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Type of lesson plans/ Grade Term/
Learning theme

Numeracy lesson plans

**Primary 2** 

# Term 2

Creating opportunities for classroom talk

Weeks

16-20

Numeracy lesson plans
Primary 2 Term 2
Creating opportunities
for classroom talk

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





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 stepby-step guide for teachers, while ensuring children that become active learners. Alongside the plans, new structures and processes ensure that teachers are continuously supported by both the State School Improvement Team (SSIT) and the LGEA-based school support officers (SSOs).

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

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

**Professor Haruna Wakili** Honourable Commissioner. Ministry of Education,

Science and Technology, Jigawa State

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Numeracy lesson plans Primary 2

Term 2
Creating
opportunities for
classroom talk

# Introduction Creating opportunities for classroom talk

Weeks 16—20



### Classroom talk

In any classroom, the pupils should do most of the talking, not the teacher. If pupils have the chance to talk they will quickly improve their language skills.

They should experience lots of different types of talk, in pairs, small groups, and within the whole class, eg:

Having conversations between themselves and with adults in the school.

Asking questions of each other and of the adults in the school.

Answering questions.

Expressing opinions.

Explaining how to do something.

Giving instructions.

Solving problems.

Designing ways of recording findings.

Carrying out investigations into numbers.

Sharing ideas.

Singing songs.

Saying rhymes.

These are all included in the numeracy lesson plans.

Here are some ideas to help you encourage all pupils to join in classroom talk:

Ask questions which have lots of different answers and can be answered by individuals, not the whole class at the same time.

When you ask a question, 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 you ask a question, give the pupils 2 or 3 minutes to discuss the answer with a partner before putting their hands up.

When you ask a question, give the pupils 2 or 3 minutes to write the answer in their exercise books and then ask random pupils. This makes all pupils try to think of the answer.

Sit the pupils in a circle and ask them a question which has lots of different answers. Go around the circle and ask every pupil to answer.



# Numeracy lesson plans Primary 2

Term 2
Creating
opportunities for
classroom talk

Weeks 16—20

# Introduction Essential low-cost or free teaching aids

# Make a calendar

Prepare three sets of cards:

П

Numbers 1—31, ie: 1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th, 13th, 14th, 15th, 16th, 17th, 18th, 19th, 20th, 21st, 22nd, 23rd, 24th, 25th, 26th, 27th 28th, 29th 30th, 31st.

2

Days of the week, ie: Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday.

3

Months of the year, ie: January, February, March, April, May, June, July, August, September, October, November, December.

# •

# How to use the calendar

Stick three empty, dry, water bags together in a row and place the cards inside them to make each day's date.

Store the rest of the cards in a box below the calendar.

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

Ask the pupils to change the date every day as shown below.

# **Metre sticks**

Cut strips of card to the same size as a metre stick and carefully mark the centimetres (cms) on the card in the correct place. These can then be used for measuring.

Ask a local carpenter if they have any long ends of wood to turn into a metre stick.

Ask them to make marks for centimetres, with longer marks for 10, 20, 30, etc, then write the numbers next to them.

# 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.

# 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 this is 4 Tens and 5 Units making 45.

Repeat several times making new two-digit numbers.

Dictate a number to 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, etc.

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

# Ask:

'What is the 7 worth in 73?' 'What is the 3 worth in 73?', etc.

When they are confident with two-digit numbers, repeat the process for three-digit numbers.

Calendar cards

Monday

21st

February

1 set 100—900

1 set 10—90

1 set 0-9

3

0

0

4

0

5



Numeracy lesson plans Primary 2

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classroom talk

# Introduction Songs and rhymes for the term

Weeks 16—20

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# 1 little crocodile

# How many fingers can you count?

# Hickory, dickory dock

# 5 long yams 10 green bottles

1 little, 2 little
3 little crocodiles /
4 little, 5 little
6 little crocodiles /
7 little, 8 little,
9 little crocodiles /
10 little crocodiles.

How many fingers can you count, can you count / How many fingers can you count, count for me / How many fingers can you count, can you count, can you count, can you count / How many fingers can you count, count for me / 1, 2, 3, 4, 5, 6, 7, 8 and 9 and 10.

How many toes can you count, can you count, can you count / How many toes can you count, count for me / How many toes can you count, can you count, can you count / How many toes can you count, count for me / 1, 2, 3, 4, 5, 6, 7, 8 and 9 and 10.

Hickory dickory, dock /
The mouse ran up the clock /
The clock struck 1 /
The mouse ran down /
Hickory dickory, dock /
Tick tock.

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 yam... 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...

(Repeat until no more bottles are left standing.)







# **Words/phrases**

# **Assessment**

long
longer
longest
short
shorter
shortest
standard
non-standard units
metric stick
metres
centimetres
measure

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







# Numeracy lesson plans Primary 2

# Term 2

Creating opportunities for classroom talk

Week 16 Length Day 1

# **Estimating length**

and distances

# **Learning outcomes**

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

Recognise half of a shape.

Use non-standard measurements (natural units), eg: arm length, foot, hand span.

# **Teaching aids**

# **Before the lesson:**

Read Macmillan New Primary Mathematics 2, pages 28 and 82.

Prepare several shapes divided into half and coloured.

Prepare enough uncoloured shapes for each pupil to have one.

# Daily practice

minutes

# Whole class teaching

Show pupils the coloured shapes and ask them to identify the fraction that has been shaded.

Give each pupil a shape and ask them to shade half of the given shape.

Ask pupils to explain how they recognise a half.







10

minutes

Macmillan **New Primary** Mathematics 2

25 minutes

10 minutes

# Introduction

# **Main activity**

# Whole class teaching

Call out a body part and ask pupils to point to that part of their body.

Ask pupils to read Macmillan **New Primary Mathematics** 2, page 82, showing the different parts of the body that can be used to measure length.

# Whole class teaching

**Explain the meaning** of length.

Show and demonstrate how the parts of the body (natural units) can be used to measure length, ea: hand span.

Draw the table below on the chalkboard.

Explain how to use and complete the table.

# **Group task**

Tell the pupils you are going to use your hand span to measure the width of the window.

Before you do this, ask each group to write down their guess (estimate) of how many hand spans the window will measure.

Now measure the window using your hand span.

See which group had the closest guess.

Ask pupils to draw the table in their books.

Ask them to use their hand span to find the length of their table and chairs and record them in a table.

# **Plenary**

# Whole class teaching

Ask pupils why they have different answers (because their hands are different sizes).



	Umar	Fatima	Hussaina	Sanni
table	5	3	6	4
chair				





Numeracy lesson plans **Primary 2** 

Term 2 Creating opportunities for

classroom talk

Week 16 Length Day 2

# **Measuring with** non-standard units

# **Learning outcomes**

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

Identify and recognise a quarter of a shape.

Appreciate why there are differences when using non-standard items for measuring length.

Use non-standard units to measure length.

# **Teaching aids**

# **Before the lesson:**

**Read Macmillan New Primary** Mathematics 2, page 29 and pages 83-85.

Prepare several shapes divided and shaded in quarters.

Collect ropes, sticks of broom, pupils' sandals, straws, etc.

minutes

Macmillan **New Primary** Mathematics 2

# **Daily practice**

# Whole class teaching

Show pupils the prepared coloured shapes.

Ask pupils to identify the fraction of shapes that are shaded.

Ask pupils to explain how they recognise a quarter.

Ask pupils to colour a quarter of each shape in Macmillan New Primary Mathematics 2, page 29, numbers 6—10.







