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Type of lesson plans/ Grade Term/ Learning theme

Numeracy lesson plans Primary 2

Term 2 Involving pupils in their learning

Weeks 11—15

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

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



Introduction

Good teaching can help learners achieve positive outcomes, even in difficult circumstances. But learners have little chance of making progress where the teaching is poor.

Throughout 2010 in Kaduna State, the Ministry of Education carried out baseline surveys to assess classroom teachers, head teachers and pupil learning outcomes. Sadly, the findings were alarmingly poor. It was clear that despite substantial inputs into education, the majority of teachers were themselves victims of an education system that was in a serious downward spiral. Following this research, the State Ministry of Education, the State Universal Basic Education Board and local government education authorities, supported by the Education Sector Support Programme in Nigeria (ESSPIN), embarked on a series of reforms to strengthen schools.

To improve the teaching of basic literacy and numeracy in primary schools, Kaduna is introducing a carefully designed series of literacy and numeracy lesson plans for primary 1—3 teachers. These provide a step-bystep guide to teachers, while ensuring that teaching and learning become more exciting and children become active learners.

Alongside the lesson plans, structures and processes have been put in place so that teachers are continuously supported by the State School Improvement Team and specially-trained school support officers.

I am confident that these lesson plans will raise standards in our schools. I commend all those who have worked hard to produce these plans and train our teachers to use them, and I offer thanks to the UK Department for International Development (DFID) for its ongoing support for education reform in Kaduna State through its ESSPIN programme.

Mohammed Usman

Honourable Commissioner of Education Kaduna State

Term 2 Involving pupils in their learning

Introduction Involving pupils in their learning

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Weeks 11—15

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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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Term 2 Involving pupils in their learning

Introduction Essential low-cost or free teaching aids

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Counters

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.

Weeks 11—15

Shapes	Money	Hundred square											
Ask the pupils to help you collect different shapes from around the local area, eg:	Make sets of coins and notes by cutting them out of a cardboard carton and	A Hundred square can be used to: Find number patterns.	lot	s of	ра	tter	'ns.	He	nave ere c of t	are	<u>.</u>	E	orizontal patterns (across): ach line follows the pattern dd, even, odd, even.
Boxes are cuboids. Tubes and pipes are cylinders. Balls are spheres.	writing the correct amounts on them.	 Identify odd and even numbers. Help with counting. Help with addition. Help pupils see the relationship between addition and multiplication. Help pupils see the 	Vertical patterns (down): The numbers rise in Tens eg: 1, 11, 21, 31, etc. Each line is either all odd or all even. Hundred square		The Hundred square below shows patterns when counting in twos (bold), fives (thicker frame) and Tens (white boxes).								
		relationship between the	Hur		ı squ	are							_
		multiplication tables.	1	2	3	4	5		7	8	9	10	
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Term 2 Involving pupils in their learning

Introduction Songs, rhymes and games for the term

The time song

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

The clock rhyme

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

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.

Weeks 11—15

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Time of the day rhyme	Days of the week song	Days of the week rhyme	What's the time, Mr Lion?	What's in the bag?
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.	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.	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. 	 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 if the bag and see if the class was correct. Repeat.

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Week 11 Numbers 0—999

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Words/phrases

Assessment

more than less than three-digit numbers o'clock 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

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Term 2 Involving pupils in their learning

Week 11 Numbers 0—999 Day 1

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Counting from 0—999

Lesson

title

Dy the end of the lessen most	
By the end of the lesson, most pupils will be able to:	Whole class teaching
Sequence the days of the week.	Sing the 'Days of the week' song twice with the pupils.
Count from 0—999.	Ask the pupils if any of them have day of the week they like the best.
Teaching aids	If they do, ask them why they like that day.
Before the lesson:	Ask the question again and see if another pupil has a different answe
Look at the number square in MAN Primary Mathematics 2, page 10.	
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 MAN Primary Mathematics 2, pages 10—11.	

Song

minutes

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10 MAN Primary minutes Mathematics 2		25 MAN Primary minutes Mathematics 2		10 minutes
Introduction		Main activity		Plenary
Whole class teaching		Whole class teaching	Individual task	Whole class teaching
Write '100' on the chalkboard and ask individual pupils to tell you anything they know about it.	Ask the pupils to use the number square to read the numbers 101—150 aloud together once.	Place the number cards fac down on your table, giving one pupil the number 1 card to hold.	complete the number table	Bring out nine pupils and give each pupil a number card to hold so the rest of the class can see them.
Ask each group to look at the number square in MAN Primary Mathematics 2, page 10.Then ask one table to read 151—160, another table 161—170, etc.Ask the pupils what they notice about the numbers between 100 and 200, eg: they repeat 1—99 but have 100 in front of them.	Ask two pupils to come out and pick a card, then stand together with the third pupil to make a number between	_	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.	
	100 and 200. Ask if anyone can read that number to the rest of the class.	_		
		Ask each pupil to find that number on their number square in MAN Primary Mathematics 2, page 10 and cover it up with a counter.	- d	
		Repeat with different numbers and continue playing the game until 10 numbers have been covered.	_	

