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Type of lesson plans/ Grade Term/ Learning theme

Numeracy lesson plans Primary 1

Term 3 Asking questions

## Numeracy lesson plans Primary 1 Term 3 Asking questions

**Weeks** 21—25

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

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### Foreword

Quality education comes about as a mix of factors. The teacher is the most important element in ensuring that a child acquires the right kind of education to meet acceptable learning outcome benchmarks. It takes a lot to bring a teacher to exhibit the right mix of attitudes, aptitudes and skills, which is why the state has partnered with ESSPIN to develop literacy and numeracy lesson plans.

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I hope the lesson plans will empower our teachers to equip our children with the literacy and numeracy skills they need to succeed in both school and society.

Finally, I commend all who have worked hard to develop and produce the lesson plans, especially the Enugu State Universal Basic Education Board, the UK Department for International Development (DFID) and the DFID-funded Education Sector Support Programme in Nigeria (ESSPIN).

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**Professor Chris Uchechukwu Okoro** Honourable Commissioner for Education Enugu State

### Introduction

The literacy and numeracy lesson plans arising from the School Improvement Programme (SIP) are part of efforts to improve teaching and learning in response to the baseline surveys and classroom observations in 2010. These indicated that teachers had challenges with lesson delivery, which in turn negatively affected children's learning.

The state plans to make the lesson plans available to teachers in all 1,223 public primary schools at the beginning of the 2014/15 school year.

I hereby call on all stakeholders to ensure the lesson plans are put to effective use to improve teaching and learning in our schools.

**Nneka Onuora** Executive Chairman Enugu State Universal Basic Education Board

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Numeracy lesson plans Primary 1

Term 3 Asking questions

# Introduction Asking questions

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Weeks 21—25

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### Effective questioning in the classroom

#### **Pupil participation**

### Thinking time

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#### **Different questions**

Questioning is a very useful way to find out what pupils already know and whether they understand what they are learning. It is also a strategy to measure how successful your teaching is.

When you use questioning as part of your teaching, you are involving pupils in their learning, and giving them immediate feedback. This is a good way to develop motivation. Ask pupils to discuss questions in pairs or small groups. This is a good way to get the whole class talking. It gives pupils the chance to explain their thinking.

Explain to your class that the question is for them to discuss in a pair or a group. Tell them they have 2—3 minutes to discuss it. Ask the question and walk around the class listening to the pupils talk. You can then ask further questions to extend their thinking or help their understanding.

It is really important that when you ask pupils questions you count to 15 in your head before you choose someone to answer. This gives all pupils the chance to think of something to say, not just the 'quick thinkers'.

When asking questions remember to choose pupils from different areas of the classroom – choose pupils who do not have their hand up and choose pupils whose understanding you want to check. The main types of questions are 'closed' questions and 'open' questions. When you ask closed questions there will only be one answer, eg: 'What is 3 x 4?', 'What colour is the dog in the story?'. It is easier to ask closed questions. An open question is one that has many answers, eg: 'What do you think Martin likes doing on a Saturday?' Asking open questions makes children think of different ideas.

If pupils give you a different answer to the one you are expecting, think carefully about their reasoning – it could be that it is a reasonable answer, just not the one you are expecting.

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Numeracy lesson plans Primary 1

Term 3 Asking questions

## Introduction Low-cost teaching aids for the term

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#### **Place value cards**

Use card to construct the cards pictured below.

If possible, make one set per pair of pupils.

You could also make one large class set.

Wee	ks
21—	·25

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How to use the place value cards				ng a red									Making clocks
Place a Unit card on top of a Ten card, eg: 5 on top of 40 makes 45. Explain that	Ask the pupils to make a two-digit number with: 4 Tens and 8 Units,	baç	gs t	10 e toge 10 r	the	er in					cl	isplay it somewhere in the lassroom so that the pupils an see it.	Cut large circles out of cardboard and write the numbers 1—12 on them
this is 4 Tens and 5 Units making 45.	3 Tens and 9 Units, 7 Tens and 0 Units, etc.			nun								Hundred square can be sed to:	to make clock faces. Punch a hole in the
Repeat several times, making new two-digit numbers.	Each time they make a new number, ask them: 'What number have	_ inside each bag to make a Hundred square, as shown below. Store the cards in a box below the square and ask		Fi	ind number patterns. lentify odd and even	middle. Cut out two strips of cardboard – one long enough to reach the numbers, and one shorter.							
Dictate a number to the	you made?'				umbers. lelp with counting.								
pupils. Ask them to make that number using cards.	Ask questions, eg: 'What is the 7 worth in 73?'	<sup>-</sup> the	e pu	ipils ct pl	to	put	the	em i	n tł	ne		elp with addition.	Use the hole in the middle to attach the hands to
Ask:	'What is the 3 worth in 73?'	Hun	drec	d squa	are								the clock so that they can be moved around.
'How many Tens are in the number?'		1	2	3	4	5	6	7	8	9	10		
'How many Units are in the		11	12	13					18		20	_	

number?'

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

Numeracy lesson plans Primary 1

Term 3 Asking questions

## Introduction Songs and rhymes for the term

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5 long yams	10 little fingers	10 fat fish	10 green bottles	10 chunky chickens
<ul> <li>5 long yams in a farmer's field / Round and fat, and ready to be picked / Along came (sing the name of a pupil) with a hoe one day / Picked a yam and took it away /</li> <li>4 long yams</li> <li>3 long yams</li> <li>2 long yams</li> </ul>	1 little, 2 little,3 little fingers /4 little, 5 little,6 little fingers /7 little, 8 little,9 little fingers /10 little fingers(clap, clap, clap).	10 fat fish in the cooking pot / Big and fat with pepe on top / Along came (sing the name of a pupil) with Naira one day / Bought a fat fish and took it away. 9 fat fish 8 fat fish 7 fat fish	<ul> <li>10 green bottles standing on the wall (x2) / If 1 green bottle should accidentally fall / There'd be 9 green bottles standing on the wall / 9 green bottles standing on the wall (x2)</li> <li>(Repeat until no more bottles are left standing.)</li> </ul>	10 chunky chickens, frying in a pan / One went pop and another went bang / There were 8 chunky chickens frying in a pan (Continue to subtract two chickens each time, until there are no chickens left in the pan.)

1 long yams...

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(Repeat until no more yams are left)



Words/phrases

#### Assessment

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clock o'clock later earlier short hand long hand forwards backwards Hundred square bundles of Tens and Units two-digit number greater than less 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. 

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Lesson title		15   minutes	
Counting 0—99	Learning outcomes	Daily practice	
	By the end of the lesson, most pupils will be able to:	Whole class teaching Ask the pupils to say what day	
	Give reasons why we need to	_ it is.	
	tell the time. Count numbers from 0—99.	Ask them how many days there are in a week. Ask if anyone can say the months of the year.	
	Count numbers from 0—99.		
	Teaching aids	Show them the big clock and ask them to tell you what we use a clock for.	
	Before the lesson:	Tell the pupils that there are	
	Display a calendar on the wall.	24 hours in a day.	
	Have ready a large clock with moveable hands.	Using the hands of the clock, show them that the short hand goes	
	Have ready a set of 0—9 number cards for each pair of pupils.	<ul> <li>twice around the clock in a day.</li> <li>Explain that this is 12 hours of</li> </ul>	
	Prepare bundles of 9 Tens and	- daytime and 12 hours of night-time.	
	10 Units, using straws or sticks, for each pair.	Ask the pupils to talk to a partner and think of two reasons why we need to tell the time.	
		Ask several pupils to say one of their ideas.	