10 minutes 25 minutes

Macmillan
New Primary
Mathematics 2

10 minutes

# Introduction

# Pair task

Explain to the pupils the meaning of non-standard units, ie: units of measurement that are different sizes.

Ask pupils to compare the length of their arms, feet sizes and hand spans.

Ask them why they would get different answers if they measured the length of the chalkboard using hand spans. Ask pairs to list other items that could be used for measuring length, eg: sticks, ropes, etc.

Ask for their suggestions and praise them for their ideas.

# **Main activity**

# Whole class teaching

Take pupils outside, or do a demonstration at the front of the class.

Choose several children of different heights to be your demonstrators.

Ask each pupil, in turn, to walk the same distance and ask all the pupils to count the steps taken.

There should be a difference in the number of steps taken to cover the same distance. Can the pupils explain this (the length of pupils' legs are different, therefore the length of stride is likely to be different).

# Pair task

Discuss with the pupils what is happening in the pictures in Macmillan New Primary Mathematics 2, pages 83—85.

# **Group task**

Give each group one different non-standard item, eg: rope, stick, broomstick, straws, etc.

Ask the pupils to measure the length of the chalkboard using the non-standard unit materials.

Ask them to compare their result with other groups and comment on the different answers.

# Plenary

# Individual task

Ask pupils to give reasons for the differences in the measurement.





**Measuring in** 

metres

# Numeracy lesson plans

**Primary 2** 

## Term 2

Creating opportunities for classroom talk

Week 16 Length Day 3

# Learning outcomes

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

Recognise a half and a quarter of a shape.

Use a metre stick to measure the length, width and height of given objects in metres.

# **Teaching aids**

# **Before the lesson:**

Read Macmillan New Primary Mathematics 2, page 86.

Prepare carefully and accurately a number line 0—100cm.

Collect metre sticks or rulers and measuring tapes.

# **Daily practice**

minutes

# Whole class teaching

Draw several shapes on the chalkboard and divide one of them in half.

Ask individuals to come to the chalkboard and divide the other shapes in half.

Now invite other pupils to come to the chalkboard and divide the shapes into quarters.

Ask individuals to come to the chalkboard and shade in one quarter, one half or three quarters of a shape.

Draw more shapes, eg: circles, squares and rectangles on the chalkboard with a half or quarter shaded and ask, 'What fraction is shaded?'







10 minutes

25 minutes

Macmillan
New Primary
Mathematics 2

10 minutes

# Introduction

# Whole class teaching

Quickly revise the meaning of non-standard measurements.

Explain that non-standard measurements will give different answers.

Tell pupils that when you measure something using a standard measurement, the answer will always be the same.

Introduce the word metric.

Show pupils several metre sticks, and then ask what they notice (they are all the same length).

Tell them each metre is 100 centimetres (cm). Show them how every centimetre is the same size.

Show pupils the 100cm line, and compare the number line to a metre stick (they must be the same length).

Ask pupils to suggest things that might measure 1cm, eg: a fingernail, the width of a pencil.

Demonstrate very carefully how to measure accurately using a metre stick.

# **Group task**

**Main activity** 

Give each group a metre stick or a 100cm line and ask them to work together to complete the work in Macmillan New Primary Mathematics 2, page 86.

Visit each group several times to check they are measuring accurately and support any groups who are finding it difficult.

# **Plenary**

# Whole class teaching

Ask pupils how many centimetres there are in one metre.

Show them again the size of a centimetre.

Ask them to tell you which of the following things would be measured in centimetres and which would be in metres, eg: playground pencil field car book elephant's trunk mobile phone, etc.





Numeracy lesson plans **Primary 2** 

Term 2 Creating opportunities for classroom talk

Week 16 Length Day 4

centimetres

# **Measuring in Learning outcomes**

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

Identify larger fractions of a shape.

Use centimetres to measure length.

# **Teaching aids**

# **Before the lesson:**

Make enough rectangular and square shapes in different sizes for two per pupil.

Gather enough rulers (15cm long or more) for each pair of pupils.

# **Daily practice**

minutes

# Individual task

Draw several shapes, eg: squares, circles, rectangles and triangles on the chalkboard, shading a quarter of some and half or three quarters of others.

Ask pupils to identify the shaded fraction of each shape.

Give pupils two blank shapes each and ask them to divide them into quarters.

Ask them to colour one quarter of one shape and three quarters on the other shape.



10 minutes 25 minutes 10 minutes

# Introduction

# Whole class teaching

Ask pupils to identify things around them which are small in size, eg: pencil, book, diagram in a book.

Ask them to identify things that are large, eg: wall of the classroom, chalkboard, etc.

Invite a pair of pupils to come out and demonstrate how to measure the length of the chalkboard using a metre stick.

# Pair task

Give each pair a ruler (at least 15cm long).

Ask them to point to the places on their ruler that show: 5cm 11cm 0cm 15cm

# Whole class teaching

Revise how to measure accurately using a centimetre ruler, ie: place the 0cm mark at the very beginning of the item to be measured.

# Main activity

# Pair task

Make available small items for measurement such as dusters, exercise books, etc.

Ask pupils to use their centimetre ruler to measure five small items and record the results in their books.

# Plenary

# Whole class teaching

Hold up one of the items and ask which pair measured it.

Ask them how many centimetres they recorded for that item.

If they are correct, praise them. If not, remind the class how to carefully measure length and record the results.





Numeracy lesson plans **Primary 2** 

Term 2 Creating opportunities for

classroom talk

Week 16 Length Day 5

# Measuring in metres and centimetres

# **Learning outcomes**

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

Recognise a half, a quarter and larger fractions, eg: three quarters of a shape.

Measure accurately using standard measurement units.

# **Teaching aids**

# **Before the lesson:**

Read Macmillan New Primary Mathematics 2, page 89.

Gather rulers for the whole class.

Make two vertical lines on the wall. both from foor level to 1m 60cm high, and use chalk, a marker pen or paint to show each centimetre.

minutes

Macmillan **New Primary** Mathematics 2

# **Daily practice**

# Individual task

Ask pupils to use a centimetre rule to measure the length of the lines in Macmillan New Primary Mathematics 2, page 89.





•

10 minutes 25 minutes 10 minutes

## Introduction

# **Main activity**

# Plenary

# Whole class teaching

Show the pupils the two vertical lines drawn on the wall.

Point out to the pupils that they are measured out in centimetres. Show them where the 100cm mark is and ask them what we call 100cm (1 metre).

# Whole class teaching

Ask a pupil to come and stand in front of one of the lines on the wall. Make sure they have their back against the wall and feet flat on the floor.

Put your hand on their head and touch your fingers on the wall.

Now ask the pupil to move away while you keep your fingers on the wall.

Read out the measurement and tell the pupil this is their height in metres and centimetres.

Demonstrate again with another pupil.

# Pair task

Ask two pairs at a time to come out and measure each other against one of the measuring lines.

Tell them to record their heights in their books, eg:

'I am 1m cm'

'Fatima is 1m cm'.