Numeracy

lesson plans Primary 2

Term 2 Involving pupils in their learning

Week 11 Numbers 0—999 Day 2

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Counting from 0—200

Lesson

title

Daily practice Learning outcomes Whole class teaching By the end of the lesson, most pupils will be able to: Say the 'Months of the year' rhyme. Identify some events and Ask the pupils if they can tell you activities that always take place months in the last year which at a particular time of the year. have significant events for them Use 0—9 number cards to make or for everybody, eg: a religious celebration in October, brother's two- and three-digit numbers. wedding in March. **Teaching aids** Ask them to come and underline that month on the list on the chalkboard. Before the lesson: Write a list of the months of the year on the chalkboard. Read MAN Primary Mathematics 2, page 12. Have ready 10 bundles of Ten for each pair.

15

minutes

Rhyme

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

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10 minutes	25 MAN Primary minutes Mathematics 2	10 minutes		
Introduction	Main activity	Plenary		
Whole class teaching	Pair task	Pair task		
Ask three pupils to come out and pick a number card from your table and show it to the class.	Give each pair a set of number cards from 0—9. Explain that in the same way	Ask one member of each pair to choose a number between 0 and 200 without saying which number they		
Ask them to stand together to make a three- digit number.	as you have bundles of Ten you can also have bundles of 100.	have chosen. Tell the other pupil in the pair they have to ask questions		
Ask the pupils to put up their hand if they can read the number.	Give each pair 10 bundles of Ten and ask them to use them to answer the following question:	to find out what number the pupil is holding, eg: 'Is it more than 10?' 'Is it less than 100?'		
Repeat five times.	'How many bundles of Ten are in 100?' (10)	Continue until each pupil		
	Ask pupils to look at MAN Primary Mathematics 2, page 12 and talk them through it.	has had two turns.		
	Ask them to complete the exercise using number cards.			

Lesson title

Numeracy lesson plans Primary 2

Term 2 Involving pupils in their learning

Week 11 Numbers 0—999 Day 3

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'More than' and 'less than'

Learning outcomes

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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

Rhyme

15

minutes

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	25 minutes		10 minutes
Introduction	Main activity		Plenary
Pair task	Pair task		Whole class teaching
Give out a set of place value cards to pairs of pupils.	Ask the pupils to tell you what the terms 'more than'	Ask each pair to answer the following question	Put a pile of number cards on the table and ask a pupil
Call out the number 169 and ask each pair to make that number using their place	and 'less than' mean. Ask each pair to write down, as fast as they can, 10	for each pair of numbers: 'Which number is less than the other?'	to come out, pick one and hold it up for everyone to see.
value cards.	numbers which are 'more than' 100 and 10 numbers	Ask one pupil from each pair to come out and draw a circle around the numbers that are 'more than' or put a square around the numbers that are 'less then'.	Ask the rest of the pupils to guess the answer
Ask pupils questions to help them understand the value of each digit. Ask:	that are 'less than' 100. Write five pairs of numbers		to the following question: 'Will the next card be more
'How many is the 1 worth?' (100)	between 100 and 999 on the chalkboard.		than or less than this one?' When the guess has been
'How many is the 9 worth?' (9)	Ask each pair to answer the following question		made, ask that pupil to pick the next card from the pile and check. If they
'How many is the 6 worth?' (60)	for each pair of numbers: 'Which number is more than the other?'		have guessed correctly they can stay. If they haven't
Repeat for different numbers, up to 999.			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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Term 2 Involving pupils in their learning

Week 11 Numbers 0—999 Day 4

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How many more than?

Lesson

title

Learning outcomesDaily practiceBy the end of the lesson, most
pupils will be able to:Whole class teaching
Play 'What's the time, Mr Lion?'
from the introductory section.Say different times.Use a number line to answer the

15

minutes

Game

Teaching aids

Before the lesson:

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

question 'How many more than?'

10 minutes	25 minutes			10 minutes
Introduction	Main activity			Plenary
Whole class teaching	Group task		Individual task	Pair task
Say 10 numbers from 0—999 and ask the pupils to say a number that is 'more than' each number.	Show the pupils how to write a number line between two given numbers, eg: 150 and 157150 152 153 154 155 156 157Ask 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'.	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?'	Ask pupils to tell the answers to their partner using the phrase 'more than'.

Term 2 Involving pupils in their learning

Week 11 Numbers 0—999 Day 5

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How many less than?

