## This publication is not for sale

( )

۲

Kano State Government

Produced with the support of



۲

Type of lesson plans/ Grade Term/ Learning theme

( )

Numeracy lesson plans Primary 3

Term 1 Organising the classroom for effective learning

**Weeks** 6—10

۲

## Numeracy lesson plans Primary 3 Term 1 Organising the classroom for effective learning

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



### Introduction

The quality of education is a key element to socioeconomic development in any society. Perhaps the most critical element in ensuring quality of education to output. The majority of is the teacher. Good teaching methodology, with the right textbooks. will quickly provide a good platform for a quality education system in Kano State.

The challenges are sometimes overwhelming when vou have 5.335 schools with over 2.3 million children and 46.643 teachers. The Kano State Ministry of Education carried out a series of baseline surveys to assess classroom teachers, the role of the head teacher and the level of pupil learning outcomes.

The findings in most cases were alarmingly poor, with not much difference between qualified and unqualified teachers with respect teachers were themselves victims of an education system that was in a serious downward slope.

Following this, the Kano State Ministry of Education, the State Universal Basic Education Board (SUBEB) and local government education authorities (LGEAs), supported by the **Education Sector Support** Programme in Nigeria (ESSPIN), embarked on a series of reforms that will help strengthen schools.

This work has focused on classroom teachina skills in particular how to make teaching child-centred and the organisational structures needed for SUBEB and LGEA staff to provide effective support and advice to primary schools.

With many school leavers unable to read or write. a specific focus has been on improving the teaching of basic literacy and numeracy. To support this, Kano State has developed a benchmark for assessment and carefully designed literacy and numeracy lesson plans for Primary 1—3 teachers. These plans provide a step-by-step guide to teachers, while ensuring children become active learners.

The lesson plans, however, are not sufficient. Structures and processes have also been put in place so that teachers are continuously supported by both the State School Improvement Team and the LGEA-based school support officers.

We are sure that within a short time of these lesson plans being introduced, children's learning abilities will improve considerably. The materials will also enable teaching and learning to be more exciting - an important element in all classes, but in particular at the primary level. We are confident that these lesson plans will raise standards and improve the quality of children proceeding to higher levels of education.

We commend all those who have produced these lesson plans and trained our teachers to use them. We offer thanks to the UK Department for International Development (DFID) for its ongoing support to education reform in Kano State through its ESSPIN programme. Let's make every Kano school an improving school.



**Barister Faroug Iya Sambo** Honourable Commissioner of Education Kano State

Althous

Wada Zakari **Executive Chairman SUBEB** Kano State

۲

 $(\mathbf{\Phi})$ 

Term 1 Organising the classroom for effective learning

## Introduction ) Organising the classroom for effective learning

۲

۲

Weeks 6—10

۲

## Organising the classroom for effective learning

## Your classroom is a flexible space. You can change it to suit the learning activities.

Pupils take part in many different activities during each week, eg: games, role plays, circle discussions, group tasks, copying from the chalkboard, using teaching aids, working with a partner, working alone. All these activities need different ways of organising your classroom, eg:

Tables arranged around the edge of the room so there is a space in the middle for games, songs or role play. Pupils can see each other and this helps communication. Tables arranged in rows so that the pupils can see the chalkboard. This is useful when they need to see something you have written or drawn on the chalkboard.

Tables arranged in groups. This helps pupils to talk together and share ideas. They can see each other clearly and can easily work with one set of number cards or one sheet of paper to produce a joint end product.

Each time you start the day you should think about the activities you need to do and decide if your classroom needs to be arranged differently. Work with the other teachers in your school and cluster, your head teacher and SSO to discuss different ways of arranging your classroom for learning.

### Group and pair work

Group and pair work is the basis of a learner-centred classroom, they allow pupils to work together:

To discuss, solve problems or to play learning games.

To find their own way in their learning.

The main benefits of group and pair work are:

More pupils can be active at one time. Pupils can talk and listen to each other, or work on a problem together.

The teacher can walk around the room to monitor what groups and individuals are doing, and can stop with each group to help them with their task. Spending more time with the pupils helps teachers better understand what individual pupils know and can do. Group work is also one of the best ways of teaching social skills to pupils. While working in groups, pupils are learning a variety of skills including:

Co-operation.

Taking turns.

Listening to others.

Sharing.

Working harmoniously with others.

Solving problems.

The development of these life skills is a major reason why group and pair work is undertaken in most modern classrooms.

Term 1

Organising the classroom for effective learning

## Introduction Essential low-cost or free teaching aids

### Counters

Ask the pupils to help you collect together as many bottle tops, small sticks and small stones as possible. Put each set of counters into a jar to keep in the classroom so they are available when the pupils need them.

Weeks 6—10

۲

 $( \mathbf{ } )$ 

Halves and quarters	Equivalent fraction game		Building a shop		
Cut out two identical circles, one plain and one coloured.	Make a set of cards to play a matching game with the pupils. Write one	Ask the pupils to place the cards face down on the table and turn two	Collect about 20 items and put them on a table in the corner of	Encourage the pupils to go shopping, buying items and handing over	
Draw a line from the centre of each to the edge of the circle.	- of the following fractions on each card: $\frac{1}{2} \frac{2}{4} \frac{1}{3} \frac{2}{6} \frac{4}{6} \frac{4}{4} \frac{2}{3} \frac{3}{3}$	cards over. If the fractions are equivalent they can take the pair. If not, they turn them over again and the next person tries to find a pair. Use this game with pupils who finish their work quickly during and after Week 7.	your classroom. Label them with different prices, according to what	the correct money. This will develop their language skills as well	
Cut along this line on both circles.			and the next person tries	the pupils are learning. Encourage pupils to	as their understanding – of money.
Now slide one circle on top of the other through the slits.			<ul> <li>draw pictures of things they can find in the shop, along with their price, and stick or hang these</li> </ul>		
You are now able to rotate the circles on top	– Week 7.		on the wall around the 'shop'.		
of each other to show: $\frac{1}{2} \frac{1}{4} \frac{2}{4}$			Make a label saying 'shop' and display it so the pupils can see.		
The pupils could make their own.			Have a box with some Nigerian 'money' made out of cardboard.		

Term 1 Organising the classroom for effective learning Introduction Multiplication

( )

Weeks 6—10

۲

## Practise multiplication tables

It is very important that pupils know their multiplication tables from 0—10. If you ask them a random multiplication question they should be able to answer it instantly. In order for them to do this you will need to play lots of games with them.

## **Asking questions**

Spend 5 minutes at the start or end of lessons asking pupils random multiplication questions. Ask them to raise their hand when they know the answer.

