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Type of lesson plans/
Grade

Term/
Learning theme

Numeracy lesson plans
Primary 1

Term 3
Asking questions

Weeks
21—25

Numeracy lesson plans Primary 1 Term 3 Asking questions

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

Introduction

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

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

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

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

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

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

Numeracy lesson plans
Primary 1

Term 3
Asking questions

Weeks
21—25

Introduction
Asking questions

Effective questioning in the classroom

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.

Pupil participation

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.

Thinking time

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.

Different questions

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 Musa 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.

Numeracy lesson plans
Primary 1

Term 3
Asking questions

Weeks
21—25

Introduction

Low-cost teaching aids for the term

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.

Ten card
1 set 10—90

Unit card
1 set 1—9

How to use the place value cards

Place a Unit card on top of a Ten card, eg: 5 on top of 40 makes 45. Explain that this is 4 Tens and 5 Units making 45.

Repeat several times, making new two-digit numbers.

Dictate a number to the pupils. Ask them to make that number using cards.

Ask:

'How many Tens are in the number?'

'How many Units are in the number?'

Ask the pupils to make a two-digit number with:
4 Tens and 8 Units,
3 Tens and 9 Units,
7 Tens and 0 Units,
and so on.

Each time they make a new number, ask them:
'What number have you made?'

Ask questions, eg:
'What is the 7 worth in 73?'
'What is the 3 worth in 73?'

Making a large Hundred square

Stick 10 empty, dry, water bags together in a row to make 10 rows.

Place number cards inside each bag to make a Hundred square, as shown below.

Store the cards in a box below the square and ask the pupils to put them in the correct place each morning.

Hundred square

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

Display it somewhere in the classroom so that the pupils can see it.

A Hundred square can be used to:

Find number patterns.

Identify odd and even numbers.

Help with counting.

Help with addition.

Making clocks

Cut large circles out of cardboard and write the numbers 1—12 on them to make clock faces.

Punch a hole in the middle. Cut out two strips of cardboard – one long enough to reach the numbers, and one shorter.

Use the hole in the middle to attach the hands to the clock so that they can be moved around.

Numeracy lesson plans
Primary 1

Term 3
Asking questions

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21—25

Introduction

Songs and rhymes for the term

5 long yams

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 /

4 long yams…
3 long yams…
2 long yams…
1 long yams…

(Repeat until no more yams are left)

10 little fingers

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

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…

10 green bottles

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)...

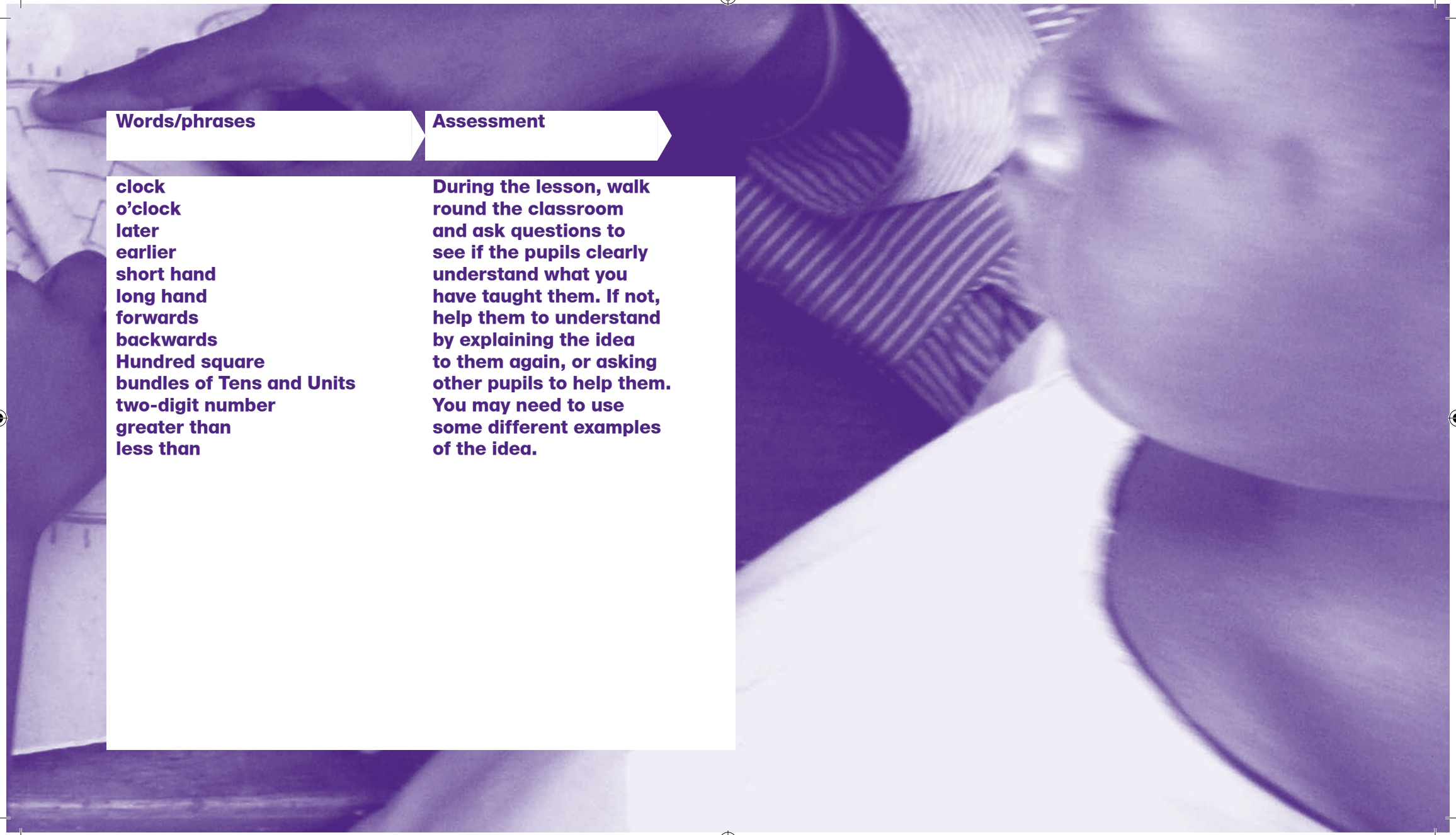
(Repeat until no more bottles are left standing.)