Lesson

title

Learning outcomes **Daily practice** By the end of the lesson, most Whole class teaching pupils will be able to: Teach the pupils the 'Time of the Use the term 'o'clock' to describe day' rhyme. different times of the day. Ask them to make up their own Use a number line to answer the lines which are relevant to them, question 'How many less than?' eg: at 7 o'clock I... **Teaching aids Before the lesson:**

Rhyme

15

minutes

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

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10 minutes	25 minutes			10 minutes
Introduction	Main activity			Plenary
Whole class teaching	Whole class teaching	Group	Pair task	Pair task
Say 10 numbers from 1—999 and ask the pupils to tell you a number that	99 and ask the pupils write a number line between and write a number line for	Write the pairs of numbers below on the chalkboard. Ask pupils to draw	Ask pupils to tell their answers to their partner - using the phrase 'less than'.	
is 'less than' each number.	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.	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.	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.	

Week 12 Money

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Words/phrases

Assessment

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

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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.

How many altogether?

Term 2 Involving pupils in their learning

Week 12 Money Day 1

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Reviewing money

Lesson

title

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

Count from 0—999.

Learning outcomes

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

Teaching aids

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Before the lesson:

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

Whole class teaching Ask pupils to stand in a circle.

minutes

Daily practice

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	25 minutes		10 minutes
Introduction	Main activity		Plenary
Whole class teaching	Group task		Whole class teaching
Ask the pupils to tell you anything they know about	Give each group a selection of coins.	Ask each person in the group to record their	Ask each group to share their ideas with the rest of
money and record their ideas on the chalkboard.	Ask them to work out as many different ways as	answers by drawing and labelling the coins in their	the class.
Show various coins and notes to pupils and allow	they can to make N1 using their selection of coins.	exercise books, eg: N1 = $(25K)$ $(25K)$	
them to handle them.	Remind the groups that		
Ask pupils to identify the amount written on each coin and note.	they can use each coin more		
Ask pupils to identify		(10K) (10K)	
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.

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Term 2 Involving pupils in their learning

Week 12 Money Day 2

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Naira and Kobo

Lesson

title

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

Order numbers from 0—200.

Learning outcomes

Explain the relationship between Naira and Kobo.

Teaching aids

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Before the lesson:

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Have ready a blank number card for each pupil.

Have ready a selection of Nigerian coins and notes.

Daily practice

15 <u>minu</u>tes,

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.

25 10 10 minutes minutes minutes Introduction **Main activity** Plenary Whole class teaching **Group task** Whole class teaching Give each pupil a Naira note Ask the rest of the class Ask pupils to put all their Ask each group how many to check that those notes notes in the middle of the of value up to N100. answers they found. make N20. table and pick one out. Select the pupil holding Ask each group to tell the N20 to stand in front of the Repeat three times with Ask them to identify as rest of the class one of the chalkboard, holding their different values of notes, many ways as they can of sums they made. note so the rest of the class making that amount from up to N100. Naira notes. can see. Ask the rest of the class to Ask them each to record hold up their notes. their answers in their exercise books. Ask someone to point out

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notes which make up N20,

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

eg: N10 and N10.

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Term 2 Involving pupils in their learning

Week 12 Money Day 3

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Values of coins to N1

Lesson

title

Daily practice Learning outcomes By the end of the lesson, most **Group task** pupils will be able to: Give each group a set of place Read three-digit numbers and say value cards. the place value of each number. Ask each member of the group Add two amounts of money. to take it in turns to make a number using the place value cards. **Teaching aids** Ask the rest of the group to tell them what that number is and how many Hundreds, Tens and Units Before the lesson: it has in it. Collect a set of place value cards Ask them to ask each other for each group. questions, eq: 'How many is each digit worth?' 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.

15 <u>minu</u>tes,

Read MAN Primary Mathematics 2, page 115, exercise E and make sure you understand the task.

10 minutes		25 Game minutes	MAN Primary Mathematics 2	10 minutes
Introduction		Main activity		Plenary
Whole class teaching		Group task	Individual task	Pair task
Show the pupils where the bank in the classroom is located and ask them what	Ask a pupil to come out, roll the dice then tell you what number is on it.	Give each group a dice and tell them to take turns to throw it.	Ask pupils to complete MAN Mathematics 2, page 114, Exercise E.	Ask each pair to compare their answers and help each other work out the correct
Write their ideas on the chalkboard.to look at the chalkboard	Ask the rest of the class to look at the chart on the chalkboard and tell you how	When it lands, tell that pupil to look at the chart on the chalkboard and say how		answer if necessary.
Explain that they are going to play a game where one person in each group will	many Naira that number is worth, eg: if a two is rolled it is worth N10.	and collect those notes.		
have to visit the bank to collect money. Write the chart below on the chalkboard.	ir understands.	Repeat with the next person in the group and continue until everyone has had two turns going to the bank.	n	
		Ask each pupil to add together their two notes and say how much money they have.		
Dice value chart \bullet = N5 \bullet = N10	• = N10	The pupil with the most money is the winner.		
• • • = N20 • • • • = N20	• • • • = N50			

Term 2 Involving pupils in their learning

Week 12 Money Day 4

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Shopping

Lesson

title

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

Learning outcomes

Identify Hundreds, Tens and Units in a number.