Quick multiplication			Multiplication snap	Circle multiplication
Multiplying by 2 and 4 To multiply by 2 double the number, eg:	Multiplying by 9 Use your fingers to answer the question 9 x 3 =	Multiplying by 11 Use a quick way to answer the question 3 x 11 =	Make two sets of cards – one set with multiplication sums on them and one set with the answers.	Sit the pupils in a circle and ask the first pupil to point to another pupil in the circle and ask them a multiplication question, eg: 'What does 3 x 6 equal?'
$4 \Rightarrow 8$ If you know how to double a number, multiplying by 4 is easy. Double a number and then double it again, eg: $4 \Rightarrow 8 \Rightarrow 16$ When you multiply by 2 or 4 the answer will always be an even number.	Hold both hands in front of you with your palms facing you.	<ul> <li>Write down the number that is being multiplied by 11. Then write the same number</li> <li>again next to it. 3 → 33 3 x 11 = 33</li> <li>This will work for any number up to 10, eg: 4 x 11 = 44</li> </ul>	Give one pupil the sum cards and the other the answer cards.	
	<ul> <li>Bend down the third finger, counting from your thumb, on your left hand.</li> <li>You now have 2 fingers to the left of the bent finger and 7 to the right of the bent finger.</li> </ul>		Ask each pupil to put their top card down on the table in front of them. If a question and an answer match, the pupils say 'snap' and put their hand on their pile of cards.	The person they have pointed to answers the question and then uses one of the numbers from the previous question to ask the next pupil, eg: 'What does 6 x 5 equal?'
	Put the two numbers together and it will give you 27.		The first pupil to put their hand down collects all the cards on the table.	This continues until all the pupils in the circle have had a turn.
	9 x 3 = 27 Try this technique to multiply another number by 9.		The game continues until one pupil has all the cards and the other has none.	

kano-num-3-weeks-6-10-closeout.indd 10

۲

۲

Week 6 Fractions

۲

CENTI

Naira G

Náírà

۲

۲

Words/phrases

#### Assessment

۲

۲

fractions equal parts half quarter third triangle Hundreds

Goma

۲

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.

Term 1 Organising the classroom for effective learning

Week 6 Fractions Day 1

۲

# Fractions of shapes

Lesson

title

( )

### Learning outcomes **Daily practice** By the end of the lesson, most Whole class teaching pupils will be able to: Ask the pupils to count in Count in Hundreds. Tens to 100. Ask them to count in Hundreds Find fractions of shapes. to 1,000. **Teaching aids** Ask: Which number is 100 more than 400?' **Before the lesson:** 'Which number is 100 more Have ready sheets of newspaper, than 600?' one for each pupil. Ask the pupils to count backwards in Hundreds from 1,000. Ask the boys to count forwards in Hundreds. Ask the girls to count forwards in Hundreds.

minutes

10 minutes	25 New Method minutes Mathematics 3		10 minutes
Introduction	Main activity		Plenary
Whole class teaching	Whole class teaching		Pair task
Give each pupil a sheetof newspaper.Ask them to fold it into fourequal parts.Ask them to shade oneof the segments.Write the fraction on thechalkboard: $\frac{1}{4}$ Now ask them to shadeanother quarter. Ask theclass how you would writethat fraction: $\frac{2}{4}$ Repeat until the wholeshape is shaded and thefraction written is $\frac{4}{4}$	Look together at New Method Mathematics 3, page 11, Lesson 1, question 1. Ask the pupils, 'What fraction is shaded?' Look together at questions 2—8. In pairs, tell the pupils to discuss the shaded fractions.	<ul> <li>Remind them to count how many sections each shape is divided into and then count how many sections</li> <li>are shaded.</li> <li>Tell them to copy the shaded fraction shapes into their exercise books and write the fraction that is shaded next to the shape.</li> </ul>	Ask the pairs to discuss what they know about fractions.

Term 1 Organising the classroom for effective learning

Week 6 Fractions Day 2

# Fractions of shapes

Lesson

( )

۲

	15 minutes
Learning outcomes	Daily practice
By the end of the lesson, most	Whole class teaching
pupils will be able to:	Draw a number line with the
Add on in Hundreds.	pupils which shows jumps
Find a third of a shape.	<ul> <li>of 100, up to 1,000, as shown opposite below.</li> </ul>
Teaching aids	Ask them about 10 questions to answer using the number line, eg:
Before the lesson:	'How many is 100 add 300?'
Draw a triangle on the chalkboard.	'What do you get if you add 500 and 200?'
Have a piece of newspaper ready for each pair.	

۲

10 minutes	25 minutes		10 minutes
Introduction	Main activity		Plenary
Whole class teaching	Whole class teaching		Whole class teaching
Divide the triangle into three equal parts.	Ask the class to draw a triangle in their books	Repeat by shading all three parts and ask them	Hold up a piece of newspaper, fold it into four,
Ask the pupils how many parts you have divided the	and divide it into three equal parts.	what <u>3</u> is equal to.	and ask the class: _ 'What fraction is each
triangle into. Shade one part of the triangle and ask pupils to tell you what fraction of the triangle is shaded. Explain that one part out of three has been shaded, which can be written as the fraction <u>1</u> <u>3</u>	<ul> <li>Ask them to shade</li> <li>one of the parts and write the fraction.</li> <li>Ask them to draw another triangle and split it into</li> <li>three parts, this time shading two parts and writing the fraction.</li> </ul>	<ul> <li>Give each pair a piece of newspaper and ask them to fold it into three equal parts.</li> <li>Ask them to number each section, from 1 to 3.</li> <li>Ask: 'What fraction is each section?'</li> <li>Explain to the class that each section is <u>1</u> 3</li> </ul>	section?' 'What fraction is two sections?' 'What fraction is three sections?' 'What fraction is four sections?' Repeat, but this time fold the newspaper into six.

Daily practice number line

100	200	300	400	500	600	700	800	900 1,000
1	1	1			- I -			

۲

۲

Term 1 Organising the classroom for effective learning

Week 6 Fractions Day 3

۲

# Fractions of groups

Lesson

title

#### Learning outcomes **Daily practice** By the end of the lesson, most Whole class teaching pupils will be able to: Ask the class to count in Add on in Hundreds, from different Hundreds from different starting starting points. points, drawing a number line to help them, as shown Find fractions of amounts. opposite left. If they find this difficult, start **Teaching aids** with 26 and add 10 sets of Ten to help them understand, as shown opposite right. Before the lesson: Collect enough counters for

minutes

Collect enough counters for each pupil to have eight.