Numeracy lesson plans Primary 1

Term 3 Asking questions

Week 21 Numbers Day 1

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10 minutes	25 minutes		10 minutes
Introduction	Main activity		Plenary
Whole class teaching	Pair task		Whole class teaching
Ask pupils to count between 0 and 100 forwards	Give each pair a set of 0—9 number cards.	Ask them to use the same two cards to make	Ask different pairs to read out a number from their list.
and then backwards.	Ask them to pick two cards and make a two-digit	a different number and write it in their exercise books.	Ask them to show the class their bundles of Tens and Units for the number.
choose pupils to tell you the next three numbers, eg: 17 (18, 19, 20).	number using those two cards.	Ask the pairs to repeat until they have 10 numbers written	
Write random two-digit	number in their exercise	in their exercise books.	
numbers on the chalkboard and choose some pupils to read them to the class.	books and say it to their partner.	Ask them to make each number using their bundles of Tens and Units.	
Choose some other pupils to tell you the number that comes before and after			

each number you point to.

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Lesson

title

Numeracy lesson plans Primary 1

Term 3 Asking questions

Week 21 Numbers Day 2

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### Counting 0—99

### Learning outcomes

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

Tell the time using o'clock.

Identify the numbers 0—99 using a Hundred square.

**Teaching aids** 

### **Before the lesson:**

Have ready the big clock and make card clocks with moveable hands for each group.

Have two sets of 0—9 number cards, a small stone and bundles of Tens and Units ready for each pair.

Read Macmillan New Primary Mathematics 1, page 46.

### **Daily practice**

15 minutes

#### Group task

Ask the pupils to tell you the time they come to school every day.

Give each group a clock and show them how to make that time.

Ask them to explain how the hands on the clock work, ie: the short hand counts the hours and the long hand counts the minutes.

Show 1 o'clock on the big clock and ask the groups to say the time.

Ask them to move their clocks to 1 o'clock, 2 o'clock and so on.

Tell the groups to hold up their clocks and say the times.

Make sure everyone has a turn making the time.

10 minutes	25 Macmillan minutes New Primary Mathematics 1		10 minutes	
Introduction	Main activity		Plenary	
Whole class teaching	Pair task		Whole class teaching	
Draw a Hundred square on the chalkboard.	Ask the pupils to open Macmillan New Primary	Ask each pair to turn over two cards at a time and put	Rub out some of the numbers on the	
Ask the pupils to count to 100 as you write the numbers in the square.	Mathematics 1, page 46 and find the Hundred square.Ask them to count forwards	them next to each other. Ask the pairs to find that number on the Hundred	Hundred square. Tell the pupils to count the numbers with you,	
Ask pairs of pupils to count from different starting points.	- and backwards using the Hundred square. Give each pair two sets	square, put a stone on it and say the number. Ask them to make each	saying the missing numbers as you come to them.	
Point to random numbers on the Hundred square	of 0—9 number cards, a small stone and bundles	number using their bundles of Tens and Units.		
and ask individual pupils to say them.	of Tens and Units.	Ask them to turn over another two number cards		
Ask some pupils to say random numbers and the rest to point to them on the Hundred square.	-	and repeat the process several times.		

#### Lesson title

Numeracy lesson plans Primary 1

Term 3 Asking questions

Week 21 Numbers Day 3

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### Making numbers 0—99

	15   minutes 			
Learning outcomes	Daily practice			
By the end of the lesson, most	Whole class teaching			
pupils will be able to: Tell the time using o'clock and say the time one hour later.	Set the large clock to different o'clock times and choose pupils to tell you the time.			
Make two-digit numbers.	Set the clock to 10 o'clock and ask what the time is one hour later.			
Teaching aids	Move the minute hand slowly round the clock and move the hour			
Before the lesson:	hand to the next hour. Ask what time it shows now.			
Have ready the big clock and the card clocks with moveable hands.	Repeat with different o'clock times.			
Have two sets of 0—9 number cards, a small stone and bundles of Tens and Units for each pair.	Give each group a clock, say an o'clock time and ask them to make it. Tell them to move it on one hour			
Read Macmillan New Primary Mathematics 1, page 45, Exercise 1, questions a—g.	and say the new time.			

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10 minutes		25MacmillanminutesNew PrimaryMathematics 1		10 minutes
Introduction		Main activity		Plenary
Whole class teaching		Pair task		Whole class teaching
Draw a blank Hundred square on the chalkboard and choose some	Write three consecutive numbers on the chalkboard, eg: 45, 46, 47.	Give each pair bundles of Tens and Units and a set of 0—9 number cards.	Repeat for five different numbers. Ask the pairs to open	Choose some pairs to say the answers they have written and ask the class
pupils to help you write in the numbers.	Ask pupils to tell you the next two numbers.	Call out a two-digit number and ask pupils to use their	Macmillan New Primary Mathematics 1, page 45,	if they are correct.
Ask the class to count forwards and backwards using the Hundred square.	Repeat with different numbers.	bundles of Tens and Units to make the number. Ask the pairs to use the	Exercise 1. Explain how to write Tens and Units as T and U and	_
Say a number from 0—99	-	number cards to show	then write the numbers.	
and ask the pupils to point to it.		the number.	Ask them to complete questions a—g in their exercise books.	_

#### Lesson title

Numeracy lesson plans Primary 1

Term 3 Asking questions

Week 21 Numbers Day 4

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### Reading and matching the numerals 0—99

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Learning outcomes	Daily practice			
By the end of the lesson, most pupils will be able to: Tell the time using o'clock and say	<b>Group task</b> Set the large clock to any o'clock time and ask the pupils			
the time one hour earlier. Order numbers from 0—100.	to say the time. Ask what the time is one hour later.			
Teaching aids	Give each group a clock and ask them to make that time			
Before the lesson:	by moving the minute hand round the clock and the hour hand on one hour.			
Have ready the big clock and the card clocks for each group.	Tell them to set their clocks to 3 o'clock and ask what the time			
Have ready a set of 0—100 number cards, 10 bundles of Ten and 10 sticks.	is one hour earlier. Show them how to move the minute hand round backwards			
Read Macmillan New Primary Mathematics 1, page 38, Exercise 2, questions d, g, i and j.	and the hour hand back one hour. Repeat with different times, making one hour earlier			
Practise singing '10 little fingers'.	each time.			

15 minutes

#### 10 minutes

	Mathematics 1			
Introduction	Main activity			Plenary
Whole class teaching	Group task		Individual task	Whole class teaching
Arrange the pupils in a circle and sing '10 little fingers'.	Divide the number cards into Tens, shuffle them and give	Ask each group to come out and arrange themselves with	Ask the pupils to look in Macmillan New Primary	Count backwards from 100. Ask individual pupils to
Ask each pupil to say a number, counting in order	each group a set of Ten, eg: $0-9$ or $30-39$ .	their number cards in order, from 0—100.	Mathematics 1, page 38, Exercise 2, questions d, g, i and j.	say a number between 0 and 100, then everyone
from 1. Continue until they	Ask the groups to put their cards in the correct order.	Ask them to read their numbers in order until they	Ask them to say the number for each set of	count forwards to 100 from that number.
have all had a turn and repeat starting with different numbers.	Ask each group to read out their numbers in order, starting with the group that has 0—9 and continuing until you reach 100.	reach 100. Ask each group to make 36 with their bundles and sticks.	bundles and sticks.	Repeat three times, starting from different numbers.