10 chunky chickens

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.)

Week 21 Numbers



Words/phrases	Assessment
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.

Lesson title

15 minutes

Numeracy lesson plans
Primary 1

Term 3
Asking questions

Week 21
Numbers
Day 1

Counting 0—99

Learning outcomes

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

Give reasons why we need to tell the time.

Count numbers from 0—99.

Teaching aids

Before the lesson:

Display a calendar on the wall.

Have ready a large clock with moveable hands.

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

Prepare bundles of 9 Tens and 10 Units, using straws or sticks, for each pair.

Daily practice

Whole class teaching

Ask the pupils to say what day it is.

Ask them how many days there are in a week. Ask if anyone can say the months of the year.

Show them the big clock and ask them to tell you what we use a clock for.

Tell the pupils that there are 24 hours in a day.

Using the hands of the clock, show them that the short hand goes twice around the clock in a day.

Explain that this is 12 hours of daytime and 12 hours of night-time.

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.

10 minutes	25 minutes	10 minutes
Introduction	**Main activity**	**Plenary**

Whole class teaching

Ask pupils to count between 0 and 100 forwards and then backwards.

Call out numbers and choose pupils to tell you the next three numbers, eg: 17 (18, 19, 20).

Write random two-digit numbers on the chalkboard and choose some pupils to read them to the class.

Choose some other pupils to tell you the number that comes before and after each number you point to.

Pair task

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

Ask them to pick two cards and make a two-digit number using those two cards.

Ask them to write that number in their exercise books and say it to their partner.

Ask them to use the same two cards to make a different number and write it in their exercise books.

Ask the pairs to repeat until they have 10 numbers written in their exercise books.

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

Whole class teaching

Ask different pairs to read out a number from their list.

Ask them to show the class their bundles of Tens and Units for the number.

Lesson
title

Counting 0—99

15
minutes

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

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 minutes	Macmillan New Primary Mathematics 1	10 minutes

Introduction

Whole class teaching

Draw a Hundred square on the chalkboard.

Ask the pupils to count to 100 as you write the numbers in the square.

Ask pairs of pupils to count from different starting points.

Point to random numbers on the Hundred square and ask individual pupils to say them.

Ask some pupils to say random numbers and the rest to point to them on the Hundred square.

Main activity

Pair task

Ask the pupils to open Macmillan New Primary Mathematics 1, page 46 and find the Hundred square.

Ask them to count forwards and backwards using the Hundred square.

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

Ask each pair to turn over two cards at a time and put them next to each other.

Ask the pairs to find that number on the Hundred square, put a stone on it and say the number.

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

Ask them to turn over another two number cards and repeat the process several times.

Plenary

Whole class teaching

Rub out some of the numbers on the Hundred square.

Tell the pupils to count the numbers with you, saying the missing numbers as you come to them.

Lesson
title

Making numbers 0—99

15
minutes

Learning outcomes

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

Tell the time using o'clock and say the time one hour later.

Make two-digit numbers.

Teaching aids

Before the lesson:

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

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

Read Macmillan New Primary Mathematics 1, page 45, Exercise 1, questions a—g.

Daily practice

Whole class teaching

Set the large clock to different o'clock times and choose pupils to tell you the time.

Set the clock to 10 o'clock and ask what the time is one hour later.

Move the minute hand slowly round the clock and move the hour hand to the next hour. Ask what time it shows now.

Repeat with different o'clock times.

Give each group a clock, say an o'clock time and ask them to make it.

Tell them to move it on one hour and say the new time.

Repeat with different times.

10 minutes

Introduction

Whole class teaching

Draw a blank Hundred square on the chalkboard and choose some pupils to help you write in the numbers.

Ask the class to count forwards and backwards using the Hundred square.

Say a number from 0—99 and ask the pupils to point to it.

Write three consecutive numbers on the chalkboard, eg: 45, 46, 47.

Ask pupils to tell you the next two numbers.

Repeat with different numbers.

25 minutes

Macmillan New Primary Mathematics 1

Main activity

Pair task

Give each pair bundles of Tens and Units and a set of 0—9 number cards.

Call out a two-digit number and ask pupils to use their bundles of Tens and Units to make the number.

Ask the pairs to use the number cards to show the number.

Repeat for five different numbers.

Ask the pairs to open Macmillan New Primary Mathematics 1, page 45, Exercise 1.

Explain how to write Tens and Units as T and U and then write the numbers.

Ask them to complete questions a—g in their exercise books.

10 minutes

Plenary

Whole class teaching

Choose some pairs to say the answers they have written and ask the class if they are correct.

Lesson title

15 minutes

Numeracy lesson plans
Primary 1

Term 3
Asking questions

Week 21
Numbers
Day 4

Reading and matching the numerals 0—99

Learning outcomes

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

Tell the time using o'clock and say the time one hour earlier.

Order numbers from 0—100.

Teaching aids

Before the lesson:

Have ready the big clock and the card clocks for each group.

Have ready a set of 0—100 number cards, 10 bundles of Ten and 10 sticks.

Read Macmillan New Primary Mathematics 1, page 38, Exercise 2, questions d, g, i and j.

Practise singing '10 little fingers'.

Daily practice

Group task

Set the large clock to any o'clock time and ask the pupils to say the time.

Ask what the time is one hour later.

Give each group a clock and ask them to make that time by moving the minute hand round the clock and the hour hand on one hour.

Tell them to set their clocks to 3 o'clock and ask what the time is one hour earlier.

Show them how to move the minute hand round backwards and the hour hand back one hour.

Repeat with different times, making one hour earlier each time.

10 minutes	Song	25 minutes	Macmillan New Primary Mathematics 1	10 minutes

Introduction

Whole class teaching

Arrange the pupils in a circle and sing '10 little fingers'.

Ask each pupil to say a number, counting in order from 1.

Continue until they have all had a turn and repeat starting with different numbers.