( )

10 minutes		25 minutes	10 minutes	
Introduction		Main activity	Plenary	
Whole class teaching Give each pupil eight counters and ask them to divide them in half, or into two groups. Ask the pupils: 'How many counters in each group?' Explain that what they have just done can be written as $\frac{1}{2}$ of 8 = 4	Now ask them to divide their eight counters into quarters, or four groups. Ask how many in each group. Write: $\frac{1}{4}$ of 8 = 2 4	Group taskLook together at the following on the chalkboard: $\frac{1}{3}$ of 9 $\frac{1}{4}$ of 16 $\frac{3}{3}$ of 20 $\frac{1}{4}$ of 20 $\frac{3}{4}$ of 20 $\frac{1}{5}$ of 20Ask the groups to use their counters to divide the numbers into the correct equal parts.Ask them to write the sum and answer in their exercise books.Walk around each of the groups to check they understand.	Whole class teachingSelect 10 pupils to come to the front of the class.Ask them to divide in half.Count how many pupils are in one half and write on the chalkboard: $1 of 10 = 5$ $2$	<ul> <li>Select 12 different pupils to come to the</li> <li>front of the class.</li> <li>Ask them to divide into quarters.</li> <li>Count how many pupils are in one quarter and write on the chalkboard: <u>1</u> of 12 = 3 <u>4</u></li> </ul>
Daily practice number line +100 +100 +100 +100 +100 26 126 226 326 426	0 +100 +100 +100 +100 526 626 726 826 926		+10 +10 +10 +10 +10 76 86 96 106 116 120	6

kano-num-3-weeks-6-10-closeout.indd 18

۲

Term 1 Organising the classroom for effective learning

Week 6 Fractions Day 4

۲

## Fractions of amounts

Lesson

title

( )

#### Learning outcomes **Daily practice** By the end of the lesson, most Whole class teaching pupils will be able to: Ask the pupils to remind you Add three-digit numbers together. how to add the following numbers together: 45 + 53Find fractions of amounts. Explain that they can use the same system to add together **Teaching aids** Hundreds, Tens and Units. Show them the following example Before the lesson: on the chalkboard: 123 + 526 =Prepare lots of different counters for the pupils to use. Tell them to expand the smallest number first and then use a number line to add the two numbers together, ie: 526 + 100 + 20 + 3 +100 +20 +3 526 626 646 649

minutes

kano-num-3-weeks-6-10-closeout.indd 19

10 minutes	25 minutes	10 minutes
Introduction	Main activity	Plenary
Whole class teaching	Group task	Whole class teaching
Give each pupil 12 counting objects and ask them to divide them into quarters, or four groups.	Look together at the following on the chalkboard: $\frac{3}{5}$ of 25 $\frac{1}{3}$ of 15	Select nine pupils to come to the front of the class. Ask them to divide
Ask how many counters they have in each group.	$\frac{2}{6}$ of 12 $\frac{4}{6}$ of 12	into thirds.
Write: $\frac{1}{4}$ of 12 = 3 Give each pupil 20 counting	Ask the pupils to use their counters to help them find fractions of amounts.	Count how many pupils are in one third and write on the chalkboard: $\frac{1}{3}$ of 9 = 3
objects and ask them to divide them into quarters or four groups.	Ask them to write the sum and the answer in their exercise books.	3 Select eight different pupils to come to the front of the class.
Ask how many counters in each group. Write: 1 of 20 = 5	Walk around each of the groups to check they understand.	Ask them to divide into quarters.
4		Count how many pupils are in one quarter and write on the chalkboard: $\frac{1}{4}$ of 8 = 2

Term 1 Organising the classroom for effective learning

Week 6 Fractions Day 5

## Fractions of amounts

Lesson

Learning outcomes	Daily practice
By the end of the lesson, most pupils will be able to: Add three-digit numbers together. Find fractions of amounts. Teaching aids	Whole class teachingAsk the pupils to add two numbers together using a number line, eg: $258 + 231 =$ $231 = 200 + 30 + 1$ $+100 + 100 + 30 + 1$
Before the lesson:	
<ul> <li>Have ready lots of counters for the pupils to use.</li> <li>Write these questions on the chalkboard:</li> <li>1. Divide 12 eggs into 2 equal parts.</li> <li>2. Divide 12 eggs into 3 equal parts.</li> <li>3. Divide 30 kernels into 5 equal parts.</li> </ul>	Ask them to solve the following in their exercise books: 324 + 145 = 632 + 257 = 423 + 455 = Ask pupils to exchange their books and mark each other's work.

| 15 | minutes

۲

kano-num-3-weeks-6-10-closeout.indd 21

۲

( )

10 minutes	25 minutes	10 minutes
Introduction	Main activity	Plenary
Whole class teaching	Group task	Whole class teaching
Look together at the questions on the	Look together at the following on the chalkboard:	Mark the work together as a whole class.
chalkboard. Give the pupils counters to use and work though questions 1—3 as a whole class.	$- \frac{1}{3} \text{ of } 12  \frac{1}{6} \text{ of } 12$ $\frac{3}{4} \text{ of } 16  \frac{2}{5} \text{ of } 20$ $\frac{3}{4} \text{ of } 8$	If you are given any wrong answers, ask pupils to use counters as you demonstrate the correct answer.
Ask the pupils questions to check their under- standing, eg: 'How many equal groups	<ul> <li>4</li> <li>Tell the pupils to use their counters to help them find fractions of amounts.</li> </ul>	
will you divide the counters into if you are finding half?'	Ask them to write the sum and the answer in their exercise books.	
'How many equal groups will you divide the counters into if you are		

۲

finding thirds?'

۲

## Week 7 Writing fractions

۲

۲

## Words/phrases

#### Assessment

fractions numerator denominator equivalent

۲

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. ۲

#### Lesson title

Numeracy lesson plans Primary 3

Term 1 Organising the classroom for effective learning

Week 7 Writing fractions Day 1

۲

## Numerator and denominator

 By the end of the lesson, most pupils will be able to:
 7

 Practise the 3 and 4 times tables.
 5

 Find the numerator and denominator of a fraction.
 7

 Teaching aids
 7

 Before the lesson:
 8

 Read New Method Mathematics
 8

Learning outcomes

۲

3, page 14 and make sure you understand the fraction board.

## **Daily practice**

minutes

Game

## Whole class teaching

Ask the pupils to stand facing their partner and tell them they are going to clap the <mark>3 times table</mark>.

Teach them to follow this clapping pattern:

Tap your hands once on your thighs (whisper the number 1)

Tap your hands once on your stomach (whisper the number 2)

Clap hands together with a partner (say the number 3).

Continue to the number 36.

Explain that every time they clap hands with their partner they will be saying a number from the 3 times table.

Repeat for the four times table, with a tap on the shoulders for the extra number.

kano-num-3-weeks-6-10-closeout indd 25

10 minutes		25 minutes		10 minutes
Introduction		Main activity		Plenary
Whole class teaching		Individual task		Whole class teaching
Ask the pupils: What is a fraction?' (Part of a whole.)	Ask pupils to colour in one of the four parts. The shaded part is called	Ask pupils to draw a rectangle in their books.	Ask them to write a fraction to describe their work, - eg: if they have divided the	Ask five pupils to share what they have learned with the rest of the class.
Ask pupils to draw a rectangle in their books and divide it into four equal parts. Ask them to count the number of parts. Tell them that the number of parts (4) is referred to as the denominator. This number is placed at the bottom of the fraction.	<ul> <li>the numerator. This number is written at the top of the fraction, eg: 1/4</li> <li>Repeat with another shape.</li> </ul>	Ask them to choose two numbers less than 5. Tell them to write down the largest number they chose as the denominator. Ask them to divide their rectangle into that number of parts. Tell pupils to write down the smallest number and shade that number of parts. Ask them to look at	rectangle into four equal parts and shaded two parts they have shaded $\frac{2}{4}$ (or $\frac{1}{2}$ ) of the rectangle. In this case, 2 is the numerator and 4 the denominator. Walk around the class and help pupils to label their fractions correctly. Ask the pupils to repeat with different numbers.	
		how many parts they have shaded and write that number on the shape. This number is the numerator.		