Song

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minutes

Macmillan

minutes New Primary

25

### Numeracy lesson plans Primary 1

Term 3 Asking questions

Week 21 Numbers Day 5

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## Less than and greater than

Lesson title

Learning outcomes	Daily practice
By the end of the lesson, most pupils will be able to: Use 'o'clock' to say the time one hour earlier and one hour later. Use the terms 'greater than' and less than'.	Group task Show 9 o'clock on the large clock and ask the pupils to say what the time is. Move the big hand to the number 6 and move the little hand half way between the 9 and the 10.
Teaching aids	Say that the minute hand has moved half way so the time is now half past 9.
Before the lesson: Have ready the big clock and the card clocks for each group. Collect enough bottle tops for each group to have two and write a different number between 0 and 100 inside each bottle top.	Give out the group clocks and ask the pupils to practise making half past times, eg: half past 4, half past 2. Make some half past times on the large clock and ask the pupils to say the time.
Write 'less than' and 'greater than' on large flash cards. Have ready the 0—100 number cards.	

15 minutes

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10 minutes		25 minutes		10 minutes
Introduction		Main activity		Plenary
Whole class teaching		Group task		Group task
Show the 'less than' and 'greater than' flash cards.	If it is wrong, ask the pupils to move so that it reads	Ask each group to choose 6 number cards and put them on the floor in front of them.	They can use the Hundred square and bundles of Tens and Units to help them.	Make o'clock and half past times on the big clock and choose different groups to
Ask two pupils to come out, choose a number card each and hold them up.	correctly, eg: 84 is 'greater than' 73. Write the results on	Give out the bottle tops and ask the pupils to place	Tell the pupils to write the results in their	say the times.
Ask another pupil to stand between the pupils	With different humbers	each bottle top on one of the number cards.		
holding the 'greater than' card and the rest of the pupils to read it, eg: 73 is 'greater than' 84. Ask the rest of the class to say if it is correct or not.	Repeat this activity using the 'less than' card.	Ask the group members to say whether the number written on the bottle top is 'less than' or 'greater than' the number underneath it.	Ask each group to say a 'greater than' and a 'less than' answer they have made.	

### Week 22 Addition 0—20

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### Words/phrases

Assessment

o'clock half past Tens Units number line add addition addition square before after 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.  $( \bullet )$ 

### Numeracy lesson plans Primary 1

Term 3 Asking questions

Week 22 Addition 0—20 Day 1

### **Number lines**

Lesson

title

### By the end of the lesson, most

Learning outcomes

pupils will be able to:

Say the o'clock and half past times on a clock.

Add two numbers from 0—20 using number lines.

**Teaching aids** 

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

Have ready the big clock and the card clocks with moveable hands.

Prepare a bag containing 40 counters or fewer for each pair. Make sure there is a different number of counters in each bag.

Draw a Hundred square and a number line from 0—20 on the chalkboard.

### Group task

**Daily practice** 

15

minutes

Give each group a card clock.

Say some o'clock and half past times and ask the pupils to show them on the clocks.

Make some o'clock and half past times on the big clock and ask the pupils to say the time.

Choose different groups to say the days of the week and the months of the year.

10 minutes	25 minutes			10 minutes
Introduction	Main activity			Plenary
Pair task	Whole class teaching		Individual task	Whole class teaching
Give each pair a bag of counters.	Show the pupils the number line on the chalkboard.	on gives the answer, ie: 10 + 2 = 12 Repeat with 5 + 2, 13 + 4 and 9 + 5. Remember to start with the biggest	Tell the pupils to draw number lines in their exercise books to help them work out the answers.	Say a number between 0 and 100 and ask the pupils to say numbers that are greater than and less than that number.
Ask them to count the counters in the bag and write the number in their exercise books.	Start with the biggest number and make the same			
Ask them to swap bags with another pair and repeat.		number each time. Write the following sums on the chalkboard: 11 + 3 = 15 + 3 = 18 + 1 =		
Continue until each pair has counted the contents of five different bags.				
Ask the pupils to say some of the numbers they found and point to them on the Hundred square.		9 + 6 =		
	Number line			
	0 1 2 3 4 5 6 7 8	+1 +1 9 10 11 12 13 14 15 16	17 18 19 20	

#### Lesson title

Numeracy lesson plans Primary 1

Term 3 Asking questions

Week 22 Addition 0—20 Day 2

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## Addition of numbers 0—20

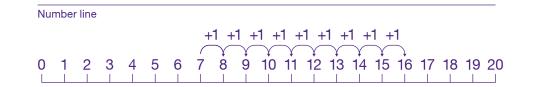
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Learning outcomes	Daily practice
By the end of the lesson, most pupils will be able to: Use a number line to add two numbers between 0 and 20. Know some number bonds to 10.	Group task Give each pupil a number card. Ask each group to read the numbers and to arrange themselves in a line from smallest to biggest with their cards facing the class.
Teaching aids	Ask the class to check if they are correct.
Before the lesson: Have ready a number card for each pupil, with a different number	Ask the pupils to write their group's numbers in the correct order in their exercise books.
between 0 and 100. Have ready 10 counters for each pair.	
Read Macmillan New Primary Mathematics 1, page 123, activity A.	

15 minutes

10 minutes		25 Macmillan minutes New Primary Mathematics 1		10 minutes
Introduction		Main activity		Plenary
Whole class teaching		Pair task		Whole class teaching
Remind the pupils they	Write the following sums	Ask the pupils to open	Give out the counters	Stand the class in a circle.
are using a number line to add numbers.	on the chalkboard: 5 + 8 =	Macmillan New Primary Mathematics 1, page 123,	and ask the pairs to make 10 using 2 groups	Ask two pupils to call out two numbers between
Choose some pupils to help you solve 7 + 9. Remind the pupils to start with the biggest number and always count from left to right, or forwards, when adding on a number line.	7 + 4 = 3 + 9 =	Show them how to use the addition table, going down the columns and across the rows to find the answers.to be the same size).Write their groupings on the chalkboard, end 1 + 9	(the groups do not have to be the same size).	1 and 10. — Ask the class to add thos numbers together in their heads and put their hand up if they know the answe
	Ask the pupils to do the sums in their exercise books using number lines.		Write their groupings e on the chalkboard, eg: 1 + 9	
	Choose some pupils to come and draw their number lines on the chalkboard.	Tell them to use the addition table to solve 0 + 1 = 0 + 2 = 1 + 1 = 2 + 2 =	- 2 + 8 3 + 7	Repeat with five different pairs of numbers.



	Lesson title		15   minutes 
	Number bonds	Learning outcomes	Daily practice
to 20	By the end of the lesson, most	Whole class teaching	
		pupils will be able to:	Show the class the Hundred squar
	Use a Hundred square to count from 0—99.	and ask them to count together from any given number. Repeat	
	Use a number line to make sums	<ul> <li>from different starting points.</li> </ul>	
	that add up to 20.	Say various numbers between 0—100 and ask pupils to	
	Teaching aids	come and touch them on the Hundred square.	
			Rub out some numbers from the
		Before the lesson:	Hundred square.
		Draw a large Hundred square on the chalkboard.	Choose some pupils to come and write the missing numbers in.
		Ask how they knew which number it was.	
			Repeat two or three times with different numbers.