Find the cost of two objects.

Teaching aids

Before the lesson:

Read MAN Primary Mathematics 2, page 21, Exercise D.

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

15

minutes |

Whole class teaching

MAN Primary

Mathematics 2

Read out the numbers in MAN Primary Mathematics 2, page 21, exercise D 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	25 minutes		10 minutes	
Introduction	Main activity		Plenary	
Whole class teaching	Group task		Whole class teaching	
Show examples of Naira notes to the pupils. Ask them to choose one	Explain that you have set up a market and that each item has a price label.	Tell them that you are going to be the market seller. Ask each group to send	m to be the market seller. come of they are	Ask one or two groups to come out and explain how they answered the question.
note and say what they might buy for that amount.	Give each group a set of money cards.	two pupils 'shopping' in the class market. Ask them to buy one item each.		
Show them two notes and ask, 'Which note is worth more than the other?'	Ask two pupils to come out, choose an item each and hold up the labels for the pupils to see.	Ask each group to use their money cards to work out how much their two items will cost and record the sum in their exercise books, eg: N10 + N20 = N30. Ask them to repeat this until they have about 10 sums per group.		
Ask them, 'How much are these two notes worth altogether?'	Ask each group to pick out the Naira they will need to buy each item.			
Repeat with a different pair of notes.	Ask them to add the two amounts together and answer the following question, 'How much would these two items cost altogether?'			

Term 2 Involving pupils in their learning

Week 12 Money Day 5

Shopping

Lesson

title

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 MAN Primary Mathematics 2, page 22, Exercises A and B.

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

minutes | Mathematics 2

MAN Primary

Individual task

Ask the pupils to complete MAN Primary Mathematics 2, page 22, exercises A and B, 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.

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10 minutes	25 Game minutes	10 Song minutes
Introduction	Main activity	Plenary
Group task	Pair task	Whole class teaching
Ask two pupils to shop in the market and one pupil to be the market seller.	Play the 'Bank' game as on Day 3, this time continuing until the first person in the group gets N100	Sing a counting song.
Give the shopper some money cards to buy one item.	group gets N100. While they are doing this ask different pairs of pupils to	
Ask the rest of the class to help them work out which	come out in turn and shop in the market.	
notes they need to pay for that item.	Ask them to buy one item and work out what notes	
Repeat this process	they need to pay for it.	
five times with different shoppers and sellers.	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.	



Words/phrases

Assessment

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

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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

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Numeracy lesson plans

Primary 2

Term 2 Involving pupils in their learning

Week 13 Shapes Day 1

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Shapes in the environment

Lesson

title

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Learning outcomes	Daily practice	
By the end of the lesson, most pupils will be able to:	Pair task Ask the pupils to look at the	
Recognise Nigerian coins and notes.	examples of Naira notes in MAN Primary Mathematics 2, page 111	
Identify cubes, cuboids, cylinders and spheres.	Ask them to choose three Naira notes from the picture.	
Teaching aids	Ask them to say how much these notes are worth altogether and suggest something they could buy with that amount of money.	
Before the lesson: Collect examples of three- dimensional shapes (3D), eg: cubes,	Ask each pair to share their ideas with the class.	

cuboids, spheres and cylinders.

15 | MAN Primary minutes | Mathematics 2

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10 minutes	25 minutes	10 minutes
Introduction	Main activity	Plenary
Whole class teaching	Individual task	Pair task
Show the pupils the selection of 3D shapes you collected and ask them to identify them.	Ask pupils to draw in their exercise books at least five objects that they have seen.	Ask the pupils to look at each others' drawings and try to guess the names of the shapes their friend
Take the pupils around the school compound to find as many cubes, cuboids, cylinders and	-	has drawn.

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Numeracy lesson plans Primary 2

Term 2 Involving pupils in their learning

Week 13 Shapes Day 2

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Sorting shapes

Lesson

title

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.

Learning outcomes

Teaching aids

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Before the lesson:

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

Read MAN Primary Mathematics 2, page 147 and make sure that you understand the ideas.

Have ready one set of 1—15 number cards.

Daily practice

15 minutes

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	25 minutes	MAN Primary Mathematics 2	10 minutes
Introduction	Main activity		Plenary
Whole class teaching	Group task	Individual task	Whole class teaching
Put the 3D shapes on a table at the front of the classroom.	 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 the pupils to complete MAN Primary Mathematics 2, page 147 in their	Put shapes into a bag without the pupils seeing you do this.
Ask the pupils to say where they found them and what they are used for.		exercise books.	Ask pupils to come out, feel the bag and guess what shapes are inside.
	Ask each group to explain how they have sorted them.		

Numeracy lesson plans Primary 2

Term 2 Involving pupils in their learning

Week 13 Shapes Day 3

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Sorting shapes

Lesson

title

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

Add two amounts of money together.