Term 1 Organising the classroom for effective learning

Week 7 Writing fractions Day 2

۲

## Equivalent fractions

Lesson

title

## minutes **Daily practice** Learning outcomes By the end of the lesson, most Whole class teaching pupils will be able to: Repeat the clapping game Practise the 3, 4 and 5 from yesterday with the 3 and 4 times tables. times table. Identify equivalent fractions. Make up a pattern for clapping the 5 times table. **Teaching aids** Before the lesson: Write the following on the chalkboard:

Game

Circle the numerators in these fractions:  $\frac{3}{5} \frac{3}{4} \frac{1}{2} \frac{2}{3} \frac{2}{4}$ 

kano-num-3-weeks-6-10-closeout.indd 27

۲

10 minutes	25 New Method minutes Mathematics 3		10 minutes
Introduction	Main activity		Plenary
Whole class teaching	Whole class teaching		Whole class teaching
Draw and label on the chalkboard: <u>4</u> = numerator 5 = denominator	Ask the pupils to look at the fraction board in New Method Mathematics 3, page 14.	Ask the pupils to answer questions 1—8 in New Method Mathematics 3, page 14 in their	Go through the answers with the pupils and ask them to check that they are correct.
Tell the pupils to ask questions if they don't understand.	Explain that fractions that have the same value are called 'equivalent fractions'.	exercise books. Tell them to use the fraction board to help them	
Invite some pupils to write fractions on the chalkboard. Choose other pupils to read the fractions.	Ask the following questions: What fraction is equivalent to $\frac{2}{12}$	find equivalent fractions.	
Ask the class: 'Which is the numerator?' 'Which is the denominator?'	What fraction is equivalent to $\frac{4}{8}$ What fraction is equivalent to $\frac{5}{10}$		

Lesson Litle		15   minutes 		
<b>Equivalent</b> fractions	Learning outcomes	Daily practice		
	By the end of the lesson, most pupils will be able to: Remember their multiplication tables. Use shaded shapes to write	Pair task         Give each pair a set of 0—9         number cards.         Ask them to place the cards face         down on the table.		
	equivalent fractions. <b>Teaching aids</b>	The first person turns over two cards and multiplies them together, saying the answer aloud. Their partner checks the answer.		
	<b>Before the lesson:</b> Have ready 0—9 number cards, one set for each pair of pupils.	Tell pupils to replace the cards and continue taking turns to turn over two cards and multiply the two numbers.		

Term 1 Organising the classroom for effective learning tit

Week 7 Writing fractions Day 3

۲

10 minutes	25 minutes		10 minutes
Introduction	Main activity		Plenary
Whole class teaching	Whole class teaching		Whole class teaching
Ask pupils to draw the rectangles shown below in their exercise books.	Ask pupils to draw a circle in their exercise books and divide it into quarters.	Ask them what they have found out, ie: $2$ $4$ $4$	Ask pupils to swap books and check each other's work.
Ask them to tell you what the fractions of the shaded areas are.	Ask them to shade a half using one type of shading. Ask them to shade two	$- 4 2$ Explain that it can also be $- \text{ written as } \frac{2}{4} = \frac{1}{2}$	_
Explain that they are equivalent fractions as they have the same amount of the whole shape shaded.	quarters using another they type of shading. of	4  2 Write further examples of equivalent fractions on the chalkboard: $\frac{1}{2} \text{ and } \frac{4}{8}$ $\frac{1}{4} \text{ and } \frac{3}{12}$	_
		4 Ask pupils to draw the shapes in their exercise books.	-

۲

Term 1 Organising the classroom for effective learning

Week 7 Writing fractions Day 4

۲

# Equivalent fractions

Lesson

Learning outcomes	Daily practice
By the end of the lesson, most pupils will be able to:	Whole class teaching
Quickly recall multiplication sums.	Ask the pupils to stand in
	a circle while you stand in the - middle with the ball.
Find equivalent fractions.	Throw the ball to a pupil and at
Togehing gide	the same time ask a multiplication
Teaching aids	sum, eg: 2 x 8.
Before the lesson:	The pupil should answer quickly and throw the ball back to you.
Have ready or make a ball to throw.	Repeat, making sure all pupils have a turn.
Collect enough newspapers for each group to have one.	If a pupil doesn't know the answer, they may throw the ball
Write on the chalkboard:	- to a friend to answer for them.
Which is greater,	
$\frac{1}{2}$ or $\frac{1}{4}$ , $\frac{2}{3}$ or $\frac{3}{4}$	
Which is less	

| 15 | minutes

Which is less,  $\frac{1}{2}$  or  $\frac{1}{3}$ ,  $\frac{1}{3}$  or  $\frac{1}{4}$ 

۲

( )

10 minutes	25 minutes			10 minutes
Introduction	Main activity			Plenary
Whole class teaching Write the sign > on the	<b>Pair task</b> Give each pair two	Ask them to shade one	Give each group	Whole class teaching Mark the answers together
chalkboard and ask the pupils what it means (greater than).	rectangles cut out of newspaper. Tell the pairs to fold one	section of each rectangle and write the fraction — for each rectangle in their exercise books.	a newspaper and ask them to use newspaper shapes to help them complete the questions	as a class.
Write the sign < and ask the pupils what it means (less than).	rectangle in half and the other into quarters.	Ask them to look at their shapes and decide	— on the chalkboard.	
Write the following pairs of numbers on the chalk-	—	which fraction takes up the most sections.	_	
ooard and ask pupils o put the correct sign in oetween them, eg:	Tell them to describe one of the fractions as greater than the other.			
3 < 7 12 57 45 21 63 48		Tell them to write this in their books using the > sign between the two fractions.	_	

	Lesson title		15   minutes	
Numeracy lesson plans	Equivalent	Learning outcomes	Daily practice	
Primary 3	fractions	By the end of the lesson, most	Pair task	
Term 1 Organising the classroom for		pupils will be able to:	Give each pair a set of 0—9 number cards.	
		Remember their multiplication		
effective learning		tables.	Ask them to place the cards face down on the table. The first person should turn over	
		Find an equivalent fraction.		
		Teaching aids	two cards and multiply them together, saying the answer	
Week 7 Writing fractions			aloud. Their partner should check	
Day 5		Before the lesson:	the answer.	
		Have ready 0—9 number cards,	Tell pupils to replace the cards	
		one set for each pair of pupils.	and continue taking turns to - turn over two cards and multiply	
		Have ready enough counters for each pupil to have six.	the numbers.	