While pupils wait for their turn to measure their heights, ask them to draw and label lines in their books that measure:
8cm
4cm

14cm 1cm

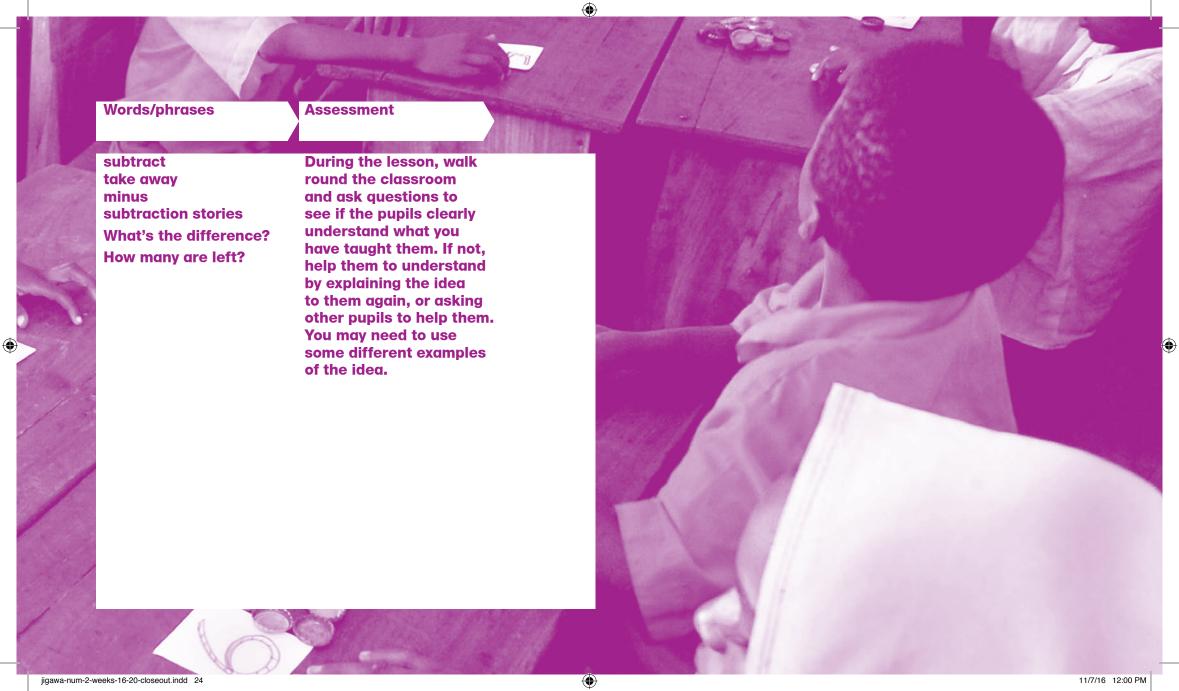
10cm 3cm

# Whole class teaching

Find out who is the tallest and the smallest in the class.









Numeracy lesson plans **Primary 2** 

Term 2

Creating opportunities for classroom talk

Week 17 Subtraction 0—99 Day 1

# Using a number line for subtraction

# **Learning outcomes**

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

Identify the value of each digit in three-digit numbers.

Use a number line to subtract two numbers between 0-99.

Explain how to subtract numbers using a number line.

# **Teaching aids**

# **Before the lesson:**

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

Write the following numbers in two columns on the chalkboard:

# **Daily practice**

minutes

# Whole class teaching

Point to a number on the chalkboard and ask the class to say the number.

Ask pairs to use their place value cards to tell you how many Hundreds, Tens and Units there are in each number.

Say a number that is on the chalkboard and ask the class to make that number using their place value cards and hold them up for you to see.

Repeat these tasks many times with different numbers.

Column 1	Column 2
35	67
22	45
43	86
31	78
23	89
44	67



•

10 minutes 25 minutes 10 minutes

# Introduction

# oddotion main dot

and column 2.

Repeat a few times

using different pairs of

numbers from column 1

# Whole class teaching

Ask a pupil to choose two numbers from the chalkboard, one from column 1 and the other from column 2.

Ask pupils to write them in a subtraction sum, putting the largest number first, eg:

$$67 - 31 =$$

$$= 30 + 1$$

$$= 10 + 10 + 10 + 1$$

Now you have expanded the number, use it to take 31 from 67 as shown in the diagram below:

# Main activity

# Pair task

Ask each pair to complete the following questions:
Subtract two from seven.
Take away three from eleven.
Find the difference between 59 and 33.

# Plenary

# Individual task

Ask each group to show the method they used to find the answer.





line for subtraction

Numeracy lesson plans Primary 2

Term 2

Creating opportunities for classroom talk

Week 17 Subtraction 0—99 Day 2

# Using a number Learning outcomes

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

Expand three-digit numbers.

Subtract two, two-digit numbers.

# **Teaching aids**

# **Before the lesson:**

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

| 15 | minutes<sub>|</sub>

# Daily practice

# Individual task

Explain that numbers can be expanded as follows: 123 = 1 Hundred + 2 Tens + 3 Units.

Read out random three-digit numbers and ask pupils to write them in their exercise books in the same form. They can use their place value cards to help them.

Stop after each number and ask pupils to tell you what they have written.







10 minutes 25 minutes 10 minutes

# Introduction

# Main activity

# Plenary

# **Group task**

Give half of the groups number cards 1—5 and the other half number cards 6—9.

Ask them to make as many two-digit numbers as they can using those numbers.

Ask the half with digits

1—5 to write their numbers in a list on one half of the chalkboard.

Ask the half with digits 6—9 to write their numbers on the other half of the chalkboard.

# Pair task

Give each pair a set of place value cards.

Ask pupils to take three numbers from each side of the chalkboard and make them using their place value cards.

Now ask the pupils to choose three numbers greater than 60 and three numbers less than 60, and use them to make three subtraction sums, eg: 69 - 53 =

Ask them to complete these sums using a number line.

# Whole class teaching

Say these sums for the pupils to work out without pencil and paper:

$$10 - 5 =$$

$$9 - 7 =$$

$$2 - 1 =$$

$$8 - 6 =$$

$$10 - 8 =$$





Take away

Lesson title

# Numeracy lesson plans

**Primary 2** 

# Term 2

Creating opportunities for classroom talk

Week 17 Subtraction 0—99 Day 3

# **Learning outcomes**

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

Use a number line to subtract two numbers.

Expand three-digit numbers.

Explain how they did the subtraction.

# **Teaching aids**

# **Before the lesson:**

Have ready a set of place value cards for each pair as well as counters, sticks, stones, straws.

Read Macmillan New Primary Mathematics 2, page 50, Exercise 1.

Prepare number lines from 0—100, one per group.

# **Daily practice**

# Pair task

minutes

Demonstrate on the chalkboard that:

541 = 5 Hundreds, 4 Tens, 1 Unit

=500 + 40 + 1

145 = 1 Hundred, 4 Tens, 5 Units = 100 + 40 + 5

Ask the pupils to complete the following:

897 = Hundreds, Tens, Units

523 = Hundreds, Tens, Units

245 = Hundreds, Tens, Units

= + + +

10 minutes

minutes

Macmillan **New Primary** Mathematics 2 10 minutes

## Introduction

# **Main activity**

# Whole class teaching

Remind the pupils how to use a number line to subtract numbers on the chalkboard. two numbers.

Remind them how to use counters to subtract two numbers.

# Individual task

Write several two-digit

Ask pupils to expand the numbers and record the answers in their books.

Explain to pupils that sometimes subtraction sums are written vertically. Ask them to look at Macmillan New Primary Mathematics 2, page 50.

Tell them that when they see sums written in this way they should first of all write them in a way that is familiar to them, eg:

TU

28

-12

Should be written as:

28 - 12 =

# Pair task

Give half of the pairs 30 counters between them.