Main activity

Group task

Divide the number cards into Tens, shuffle them and give each group a set of Ten, eg: 0—9 or 30—39.

Ask the groups to put their cards in the correct order.

Ask each group to read out their numbers in order, starting with the group that has 0—9 and continuing until you reach 100.

Ask each group to come out and arrange themselves with their number cards in order, from 0—100.

Ask them to read their numbers in order until they reach 100.

Ask each group to make 36 with their bundles and sticks.

Individual task

Ask the pupils to look in Macmillan New Primary Mathematics 1, page 38, Exercise 2, questions d, g, i and j.

Ask them to say the number for each set of bundles and sticks.

Plenary

Whole class teaching

Count backwards from 100.

Ask individual pupils to say a number between 0 and 100, then everyone count forwards to 100 from that number.

Repeat three times, starting from different numbers.

Lesson title

15 minutes

Numeracy lesson plans
Primary 1

Term 3
Asking questions

Week 21
Numbers
Day 5

Less than and greater than

Learning outcomes

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’.

Teaching aids

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.

Write ‘less than’ and ‘greater than’ on large flash cards.

Have ready the 0—100 number cards.

Daily practice

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.

Say that the minute hand has moved half way so the time is now half past 9.

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.

10 minutes

Introduction

Whole class teaching

Show the ‘less than’ and ‘greater than’ flash cards.

Ask two pupils to come out, choose a number card each and hold them up.

Ask another pupil to stand between the pupils 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.

If it is wrong, ask the pupils to move so that it reads correctly, eg: 84 is ‘greater than’ 73.

Write the results on the chalkboard and repeat with different numbers.

Repeat this activity using the ‘less than’ card.

25 minutes

Main activity

Group task

Ask each group to choose 6 number cards and put them on the floor in front of them.

Give out the bottle tops and ask the pupils to place each bottle top on one of the number cards.

Ask the group members to say whether the number written on the bottle top is ‘less than’ or ‘greater than’ the number underneath it.

They can use the Hundred square and bundles of Tens and Units to help them.

Tell the pupils to write the results in their exercise books, eg: ‘12 is less than 65’.

Ask each group to say a ‘greater than’ and a ‘less than’ answer they have made.

10 minutes

Plenary

Group task

Make o’clock and half past times on the big clock and choose different groups to say the times.

Week 22
Addition 0—20

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.

Numeracy lesson plans
Primary 1

Term 3
Asking questions

Week 22
Addition 0—20
Day 1

Lesson title

Number lines

15 minutes

Learning outcomes

By the end of the lesson, most 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.

Daily practice

Group task

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

Pair task

Give each pair a bag of counters.

Ask them to count the counters in the bag and write the number in their exercise books.

Ask them to swap bags with another pair and repeat.

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.

Main activity

Whole class teaching

Show the pupils the number line on the chalkboard.

Write '10 + 2 =' and demonstrate how to use the number line to work it out.

Start with the biggest number and make the same number of jumps (2) as the smallest number: + 1 + 1

The number you land on gives the answer, ie: 10 + 2 = 12

Repeat with 5 + 2, 13 + 4 and 9 + 5. Remember to start with the biggest number each time.

Write the following sums on the chalkboard:
11 + 3 =
15 + 3 =
18 + 1 =
9 + 6 =

Individual task

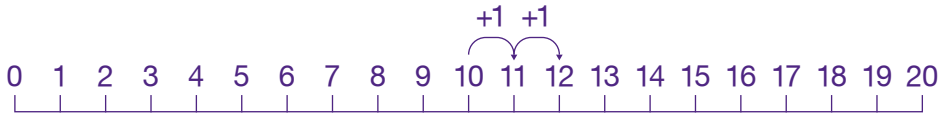
Tell the pupils to draw number lines in their exercise books to help them work out the answers.

Plenary

Whole class teaching

Say a number between 0 and 100 and ask the pupils to say numbers that are greater than and less than that number.

Number line



Lesson title

Addition of numbers 0—20

15 minutes

Numeracy lesson plans
Primary 1

Term 3
Asking questions

Week 22
Addition 0—20
Day 2

Learning outcomes

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.

Teaching aids

Before the lesson:

Have ready a number card for each pupil, with a different number between 0 and 100.

Have ready 10 counters for each pair.

Read Macmillan New Primary Mathematics 1, page 123, activity A.

Daily practice

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.

Ask the class to check if they are correct.

Ask the pupils to write their group's numbers in the correct order in their exercise books.

10 minutes

Introduction

Whole class teaching

Remind the pupils they are using a number line to add numbers.

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.

Write the following sums on the chalkboard:
5 + 8 =
7 + 4 =
3 + 9 =

Ask the pupils to do the sums in their exercise books using number lines.

Choose some pupils to come and draw their number lines on the chalkboard.

25 minutes

Macmillan New Primary Mathematics 1

Main activity

Pair task

Ask the pupils to open Macmillan New Primary Mathematics 1, page 123, activity A.

Show them how to use the addition table, going down the columns and across the rows to find the answers.

Tell them to use the addition table to solve:
0 + 1 =
0 + 2 =
1 + 1 =
2 + 2 =

Give out the counters and ask the pairs to make 10 using 2 groups (the groups do not have to be the same size).

Write their groupings on the chalkboard, eg:
1 + 9
2 + 8
3 + 7

10 minutes

Plenary

Whole class teaching

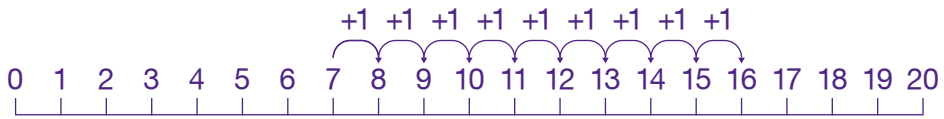
Stand the class in a circle.

Ask two pupils to call out two numbers between 1 and 10.

Ask the class to add those numbers together in their heads and put their hand up if they know the answer.

Repeat with five different pairs of numbers.