Numeracy lesson plans Primary 1

Term 3 Asking questions

Week 22 Addition 0—20 Day 3

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10 minutes	25 minutes		10 minutes
Introduction	Main activity		Plenary
Whole class teaching	Pair task		Whole class teaching
Draw a number line from 0—20 on the chalkboard. Write: '14 + 5 =' and	Ask the pupils: 'If I start at number 10, - how many jumps do I need	Ask the pupils to draw a number line to 20 in their exercise books.	Ask pairs to read out their sums and ask the rest of the class to say if they
'18 + 2 =' Select some pupils to	to make to reach 20?' - Explain that they need 10 jumps to make 20, which	Tell them to use it to find as many different ways to make 20 as they can.	- are correct.
come and explain how to find the answers using a number line.	can be written as the sum $10 + 10 = 20$ .	Tell them to write their answers as sums, eg:	-
Remind the class to count from left to right when	<ul> <li>Repeat, starting with different numbers.</li> </ul>	16 + 4 = 20.	

from left to right when adding, starting from the biggest number.

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#### Lesson title

Numeracy lesson plans Primary 1

Term 3 Asking questions

Week 22 Addition 0—20 Day 4

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## Addition on the number line

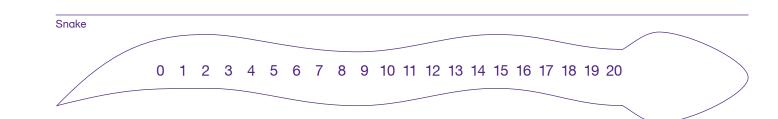
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Learning outcomes	Daily practice
By the end of the lesson, most pupils will be able to:	Whole class teaching
Group objects from 0—99 into sets of Tens and Units.	Stand the pupils in a circle and ask them to count around the circle to 100.
Use a number line to add two numbers together.	Pupils who say a Ten, eg: 10, 20 should take a step back.
Teaching aids	Repeat several times, starting with different pupils.
	Give each pair a bundle of Ten and nine Units.
<b>Before the lesson:</b> Have ready a bundle of Ten, 9 Unit sticks and 20 counters for each pair.	Remind the pupils that 1 bundle of sticks is one Ten and each single stick is one Unit.
Have ready a large piece of paper and pencils or crayons for each group.	Ask them to show you 11 by holding up 1 bundle of Ten and 1 Unit.
ior odon group.	Ask them to show you other numbers less than 20.

15 minutes

10 minutes	25 minutes		10 minutes	
Introduction	Main activity		Plenary	
Pair task	Group task		Whole class teaching	
Ask the pupils to use their counters to make two sets of numbers that add up to 10, eg: 6 + 4, 7 + 3. Ask them to write the sums in their exercise books. Ask them to make two new sets of numbers that	Give each group a large sheet of paper. Ask them to draw a long snake that fills the length of the paper. Ask them to make the snake into a number line by writing the numbers 0—20 inside it, as shown below.	Ask them to decorate their snake by drawing pictures or colouring it in. Write the following sums on the chalkboard: 12 + 5 = 13 + 3 = 15 + 1 =	Ask each group to come out and show the rest of the class their number line snake. Display the snakes so the pupils can use them when needed.	
make 20 and write the sums in their exercise books.		Ask the pupils to use their snake number line to answer		
Choose some pairs to write their sums on the chalkboard.		the sums.		



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### Numeracy lesson plans Primary 1

Term 3 Asking questions

Week 22 Addition 0—20 Day 5

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### Addition table 0—20

Lesson

title

### Learning outcomes

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

Use a number line to add numbers up to 20.

Fill in an addition table.

### **Teaching aids**

### **Before the lesson:**

Have ready the number line snakes from yesterday.

Have ready a set of 0—20 number cards and 100 counters for each group.

Copy the addition table from Macmillan New Primary Mathematics 1, page 123, activity A on to the chalkboard.

### Daily practice

Macmillan

New Primary Mathematics 1

### Group task

15

minutes

Ask each pupil to find the Hundred square in Macmillan New Primary Mathematics 1, page 46.

Give each group 100 counters and a set of 0—20 number cards.

Ask each group to shuffle the number cards and put them in a pile.

Tell them to turn over a number card and put that number of counters on the correct number on the Hundred square.

Continue round the group until they have covered 20 squares and each pupil has had a few turns.

10 minutes	25 Macmillan minutes New Primary Mathematics 1		10 minutes
Introduction	Main activity		Plenary
Whole class teaching	Group task		Whole class teaching
Give out the number line snakes. Ask random addition questions from 0—20 and ask the pupils to use the number lines to work out the answer, eg: 12 + 6, 8 + 7.	Tell the pupils to look in Macmillan New Primary Mathematics 1, page 123, activity A. Remind them how to use an addition table, ie: they should add a number from a column and a row together and write the answer where the two numbers meet.	Choose some groups to say the sums for the spaces in the addition grid on the chalkboard. Tell the class to use their number lines to work out the answers. Choose some groups to say the answers and write them in the spaces.	Tell the pupils they are going to count to 100.Choose a pupil to start counting from 1.When he or she has said a few numbers, ask another pupil to continue counting.Repeat until the class reaches 100.

Continue until the table is complete.

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### Week 23 Subtraction 0—20

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### Words/phrases

#### Assessment

o'clock half past daytime night-time number lines less than greater than minus subtract subtraction take away missing numbers How many less than? What's the difference between? How many Tens in each number? How many Units in

each number?

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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. 

#### Lesson title

Numeracy lesson plans Primary 1

Term 3 Asking questions

Week 23 Subtraction 0—20 Day 1

## Subtraction 0-20

#### Learning outcomes

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

Read o'clock and half past times on a clock.

Solve simple problems using different terms for subtraction.

**Teaching aids** 

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

Have ready the big clock and the counters from last week.

Make subtraction flash cards: 'take away', 'minus', 'How many less than?', 'subtract', 'What's the difference between?' Display them in the classroom after the lesson.

Have ready a set of 0—9 number cards and a 'less than' card for each group.

#### **Daily practice**

15 minutes

#### Whole class teaching

Ask the pupils how many hours there are in a day.

Show them the clock and ask them to say the hours on the clock.

Tell them you are going to show them some o'clock times for daytime.

Ask them to say the time and what they do at those times.

Repeat with some o'clock times for night-time.

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10 minutes	25 minutes		10 minutes	
Introduction	Main activity		Plenary	
Whole class teaching	Whole class teaching		Group task	
Ask 15 pupils to come and stand at the front.	Read and explain the subtraction words to	Read and explain them to the class.	Lay a set of 0—9 number cards face down in front	Tell them to read out the numbers and ask the
Ask one pupil to take away 8 pupils from the	<ul> <li>the class.</li> <li>Write the following problems</li> </ul>	Tell the pupils to use counters to solve	- of each group and give them a 'less than' card.	group which number is ' <mark>less than</mark> ' the other.
15 pupils. Ask, 'How many pupils are left?'	on the chalkboard: '10 take away 6'	the problems in their exercise books.	Ask four pupils in every group to choose one	Tell them to place the 'less than' flash card in the
Write ' $15 - 8 = 7$ ' on the chalkboard.	'12 minus 8' '14 subtract 10'	Tell the pupils to write each problem as a sum, eg:	<ul> <li>card each and make two,</li> <li>two-digit numbers between</li> <li>0—99 with their cards.</li> </ul>	middle of the numbers.
Repeat with different numbers of pupils.	'What is the difference between 14 and 18?'	·10 − 6 = 4'.		say their answers, eg: 50 is 'less than' 69.