10New MethodminutesMathematics 3	25 New Method minutes Mathematics 3	10 minutes	
Introduction	Main activity	Plenary	
Whole class teaching	Pair task	Whole class teaching	
Ask pupils to look at question 9 in New Method Mathematics 3, page 14.	Ask pupils to answer question 9 in New Method Mathematics 3, page 14.	Ask pupils to tell you some- thing they have learned about fractions over the past	
Ask pupils to put a counter on all the fractions that are equal to $\frac{1}{4}$	Tell them to use the fraction board to help them.	two weeks.	
Next, ask pupils to put a counter on all fractions equal to $\frac{3}{4}$	-		

Week 8 Addition of threedigit numbers

۲

 $(\mathbf{\Phi})$ 

## Words/phrases

#### Assessment

addition bridging the Ten expanding Hundreds Tens Units 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. ۲

7.99

۲

Numeracy lesson plans Primary 3

Term 1 Organising the classroom for

effective learning

Week 8 Addition of threedigit numbers Day 1

۲

### Addition of threedigit numbers

( )

#### **Daily practice** Learning outcomes By the end of the lesson, most Whole class teaching pupils will be able to: Ask the pupils to write the number Write addition sums up to 10. 10 in their exercise books and ask them to make as many Add three-digit numbers using addition sums as they can that the expanded form. give the answer 10. Ask individual pupils to read **Teaching aids** out one sum and write it on the chalkboard for everyone to check. Before the lesson: Have ready a set of 0—9 number cards for each pair. **Read New Method Mathematics** 3, page 29 to make sure you understand addition using the expanded form.

minutes

kano-num-3-weeks-6-10-closeout.indd 37

Introduction		Main activity		Plenary
Whole class teaching		Individual task		Whole class teaching
Write on the chalkboard, 156 + 231'. Ask pupils, How would you work this sum out?' Take answers from a couple of pupils.	Explain the expanded form as shown below, reminding pupils that they should only expand the smallest number: 156 = 100 + 50 + 6 = 100 + 10 + 10 + 10 + 10 + 10 + 6 (most pupils will not need this step, they should be able to add 50 directly without expanding). Remind pupils how to use a number line to help them work out the sum. +100 + 50 + 6 231 331 381 387 Repeat the exercise with the sum 124 + 235.	Ask the pupils to complete the following sums in their exercise books: 173 + 121 = 222 + 666 = 345 + 543 = 621 + 323 = 746 + 144 = Tell them to use the method you have shown them. Observe individual pupils working out the sums and help them if needed. Check that they are using the number lines.	Ask pupils who finish quickly to choose four numbers between 0 and 5 and use them to make two, two-digit numbers. Ask them to add those numbers together.	Ask the pupils the following question: 'You are given a shopping list and asked to buy 4 yam for 230 Naira and some onions for 122 Naira. How much money would you need?' Tell them they can use any method to solve the problem.

kano-num-3-weeks-6-10-closeout.indd 38

Numeracy lesson plans Primary 3

Term 1 Organising the classroom for effective learning

Week 8 Addition of threedigit numbers Day 2

۲

# Addition of twodigit numbers

 $( \bullet )$ 

۲

Learning outcomes	Daily practice
By the end of the lesson, most pupils will be able to: Write addition sums up to 9. Add two-digit numbers that bridge the Ten on a number line.	<ul> <li>Whole class teaching</li> <li>Write the number 9 and ask pupils to see who can think of the most ways of making 9.</li> <li>Write their sums around the number 9.</li> </ul>
Teaching aids	
Before the lesson:	
Read the lesson plan carefully and make sure you understand the method.	

| 15 | minutes

Introduction		Main activity		Plenary
				Fielding
Whole class teaching		Whole class teaching		Whole class teaching
Write this sum on the chalkboard: 57 + 39 = Ask the pupils the following questions: Which number would you write on the number line first?' Look at the smallest number. What could you do with it to make it easier to add to 57?'	<ul> <li>Ask the pupils to explain their ideas, and then show the following method:</li> <li>- 39 = 30 + 9</li> <li>Draw a number line as below, and keep it on the chalkboard for the rest of the lesson.</li> </ul>	Give the pupils the following sums, stopping after each one to check they are using the correct method: 45 + 27 = 38 + 18 = 66 + 25 = Ask if anyone has a quicker way of adding the units. Show them the following: 57 + 39 = 39 = 30 + 9 Start by adding 30 and then ask how many they jumps would need to reach the nearest Ten, eg: 3	Ask them to work out how many more jumps they would need to make 9 jumps altogether, eg: $3 + \boxed{} = 9$ Write this on the number line as below. Explain that using this will be quicker than adding in jumps of 1. Ask pupils to try the following sums using the same method: 47 + 26 = 53 + 28 =	Go through the sums with the class and check they are using the correct method.
$\frown$	+1 +1 +1 +1 +1 +1 +1 +1 +1 7 88 89 90 91 92 93 94 95 96		$\frown$	-3 +6 90 96

Numeracy lesson plans Primary 3

Term 1 Organising the classroom for effective learning

Week 8 Addition of threedigit numbers Day 3

۲

# Addition of twodigit numbers

 $( \bullet )$ 

۲

Learning outcomes	Daily practice
By the end of the lesson, most pupils will be able to: Write addition sums up to 8. Add two-digit numbers, which bridge the Ten, on a number line. Teaching aids	Whole class teachingAsk the pupils to write as many sums as they can which give the answer 8.Write different ideas on the chalkboard and ask the pupils how they decided which sums to write.
Before the lesson: Read the lesson plan carefully and make sure you understand the method.	

| 15 | minutes

10 minutes	25 minutes		10 minutes
Introduction	Main activity		Plenary
Whole class teaching	Pair task	Whole class teaching	Pair task
Write the following sum on the chalkboard and ask pupils to help you do in it the quickest way: 46 + 28 = Write the largest number on the number line.	Write the following sums on the chalkboard for the pupils to complete in pairs: 45 + 28 = - 63 + 18 = 36 + 28 = 76 + 18 =	For each sum ask the pairs, 'How did you break up the 8?' Write the different ways of breaking up the 8 next to the sum on the chalkboard.	<ul> <li>Ask the pupils the following problem to solve using any method they can:</li> <li>'The farmer wants to sell some yams at the market. He cuts 55 from 1 field and 28 from another. How many yams does he have</li> </ul>
Expand the number 28: 28 = 20 + 8	52 + 18 =		altogether?'
Draw this on a number line, remembering to add	_		Ask individual pupils to give you their answer and explain how they did it.

Draw this on a number line, remembering to add the 20 first, then break up 8 to jump to the nearest Ten and complete the sum.