Write 10 problems on the chalkboard for them to solve, eq:

30 - 12 =

27 - 15 =

Ask the other pairs to complete Macmillan **New Primary Mathematics** 2, page 50, Exercise 1, questions 1—6 writing the sums first as horizontal sums, eg: 28 - 12 =

When each pair completes their task, swap them over to do the other task.

# **Plenary**

# **Group task**

Give the class a subtraction story to solve, using counters or a number line, eg: 'A woman took 29 yams to market and sold 13. How many did she have left?'

Ask pupils for their answers and to tell you how they got the answer.





# Numeracy lesson plans **Primary 2**

Term 2

Creating opportunities for classroom talk

Week 17 Subtraction 0—99 Day 4

**Subtraction stories** 

# **Learning outcomes**

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

Compare the size of two numbers by looking at the value of each digit.

Use a number line to solve simple subtraction sums.

Explain how they did the subtraction.

# **Teaching aids**

# **Before the lesson:**

Work out the answers to the following number stories: '53 people were on a bus. 21 got down in Ilorin. How many were left on the bus?' '75 cows were drinking at the river, 20 of them moved away. How many were still drinking?' '45 yam seeds were planted and

25 grew. How many didn't grow?'

**Daily practice** 

minutes

# Whole class teaching

Tell the pupils that they going to learn an easy way to order numbers.

Ask them to use their place value cards to make the following numbers: 23 and 53.

Ask them which number is the biggest and how they worked it out.

Tell the pupils that to compare the size of two numbers they should start by finding out how many Hundreds there are, eg: 300 is bigger than 200.

Ask them to use their place value cards to tell you which number is the biggest of the following: 456 and 356 777 and 877 255 and 655



# Introduction

# Whole class teaching

Put two numbers on the chalkboard a long distance apart to create a blank number line, ea:

41

Tell pupils you are thinking of a number less than 60. but more than 41.

Ask them to suggest what it could be.

If they offer a possible answer write the number on your blank 41-60 number line.

Stop when they guess correctly.

Now without making a number line, say you are thinking of a number less than 15 but more than 3.

Tell the class they have to find out your number by asking clever questions.

Tell them they can only ask 'more' or 'less' questions and you can only answer 'yes' or 'no', eg:

'Is it less than 10?' ('Yes')

'Is it more than 7?' ('No')

'Is it more than 5?' ('No')

'Is your number 4?' ('Yes')

# **Main activity**

# Whole class teaching

**(** 

Read out one of your subtraction stories.

Invite a pair of pupils to demonstrate how to solve it using the number line written on the chalkboard.

# Pair task

Give each pair a number line.

Read out your subtraction stories clearly and slowly.

Make sure every pair has enough time to record an answer before reading out the next problem.

# **Plenary**

# Whole class teaching

Ask a pupil to think of a number between 10 and 15.

Ask other pupils find the number by asking 'more or less' questions.

Repeat with different pupils.





Numeracy lesson plans **Primary 2** 

# Term 2

Creating opportunities for classroom talk

Week 17 Subtraction 0—99 Day 5

**Creating** 

subtraction stories

# **Learning outcomes**

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

Write down number facts about a number of their choice.

Make up simple subtraction stories.

# **Teaching aids**

# **Before the lesson:**

Draw three boxes on the chalkboard.

Have ready a number line for each pair.

# **Daily practice**

# **Group task**

minutes

Ask the pupils to choose a number between 100 and 999.

Ask them to write down anything they know about their number.

Ask one of the group to be the 'expert' on that number and stay in their place.

Tell the rest of the group to move round to each expert and find out as much as they can about the number each group has chosen.

Ask individuals to tell the rest of the class anything interesting they have found out about numbers.



25 minutes

10 minutes

### Introduction

# **Main activity**

# Whole class teaching

Ask a pupil to think of a number between 10 and 15.

Ask other pupils to find the number by asking 'more' or 'less' questions.

Repeat with different pupils.

# Whole class teaching

Give each pair a number line.

Read out one subtraction story from yesterday, clearly and slowly.

Ask the pupils to tell you how they worked out the answer.

Ask the pupils to suggest a number of animals between 20 and 100.

Ask them to tell you something that the animals are doing and write it in the first box on the chalkboard, eg: '23 goats eating grass in a field'.

Ask the pupils to tell you a number smaller than their

first number.

Ask them to describe something that this number of animals did, and write it in the second box, eg: '15 goats moved to another place'.

Ask if anyone can tell you the final part of the question and write it in the third box, eg: 'How many goats were left eating grass in the field?'.

Ask the class to work out the answer.

# Pair task

Give each pair a number line.

Ask each pair to make up one subtraction story in their exercise books in the same way as you have just done on the chalk-board with them. (You may have to lead them through the process as above.)

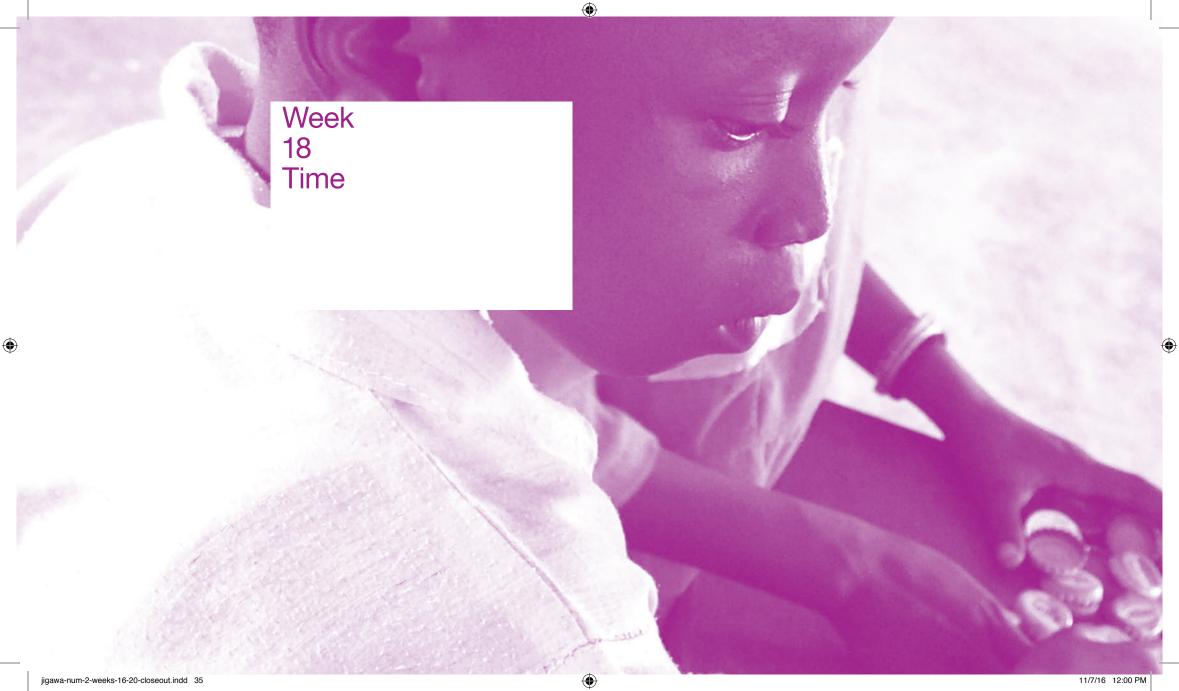
When they have done this, ask two pairs to come together to answer each others' questions.

# **Plenary**

# Whole class teaching

Ask some pairs to read out their subtraction stories for the whole class to solve.