Repeat several times.

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#### Lesson title

Numeracy lesson plans Primary 1

Term 3 Asking questions

Week 23 Subtraction 0—20 Day 2

# Subtraction using a number line

Learning outcomes	Daily practice
By the end of the lesson, most pupils will be able to: Count the hours forwards and backwards on a clock.	Whole class teaching Make some o'clock and half past times on the clock and ask the pupils to say the time.
Use a number line to subtract.	Choose a pupil to come and make 9 o' clock.
Teaching aids	Ask them to say what time it will be one hour later and two hours later.
Before the lesson: Have ready the big clock.	Move the big hand forwards as they count.
Have ready the 'less than' and 'greater than' flash cards.	Ask them to say the time one hour earlier and two hours earlier.
Have ready the snake number lines from last week.	Emphasise that they are counting backwards.

15 minutes

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10MacmillanminutesNew PrimaryMathematics 1	25 minutes		10 minutes
Introduction	Main activity		Plenary
Whole class teaching	Group task		Group task
Show the pupils the 'less than' and 'greater than' flash cards.	Draw a number line to 20 on the chalkboard Ask the pupils if anyone	Tell the pupils that to take away we count backwards or from right to left.	Tell the groups to look at their snake number lines and use their fingers
Ask them to look in Macmillan New Primary Mathematics 1, page 46.	can think how to use the number line to subtract two numbers.	Start at 19 and count back 5 jumps. Ask them what number we land on (14).	to jump backwards to solve 12 - 8 = 17 - 4 = 19 - 6 =
Tell them to choose two numbers from the Hundred square.	Show them how to use the number line to work out 19 – 5 as shown below.	Tell them this is the answer to the sum, $19 - 5 = 14$ .	Remind them to start with the bigger number and

Repeat with 15 – 6.

tart with and count backwards with the smaller number.

Number line -1 -1 -1 -1 -1 9 10 11 12 13 14 15 16 17 18 19 20 0 1 2 3 5 6 7 8 4

Tell them to use 'greater

than' and 'less than' to describe the numbers, eg: '79 is greater than 66', '44 is less than 80'.

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Lesson

title

Numeracy lesson plans Primary 1

Term 3 Asking questions

Week 23 Subtraction 0—20 Day 3

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# Subtraction using a number line

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Learning outcomes	Daily practice		
By the end of the lesson, most pupils will be able to:	<b>Group task</b> Ask the pupils to find the Hundred		
Count to 100. Subtract numbers using a	<ul> <li>Ask the pupils to find the number of square in Macmillan New Primary</li> <li>Mathematics 1, page 46.</li> </ul>		
number line.	Give each group the counters and a dice.		
Teaching aids	Tell them to put their counters at the bottom of the Hundred square		
<b>Before the lesson:</b> Find a counter for each pupil and a dice for each group.	Tell each pupil to roll the dice and use one counter to count to the number rolled on the Hundred square.		
Have ready the snake number lines.	Tell them to take turns, each time counting on from the number that they landed on during their previous turn.		
	The first pupil to reach 100 with their counter is the winner.		

Macmillan

minutes New Primary

10 minutes	25 minutes		10 minutes
Introduction	Main activity		Plenary
Group task	Whole class teaching		Pair task
Ask the pupils to tell you some of the words that mean subtraction.	Draw a number line to 20 on the chalkboard, as shown below.	Write the following sums on the chalkboard: 14 – 3 =	Ask the pupils to share their work with a partner.
Ask each group to use each one in a question that the rest of the class has to answer.	Show the pupils how to use it to work out 16 – 7. Remind them to count backwards from the bigger	12 - 5 = 17 - 16 = 20 - 10 = 19 - 16 = 14 - 12 =	Ask them to compare their answers and see if they are correct.
Tell them to use their snake number lines to help them answer.	Ask them to say the answer and write it next to the sum.	17 - 1 = Ask the pupils to do the sums in their exercise books.	_
		Tell the pupils to draw a number line for each one.	_

Nun	nber	r line																		_
									_	-1 -	1 –	1 –	1 –	1 –	1 –	1				
									5	$\searrow$	$\searrow$	$\searrow$	$\searrow$	$\searrow$	$\searrow$	$\overline{}$				
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	1		1	1		1		1		1	1	1		1					1	1

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Lesson title		15   Macmillan   minutes   New Primary   Mathematics 1
Missing numbers	Learning outcomes	Daily practice
	By the end of the lesson, most pupils will be able to:	Whole class teaching Ask the pupils to look in Macmillan
	Say how many Tens and Units there are in two-digit numbers.	New Primary Mathematics 1, page 46.
	Use a number line to find missing numbers in subtraction sums.	Count in Tens with the pupils using the Hundred square, pointing to the numbers as they say them.
	Teaching aids	Give each pair bundles of Tens and Units.
	Before the lesson:	Write: '54, 72, 23, 45, 68, 99, 33' _ on the chalkboard.
	Have ready counters and bundles of Tens and Units for each pair.	Ask the pairs to make the numbers with their bundles
	Practise singing '10 fat fish'.	of Tens and Units.
		Ask them, 'How many Tens in each number?', 'How many Units in each number?'
		Tell them to record the numbers in their exercise books as 5 Tens and 4 Units, 7 Tens and 2 Units, and so on.

Numeracy lesson plans Primary 1

Term 3 Asking questions title

**Week 23** Subtraction 0—20 Day 4

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Vhole class teaching			
	Pair task		Whole class teaching
Ask the pupils if they can ell you how to find the nissing number in the sum $8 - \boxed{} = 15$ Show them that they start and jump backwards along the number line until hey come to 15 and then hey count the number of jumps they have taken, as shown below. Explain that we can now complete the sum, $8 - \underline{3} = 15$	Write the following sums on the chalkboard: $20 - \boxed{=} = 19$ $20 - \boxed{=} = 18$ $20 - \boxed{=} = 17$ $20 - \boxed{=} = 16$ $20 - \boxed{=} = 15$ $20 - \boxed{=} = 14$ $20 - \boxed{=} = 13$ $20 - \boxed{=} = 12$	Ask the pupils to complete the sums in their exercise books. Tell them to draw number lines to work out the answers. Ask some pairs to say their answers and ask the class if they are correct.	Ask the pupils to sing and role play '10 fat fish'. Ask them to say what they are doing, ie: taking away fish.

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#### Numeracy lesson plans Primary 1

Term 3 Asking questions

Week 23 Subtraction 0—20 Day 5

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## Making subtraction sums

Lesson title  $( \bullet )$ 

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Learning outcomes	Daily practice
By the end of the lesson, most pupils will be able to: Tell o'clock and half past times on a clock. Use number lines to do subtraction sums.	Group task Choose some pupils to say the days of the week. Point to the chart and say the months of the year with the class. Make o'clock and half past times on the big clock and ask the class
Teaching aids	to say the times. Give each group a card clock.
Before the lesson: Have ready a days and months chart, the big clock and the card clocks with moveable hands.	Tell them to make the following times and hold their clocks up for you to check: 4 o'clock, one hour earlier, one hour later, half past 7, half past 1.
Have ready the 10—99 number cards and bundles of Tens and Units for each pair.	
Read Macmillan New Primary Mathematics 1, page 76, Exercise B, questions a—f.	
Practise singing '10 green bottles'.	