Number line



Lesson title

Number bonds to 20

15 minutes

Numeracy lesson plans
Primary 1

Term 3
Asking questions

Week 22
Addition 0—20
Day 3

Learning outcomes

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

Use a Hundred square to count from 0—99.

Use a number line to make sums that add up to 20.

Teaching aids

Before the lesson:

Draw a large Hundred square on the chalkboard.

Daily practice

Whole class teaching

Show the class the Hundred square and ask them to count together from any given number. Repeat from different starting points.

Say various numbers between 0—100 and ask pupils to come and touch them on the Hundred square.

Rub out some numbers from the Hundred square.

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.

10 minutes	25 minutes	10 minutes

Introduction

Whole class teaching

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

Write: '14 + 5 =' and '18 + 2 ='

Select some pupils to come and explain how to find the answers using a number line.

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

Main activity

Pair task

Ask the pupils: 'If I start at number 10, how many jumps do I need to make to reach 20?'

Explain that they need 10 jumps to make 20, which can be written as the sum 10 + 10 = 20.

Repeat, starting with different numbers.

Ask the pupils to draw a number line to 20 in their exercise books.

Tell them to use it to find as many different ways to make 20 as they can.

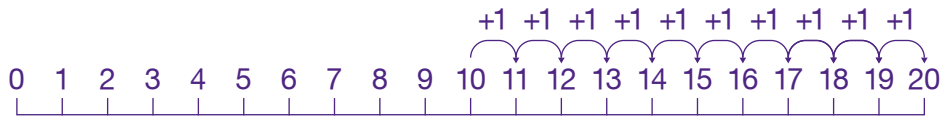
Tell them to write their answers as sums, eg: 16 + 4 = 20.

Plenary

Whole class teaching

Ask pairs to read out their sums and ask the rest of the class to say if they are correct.

Number line



Lesson title

Addition on the number line

15 minutes

Numeracy lesson plans
Primary 1

Term 3
Asking questions

Week 22
Addition 0—20
Day 4

Learning outcomes

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

Group objects from 0—99 into sets of Tens and Units.

Use a number line to add two numbers together.

Teaching aids

Before the lesson:

Have ready a bundle of Ten, 9 Unit sticks and 20 counters for each pair.

Have ready a large piece of paper and pencils or crayons for each group.

Daily practice

Whole class teaching

Stand the pupils in a circle and ask them to count around the circle to 100.

Pupils who say a Ten, eg: 10, 20, should take a step back.

Repeat several times, starting with different pupils.

Give each pair a bundle of Ten and nine Units.

Remind the pupils that 1 bundle of sticks is one Ten and each single stick is one Unit.

Ask them to show you 11 by holding up 1 bundle of Ten and 1 Unit.

Ask them to show you other numbers less than 20.

10 minutes	25 minutes	10 minutes

Introduction

Pair task

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 make 20 and write the sums in their exercise books.

Choose some pairs to write their sums on the chalkboard.

Main activity

Group task

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 the pupils to use their snake number line to answer the sums.

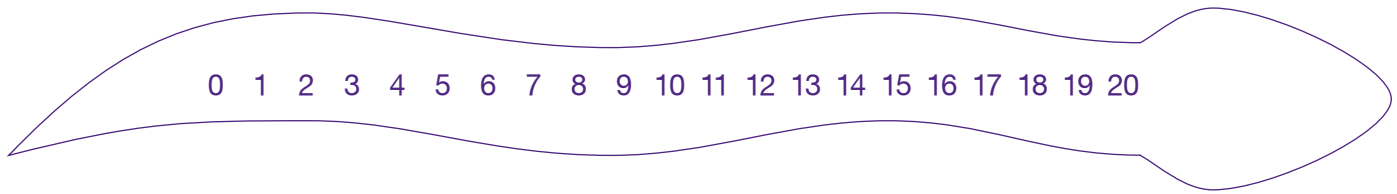
Plenary

Whole class teaching

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.

Snake



Lesson title

15 minutes | Macmillan New Primary Mathematics 1

Numeracy lesson plans
Primary 1

Term 3
Asking questions

Week 22
Addition 0—20
Day 5

Addition table 0—20

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

Group task

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 minutes	Macmillan New Primary Mathematics 1	10 minutes

Introduction

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.

Main activity

Group task

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.

Continue until the table is complete.

Plenary

Whole class teaching

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.

Week 23 Subtraction 0—20

Words/phrases

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?

Assessment

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

Numeracy lesson plans
Primary 1

Term 3
Asking questions

Week 23
Subtraction 0—20
Day 1

Lesson title

Subtraction 0—20

15 minutes

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

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.

10 minutes	25 minutes	10 minutes

Introduction

Whole class teaching

Ask 15 pupils to come and stand at the front.

Ask one pupil to take away 8 pupils from the 15 pupils. Ask, 'How many pupils are left?'

Write '15 – 8 = 7' on the chalkboard.

Repeat with different numbers of pupils.

Main activity

Whole class teaching

Read and explain the subtraction words to the class.

Write the following problems on the chalkboard:

'10 take away 6'

'12 minus 8'

'14 subtract 10'

'What is the difference between 14 and 18?'

Read and explain them to the class.

Tell the pupils to use counters to solve the problems in their exercise books.

Tell the pupils to write each problem as a sum, eg: '10 – 6 = 4'.

Plenary

Group task

Lay a set of 0—9 number cards face down in front of each group and give them a 'less than' card.

Ask four pupils in every group to choose one card each and make two, two-digit numbers between 0—99 with their cards.

Tell them to read out the numbers and ask the group which number is 'less than' the other.

Tell them to place the 'less than' flash card in the middle of the numbers.

Choose some groups to say their answers, eg: 50 is 'less than' 69.

Repeat several times.

Lesson title

15 minutes

Numeracy lesson plans
Primary 1

Term 3
Asking questions

Week 23
Subtraction 0—20
Day 2

Subtraction using a number line

Learning outcomes

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

Count the hours forwards and backwards on a clock.

Use a number line to subtract.

Teaching aids

Before the lesson:

Have ready the big clock.

Have ready the ‘less than’ and ‘greater than’ flash cards.

Have ready the snake number lines from last week.

