle.

Ask:

‘How many counters are in each quarter of the circle?’

‘How many counters are in one quarter of the circle?’

‘How many counters are in two quarters of the circle?’

‘How many counters are in three quarters of the circle?’

Explain to them that they have divided one pile of 20 counters into quarters (four equal piles of five), which can be written as

$$\frac{1}{4} \text{ of } 20 = 5$$

Ask each group to do the following in the same way:

$$\frac{1}{4} \text{ of } 4 =$$

$$\frac{1}{4} \text{ of } 8 =$$

$$\frac{1}{4} \text{ of } 12 =$$

$$\frac{1}{4} \text{ of } 16 =$$

Macmillan  
New Primary  
Mathematics 2

10  
minutes

## Plenary

### Individual task

Ask the pupils to say how many quarters they coloured in each group.

Tell them to record their answers by putting counters on the Hundred square.

Ask if they notice anything about the numbers they have written.

Ask if they can finish the pattern up to 100.

Ask if they notice anything about the pattern.

Tell the class to colour one quarter of each shape in Macmillan New Primary Mathematics 2, page 30, exercise 1, copying the shapes into their exercise books and ignoring the instruction in the textbook.

**Numeracy  
lesson plans  
Primary 2**

**Term 2**  
Involving pupils in  
their learning

**Week 15**  
**Fractions**  
Day 5

Lesson  
title

# Finding three-quarters

15  
minutes

Macmillan  
New Primary  
Mathematics 2

## Learning outcomes

**By the end of the lesson, most pupils will be able to:**

Recognise the relationship between numbers on a number square.

Identify three-quarters of a shape.

## Teaching aids

**Before the lesson:**

Collect 28 counters for each pair.

Find newspaper and round plates for each pair to make circles.

Read Macmillan New Primary Mathematics 2, page 30.

Find the Hundred square in Macmillan New Primary Mathematics 2, page 22.

## Daily practice

**Whole class teaching**

Ask each pupil to find the Hundred square in Macmillan New Primary Mathematics 2, page 22.

Tell them to look closely at the Hundred square and tell you everything they know about the pattern of the numbers.

Record their answers on the chalkboard.

Tell them to choose a number to start from, between 1 and 10, and count in twos, Tens, fives and fours from that number, putting counters on the numbers as they go.

Ask if any of the numbers have more than one counter on them.

Ask if any pupils can explain this.

10  
minutes

## Introduction

### Pair task

Give each pair a piece of newspaper and a plate to draw around.

Ask them to divide the circle into four equal parts and label each part  $\frac{1}{4}$

Give each pair 28 counters and ask them to make four equal piles of counters and put them in each section of the circle.

25  
minutes

## Main activity

### Pair task

Ask each pair to fold their paper in half and tell you how many quarters there are in each half.

Ask each pair to draw a square in their exercise books, divide it into four equal parts and label each section  $\frac{1}{4}$

Ask them to shade one half of the shape and label it  $\frac{2}{4}$

Ask them to shade three-quarters of the shape and label it  $\frac{3}{4}$

Macmillan  
New Primary  
Mathematics 2

10  
minutes

## Plenary

### Whole class teaching

Ask the pupils to tell you everything they know about  $\frac{1}{2}$  and  $\frac{1}{4}$

and record their ideas on the chalkboard, making sure they are correct.

## Credits

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In 2008, Kwara State carried out a Teachers' Development Needs Assessment for all primary school teachers. This showed that most teachers in Kwara State did not have strong literacy and numeracy skills. The Kwara State Government responded by developing a strategy to support existing teachers and improve new teachers' pre-service training.

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These literacy and numeracy lesson plans, developed by the Kwara State School Improvement Team, were part of that strategy. Two years after introducing these plans alongside the training and support programme, Kwara State began to see strong improvements in teachers' teaching skills and pupils' learning outcomes.

## Special thanks go to:

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The Honourable Commissioner and staff of the Kwara State Ministry of Education and Human Capital Development, as well as the Kwara State Universal Basic Education Board for their support and valuable input and for agreeing to share these plans with other states.

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Thanks also go to the teachers of Kwara State who have used these plans to bring about change in their classrooms.