Learning outcomes

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

Game

15

minutes

Whole class teaching

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

10 minutes		25 minutes		10 minutes
Introduction		Main activity		Plenary
Whole class teaching		Group task		Whole class teaching
Explain to the pupils that you are going to remove the cloth and they have	Ask one or two pupils to tell you how they remembered the objects.	Tell the pupils that the flat part of the shape is called the <mark>face</mark> .	Encourage the pupils to make their faces as attractive as possible, using	Ask the pupils to show their boxes with the faces on to the rest of the class.
30 seconds to remember everything they can see on the table.	Make it fun!	Give each pupil a shape and ask them to count the faces on their shape.	colours and string for the hair if possible. Ask the pupils to count the faces on their box.	
Take the cloth away, give the pupils 30 seconds to look at the objects, then put the cloth back so the objects	way, give the ds to look nen put the	Explain that you are going to help them remember that the flat part is called a face.		
are hidden.		Put the pupils in groups of six and give each group a		
Ask each pupil to tell the person sitting next to them		cardboard box.		
which objects they can remember.		Ask each pupil to draw a face on one side of the box (so there are six faces altogether).		
Uncover the shapes again, then ask the pupils to put up their hands and tell you how many they remembered.				

Numeracy lesson plans Primary 2

Term 2 Involving pupils in their learning

Week 13 Shapes Day 4

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Counting edges and faces

Lesson title ۲

Learning outcomes	Daily pr	actice			
By the end of the lesson, most pupils will be able to:	Individu Ask pup			MAN	
Count the number of faces and edges on each shape.	 Ask pupils to complete MAN Primary Mathematics 2, page 1 exercise F, questions 1—3, usi 	2, page 11 —3, using	age 116,		
Record findings in a simple table.	 number line to help them. 			·m.	
Teaching aids					
Before the lesson:					
Read MAN Primary Mathematics 2, page 116, exercise F, questions 1—3 and make sure you understand the task.					
Draw the table on the right on the chalkboard.					
	Shape	Square	Circle	Rectangle	Trior

15MAN PrimaryminutesMathematics 2

Shape	Square	Circle	Rectangle	Triangle
Cuboid	2		4	
Cylinder				
Pyramid				
Cube				

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10 minutes	25 minutes		10 minutes
Introduction	Main activity		Plenary
Whole class teaching	Whole class teaching	Pair task	Whole class teaching
Ask the pupils if they can remember what the flat part of a shape is called.	Show the pupils how to complete the table below, helping them to count the	Ask the pupils to count the number of edges on each shape and draw their own	Ask the pupils to say how many edges they found on each shape.
Show them one of their boxes from the previous day and ask them what shape	different shapes of the faces on each 3D shape.	table in their exercise book to record their answers.	

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Shape	Square	Circle	Rectangle	Triangle
Cuboid				
Cylinder				
Pyramid				
Cube				

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the face is (it should be a square or rectangle).

Lesson title

Numeracy lesson plans Primary 2

Term 2 Involving pupils in their learning

Week 13 Shapes Day 5

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Faces of shapes

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

Learning outcomes

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:

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Read MAN Primary Mathematics 2, pages 148 and 150 and check you understand the ideas.

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

Daily practice

15 minutes

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, eq:

'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.

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10 minutes		25 MAN Primary minutes Mathematics 2	10 Game minutes
Introduction		Main activity	Plenary
Whole class teaching		Individual task	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.	They might ask questions such as: 'Is one of the faces a square?' (this game can be played in the pupils' local language). Allow pupils to ask questions until the shape has been guessed and then ask another pupil to come out and think of a shape.	Look at MAN Primary Mathematics 2, pages 148—149 with the pupils and talk about the shapes. Ask the pupils to copy and complete MAN Primary Mathematics 2, page 150 in their exercise books.	Play 'What's in the bag'.

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Week 14 How many more than?

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Words/phrases

Assessment

cube cuboid cylinder sphere pyramid square rectangle triangle circle corners faces edges environment How many more than?

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What number comes before...?

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. (\bullet)

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after...?

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Lesson title		15 minutes
Using a	Learning outcomes	Daily practice
number line	By the end of the lesson, most	Group task
	pupils will be able to:	Tell pupils to go around the school
	Classify objects according to shape and size.	grounds and draw as many different shaped objects as they can find.
	Explain how to add together two- digit numbers.	Ask the pupils to label the different shapes they have drawn.
		Tell them to group the shapes so
	Teaching aids	that each object in the group has something the same about them.
	Before the lesson:	Ask the pupils to count the total number of the objects in each
	Remind yourself how to add two-digit numbers together using	group, and explain how they sorted them.

a number line.

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Numeracy lesson plans Primary 2

Term 2 Involving pupils in their learning

Week 14 How many more than? Day 1

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10 minutes	25 minutes		10 minutes
Introduction	Main activity		Plenary
Pair task	Group task		Whole class teaching
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	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?'	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	Ask the pupils if they notice anything about the answers.
pupils to try and guess your number by asking you questions in the same way.	'When we have expanded it, what do we do with it?'		