Daily practice

Whole class teaching

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

Choose a pupil to come and make 9 o’ clock.

Ask them to say what time it will be one hour later and two hours later.

Move the big hand forwards as they count.

Ask them to say the time one hour earlier and two hours earlier.

Emphasise that they are counting backwards.

10 minutes	Macmillan New Primary Mathematics 1	25 minutes	10 minutes

Introduction

Whole class teaching

Show the pupils the 'less than' and 'greater than' flash cards.

Ask them to look in Macmillan New Primary Mathematics 1, page 46.

Tell them to choose two numbers from the Hundred square.

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

Main activity

Group task

Draw a number line to 20 on the chalkboard

Ask the pupils if anyone can think how to use the number line to subtract two numbers.

Show them how to use the number line to work out 19 – 5 as shown below.

Tell the pupils that to take away we count backwards or from right to left.

Start at 19 and count back 5 jumps. Ask them what number we land on (14).

Tell them this is the answer to the sum, 19 – 5 = 14.

Repeat with 15 – 6.

Number line

Plenary

Group task

Tell the groups to look at their snake number lines and use their fingers to jump backwards to solve
12 – 8 =
17 – 4 =
19 – 6 =

Remind them to start with the bigger number and count backwards with the smaller number.

Lesson title

15 minutes | Macmillan New Primary Mathematics 1

Numeracy lesson plans
Primary 1

Term 3
Asking questions

Week 23
Subtraction 0—20
Day 3

Subtraction using a number line

Learning outcomes

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

Count to 100.

Subtract numbers using a number line.

Teaching aids

Before the lesson:

Find a counter for each pupil and a dice for each group.

Have ready the snake number lines.

Daily practice

Group task

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

Give each group the counters and a dice.

Tell them to put their counters at the bottom of the Hundred square.

Tell each pupil to roll the dice and use one counter to count to the number rolled on the Hundred square.

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.

10 minutes	25 minutes	10 minutes

Introduction

Group task

Ask the pupils to tell you some of the words that mean subtraction.

Ask each group to use each one in a question that the rest of the class has to answer.

Tell them to use their snake number lines to help them answer.

Main activity

Whole class teaching

Draw a number line to 20 on the chalkboard, as shown below.

Show the pupils how to use it to work out 16 – 7.

Remind them to count backwards from the bigger number and make 7 jumps.

Ask them to say the answer and write it next to the sum.

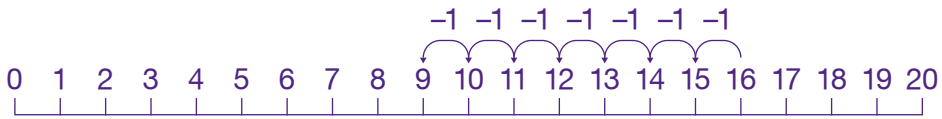
Write the following sums on the chalkboard:

14 – 3 =
12 – 5 =
17 – 16 =
20 – 10 =
19 – 16 =
14 – 12 =
17 – 1 =

Ask the pupils to do the sums in their exercise books.

Tell the pupils to draw a number line for each one.

Number line



Plenary

Pair task

Ask the pupils to share their work with a partner.

Ask them to compare their answers and see if they are correct.

Lesson title

15 minutes | Macmillan New Primary Mathematics 1

Numeracy lesson plans
Primary 1

Term 3
Asking questions

Week 23
Subtraction 0—20
Day 4

Missing numbers

Learning outcomes

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

Say how many Tens and Units there are in two-digit numbers.

Use a number line to find missing numbers in subtraction sums.

Teaching aids

Before the lesson:

Have ready counters and bundles of Tens and Units for each pair.

Practise singing '10 fat fish'.

Daily practice

Whole class teaching

Ask the pupils to look in Macmillan New Primary Mathematics 1, page 46.

Count in Tens with the pupils using the Hundred square, pointing to the numbers as they say them.

Give each pair bundles of Tens and Units.

Write: '54, 72, 23, 45, 68, 99, 33' on the chalkboard.

Ask the pairs to make the numbers with their bundles 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.

10 minutes	25 minutes	10 minutes	Song

Introduction

Whole class teaching

Ask the pupils if they can tell you how to find the missing number in the sum

18 – ☐ = 15

Show them that they start at 18 and jump backwards along the number line until they come to 15 and then they count the number of jumps they have taken, as shown below.

Explain that we can now complete the sum,

18 – 3 = 15

Main activity

Pair task

Write the following sums on the chalkboard:

20 – ☐ = 19
20 – ☐ = 18
20 – ☐ = 17
20 – ☐ = 16
20 – ☐ = 15
20 – ☐ = 14
20 – ☐ = 13
20 – ☐ = 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.

Number line

Plenary

Whole class teaching

Ask the pupils to sing and role play '10 fat fish'.

Ask them to say what they are doing, ie: taking away fish.

Lesson
title

Making subtraction sums

15
minutes

Learning outcomes

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.

Teaching aids

Before the lesson:

Have ready a days and months chart, the big clock and the card clocks with moveable hands.

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'.

Daily practice

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 to say the times.

Give each group a card clock.

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.

10 minutes	25 minutes	Macmillan New Primary Mathematics 1	10 minutes	Song

Introduction

Pair task

Arrange the 10—99 number cards face down on the table.

Ask a pupil to pick up a card and say the number.

Choose a pupil to say how many Tens and Units are in that number.

Tell the pairs to make the number with their Tens and Units and check if they are correct.

Repeat five times with different numbers.

Main activity

Whole class teaching

Write '15 – 6 =' on the chalkboard.

Ask the pupils to help you work it out using a number line, as shown below, 15 – 6 = 9.

Tell them to look at Macmillan New Primary Mathematics 1, page 76, Exercise B, questions a—f.

Tell them to complete the sums, drawing number lines in their exercise books.

Plenary

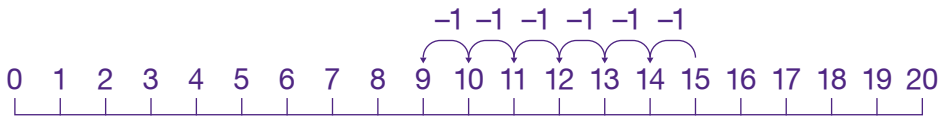
Whole class teaching

Sing '10 green bottles' with the class.