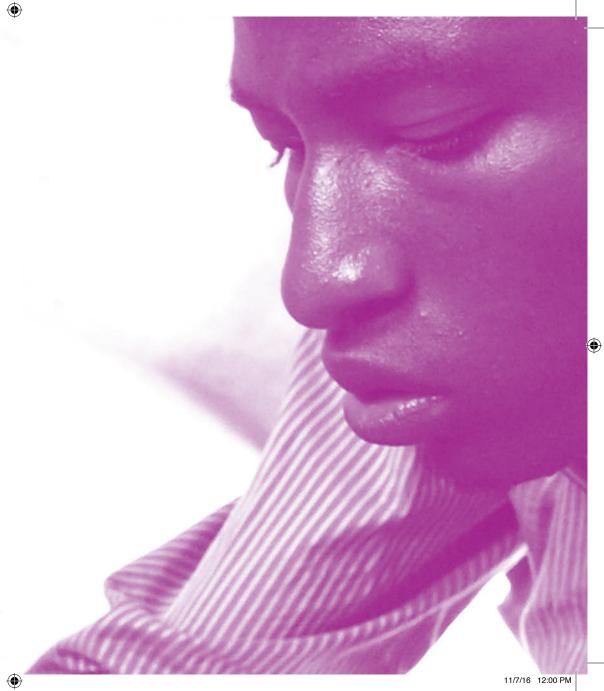


# Words/phrases

# **Assessment**

# o'clock half past

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





Numeracy lesson plans **Primary 2** 

Term 2

Creating opportunities for classroom talk

Week 18 **Time** Day 1

Clocks

#### **Learning outcomes**

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

Subtract two-digit numbers.

Identify the long and short hands of the clock and their functions.

Say the time as shown on a clock (real or cardboard) accurately in hours.

### **Teaching aids**

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

Make cardboard clocks or bring in real clocks (enough for each group to have a clock).

Make number cards containing the hours 1—12 and the minutes 0-60.

Read Macmillan New Primary Mathematics 2, page 111.

## minutes

#### **Daily practice**

#### Whole class teaching

Ask pupils to tell you a number between 50 and 99.

Ask the rest of the class to write down five numbers that are less than 50.

Ask them to read out their numbers.

Ask each pupil to choose two numbers and subtract one from the other using a number line to help them.







minutes

Macmillan **New Primary** Mathematics 2

10 minutes

#### Introduction

### **Main activity**

#### Whole class teaching

Ask pupils to discuss in pairs what time they do the following things: go to school finish school go to bed wake up

Write their suggestions on the chalkboard.

Ask them which is the earliest time or latest time of day that you have written.

#### **Group task**

Provide each group with a clock face.

Ask the pupils to discuss in their group and identify the minute hand and hour hand.

Ask if any pupils can use the hands to make any of the times written on the chalkboard.

Praise anyone who can.

Ask the pupils to draw the clock face in Macmillan New Primary Mathematics 2, page 111.

#### **Plenary**

#### Whole class teaching

Using a clock that the class can see, set the minute hand at 12 and move the hour hand to different numbers, saying the time as you do so.

Ask the pupils to join in saying the time, eg: 2 o'clock 6 o'clock 1 o'clock

Tell them that an hour has 60 minutes.

Ask them what half of that would be, and discuss their answers.

Clearly tell the class that half an hour is 30 minutes.

11/7/16 12:00 PM iigawa-num-2-weeks-16-20-closeout.indd 38



**Half hour** 

### Numeracy lesson plans

**Primary 2** 

#### Term 2

Creating opportunities for classroom talk

Week 18 **Time** Day 2

### **Learning outcomes**

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

Use a number line to subtract numbers.

Recognise o'clock and half past on a clock.

### **Teaching aids**

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

Write a number line on the chalkboard from 120—150.

Prepare clocks with cardboard or provide real clocks, one per group.

Read Macmillan New Primary Mathematics 2, page 111.

Draw a large clock face on the chalkboard, but do not add hands.

minutes

## **Daily practice**

#### Whole class teaching

Write the subtraction sum 48 - 18 =on the chalkboard.

Ask the pupils to tell you how to answer the sum using the number line.

Follow their instructions and see if they are correct.

Write three or four subtraction sums between 0 and 99 on the chalkboard for them to complete.







25 minutes

Macmillan New Primary Mathematics 2 10 minutes

#### Introduction

#### Whole class teaching

Draw a circle on the chalkboard, divide it in half and shade one half.

Ask the pupils what fraction you have shaded.

On the large clock face on the chalkboard, draw a line to divide it in half (from the 12 to the 6).

Tell the pupils you have divided the clock in half.

Explain that when the minute hand moves from 12 to 6 it has travelled half way round the clock.

Divide class into groups and provide each group with a clock.

Ask pupils to show:

1 o'clock

7 o'clock

11 o'clock

Using the large clock, show where the hands are to show half past.

Ask pupils to show:

half past 4

half past 2

half past 7

# Main activity

#### **Individual task**

Ask pupils to look at the pictures in Macmillan New Primary Mathematics 2, page 140, unit 3.

Discuss the pictures with the class.

Ask the pupils to complete Macmillan New Primary Mathematics 2, page 111, Exercise 1.

#### **Plenary**

#### Whole class teaching

Ask pupils how many minutes there are in an hour/half an hour.

Ask individuals to draw hands on the clock on the chalkboard to show different half past times.





### Numeracy lesson plans

**Primary 2** 

#### Term 2

Creating opportunities for classroom talk

Week 18 **Time** Day 3

Half past

### **Learning outcomes**

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

Use a number line to subtract two-digit numbers.

Recognise and say times that are half past the hour.

Record different times in writing.

### **Teaching aids**

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

Read Macmillan New Primary Mathematics 2, pages 113—114.

Make number cards containing all the hours and minutes.

minutes

#### **Daily practice**

#### Whole class teaching

Ask pupils to solve the following questions using the number line method they have learned:







25 minutes 10 minutes

#### Introduction

#### **Group task**

Remind pupils that the minute hand will have travelled half way round the clock when it gets to number 6. This means the time will be half past the hour.

Remind them that 30 minutes is half an hour, so 12.30 means half past 12.

Provide each group with a clock.

Ask them to show several half past times, eg: half past 2 half past 8, etc.

### **Main activity**

#### Whole class teaching

Write the following sums on the chalkboard:

37 - 14 =

84 - 24 =

73 - 11 = 45 - 33 =

67 - 25 =

Tell the pupils to use the number line method to do these sums.

### Plenary

#### Whole class teaching

Write 6.30 = half past 6 on the chalkboard.

Now ask the pupils to complete the following:

3.30 =

9.30 =

half past 10 = half past 9 =

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Numeracy lesson plans

**Primary 2** 

Term 2

Creating opportunities for classroom talk

Week 18 **Time** Day 4

Times of the day

### **Learning outcomes**

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

Solve subtraction word problems.

Say the time as shown on a clock.

Write a given time.

#### **Teaching aids**

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

Write down three subtraction number stories, eq: '85 girls and boys were at football training. 34 had to go home early. How many stayed until the end of the session?'

Read Macmillan New Primary Mathematics 2, pages 111—115.

#### **Daily practice**

#### Pair task

minutes

Read out slowly the first of your number stories.

Ask pupils to discuss the sum they need to do, write it down and solve it using a number line.

Repeat the story again so they can check they have the right numbers.

Continue until they have solved all three subtraction stories.