۲

Numeracy lesson plans Primary 3

Term 1 Organising the classroom for effective learning

Week 8 Addition of threedigit numbers Day 4

# Addition of two- and threedigit numbers

Learning outcomes	Daily practice
By the end of the lesson, most pupils will be able to:	Whole class teaching Ask the pupils to make as many
Write addition sums up to 7.	addition sums as they can which
Add two- and three-digit numbers, which bridge the Ten, on a number line.	give the answer 7.
Teaching aids	
Before the lesson:	
Read the lesson plan carefully	

15 minutes

۲

 $( \bullet )$ 

10 minutes	25 minutes			10 minutes
Introduction	Main activity			Plenary
Whole class teaching	Group task	Whole class teaching	Individual task	Pair task
Give pupils the following numbers and ask them	Ask each group to complete the following	Show the pupils how to do the sum.	Give the pupils some more sums to do.	Ask the pupils to compare their sums with
to write each one on a separate number line:	sum using a number line and be prepared to	Explain that it is the	Ask them to use as few	- each other.
46, 23, 52, 61, 44, 25, 28, 77, 39.	say how they did it: 135 + 28 =	same method they have been learning all week, but the first number	jumps as possible to do the following sums: 328 + 23 =	Ask them to look at the different ways they broke up the numbers.
Ask them to write the next multiple of 10 on the	Ask one group to tell you their answer and explain	contains three digits instead of two.	564 + 18 = 437 + 28 =	
number line and make	how they did the sum.		437 + 28 = 644 + 27 =	
one jump to reach that number, eg: +4	Ask if any groups did it another way.	_	455 + 35 =	
46 50				

# Numeracy

lesson plans Primary 3

Term 1 Organising the classroom for effective learning

Week 8 Addition of threedigit numbers Day 5

۲

# Adding threedigit numbers

Lesson

Learning outcomes	Daily practice
By the end of the lesson, most pupils will be able to: Write addition sums to 100. Add two- and three-digit numbers, which bridge the Ten, using a number line.	Whole class teachingAsk pupils to write as many sums as they can which give the answer 100.Write different ideas on the chalkboard and ask pupils how they decided which sums to write.
Before the lesson: Read the lesson plan carefully and make sure you understand the method.	

| 15 | minutes

۲

 $( \bullet )$ 

10 minutes	25 minutes			10 minutes
Introduction	Main activity			Plenary
Pair task	Whole class teaching		Pair task	Whole class teaching
Ask the pupils the following question:	Ask a pair to explain to the class how they did	Remind the pupils to answer the question by	Write the sums below on the chalkboard.	Compare their answers with the guesses on
<ul> <li>'In Primary 1 there are</li> <li>156 pupils and in Primary</li> <li>2 there are 139 pupils.</li> <li>How many pupils are</li> <li>there altogether?'</li> <li>Ask them to tell you</li> <li>how they would solve</li> <li>this problem using</li> <li>a number line.</li> </ul>	the sum. Show them that it is the method they already know, but with bigger numbers, eg: 156 + 139 = 139 = 100 + 30 + 9 +100 + 30 + 4 + 5 156 - 256 - 286 290 295	putting a circle around the answer.	Ask the pupils to think of a sensible guess before they do their calculation and write some of the guesses next to the sum on the chalkboard. Ask them to tell you how they chose their guesses.	<ul> <li>the chalkboard and see if any were close.</li> <li>Ask the pupils to tell you what they know about addition using a number line.</li> </ul>
			Ask them to do the sums in their exercise books, using the number line: 328 + 238 = 419 + 326 = 576 + 218 = 304 + 427 = 715 + 135 =	

# Week 9 Addition of threedigit numbers

۲

#### Words/phrases

Assessment

addition expanding Hundreds Tens Units bridging the Hundred multiplication table column row 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. ۲

۲

Numeracy lesson plans Primary 3

Term 1 Organising the classroom for effective learning

Week 9 Addition of threedigit numbers Day 1

۲

# Addition of threedigit numbers

Learning outcomes	Daily practice		
By the end of the lesson, most	Pair task		
<b>pupils will be able to:</b> Multiply single-digit numbers together.	Write the multiplication sign (x) on the chalkboard and ask pupils to tell you what it means.		
Add three-digit numbers that bridge the Ten on a number line.	Write the following sum on the chalkboard and ask the pupils to tell you how they would find the answer: 2 x 3 =		
Teaching aids	Give each pair 25 counters.		
Before the lesson: Have ready 25 counters for	Remind them that they should make three groups of two and count how many they have altogether.		
each pair of pupils.	Ask the pupils to use the same method to answer the following questions: $2 \times 2 =$ $3 \times 4 =$ $2 \times 4 =$ $1 \times 3 =$ $5 \times 4 =$ $4 \times 3 =$		

| 15 | minutes

۲

 $( \bullet )$ 

10 minutes	25 minutes		10 minutes
Introduction	Main activity		Plenary
Whole class teaching	Whole class teaching	Individual task	Individual task
Ask the pupils to solve the following: 180 + 212 = 256 + 132 = Invite a pupil to the chalkboard to explain their understanding of how to add three-digit numbers.	Remind the pupils of the addition method they used last week. Look together at the following calculations on the chalkboard: 224 + 546 = 437 + 132 = 371 + 526 = 305 + 692 =	Ask the pupils to complete the calculations in their exercise books.	Ask the pupils to share the answers to their questions. Choose two or three pupils to explain how they completed each sum.

### Numeracy lesson plans Primary 3

Lesson

**Multiplication** 

Term 1 Organising the classroom for effective learning

Week 9 Addition of threedigit numbers Day 2

۲

Learning outcomes	Daily practice
By the end of the lesson, most	Pair task
pupils will be able to:	Give each pair 25 counters.
Multiply single-digit numbers together.	Mix up the cards and place the face down on the table.
Add two-digit numbers that bridge the Hundred.	Ask two pupils to come out and pick one number card eacl and hold them up so the rest
Teaching aids	of the class can see.
	Ask the pairs to multiply
Before the lesson:	the numbers together, using the counters if they wish,
Have ready a set of number cards from 0—5.	and put up their hands when they know the answer.
Have ready 25 counters for each pair of pupils.	Repeat until you have done 10 different sums.

| 15

( )

۲

10 minutes	25 minutes		10 minutes	
Introduction	Main activity		Plenary	
Whole class teaching	Whole class teaching	Pair task	Whole class teaching	
Write the following numbers on the chalkboard and give pupils 5 minutes to work out how many more they need to add on to each number to reach 100: 10, 30, 50, 20, 90, 80, 60, 40, 70. Ask everyone to count in Tens from 50 to 150.	Show pupils how to do the following sum, which bridges the Hundred, using a number line: 54 + 73 = 54 = 50 + 4 = +50 + 4 73 83 93 103 113 123 127 Write the sum and answer	Give pupils the following sums to complete in pairs: 45 + 62 73 + 44 25 + 75	Ask one or two pairs to tell you their answers and explain how they did the sum.	

at the end: 54 + 73 = 127 ۲

۲

۲

Numeracy lesson plans Primary 3

Term 1 Organising the

classroom for effective learning

Week 9 Addition of threedigit numbers Day 3

۲

### Addition of threedigit numbers

( )

#### **Daily practice** Learning outcomes By the end of the lesson, most Whole class teaching pupils will be able to: Play the game 'Fizz'. Stand the Recognise multiples of three. pupils in a circle and explain that they are going to count around Add three-digit numbers. the circle, up to 50. Explain that every third number **Teaching aids** they have to say 'fizz' instead of the number, ie: '1, 2, fizz', '4, 5, fizz', '7, 8, fizz'. Before the lesson: Tell the pupils that they have Have ready a set of number cards to concentrate really hard so they from 0-9 for each group. don't miss the number. When you have finished the game ask them: 'How many are you counting on each time?'