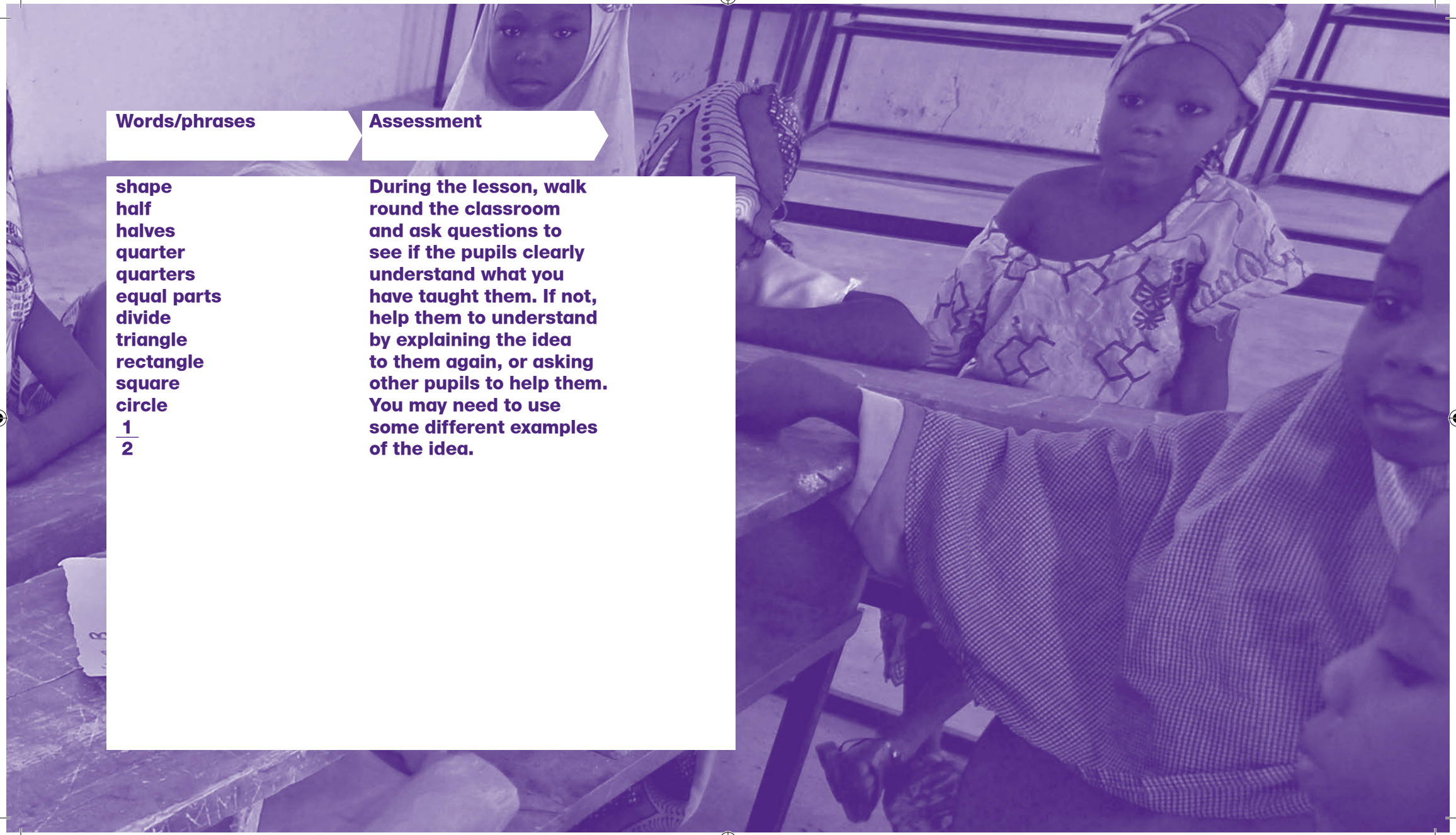
Ask if they can say some of the sums mentioned in the song, eg:
10 – 1 = 9
9 – 1 = 8.

Choose some pupils to represent the bottles as the class sings the song again.

Number line



Week 24
Halves and quarters



Words/phrases	Assessment
shape half halves quarter quarters equal parts divide triangle rectangle square circle $\frac{1}{2}$	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

Halves

15 minutes

Numeracy lesson plans
Primary 1

Term 3
Asking questions

Week 24
Halves and quarters
Day 1

Learning outcomes

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

Identify circles, squares, rectangles and triangles.

Divide a shape into two equal parts and describe each part as a half.

Teaching aids

Before the lesson:

Have ready a two-dimensional 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.

Daily practice

Individual task

Give each pupil a two-dimensional shape.

Ask them to go and stand by the matching shape in the classroom.

Tell them to compare the shapes they have and check they are standing in the correct place.

Ask them to say the name of their shape.

Ask them to swap shapes and repeat the activity.

10 minutes	25 minutes	Game	10 minutes

Introduction

Whole class teaching

Cut the large circle into two equal pieces and show the two halves to the class.

Place one on top of the other and show the pupils that they are exactly the same size.

Ask the pupils if they remember what we call each part, ie: a half.

Say that when we divide something into two equal parts each part is called a half.

Main activity

Group task

Give each pupil a circle.

Ask them to draw a picture on their circle and then fold it exactly in half.

Tell them to unfold the circle and draw along the dividing line.

Ask the pupils to cut or tear their shape down the dividing line and put them face down on the desk.

Ask the groups to mix their shapes up and spread them out.

In turn, tell the pupils to turn over two halves and see if they match.

If the halves match, the pupil keeps the picture. If they don't match, return them face down and the next pupil takes a turn.

The pupil to collect the most whole shapes is the winner.

Plenary

Whole class teaching

Ask each group to explain what they get when they separate the two pieces (two halves).

Write '$\frac{1}{2}$' on the chalkboard.