15 minutes

#### enugu-num-1-weeks-21-25-closeout.indd 45

10 minutes	25MacmillanminutesNew PrimaryMathematics 1	10 Song minutes	
Introduction	Main activity	Plenary	
Pair task	Whole class teaching	Whole class teaching	
Arrange the 10—99 number cards face down	Write '15 – 6 =' on the chalkboard.	Sing '10 green bottles' with the class.Ask if they can say some of the sums mentioned in the song, eg: $10 - 1 = 9$ $9 - 1 = 8$ .Choose some pupils to represent the bottles as the class sings the song again.	
on the table. Ask a pupil to pick up a card and say the number.	Ask the pupils to help you work it out using a number line, as shown below,		
Choose a pupil to say how many Tens and Units are in that number.	15 – 6 = 9. Tell them to look at Macmillan New Primary		
Tell the pairs to make the number with their Tens and Units and check if they are correct. Repeat five times with	Mathematics 1, page 76, Exercise B, questions a—f. Tell them to complete the sums, drawing number lines in their exercise books.		
different numbers.	Number line	-1 -1 -1 -1 -1 -1 -1 -1 -1 -1 9 10 11 12 13 14 15 16 17 18 19 	

## Week 24 Halves and quarters

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#### Words/phrases

Assessment

shape half halves quarter quarters equal parts divide triangle rectangle square circle 1 2

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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 1

Term 3 Asking questions Lesson

Halves

title

Week 24 Halves and quarters Day 1

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#### 15 minutes Learning outcomes **Daily practice** By the end of the lesson, most Individual task pupils will be able to: Give each pupil a two-Identify circles, squares, dimensional shape. rectangles and triangles. Ask them to go and stand Divide a shape into two equal by the matching shape in the parts and describe each part classroom. as a half. Tell them to compare the shapes they have and check they are **Teaching aids** standing in the correct place. Ask them to say the name of their shape. Before the lesson: Ask them to swap shapes and Have ready a two-dimensional repeat the activity. shape (circle, square, rectangle or triangle) for each pupil. Make a larger circle, square, rectangle and triangle with the name written on each shape and display them around the classroom. Make a small circle for each pupil.

10 minutes	25 Game minutes		10 minutes
Introduction	Main activity		Plenary
Whole class teaching	Group task		Whole class teaching
Cut the large circle into	Give each pupil a circle.	In turn, tell the pupils to	Ask each group to explain
two equal pieces and show the two halves to the class.	Ask them to draw a picture on their circle and then fold	- turn over two halves and see if they match.	what they get when they separate the two pieces
Place one on top of the	it exactly in half.	If the halves match, the	(two halves).
other and show the pupils that they are exactly the same size.	Tell them to unfold the circle and draw along the dividing line.	<ul> <li>pupil keeps the picture.</li> <li>If they don't match, return them face down and the</li> </ul>	Write ' <u>1</u> ' on the chalkboard 2 Explain that this is how we
Ask the pupils if they remember what we call	Ask the pupils to cut or	next pupil takes a turn.	write a half because it is one divided into two equal parts.
each part, ie: a <mark>half</mark> .	tear their shape down the dividing line and put them	The pupil to collect the most whole shapes is the winner.	
Say that when we divide	face down on the desk.		
something into <mark>two equal</mark> parts each part is called a half.	Ask the groups to mix their shapes up and spread them out.	-	

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Numeracy lesson plans Primary 1

Term 3 Asking questions

Week 24 Halves and quarters Day 2

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## Halves

Lesson

title

#### Learning outcomes

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

Identify two-dimensional shapes in the environment.

Identify half of a shape.

**Teaching aids** 

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

Collect everyday objects, eg: cartons and tins, with square, rectangle, triangle and circle faces.

Have ready a card square, rectangle, triangle and circle for each pupil. They do not need to be the same size. **Daily practice** 

15

minutes

#### Whole class teaching

Show the objects and ask the pupils to come and touch any shapes they can see, eg: squares, circles.

Ask them to identify the shapes of some objects in the classroom, eg: windows, door, book, chalkboard.

#### Individual task

Give each pupil a shape and ask them to draw a face and hair on each side of the shape.

Ask them to make one side a happy face and one side a sad face.

Display the face shapes on a washing line across the classroom.

Write signs saying the names of the shapes.

10 minutes	25 minutes	10 minutes		
Introduction	Main activity	Plenary		
Whole class teaching	Pair task	Whole class teaching		
Ask the pupils to say a time when they have divided	Give the pairs some of the shapes.	Draw some shapes on the chalkboard and draw a		
something in half, eg: a piece of fruit or vegetable.	Ask them to fold each shape in half and colour	line to divide them into two parts. Make some equal and some not equal. Choose some pupils to identify the shapes that are divided in half and those		
Ask the pupils to say why they divided something in half, ie: to share it between two people.	in one half. Tell them to write $(1/2)^{'}$ in each part.			
Ask if anyone can come and write the sign for a half on the chalkboard.	Ask them to tear the shape in half, keep one half and give the other to their partner.	that are not. Ask the pupils to explain how they know a shape is divided in half.		
	Ask them to tell each other things that they like to share in half with their friend.	Remind them that to be a half, both parts must be the <mark>exactly the same size</mark> .		

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#### Numeracy lesson plans

**Primary 1** 

Term 3 Asking questions

Week 24 Halves and quarters Day 3

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# Dividing numbers in half

Lesson

title

#### Learning outcomes

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

Say which two-dimensional shapes fit together.

Divide objects in half.

**Teaching aids** 

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

Have ready a large card square, rectangle, triangle or circle for each group.

Have ready the everyday objects with the 2D faces, several pairs of scissors and some old newspapers.

Fill bags with a different even number of stones for each group, ie: 8, 10, 12, 14, 18.

#### **Daily practice**

15 minutes

#### **Group task**

Hold up the shape cards and ask the class to name them.

Tell the class that these shapes are flat and are called two-dimensional or 2D shapes.

Hold up some everyday objects and ask the pupils to find the shapes on them.

Give each group a card shape to draw round and several pieces of newspaper.

Tell the groups to use the newspaper to draw and cut out as many shapes as possible.

Ask them if they can arrange the cut-out shapes so they fit together with no gaps.

Let each group tell the class what they have found out. (All the shapes will fit together except the circle.)

10 minutes	25 minutes		10   minutes
Introduction	Main activity		Plenary
Whole class teaching	Group task		Whole class teaching
Ask two pupils to stand facing the class, shoulder	Give each group a bag of stones.	Ask the pupils to draw a line down the middle	Choose some pupils to draw circles on the chalkboard to
to shoulder. Stand in between them, dividing them in half. You now have one pupil on each side of you.	Ask them to divide the stones in half. Ask them to say their answers: 'Half of	<ul> <li>so that there are two circles on either side of the line:</li> <li>Ask the pupils to write how many circles</li> <li>they have in each half:</li> <li>1 of 4 = 2'</li> </ul>	explain their answers.
Explain that 'divide' means to put into groups.	(number of stones) is' Ask them to draw a row		
Tell the pupils that you have divided the number two in half. Say, 'Half of 2 is 1.' Repeat with four pupils.	of four circles in their exercise books:	Ask them to draw circles to work out half of the following numbers: 6, 8, 10.	

Numeracy lesson plans **Primary 1** 

Term 3 **Asking questions** 

Week 24 Halves and quarters Day 4

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# **Quarters**

Lesson

title

#### Learning outcomes

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

Identify and name 2D shapes.