25 minutes 10 minutes

#### Introduction

### Whole class teaching

Ask pupils to discuss in pairs the times of day that the following things happen: school opens break time school closes

Record the times on the chalkboard in words, eg: eight o'clock.

### **Main activity**

#### Individual task

Ask pupils to draw three pictures showing them and their classmates: going to school enjoying break time going home

Ask them to write the correct time underneath each picture.

### **Plenary**

#### Whole class teaching

Choose several very good pieces of work to show to the rest of the class.

Praise everyone for their efforts.





Lesson

**Telling the time** 

### Numeracy lesson plans

**Primary 2** 

#### Term 2

Creating opportunities for classroom talk

Week 18 **Time** Day 5

title

### **Learning outcomes**

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

Recognise the time on a clock as o'clock or half past the hour.

Solve a subtraction problem using a number line.

### **Teaching aids**

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

Draw 20 different clocks showing o'clock and half past times on paper.

Prepare three subtraction number stories using numbers between 0 and 99.

# minutes

## **Daily practice**

#### Pair task

Slowly read out the first of your number stories.

Ask pupils to discuss the sum they need to do, write it down and solve it using a number line.

Repeat the story again so they can check they have the right numbers.

Continue until they have solved all three subtraction stories.







25 minutes 10 minutes

#### Introduction

### **Group task**

Provide one clock per group.

Ask one pupil in the group to say aloud a time, while another pupil makes the time on the clock and everyone checks it is correct or helps if it is not.

Continue the task until each pupil in the group has said a time and had a turn at showing a time.

### **Main activity**

#### Individual task

Tell the pupils you are going to show them a time on the clock and they have to write down the time they think it is.

Using the clocks you prepared, show each one to the pupils, leaving enough time for them to look, think and then record their answer.

#### Plenary

#### Whole class teaching

Ask a pupil from each group to come out and write the following times in words: half past 4 5 o'clock 10 o'clock









Lesson

### **Numeracy** lesson plans

**Primary 2** 

#### Term 2

Creating opportunities for classroom talk

Week 19 **Time** Day 1

title

# Days of the week

#### **Learning outcomes**

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

Solve subtraction problems.

Identify the days of the week in order.

Sequence weekly events.

#### **Teaching aids**

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

Read Macmillan New Primary Mathematics 2, page 118, Exercise 1, questions 1—5.

Draw a large clock face on the chalkboard, but do not draw the hands.

# minutes

### **Daily practice**

#### Pair task

Ask pupils to complete the following:

From 47 take away 26.

Take five away from nine.

Subtract 25 from 26.

Take away 15 from 36.

Ask pupils to tell you how they did it.







10 Song minutes

25 minutes Macmillan New Primary Mathematics 2 10 minutes

#### Introduction

#### Whole class teaching

Ask pupils to sing any songs they know about time.

#### Pair task

Ask pupils to discuss in pairs what days they: attend school go to the market

Ask the pupils to think of one other thing they do on the same day each week.

Ask them to tell you what they do and on which day.

### **Main activity**

#### Whole class teaching

Write the days of the week on the chalkboard in a jumbled order.

Ask pupils to think on their own about the correct order.

Invite a pupil to come to the chalkboard and write number 1 under the first day of the week.

Repeat until all the days have been ordered correctly.

Ask pupils to write out the days of the week in the correct order.

Look together at Macmillan New Primary Mathematics 2, page 118, Exercise 1 and discuss it.

### **Plenary**

#### Pair task

Ask pupils in pairs to discuss their favourite day of the week and explain why it is their favourite.

Ask individuals to share their thoughts with the class.





### Numeracy lesson plans

**Primary 2** 

#### Term 2

Creating opportunities for classroom talk

Week 19 Time Day 2

# Months of the year

#### **Learning outcomes**

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

Subtract two-digit numbers.

Know the names of the months of the year and order them with help.

Identify events that take place on each day of the week.

### **Teaching aids**

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

Read Macmillan New Primary Mathematics 2, page 119.

Prepare 12 cards per group, containing the names of the months of the year.

15 minutes

#### **Daily practice**

#### Whole class teaching

Ask pupils to write down the answers to the following questions:

19 – 15 =

26 – 12 =

44 - 22 =

29 – 18 =

57 – 37 =

Ask them to tell you how they worked out the answers.





25 minutes 10 minutes

#### Introduction

#### **Group task**

Provide each group with a set of cards showing months of the year.

Ask them to spread them out on their table.

Ask the class if anyone knows the first month.
When the correct answer is given, ask groups to identify January and place it as the beginning of a line.

Now repeat the process until all the months have been identified and ordered correctly.

Be aware of groups who are struggling and

support them.

Ask pupils to say the months of the year with you.

Ask them to point to each card as they say the month.

### **Main activity**

#### Whole class teaching

Discuss with pupils what they do on each day of the week, either in school or at home.

Ask them to draw a timeline, writing the days of the week below the line.

Ask them to draw and write one thing they do on each day above the line, eg:

#### **Plenary**

#### Whole class teaching

Ask pupils to tell you the months of the year in order.

Write them on the chalkboard as they say them.

Ask pupils several questions, eg:

'Which months are the rainy season?'

'Who has a birthday not in the rainy season?'

'What month is in the dry season?'

school

Sunday Monday Tuesday Wednesday Thursday Friday Saturday



Lesson

### **Numeracy** lesson plans

**Primary 2** 

#### Term 2

Creating opportunities for classroom talk

Week 19 **Time** Day 3

title

**Dates** 

### **Learning outcomes**

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

Answer subtraction sums orally.

Order the days of the week and the months of the year.

Say the date as it appears on a calendar.

#### **Teaching aids**

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

Collect three sets of cards for each group: numbers 1—31 (dates), days of the week and months of the year.

Read Macmillan New Primary Mathematics 2, page 116.

## minutes

### **Daily practice**

#### **Group task**

Read out the following sums and ask the pupils to put their hands up to tell you the answer:

10 - 5 =

18 - 9 =

20 - 10 =

16 - 8 =

19 – 6 =

After each sum, ask different pupils how they worked it out.







25 minutes 10 minutes

#### Introduction

### **Main activity**

#### Pair task

Ask the pupils to discuss the important activities that take place on Friday, Saturday and Sunday.

Ask the pupils to share their ideas with the rest of the class.

### **Group task**

Give each group three sets of cards: numbers 1—31. the days of the week and the months of the year.

Ask the pupils to arrange their sets of cards to make today's date, eg: Wednesday 23rd July.

Give them some more days and dates to make with their cards eg: their own birthday the last day of term the last day of May

Ask the pupils to give each other dates to make with their cards.

#### Individual task

Ask each pupil to divide a page of their exercise book into two sections.

Ask them to choose two events that happen on the same date each year and draw a picture of the events.

Ask them to write the dates underneath the pictures.

#### **Plenary**

#### Individual task

Ask the pupils to tell you how many days there are in each month of the year.





## Numeracy lesson plans

**Primary 2** 

#### Term 2

Creating opportunities for classroom talk

Week 19 **Time** Day 4

# **How many more** than?

#### **Learning outcomes**

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

Answer the question 'How many more than?'.

Write a given time.

### **Teaching aids**

#### Before the lesson:

Prepare/bring a clock made with cardboard, or a real clock.

Read Macmillan New Primary Mathematics 2, pages 116—117.

Write number cards containing the time in hours and minutes.

minutes

### **Daily practice**

#### **Group task**

Write the numbers 5—20 on the chalkboard.

Ask pupils to choose several pairs of numbers.