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Numeracy lesson plans Primary 2

Term 2 Involving pupils in their learning

Week 14 How many more than? Day 2

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Lesson title

Using a number line

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Daily practice Learning outcomes Whole class teaching By the end of the lesson, most pupils will be able to: Explain to the pupils that you are Recognise and name 3D shapes. going to remove the cloth and they have 30 seconds to remember Use a number line to answer the everything on the table. question 'How many more than?' Take the cloth away, give the pupils 30 seconds to look at the objects, **Teaching aids** then put the cloth back so the objects are hidden again. Before the lesson: Ask each pupil to tell the person sitting next to them which objects Put 10 2D and 3D shapes on to a they can remember. table and cover them with a cloth. Uncover the shapes again, then Draw a number line on the ask the pupils to put up their chalkboard from 60—80. hands and tell you how many they remembered. Ask one or two pupils to tell you how they remembered the objects. Make it fun!

15 minutes

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25 10 10 minutes minutes minutes Introduction **Main activity** Plenary Whole class teaching Pair task Whole class teaching Circle a number on Show them how to work out Ask the following Tell the class that you questions in turn for the the number line on the the answer using a number are thinking of a number chalkboard. pupils to work on in pairs. between 1 and 100. line, eg: 'How many more than 5 How many more than: Ask each pupil to say any Tell them to ask you is 15?' 6 is 19 number on the number questions to help them 3 is 12 line that is 'more than' the First, jump to the nearest 10. guess what that number is, 9 is 17 number you circled. eg: 'Is it less than 50?' Then jump to 15 and 8 is 18 Ask. count the number of jumps 6 is 15 'How many more than?' 1 is 12 vou made. Finally add the two jumps Stop after each question together and answer the and check that pupils are question: using the correct method. 5 + 5 = 10+5 +5 5 10 15

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15 is 10 more than 5.

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Numeracy lesson plans Primary 2

Term 2 Involving pupils in their learning

Week 14 How many more than? Day 3

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How many more than?

Lesson

title

Learning outcomes	Daily practice
By the end of the lesson, most pupils will be able to:	Whole class teaching Sing some number songs.
Name cubes, cuboids, cylinders and spheres.	Play 'What's in the bag?' with a selection of 2D and 3D shapes.
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.	

Song

minutes

Game

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your table.

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

25 10 10 minutes minutes minutes Introduction **Main activity** Plenary Whole class teaching Pair task Whole class teaching Give a set of number cards Ask a pupil to come out, Ask pupils to tell you which Bring out four pupils to is the smallest number and pick a card, read the to each pair. stand in pairs. which is the biggest number. number and say it aloud to Ask the pupils to use the Give each pupil in the pair the class without showing it. Ask them, number cards to repeat the a number card from 0—5 Tell the class to write 'How many more than the whole class activity. to hold, so that the rest the number in their smallest number is the of the class can see them. Ask them to record exercise books. biggest number?' the method in their Ask the class to add each Ask another pupil to come exercise books. pair of numbers together and pick another number. without writing it down and say the answer. Tell the pupils to write it in their exercise books. Ask them to explain how they did the sum.

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Lesson title

Numeracy lesson plans Primary 2

Term 2 Involving pupils in their learning

Week 14 How many more than? Day 4

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How many more than?

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Daily practice Learning outcomes Whole class teaching By the end of the lesson, most pupils will be able to: Tell the pupils to stand in a circle Explain the features of cubes, and you stand in the middle. cuboids, cylinders and spheres. Ask the pupils to walk around in Answer the question, 'How many a circle. more than?' Make a simple statement which describes a shape, eg: **Teaching aids** 'The shape I am thinking about has four corners.' Ask the pupils to continue walking Before the lesson: and put up their hand if they can Read MAN Primary Mathematics 2, guess the shape you are describing. page 66, unit 3, exer<u>cise c.</u> Ask the pupil who guesses correctly to come into the middle to describe a shape for the others to guess.

15 minutes

10 25 10 minutes minutes minutes Introduction **Main activity** Plenary Whole class teaching Pair task Pair task Show the pupils the quick Add the number of jumps Give the pupils the Ask the pupils to compare answers with each other and way to answer the question, together: 5 + 4 = 9. following pairs of numbers 'How many more than 15 and ask them to use help each other if they got Answer the question: is 24?' the above method anything wrong. 24 is 9 more than 15. to answer the question, Draw a number line, put 15 +5 +4 'How many more than?': at one end and 24 at the 25 and 17 other end. 15 20 24 24 and 16 Start at 15 and jump to the 13 and 22 nearest 10. 15 and 22 18 and 15 Jump to the next number 19 and 21 and count how many jumps

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you have made.

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Lesson title

Numeracy lesson plans Primary 2

Term 2 Involving pupils in their learning

Week 14 How many more than? Day 5

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How many more than?