Divide shapes into guarters.

#### **Teaching aids**

#### Before the lesson:

Display the words 'triangle', 'circle', 'square' and 'rectangle' in different places in the classroom.

Have ready some 2D shapes, a large paper circle, an apple or orange and a knife to cut it with.

Make a square for each pupil.

#### **Daily practice**

Game

15

minutes

#### Whole class teaching

Hold up each 2D shape and ask the pupils to say its name.

Tell them to move around the classroom and when you shout 'Freeze triangle' to freeze in the shape of a triangle.

Repeat with the names of different shapes.

Ask them to continue moving around and when you shout the name of a shape they must go and stand by the correct word in the classroom.

10 minutes		25 minutes	10 minutes
Introduction		Main activity	Plenary
Whole class teaching		Individual task	Whole class teaching
Ask the class, 'How many parts are there when you divide something in half?'	Tell the pupils you are going to cut each piece in half again.	Give each pupil a square. Tell them to fold it	Ask, 'How many people - can have an equal share of an apple divided in half?'
Ask, 'What can you tell me about each part?' (They are the same size.)	Show them the four equal parts and tell them that four equal parts are called	into quarters. Ask them to draw lines to show the quarters and ask them to write	<ul> <li>Ask, 'How many people can have an equal share of an apple divided into quarters?'</li> </ul>
Show the pupils the apple and say it is a whole apple. Write '1 apple' on the chalkboard.	quarters.Write '1' on the chalkboard.4Take a paper circle and	(1) in each part Ask the pupils to colour in one quarter.	_
Cut it in half and ask them what you have done.	remind the pupils how to fold it in half. Show them how to fold it in half again.	·	
Choose a pupil to write ' <u>1</u> ' on the chalkboard 2	Open up the circle and show them the lines dividing it into quarters.		

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Lesson title		15   minutes
Halves and	Learning outcomes	Daily practice
quarters	By the end of the lesson, most pupils will be able to:	<b>Group task</b> Write the names of the shapes
	Identify and write the names of shapes.	on the chalkboard.           Ask the pupils to read them
	Identify halves and quarters in 2D shapes.	with you. Give out the paper shapes and ask the pupils to sort out the shape
	Teaching aids	$\frac{1}{\text{Ask them to identify the same}}$
	Before the lesson:	shapes with same colour or mark.
	Have ready lots of rectangles, squares, circles and triangles	<ul> <li>Ask the pupils to write the name of the shape on the back.</li> </ul>
	cut out of paper for each group.	Help them to group their colourful - shapes on a line in the classroom.
	Have ready several pairs of scissors, lots of coloured pencils and lots of newspaper.	
	Read Macmillan New Primary Mathematics 1, page 53.	

Numeracy lesson plans Primary 1

Term 3 Asking questions

Week 24 Halves and quarters Day 5

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10 minutes	25 minutes		10MacmillanminutesNew PrimaryMathematics 1
Introduction	Main activity		Plenary
Whole class teaching	Group task		Whole class teaching
Give each pupil a sheet of newspaper and ask them	Give each group a set of shapes.	Show them that two quarters are the same	Ask the pupils to open Macmillan New Primary
to fold it in half and then into quarters.	Tell them to divide each shape into halves and	- as a half. Show them how to write	Mathematics 1, page 53 — and look at the exercise.
Ask the pupils to fold the paper corner to corner and ask them if they have folded it in half. (No, because unless the paper is square the pieces will not be	quarters by folding. On each shape ask	" <mark>2</mark> " - <mark>4</mark>	Ask them to copy each full shape in their exercise books then
		Tell them to shade in three quarters on one of their shapes.	colour in the fractions listed in the textbook.
equal sizes).	Ask the pupils to look carefully at their shapes and say what they notice about halves and quarters.	Show them how to write '3' 4	_

## Week 25 Comparing length

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Words/phrases

#### Assessment

length height order long longer longest short shorter shortest tall taller tallest small smaller smallest estimate

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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

# **Taller and smaller**

Lesson

title

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15 minutes Song

Numeracy lesson plans Primary 1

Term 3 **Asking questions** 

**Week 25 Comparing length** Day 1

Learning outcomes	Daily practice
By the end of the lesson, most pupils will be able to: Use a number square to identify missing numbers.	Whole class teaching Sing '10 chunky chickens' with the class.
Use the terms 'taller' and 'smaller'.	Ask the pupils to look at the Hundred square on the chalkboard Choose some pupils to say the missing numbers.
Before the lesson:	Rub off 6 different numbers and ask the class to write the missing numbers in their exercise books.
Draw a Hundred square on the chalkboard. Rub out the numbers: 2, 7, 12, 15, 18, 21, 23 and 27.	Call out the numbers 75, 40, 33, 88, 29 and choose pupils to point to them on the Hundred square.
Practise singing	

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'10 chunky chickens'.

10 minutes		25 minutes		10 minutes
Introduction		Main activity		Plenary
Whole class teaching		Pair task		Group task
Briefly explain what ' <mark>height</mark> ' means in the pupils' local language.	Ask them which words they use in their language. The tallest person should	Tell the pupils to find a partner. Ask them to decide which	Tell the pairs to write their names and the words 'taller' - and 'shorter' underneath	Take the pupils outside and ask them to find objects that are taller and shorter
Ask all the pupils to stand up and make a line around the classroom in order of their height.Ine tallest per- be at one end shortest at theExplain to them that we use the words 'tall' and 'short' when we are estimating height.Write the word 'shorter', 'tallest 'shortest' on the Ask the pupils questions: 'Who is the tall the class?'	be at one end and the shortest at the other.	one of them is the tallest and which is the shortest.	the correct drawing. Explain that ' <mark>estimating</mark> ' - is making a guess about	than themselves, eg: trees. Tell the pupils to say what they have found.
	Write the words 'taller', 'shorter', 'tallest' and	Ask them how they found out.	- Ask them to estimate	Tell them to say,
		<ul> <li>Ask the pupils to draw         <ul> <li>a line to divide a page of             their exercise books in half.</li> </ul> </li> <li>Tell them to draw         themselves on one half         <ul> <li>and their partner on the             other half.</li> </ul> </li> </ul>	<ul> <li>Ask them to estimate if they are taller or shorter than the door, the chalkboard and you.</li> <li>Choose some pupils to come and check their estimates.</li> </ul>	'The is taller than me. The is shorter than me.'
	'Who is the tallest in the class?'			
	'Who is the shortest in the class?'			
	'ls (pupil's name) shorter than (another pupil's name)?'			
	'ls (pupil's name) taller than (another pupil's name)?'			

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Lesson itle		15   Macmillan   minutes   New Primary   Mathematics 1
Longer and shorter	Learning outcomes	Daily practice
	By the end of the lesson, most	Group task
	pupils will be able to: Group numbers from 10—99 into	Give the bundles of Tens and Units to each aroup.
	Tens and Units.	<b>.</b> .
	Use the terms 'longer' and 'shorter'.	on the chalkboard: '24, 37, 63, 75, 51, 42, 89, 87, 56, 28'.
	Teaching aids	D intoUnits to each group.Write the following numbers on the chalkboard: '24, 37, 63, 75, 51, 42, 89, 87, 56, 28'.Ask the pupils to make the numbers using their bundles of Tens and Units.
	Before the lesson:	Ask the pupils to look
	Have ready bundles of Tens and Units for each group.	in Macmillan New Primary Mathematics 1, page 46 and
	Have ready two sticks of different sizes for each pair.	point to each number on the Hundred square as they make it.
	Look at Macmillan New Primary Mathematics 1, page 98.	