Ask them to put each pair of numbers in order of size and then answer the question: 'How many more than?', eg: if they choose 7 and 12, the question is 'How many more than 7 is 12?'.







minutes

Macmillan **New Primary** Mathematics 2

10 minutes

#### Introduction

### **Main activity**

#### Pair task

Ask the pupils to discuss in pairs what time certain events happen every day, eg: school opens school closes bed time

### **Group task**

Ask the pupils to look at the pictures in Macmillan New Primary Mathematics 2, pages 116—117.

Ask each group to talk together about what they can see happening in the pictures.

Ask one pupil in each group to say one sentence about what they can see and you write answers on the chalkboard.

Tell the pupils to listen for the things they saw in the pictures while you read what you have written on the chalkboard.

Ask them to divide a page of their exercise book into four squares and draw four events that happen at the same time every day, one in each square.

Ask them to draw a clock showing the time of each activity they have drawn in the bottom left corner of their picture.

#### **Plenary**

#### Individual task

Ask the pupils to show a partner their picture and read the times together.





#### Numeracy lesson plans **Primary 2**

#### Term 2

Creating opportunities for classroom talk

Week 19 **Time** Day 5

What's the time,

Mr Lion?

### **Learning outcomes**

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

Generate their own sums for the class to answer.

Say the time as shown on a clock (real or cardboard), accurately in hours and minutes.

Relate half an hour to half of the clock face.

### **Teaching aids**

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

Collect your number cards containing minutes and hours.

Prepare/bring a clock made with cardboard or a real clock for each group.

Read Macmillan New Primary Mathematics 2, pages 111—115.

## **Daily practice**

minutes

#### Group task

Ask each group to make up six subtraction sums, which will be answered by another group.

Ask the groups to write the sums down and give them to another group.

Ask each group to work together to answer the sums.







10 Macmillan
Mew Primary
Mathematics 2

25 minutes Game

10 minutes

Macmillan
New Primary
Mathematics 2

#### Introduction

### **Main activity**

#### Pair task

Ask the pupils to discuss in pairs what time they go to school and come home from school.

Ask the pupils to put up their hands to give the answer after a few minutes of discussion.

Ask the pupils to choose one of those times and draw a clock showing it in their exercise books.

Ask the pupils to go through the clock faces in Macmillan New Primary Mathematics 2, page 111, Exercise 1 and say the times to each other.

#### **Group task**

Ask the pupils to show you how to make the time on the half hour.

Give each group a clock and ask them to make half past times with their clock.

#### Whole class teaching

Play 'What's the time, Mr Lion?' using o'clock and half past as the times.

Ask one pupil – 'Mr Lion' – to stand at the front of the class with their back to the class and eyes closed.

Ask the rest of the pupils to stand up and face the front of the class.

The pupils walk forward saying 'What's the time, Mr Lion?'

Mr Lion turns around and says a time, eg: 'It's half past 9.'

As soon as he turns around the rest of the pupils must stand absolutely still. If he sees anyone moving, they have to sit down.

Continue until someone reaches the lion without being caught or the lion decides to shout 'It's dinner time!'.

When he shouts this, he turns round and tries to catch the pupils before they can sit down.

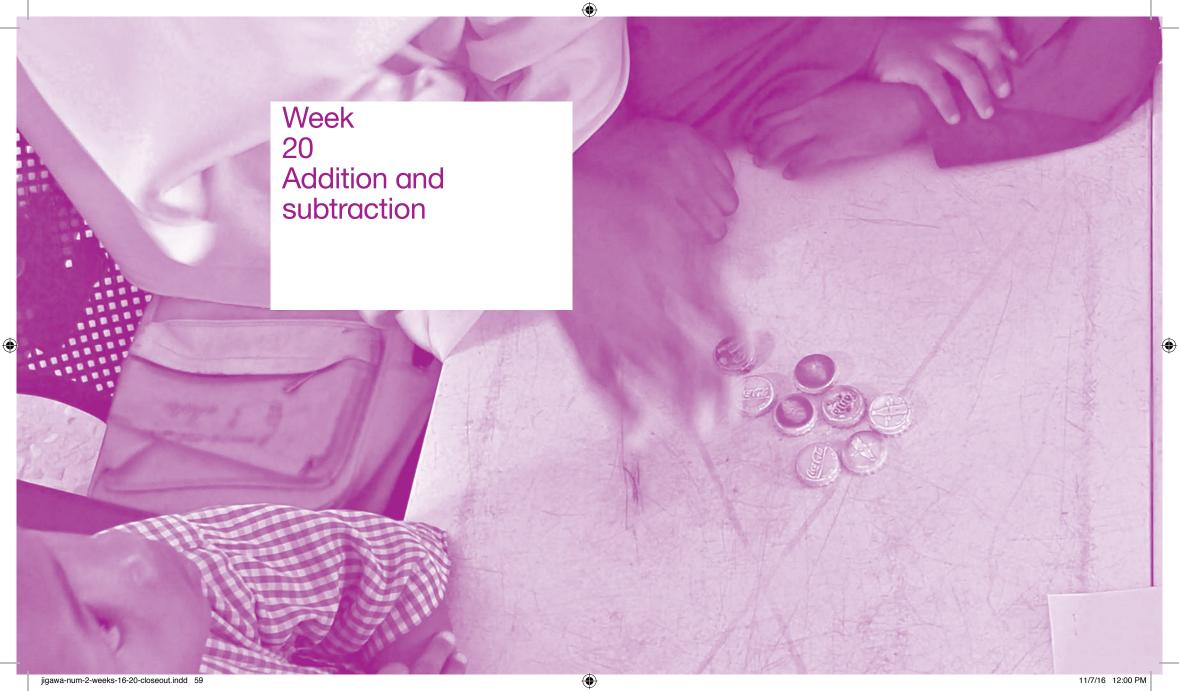
Choose another lion and continue the game.