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Daily practice Learning outcomes By the end of the lesson, most Whole class teaching pupils will be able to: Put the different shaped objects on Identify triangles, rectangles, your table. squares and circles in Ask one pupil to come out and pick common shapes. out an object which has a square, Use a number line to answer the rectangle, triangle or circle as one of its faces and ask the rest of the question, 'How many more than?' pupils which shape they can see. **Teaching aids** Repeat this activity four times, with other pupils. Before the lesson: Collect a selection of different shaped objects.

15 minutes

10 minutes	25 minutes	10 minutes
Introduction	Main activity	Plenary
Group task	Individual task	Pair 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?'	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	Ask the pupils to say something that they have learned during this week.
Tell them not to work out the answer at this stage.	they completed the sum.	
Write their questions on the chalkboard.		

Week 15 Fractions

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Words/phrases

Assessment

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? 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

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Lesson title

Numeracy lesson plans Primary 2

Term 2 Involving pupils in their learning

Week 15 Fractions Day 1

Halving numbers

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

Learning outcomes

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

Identify one half of different numbers of objects.

Teaching aids

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Before the lesson:

Collect enough counters for each pair to have 20.

Find the Hundred square in MAN Primary Mathematics 2, page 1 and look at the pattern of the numbers on it. Use the Hundred square at the start of this booklet to help you.

15	MAN Primary
minutes	Mathematics 2

Daily practice

Whole class teaching

Ask the pupils to find the Hundred square in MAN Primary Mathematics 2, page 1.

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?'

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10 minutes	25 minutes		10 minutes
Introduction	Main activity		Plenary
Whole class teaching	Pair task		Whole class teaching
Bring 20 pupils out to the front and count them.	Give each pair 20 counters and ask them to count them.	Ask one or two pairs to explain how they worked	Ask the pupils if they notice any pattern in their answers,
Ask them to divide themselves into two equal groups and count the size of	Ask them to divide the counters into two equal piles and tell you how many are in	out their answer. Give them the following to complete in their exercise	ie: the numbers should get - larger in ones, they are all even numbers.
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.	each pile. Explain to them that they have divided one pile of counters in half, which can be written as $\frac{1}{2}$ 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: $\frac{1}{2}$ of 4 = $\frac{1}{2}$ of 6 =	books: $\frac{1}{2}$ of 8 = $\frac{1}{2}$ of 10 = $\frac{1}{2}$ of 12 = $\frac{1}{2}$ of 14 = $\frac{1}{2}$ of 16 =	

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Lesson title

Numeracy lesson plans Primary 2

Term 2 Involving pupils in their learning

Week 15 Fractions Day 2

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Halving objects

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

Learning outcomes

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

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Identify half of a shape and label it.

Write the term 1

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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 MAN Primary Mathematics 2, page 40, exercise A.

Daily practice

15

minutes |

Whole class teaching

MAN Primary

Mathematics 2

Ask the pupils to find the Hundred square in MAN Primary Mathematics 2, page 1.

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		25 minutes	MAN Primary Mathematics 2	10 minutes
Introduction		Main activity		Plenary
Whole class teaching	Pair task	Individual task		Pair task
Cut an orange into two equal parts.	Ask the pupils to fold a piece of square paper into	Give out a banana to each group of pupils.	Ask the pupils to copy, colour and label half of	Ask the pupils to share their work with each other
Ask pupils to compare the size of each part and tell you what the difference is (the pieces are the same size).	 parts is one half. Ask them to write 'one half' in words on each part. Explain that one half is written as 1 	Tell them to cut it into two equal parts and then draw it in their exercise books, labelling each part <u>1</u> <u>2</u> Ask the pupils to draw a circle and divide it into two equal parts.		and check that they have labelled the parts correctly.
Explain to them that you have cut one whole orange into two equal parts and each part is one half of the orange.in wo Explo writte1or-di				
	2 1 one whole — divided into	Tell them to colour half of the circle, then draw and label both sides, eg:		
	2 two equal parts	$\left(\frac{1}{2}\right)$ $\frac{1}{2}$		

Numeracy lesson plans Primary 2

Term 2 Involving pupils in their learning

Week 15 Fractions Day 3

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Lesson title		15 MAN Primary minutes Mathematics 2	
Quarters	Learning outcomes	Daily practice	
	By the end of the lesson, most	Whole class teaching	
	pupils will be able to:	Ask the pupils to turn to the	
	Find patterns of numbers in a Hundred square.	Hundred square in MAN Primary Mathematics 2, page 1.	
	Identify a quarter of a shape.	Tell them to count in Tens, putting counters on the numbers	
	Teaching aids	as they go.	
		Ask one pupil to come out and	
	Before the lesson:	colour those numbers on the Hundred square.	
	Draw a Hundred square on the chalkboard.	Repeat this (without removing the counters they used for counting	
	Collect enough round plates for each group to have one to draw around to make circles.	 in Tens), but this time counting in fives. Ask the pupils if they can see where there are two counters on one square. 	
	Find newspaper for each group to make squares and circles with.	Ask if anyone can explain this.	
	Read MAN Primary Mathematics 2, page 44, unit 4, exercise F.		