Explain that this is how we write a half because it is one divided into two equal parts.

Lesson title

Halves

15 minutes

Numeracy lesson plans
Primary 1

Term 3
Asking questions

Week 24
Halves and quarters
Day 2

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

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 something in half, eg: a piece of fruit or vegetable.	Give the pairs some of the shapes.	Draw some shapes on the chalkboard and draw a line to divide them into two parts. Make some equal and some not equal.
Ask the pupils to say why they divided something in half, ie: to share it between two people.	Ask them to fold each shape in half and colour in one half.	Choose some pupils to identify the shapes that are divided in half and those that are not.
Ask if anyone can come and write the sign for a half on the chalkboard.	Tell them to write '$\frac{1}{2}$' in each part.	Ask the pupils to explain how they know a shape is divided in half.
	Ask them to tear the shape in half, keep one half and give the other to their partner.	Remind them that to be a half, both parts must be the exactly the same size.
	Ask them to tell each other things that they like to share in half with their friend.	

Lesson title

Dividing numbers in half

15 minutes

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

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

Ask two pupils to stand facing the class, shoulder to shoulder.

Stand in between them, dividing them in half. You now have one pupil on each side of you.

Explain that 'divide' means to put into groups.

Tell the pupils that you have divided the number two in half. Say, 'Half of 2 is 1.'

Repeat with four pupils.

Group task

Give each group a bag of stones.

Ask them to divide the stones in half.

Ask them to say their answers:

'Half of ☐ (number of stones) is ☐.'

Ask them to draw a row of four circles in their exercise books:

Ask the pupils to draw a line down the middle so that there are two circles on either side of the line:

Ask the pupils to write how many circles they have in each half:

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

Ask them to draw circles to work out half of the following numbers: 6, 8, 10.

Whole class teaching

Choose some pupils to draw circles on the chalkboard to explain their answers.

Lesson title

15 minutes | Game

Numeracy lesson plans
Primary 1

Term 3
Asking questions

Week 24
Halves and quarters
Day 4

Quarters

Learning outcomes

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

Identify and name 2D shapes.

Divide shapes into quarters.

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

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

Ask the class, 'How many parts are there when you divide something in half?'

Ask, 'What can you tell me about each part?' (They are the same size.)

Show the pupils the apple and say it is a whole apple. Write '1 apple' on the chalkboard.

Cut it in half and ask them what you have done.

Choose a pupil to write '$\frac{1}{2}$' on the chalkboard

Tell the pupils you are going to cut each piece in half again.

Show them the four equal parts and tell them that four equal parts are called quarters.

Write '$\frac{1}{4}$' on the chalkboard.

Take a paper circle and remind the pupils how to fold it in half. Show them how to fold it in half again.

Open up the circle and show them the lines dividing it into quarters.

Individual task

Give each pupil a square.

Tell them to fold it into quarters.

Ask them to draw lines to show the quarters and ask them to write '$\frac{1}{4}$' in each part

Ask the pupils to colour in one quarter.

Whole class teaching

Ask, 'How many people can have an equal share of an apple divided in half?'

Ask, 'How many people can have an equal share of an apple divided into quarters?'

Lesson title

Halves and quarters

15 minutes

Numeracy lesson plans
Primary 1

Term 3
Asking questions

Week 24
Halves and quarters
Day 5

Learning outcomes

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

Identify and write the names of shapes.

Identify halves and quarters in 2D shapes.

Teaching aids

Before the lesson:

Have ready lots of rectangles, squares, circles and triangles cut out of paper for each group.

Have ready several pairs of scissors, lots of coloured pencils and lots of newspaper.

Read Macmillan New Primary Mathematics 1, page 53.

Daily practice

Group task

Write the names of the shapes on the chalkboard.

Ask the pupils to read them with you.

Give out the paper shapes and ask the pupils to sort out the shapes that are the same.

Ask them to identify the same shapes with same colour or mark.

Ask the pupils to write the name of the shape on the back.

Help them to group their colourful shapes on a line in the classroom.

10 minutes	25 minutes	10 minutes	Macmillan New Primary Mathematics 1

Introduction

Whole class teaching

Give each pupil a sheet of newspaper and ask them to fold it in half and then into quarters.

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 equal sizes).

Main activity

Group task

Give each group a set of shapes.

Tell them to divide each shape into halves and quarters by folding.

On each shape ask them to label one half '$\frac{1}{2}$' and one quarter '$\frac{1}{4}$'.

Ask the pupils to look carefully at their shapes and say what they notice about halves and quarters.

Show them that two quarters are the same as a half.

Show them how to write '$\frac{2}{4}$'

Tell them to shade in three quarters on one of their shapes.

Show them how to write '$\frac{3}{4}$'

Plenary

Whole class teaching

Ask the pupils to open Macmillan New Primary Mathematics 1, page 53 and look at the exercise.

Ask them to copy each full shape in their exercise books then colour in the fractions listed in the textbook.

Week 25 Comparing length

Words/phrases	Assessment
length height order long longer longest short shorter shortest tall taller tallest small smaller smallest estimate	During the lesson, walk round the classroom and ask questions to see if the pupils clearly understand what you have taught them. If not, help them to understand by explaining the idea to them again, or asking other pupils to help them. You may need to use some different examples of the idea.

Numeracy lesson plans
Primary 1

Term 3
Asking questions

Week 25
Comparing length
Day 1

Lesson title

Taller and smaller

15 minutes | Song

Learning outcomes

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

Use a number square to identify missing numbers.

Use the terms ‘taller’ and ‘smaller’.

Teaching aids

Before the lesson:

Draw a Hundred square on the chalkboard. Rub out the numbers: 2, 7, 12, 15, 18, 21, 23 and 27.

Practise singing ‘10 chunky chickens’.

Daily practice

Whole class teaching

Sing ‘10 chunky chickens’ with the class.

Ask the pupils to look at the Hundred square on the chalkboard.

Choose some pupils to say the missing numbers.

Rub off 6 different numbers and ask the class to write the missing numbers in their exercise books.