Game

minutes

10 minutes	25 minutes	10 minutes
Introduction	Main activity	Plenary
Group task	Group task	Whole class teaching
Give each group a pack of 0—9 number cards.	Ask each group to pick two numbers from their list	Ask the groups to share one sum that they
Ask each group to pick six numbers and use them to write down as many three-digit numbers as they can.	<ul> <li>and add them together.</li> <li>Ask them to continue adding together different numbers from the list until they have completed at least five sums.</li> </ul>	have completed with the - rest of the class.

### Numeracy lesson plans Primary 3

Term 1 Organising the classroom for effective learning

Week 9 Addition of threedigit numbers Day 4

۲

# Three-digit

Lesson

title

# numbers

### Learning outcomes

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

Complete a multiplication table.

Multiply single-digit numbers.

Add together three-digit numbers.

### **Teaching aids**

( )

#### **Before the lesson:**

Draw table 1, shown opposite, on the chalkboard.

Read New Method Mathematics 3, page 29.

### **Daily practice**

minutes

#### Whole class teaching

Show the pupils the table on the chalkboard and explain that this is a way of doing multiplication.

Tell them to put a finger on the number 2 in the top row and a finger on the number 1 in the first column.

Ask them to move the finger on the number 2 down the column and the finger on the number 1 along the row and stop when they meet, as shown opposite in table 2.

Write the answer (2) in the box where the two numbers meet.

Repeat until all four boxes are complete.

10 minutes	5		25 minutes	New Method Mathematics 3	10 minutes
Intro	duction		Main	activity	Plenary
Whol	e class t	teaching	g Indivi	dual task	Pair task
they s		n written	in New M 3, pag	e pupils to compl lethod Mathemat e 29, questions 7 r exercise books.	ics in pairs to compare
all wri sum,	should firs ite it as a eg: 532 =		al		
you a numb	ne class t dd these ers toget nber line.	two	3		
				•	
Daily pr	actice table	1	Daily pro	ictice table 2	
x	1	2	x	1 2	
1			1	→2↓	
2			2		

#### Numeracy lesson plans Primary 3

Term 1 Organising the classroom for effective learning

Week 9 Addition of threedigit numbers Day 5

۲

### Word problems

Lesson

title

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

Complete a multiplication table.

Solve word problems.

Learning outcomes

**Teaching aids** 

#### **Before the lesson:**

Draw the table below on the chalkboard.

Write the following question on the chalkboard without the highlighting:

'A girl has a basket of 123 apples

and another girl has a basket of 95 apples. How many

apples do they have altogether?

( )

Multiplication table

x	2	3
1		
2		

#### kano-num-3-weeks-6-10-closeout indd 57

Group task

**Daily practice** 

minutes

Ask pupils to work in groups to complete the table on the chalkboard in the same way as on Day 4.

Ask each group to show their completed table and check they are correct.

10 minutes		25New MethodminutesMathematics 3	10 minutes
Introduction		Main activity	Plenary
Whole class teaching		Pair task	Whole class teaching
Read the word problem you have written on the chalkboard and explain that you are going to solve it together. Ask the pupils to help you underline the information that will help them answer the question (high- lighted in the question for your information).	If they cannot tell you, explain that you know it is an addition because of the word 'and'. Ask the pupils which two numbers they should add together to find the answer and write it as a sum on the chalkboard: 123 + 95 = Ask them to help you	Ask each pair to complete New Method Mathematics 3, page 35, questions 27—30 in the same way you have just done together. Help any pairs that you think will find it hard to read the questions.	Come together and share the answers and methods used to solve the word problems.
Ask them if they can tell you, by reading the information, what type of sum they will be expected to complete.	solve the problem by working out the answer to the sum and then you write the answer in words on the chalkboard: 'They have 218 apples altogether.'		

Week 10 Money

۲

Group B

#### Words/phrases

Assessment

addition expanding Hundreds Tens Units Naira notes Kobo coins How much altogether? 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. ۲

۲

۲

 $(\mathbf{\Phi})$ 

Numeracy lesson plans Primary 3

Term 1 Organising the classroom for effective learning

Week 10 Money Day 1

۲

# Ordering Nigerian currency

۲

Learning outcomes	Daily practice
By the end of the lesson, most pupils will be able to: Recognise and order Nigerian coins and bank notes. Add and subtract two numbers without using pencil and paper.	Whole class teaching Ask the pupils the following questions, one at a time, and ask them to work out the answers without using pencil or paper: 3 + 5 4 + 10 15 + 20 35 + 16
Before the lesson: Have ready a set of Nigerian coins and notes. Have ready six blank card circles, eight blank card rectangles, a long piece of string and some pegs or tape for each group.	<ul> <li>20 - 4 70 - 20 55 - 7</li> <li>45 + 23</li> <li>Tell the pupils to raise their hands when they think they have the answer.</li> <li>When most of the class have their hands raised, ask each of them their answer and ask a few to tell you how they worked it out.</li> </ul>

15 minutes

Tell them the correct answer.

10 minutes	25 minutes	10 minutes	
Introduction	Main activity	Plenary	
Group task	Group task	Whole class teaching	
Give a note or coin out to each group of pupils.	Give each group the circles and rectangles you	Check that each group is correct and help	
Ask them to look at the note or coin they have very carefully and be ready to describe it to the rest of the class, using the following questions as a guide: 'How much is it worth?' 'What colour is it?'	made earlier. Ask them to make one of each type of note or coin per group, trying to make them look as close as possible to the originals. Ask the groups to use string and tape or pegs to make a number line of	them hang their money number lines across the classroom.	
'What could you buy with it?' Ask each group to tell the rest of the class every- thing they can about their note or coin.	coins and notes, from the largest to the smallest.		

Numeracy lesson plans Primary 3

Term 1 Organising the classroom for effective learning

Week 10 Money Day 2

۲

# Changing money into smaller units

۲

Learning outcomes	Daily practice
By the end of the lesson, most pupils will be able to: Identify Hundreds, Tens and Units in a three-digit number. Change money into smaller units.	Whole class teaching Read the following numbers one at a time and ask pupils to write them down: - 432 761 382
Teaching aids	903 321 793
Before the lesson: Have ready a full set of Nigerian coins and notes.	844 - 805 760 520
	Choose one digit from each number and ask pupils to say whether it is the Hundreds, Tens or Units digit.
	Write down some three- digit numbers on the chalkboard and ask pupils to read the number to you.