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10 minutes	25 minutes	MAN Primary Mathematics 2	10 minutes
Introduction	Main activity		Plenary
Whole class teaching	Group task	Individual task	Pair task
Ask the pupils to fold a piece of square paper into four equal parts.	Give each group a round plate and ask them to draw around it to make a circle, then divide it into	Ask the class to complete MAN Primary Mathematics 2, page 44, unit 4, exercise F in their exercise books,	Ask the pupils to show each other the shapes they have coloured and check that they have each coloured
Explain that each of these parts is called a <mark>quarter</mark> .	four equal parts.	drawing the shapes and labelling the shaded part.	one quarter.
Ask them to write 'one quarter' in words on each part of the paper. Explain that one quarter is	quarter of the circle they have drawn, eg:		
written as 1 4			
1 one whole			
— divided into4 four equal parts			

Lesson title

Numeracy lesson plans Primary 2

Term 2 Involving pupils in their learning

Week 15 Fractions Day 4

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Finding quarters of a group of objects

Learning outcomes	Daily practice
By the end of the lesson, most pupils will be able to: Use a Hundred square to count in fours.	Whole class teaching Ask each pupil to find the Hundred square in MAN Primary Mathematics 2, page 1.
Identify a quarter of a shape. Teaching aids	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.
Before the lesson: Collect counters or stones for the whole class.	Ask them if there are any numbers where they have two counters on one number.
Read MAN Primary Mathematics 2, page 44, exercise E.	Ask if anyone can explain this.
Find newspaper to make circles and squares.	
Have ready a round plate to draw around to make a circle.	

15 | MAN Primary minutes | Mathematics 2

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10 minutes	25 minutes		MAN Primary Mathematics 2	10 minutes
Introduction	Main activity			Plenary
Group task	Group task			Individual task
Give each group a piece of newspaper and a round plate.	Give each group 20 counters and ask them to make four equal piles of	Explain to them that they have divided one pile of 20 counters into quarters	Tell them to record their answers by putting counters on the Hundred square.	Ask the pupils to say how many quarters they coloured in each group.
Tell them to draw around the plate to make a circle.coun eachAsk them to divide the circle into four equal parts and label each part 1 4Ask: 'How each 'How one of 'How two of 'How	counters, putting one pile in each part of the circle. $\overline{Ask:}$ '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 one quarter of the circle?'	(four equal piles of five), which can be written as $\frac{1}{4}$ of 20 = 5 Ask each group to do the following in the same way: $\frac{1}{4}$ of 4 =	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.	
	'How many counters are in two quarters of the circle?''How many counters are in three quarters of the circle?'	$\frac{1}{4}$ of 8 = $\frac{1}{4}$ of 12 =	Tell the class to colour one quarter of each group of objects in MAN Primary Mathematics 2,	
		$\frac{1}{4}$ of 16 =	page 44, exercise E, copying the shapes into their exercise books.	

Lesson title

Numeracy lesson plans Primary 2

Term 2 Involving pupils in their learning

Week 15 Fractions Day 5

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Finding three-quarters

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Learning outcomes	Daily practice
By the end of the lesson, most	Whole class teaching
pupils will be able to:Recognise the relationship betweennumbers on a number square.	Ask each pupil to find the Hundred square on the first page of MAN Primary Mathematics 2.
Identify three-quarters of a shape. Teaching aids	Tell them to look closely at the Hundred square and tell you everything they know about the pattern of the numbers.
Before the lesson:	Record their answers on the chalkboard.
Collect 28 counters for each pair. Find newspaper and round plates for each pair to make circles. Read MAN Primary Mathematics 2, page 47, exercise I.	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.
Find the Hundred square on page 1 of MAN Primary Mathematics 2.	Ask if any of the numbers have more than one counter on them.
	Ask if any pupils can explain this.

15 | MAN Primary minutes | Mathematics 2

10 minutes		25 minutes	MAN Primary Mathematics 2	10 minutes
Introduction		Main activity		Plenary
Pair task		Pair task		Whole class teaching
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.	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?''How many counters are in three quarters of the circle?''Ask them to repeat the activity and answer the same questions with the following numbers of counters: 12, 16, 8, 20, 4.	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 1 4 Ask them to shade one half of the shape and label it 2 4 Ask them to shade three- quarters of the shape and label it 3 4	Ask if anyone can explain why we write it as $\frac{3}{4}$ (because three out of four sections have been shaded).Ask the pupils to copy the figures from MAN Primary Mathematics 2, page 47, exercise I and say what fraction of the shape is coloured in.Ask the pupils to circle three-quarters of each group of objects.	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

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.

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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.

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