Call out the numbers 75, 40, 33, 88, 29 and choose pupils to point to them on the Hundred square.

10 minutes

Introduction

Whole class teaching

Briefly explain what 'height' means in the pupils' local language.

Ask all the pupils to stand up and make a line around the classroom in order of their height.

Explain to them that we use the words 'tall' and 'short' when we are estimating height.

Ask them which words they use in their language.

The tallest person should be at one end and the shortest at the other.

Write the words 'taller', 'shorter', 'tallest' and 'shortest' on the chalkboard.

Ask the pupils the following questions:

'Who is the tallest in the class?'

'Who is the shortest in the class?'

'Is (pupil's name) shorter than (another pupil's name)?'

'Is (pupil's name) taller than (another pupil's name)?'

25 minutes

Main activity

Pair task

Tell the pupils to find a partner.

Ask them to decide which one of them is the tallest and which is the shortest.

Ask them how they found out.

Ask the pupils to draw a line to divide a page of their exercise books in half.

Tell them to draw themselves on one half and their partner on the other half.

Tell the pairs to write their names and the words 'taller' and 'shorter' underneath the correct drawing.

Explain that 'estimating' is making a guess about something.

Ask them to estimate if they are taller or shorter than the door, the chalkboard and you.

Choose some pupils to come and check their estimates.

10 minutes

Plenary

Group task

Take the pupils outside and ask them to find objects that are taller and shorter than themselves, eg: trees.

Tell the pupils to say what they have found.

Tell them to say,
'The ___ is taller than me.
The ___ is shorter than me.'

Lesson title

15 minutes | Macmillan New Primary Mathematics 1

Numeracy lesson plans
Primary 1

Term 3
Asking questions

Week 25
Comparing length
Day 2

Longer and shorter

Learning outcomes

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

Group numbers from 10—99 into Tens and Units.

Use the terms ‘longer’ and ‘shorter’.

Teaching aids

Before the lesson:

Have ready bundles of Tens and Units for each group.

Have ready two sticks of different sizes for each pair.

Look at Macmillan New Primary Mathematics 1, page 98.

Daily practice

Group task

Give the bundles of Tens and Units 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.

Ask the pupils to look in Macmillan New Primary Mathematics 1, page 46 and point to each number on the Hundred square as they make it.

10 minutes	Macmillan New Primary Mathematics 1	25 minutes		10 minutes	Game

Introduction

Whole class teaching

Show the class two sticks and ask them which is longer and which is shorter in their local language.

Tell them we can use the words 'long' and 'short' when we are estimating length.

Ask them to look in Macmillan New Primary Mathematics 1, page 98.

Explain that 'longer' and 'shorter' are used to compare two objects.

Ask the pupils questions to help them understand the meaning of longer and shorter, eg:

'Is this pencil longer or shorter than this pencil?'

'Is this finger longer or shorter than (name an object)?'

Main activity

Pair task

Give out the sticks and ask each pair to hold up the shorter stick.

Tell the pupils to say 'This stick is shorter'.

Repeat with the longer stick.

Ask them to draw a long stick and a short stick in their exercise books.

Tell them to write 'longer' and 'shorter' under the correct drawings.

Ask them to draw other longer and shorter objects, eg: pencils, rivers.

Ask them to write 'longer' and 'shorter' under the correct drawings.

Choose some pairs to talk about the objects they have drawn using the words 'longer' and 'shorter'.

Plenary

Whole class teaching

Play the 'Lotto' game. Ask the pupils to write down 6 numbers from 40—90 in their exercise books.

Call out random numbers between 40 and 90, making sure you keep note of the numbers you have called.

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

15 minutes | Song

Numeracy lesson plans
Primary 1

Term 3
Asking questions

Week 25
Comparing length
Day 3

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

Pair task

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**		**Individual task**
Explain to the class that we use ‘is taller than’ when we are estimating height.	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 draw two objects in their exercise books and write ‘shorter’ under one.
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 the class if they agree.	Ask them to draw two trees in their exercise books and write ‘taller’ under one.
Explain that we use the words ‘is longer than’ whenever we are estimating length or distance.	Write the following questions on the chalkboard: ‘Which snake is the longest?’ ‘Which snake is the shortest?’ ‘Which snake is shorter than (the name of one of the snakes)?’ ‘Which snake is longer than (the name of one of the snakes)?’	**Whole class teaching**	
Ask the pupils to say which tree is taller, ie: ‘this tree is taller than that tree’.		Ask the pupils to show their pictures of snakes to the class and say ‘this snake is shorter than this snake’ or ‘this snake is longer than this snake’.	
Ask the pupils to compare the length of two sticks and say ‘this stick is longer than that stick’.			

Lesson title

15 minutes

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.

10 minutes	25 minutes	Macmillan New Primary Mathematics 1	10 minutes	Song

Introduction

Whole class teaching

Write 'longer than' and 'shorter than' on the chalkboard.

Show the pupils pairs of objects and ask them 'Which is shorter?' and 'Which is 'longer?'

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'.

Main activity

Pair task

Tell the pupils to look at Macmillan New Primary Mathematics 1, page 99.

Write 'longer' and 'shorter' on the chalkboard and tell the pairs to use these words to describe each picture in the textbook, eg: the top comb is shorter than the other comb, the pencils 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'.

Plenary

Whole class teaching

Sing any local song to demonstrate the concepts long and short.

Lesson title

15 minutes | Macmillan New Primary Mathematics 1

Numeracy lesson plans
Primary 1

Term 3
Asking questions

Week 25
Comparing length
Day 5

Comparing length

Learning outcomes

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

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

Pair task

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.

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 things are) and height (how tall things are).	Write ‘longer’ and ‘shorter’, and ‘taller’ and ‘shorter’ on the chalkboard.	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.
Give each pupil a stick.	Read the words to the class.	Tell them to copy the pictures into their exercise books and write the correct words underneath.	Ask them to name objects that are smaller than them.
Ask them to stand by someone with a stick that is longer or shorter than theirs.	Remind the pupils that ‘longer’ and ‘shorter’ describe length and ‘taller’ and ‘shorter’ describe height.		
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.			

Credits

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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