15 minutes

10 minutes		25 minutes		10 minutes
Introduction		Main activity		Plenary
Group task		Whole class teaching	Group task	Whole class teaching
Divide the pupils into two groups.	Choose the first pupils to put up their hand.	Ask pupils to look at the number line they made	Give each group a coin or note between 5 Kobo	Ask each group to read out some of their answers
Ask them to line up so that Group A faces Group B.	<ul> <li>If they are correct give their group one point.</li> <li>Continue until you have</li> </ul>	on Day 1. Write '100 Naira' on the chalkboard and ask	and 1,000 Naira and - ask them to write down as many ways as they can to make that amount using notes and coins.	
are going play a 'coins'	<ul> <li>described all the coins and notes.</li> <li>The team that has the</li> </ul>	them to tell you any ways they could use the notes and coins to make 100 Naira, eg: 100 Naira = 50 Naira + 50 Naira 100 Naira = 50 Naira + 10 Naira		
and 'notes' quiz. Describe each 'coin' and 'note' in turn, being careful <mark>not</mark> to say the amount it's worth.	<ul> <li>most points at the end is the winner.</li> </ul>			
Ask pupils to put up their hand when they know which coin or note you are describing.		+ 20 Naira + 20 Naira Continue until the pupils have thought of as many ways as possible to make 100 Naira using Naira notes and Kobo.	_	

### Numeracy lesson plans Primary 3

Term 1 Organising the classroom for effective learning

Week 10 Money Day 3

۲

# Shopping

Lesson

title

### Learning outcomes

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

Change money into smaller units.

Add three-digit numbers together.

### **Teaching aids**

### **Before the lesson:**

Set up a 'shopping' corner, labelling various items with different amounts of Naira, up to 1,000 Naira.

Have ready a selection of coins and notes for the pupils to use.

Write on the chalkboard:

1 Naira = Kobo 5 Naira = Kobo

10 Naira = Kobo

### **Daily practice**

minutes

### Individual task

Ask the pupils to do the following sums in their exercise books: 'Add 357 and 152.' 'Add 128 and 212.' 'Add 495 and 126.' 'Add 574 and 368.'

10 minutes	25 minutes	10 minutes
Introduction	Main activity	Plenary
Whole class teaching	Group task	Whole class teaching
Ask pupils to come and look at the shopping corner.	Give each group a selection of 50 Kobo coins.	Ask pupils to discuss in their group what
Ask them questions, eg: 'How much is the price of a ruler?'	Look together at the chalkboard. Ask pupils to	they have learned in these activities. Tell them to share
Ask pupils to look for the ruler and check the amount	work together to change Naira into smaller amounts of money.	their ideas with the rest of the class.
on the price label.	While they are working on this, ask each group to	
Ask individual pupils to say which coins or notes they would use if they wanted to buy that item.	come out in turn and use the money to shop for different items.	
Repeat the activity with a few different items.		

### minutes **Daily practice** Learning outcomes **Kobo and Naira** By the end of the lesson, most Pair task pupils will be able to: Read out the following numbers Order three-digit numbers and ask pupils to draw a number on a number line. line and put them in the correct Add together two amounts

( )

#### order on it: 793 of money. 444 25 **Teaching aids** 445 832 999 Before the lesson: 123 699 Re-label the items in the 76 shopping corner so that some cost Naira and some Kobo.

kano-num-3-weeks-6-10-closeout indd 67

۲

### Numeracy lesson plans Primary 3

Term 1 **Organising the** classroom for effective learning

**Week 10** Money Day 4

Lesson title

10 minutes	25 minutes	10 minutes
Introduction	Main activity	Plenary
Whole class teaching	Pair task	Whole class teaching
Explain to the pupils how to add money together.	Ask one person from each pair to quickly	Ask pupils to discuss their answers with each other.
Ask one pupil to go and pick two different items from the shopping corner	<ul> <li>visit the shopping corner and write down the cost of two items.</li> </ul>	_
and mention the price tag on each one.	Ask pairs to work together and write down the - cost of both items together in the same way as you have shown on the	
Write down on the chalkboard, eg:		
The price of a ruler = 1 Naira.	chalkboard.	
The price of a pencil = 50 Kobo.		
Ask the pupils to tell you how much money they	-	
would need altogether (1 Naira 50 Kobo).		
Repeat for about 10 items.	-	

#### Lesson minutes title Learning outcomes **Daily practice Adding Kobo** and Naira By the end of the lesson, most Whole class teaching pupils will be able to: Sit the class in a circle. Add together items of mixed Throw the ball across the circle Naira and Kobo. to a pupil and give them a sum Add three-digit numbers. to answer, eg: '32 plus 45'. Ask the person holding the ball **Teaching aids** to throw it to another person and give them a sum to answer. Continue until every pupil has Before the lesson: had a turn. Read through the lesson plan and make sure you understand

the ideas and methods.

Have a ball ready.

Numeracy

**Primary 3** 

Term 1

**Week 10** 

Money

Day 5

lesson plans

**Organising the** 

effective learning

classroom for

10 minutes	25 minutes			10 minutes
Introduction	Main activity			Plenary
Whole class teaching	Whole class teaching		Pair task	Whole class teaching
Ask the pupils to tell you how to find and write down the cost of two items from the shopping	you how to find and write down the cost of two items from the shopping corner in the way they did yesterday.write down amounts of money you don't always need to write the words Naira and Kobo, eg: 2 Naira 30 Kobo can be written as N2.30.Hold up two items from the shopping corner, with their price labels showing, and ask pupils to tell you how much they cost altogether without writing the sum down.Write down amounts of money you don't always need to write the words Naira and Kobo, eg: 	Write the amounts as Naira and Kobo: 2 Naira 10 Kobo 3 Naira 10 Kobo		Bring the whole class together and help them to check their work.
corner in the way they did yesterday.		Add the Kobo together and then the Naira, ie:		
Hold up two items from the shopping corner, with		10 Kobo + 10 Kobo = 20 Kobo		
their price labels showing, and ask pupils to tell		2 Naira + 3 Naira = 5 Naira		
altogether without writing the sum down.		Write the answer in Naira and Kobo:		
Repeat for two or three pairs of items.		5 Naira 20 Kobo Then write the shorter		
Ask the pupils if anyone can tell you the cost of these two items together: Pencil = N 2.10 Book = N 3.10	can tell you the cost of	version as the final answer: N5.20		
	Repeat with the following: Bag = N4.20 Cleaner = N 3.30			

#### Credits

#### Special thanks go to:

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.

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.

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.

The UK's Department for International Development (DFID) and the DFID-funded ESSPIN programme for their input, focus, guidance and constructive criticism throughout the development of the plans.

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

۲