Numeracy lesson plans Primary 1

Term 3 Asking questions Le tit

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Week 25 Comparing length Day 2

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10 Macmillan minutes New Primary Mathematics 1		25 minutes		10 Game minutes
Introduction		Main activity		Plenary
Whole class teaching		Pair task		Whole class teaching
Show the class two sticks and ask them which is longer and which is shorter	Explain that 'long <mark>er</mark> ' and 'short <mark>er</mark> ' are used to compare two objects.	Give out the sticks and ask each pair to hold up the shorter stick.	Ask them to draw other longer and shorter objects, eg: pencils, rivers.	Play the 'Lotto' game. Ask the pupils to write down 6 numbers from 40—90
in their local language. Tell them we can use the words 'long' and 'short' when we are estimating length.	Ask the pupils questions to help them understand the meaning of longer and shorter, eg: 'Is this pencil longer or	Tell the pupils to say 'This stick is shorter'. Repeat with the longer stick. Ask them to draw a long	Ask them to write 'longer' and 'shorter' under the correct drawings. Choose some pairs to talk about the objects	<ul> <li>in their exercise books.</li> <li>Call out random numbers between 40 and 90, making</li> <li>sure you keep note of the numbers you have called.</li> </ul>
Ask them to look in Macmillan New Primary Mathematics 1, page 98.	Primary 'Is this finger longer	in their exercise books. Tell them to write 'longer' and 'shorter' under the	they have drawn using the If a p words 'longer' and 'shorter'. you d draw their draw six o	If a pupil has the number you call out, they should draw a line through it in their book. When they have drawn a line through all six of their numbers they shout 'Lotto'.

#### Lesson title

Numeracy lesson plans Primary 1

Term 3 Asking questions

Week 25 Comparing length Day 3

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## **Taller and longer**

## Learning outcomes

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

Identify the Tens and Units in a two-digit number.

Use the comparative terms 'is taller than' and is 'longer than'.

**Teaching aids** 

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

Make sets of Tens and Units place value cards, enough for each pair to have a set.

#### **Daily practice**

Song

Pair task

15

minutes

Sing '10 chunky chickens' with the class.

Give each pair a set of place value cards.

Tell the pupils they are going to make the number 45.

Show them how to use the place value cards to make the number 4.

Ask them how many Tens and how many Units there are in 45.

Ask them to use the place value cards to make the following two-digit numbers: 62, 43, 71, 22, 35.

10 minutes	25 minutes			10 minutes
Introduction	Main activity			Plenary
Whole class teaching	Pair task		Whole class teaching	Individual task
Explain to the class that we use 'is taller than' when we are estimating <mark>height</mark> .	Draw and name four snakes of different sizes on the chalkboard.	Ask the pupils to write the answers in their exercise books.	Ask the pupils to show their pictures of snakes to the class and say 'this snake	Ask the pupils to draw two objects in their exercise books and write 'shorter'
Take the pupils outside and ask them each to choose two trees of different heights.	Ask the pupils to draw the snakes in order of size.	Choose some pairs to say their answers and ask	<ul> <li>is shorter than this snake' or 'this snake is longer than this snake'.</li> </ul>	under one. Ask them to draw two trees in their exercise books and write 'taller' under one.
	Write the following questions on the chalkboard:	the class if they agree.		
Explain that we use the words 'is longer than' whenever we are estimating length or distance. Ask the pupils to say which tree is taller, ie: 'this tree is	<ul><li>'Which snake is the longest?'</li><li>'Which snake is the shortest?'</li><li>'Which snake is shorter than (the name of one</li></ul>			
taller than that tree'. Ask the pupils to compare	of the snakes)?' 'Which snake is longer than (the name of one			
the length of two sticks and say 'this stick is longer than that stick'.	of the snakes)?'			

#### Lesson title

Numeracy lesson plans Primary 1

Term 3 Asking questions

Week 25 Comparing length Day 4

## **Comparing lengths**

#### Learning outcomes

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

Identify the Tens and Units in a two-digit number.

Estimate lengths using the phrase 'shorter than'.

**Teaching aids** 

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

Have ready a set of place value cards and bundles of Tens and Units for each pair.

Have ready pairs of objects of different lengths, eg: long and short rulers, books and sticks.

Read Macmillan New Primary Mathematics 1, page 99.

### Daily practice

#### Pair task

Give each pair a set of place value cards.

Ask the pupils to work with their partner to make 88, 61, 95, 56 and 74 using the place value cards.

Ask them to make each number using their bundles of Tens and Units.

Ask the pupils how many Tens and how many Units are in each number.

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| 15 | minutes

10 minutes	25 Macmillan minutes New Primary Mathematics 1	10 Song minutes
Introduction	Main activity	Plenary
Whole class teaching	Pair task	Whole class teaching
Write 'longer than' and 'shorter than' on the chalkboard.	Tell the pupils to look at Macmillan New Primary Mathematics 1, page 99.	Sing any local song to demonstrate the concepts long and short.
Show the pupils pairs of objects and ask them 'Which is shorter?' and 'Which is 'longer?'	Write 'longer' and 'shorter' on the chalkboard and tell the pairs to use these words to describe each	
Ask two pupils to come to the front of the class.		
Ask them to compare their height using the words 'is taller than' and 'is smaller than'.	are longer than the keys. Tell the pupils to write two sentences in their exercise books, one using 'longer than' and one using 'shorter than'.	

#### Lesson title

Numeracy lesson plans Primary 1

Term 3 Asking questions

Week 25 Comparing length Day 5

## **Comparing length**

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

Learning outcomes

Use a number line to show the position of a number, using 'before', 'after' and 'between'.

Compare the length and height of two similar objects.

#### **Teaching aids**

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

Collect sticks or straws of different lengths – enough for each pupil to have one.

Draw pictures of pairs of objects of different sizes on the chalkboard, eg: trees, snakes, houses, rivers, doors.

#### **Daily practice**

Macmillan New Primary

Mathematics 1

#### Pair task

15

minutes

Ask the pupils to find the Hundred Square in Macmillan New Primary Mathematics 1, page 46.

Ask them to work together to find the answers to the following questions:

'What number comes one before: 28, 46, 38, 25?'

'What number comes one after: 18, 39, 24, 43?'

'What number comes between: 45 and 47, 12 and 14?'

Walk around the class and ask pairs to show you the answers on the chart.

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10 minutes	25 minutes		10 minutes
Introduction	Main activity		Plenary
Whole class teaching	Pair task		Whole class teaching
Remind the pupils that they have been learning about length (how long	and 'taller' and 'shorter' on ea	Ask them to look at each pair of pictures and choose the correct words to describe them.	Ask the pupils to name objects in the classroom that are taller than them.
things are) and height (how tall things are).	Read the words to the class.		Ask them to name objects that are smaller than them.
Give each pupil a stick.	Remind the pupils that 'longer' and 'shorter'	Tell them to copy the pictures into their exercise	
Ask them to stand by someone with a stick that is longer or shorter than theirs.	describe length and 'taller' and 'shorter' describe height.	books and write the correct words underneath.	
Ask them, in turn, to say 'My stick is (longer or shorter) than (pupil's name).	Show them the pictures on the chalkboard.		

Swap the sticks around and repeat the activity.

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#### Credits

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#### 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.

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