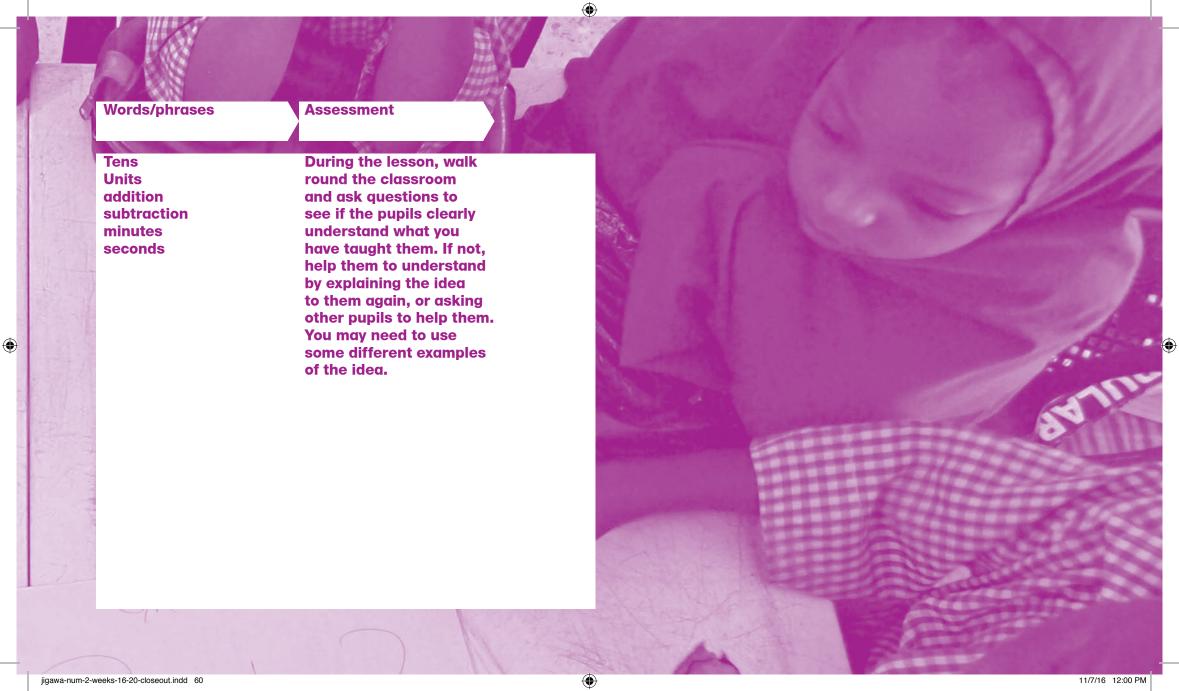
## Plenary

#### Individual task

Ask the pupils to look at Macmillan New Primary Mathematics 2, pages 113—114, Exercise 3 and tell each other the times.









Lesson

Numeracy lesson plans **Primary 2** 

Term 2

Creating opportunities for classroom talk

Week 20 **Addition and** subtraction Day 1

## title

numbers

# **Adding two-digit**

### **Learning outcomes**

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

Say the time as shown on a clock (o'clock and half past).

Add two-digit numbers.

### **Teaching aids**

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

Read Macmillan New Primary Mathematics 2, pages 34—37.

Have ready a real or dummy clock.

Have ready a number line on the chalkboard for adding two-digit numbers.

## **Daily practice**

minutes

#### Whole class teaching

Using a clock that all pupils can see, make several o'clock and half past times.

Ask pupils to tell you the times you are making.







25 minutes 10 minutes

#### Introduction

#### Whole class teaching

Demonstrate how to use a number line to add two-digit numbers, eg: 15 + 10

16 + 12

26 + 13

### **Main activity**

### Whole class teaching

Ask pupils to use a number line to complete the following:

12 + 12 = 36 + 13 = 11 + 11 =

### **Plenary**

#### Whole class teaching

Divide the class in half, to create two teams.

Tell them you are going to ask each team different questions. If they get the right answer they get two points. If they get it wrong, the other team gets a chance to answer.

Ask the following questions and more that you can think of:

'What day is after Tuesday?'

'How many minutes are there in an hour?'

'How many minutes are there in a half hour?'

'How many months are there in a year?'

'How many days are there in a week?'





numbers

Numeracy lesson plans

**Primary 2** 

Term 2

Creating opportunities for classroom talk

Week 20 **Addition and** subtraction Day 2

#### **Learning outcomes Expanding**

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

Arrange numbers in Tens and Units.

Expand numbers.

**Teaching aids** 

**Before the lesson:** 

Read Macmillan New Primary Mathematics 2, pages 34—37.

Macmillan minutes New Primary Mathematics 2

**Daily practice** 

#### Individual task

Ask pupils to use a number line to complete the addition sums in Macmillan New Primary Mathematics 2, page 37, Exercise 7, questions 1—4.









25 minutes 10 minutes

#### Introduction

### **Main activity**

#### **Plenary**

#### Whole class teaching

Create two columns on the chalkboard, one for Tens and one for Units.

Write 37 in the columns
Tens Units
3 7

Ask pupils to tell you the number you have written, and how many Tens and Units there are in 37.

Remind them that this is called expanding a number, and that 37 = 30 + 7.

Repeat with other two-digit numbers.

#### Pair task

Write three, two-digit numbers on the chalkboard, eg:

47 21 83

Ask pupils in pairs to expand these numbers and record the answers in their book.

Ask a few different pairs for the answers.

#### **Individual task**

Ask pupils to complete the following:

70 + 1 = 50 + 2 =

30 + 8 =

90 + 3 = 40 + 9 =

90 + 4 =

### Whole class teaching

Write some examples of expanded numbers on the chalkboard.

Ask individuals to come to the chalkboard and write the correct two-digit number.

Ask whole class to say the two-digit answer aloud.





Numeracy lesson plans **Primary 2** 

Term 2

Creating opportunities for classroom talk

Week 20 **Addition and** subtraction Day 3

# **Adding two-digit** numbers

#### **Learning outcomes**

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

Add two-digit numbers together.

Order the months of the year.

#### **Teaching aids**

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

Read Macmillan New Primary Mathematics 2, pages 39—40.

Have ready the previously used months of the year cards.

### **Daily practice**

minutes

Song

#### **Group task**

Sing together any song the pupils know about the days of the week or months of the year.

Recite together the months of the year.

Provide each group with a set of cards showing the months of the year.

Ask each group to spread the cards out face down all over their table.

Tell them they are going to have a race to see which group can put all the months of the year in order first.

When they are ready, say 'Go'.





25 minutes Macmillan New Primary Mathematics 2 10 minutes

#### Introduction

### **Main activity**

### Plenary

#### Whole class teaching

Give the class a word problem, eg: 'Primary 1 has 23 chairs and Primary 2 has 34 chairs. How many chairs are there altogether?'.

Ask the pupils what sum they need to do to solve this problem.

Demonstrate how to solve the problem using a number line.

#### Pair task

Ask pupils to work together in pairs to complete Macmillan New Primary Mathematics 2, pages 39—40, Exercise 12, questions 1—5.

#### Whole class teaching

Ask pupils to make up some everyday word problems for you to solve using a number line.





Numeracy lesson plans **Primary 2** 

Term 2

Creating opportunities for classroom talk

Week 20 **Addition and** subtraction Day 4

# **Addition and** subtraction

#### **Learning outcomes**

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

Add and subtract two-digit numbers.

Know some basic facts about time.

#### **Teaching aids**

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

Write the following numbers on the chalkboard:

60

12

30

24

Have a large collection of recycled shopping items, utensils etc, each individually labelled with a price.

### **Daily practice**

minutes

#### Whole class teaching

Ask the pupils to guess what the numbers on the chalkboard stand for.

Give them time to think, then give them one example, eg: 60 seconds = 1 minute.

Cross out the number 60 that vou have written.

Ask them to discuss in pairs to see if they can match the other numbers up with any facts about time (12 months = 1 year, 7 days = 1 week, 30 minutes = half an hour, 24 hours = 1 day).





25 minutes

10 minutes

#### Introduction

## **Main activity**

#### Individual task

Remind pupils how to use a number line to subtract the following using the two-digit numbers, ie: start with the largest number have shown them: and jump backwards the correct number of jumps, eg: 31 - 20 =

## Pair task

Ask pupils to complete number line in the way you 27 - 24 =38 - 23 =

47 - 24 =

19 – 16 =

43 - 32 =

#### **Group task**

Provide each group with a selection of priced items.

Ask pairs to select any two items, record the addition sum in their books and solve the sum using a number line.

Repeat several times.

Challenge the pupils to try adding three items together.

#### **Plenary**

#### Whole class teaching

Ask some of the pupils to explain and demonstrate how they added three numbers together using a number line.





**Addition and** 

subtraction

#### Numeracy lesson plans Primary 2

#### Term 2

Creating opportunities for classroom talk

Week 20 Addition and subtraction Day 5

### Learning outcomes

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

Add three, two-digit numbers together.

Recognise addition and subtraction sums.

Write the days of the week in order.

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

#### **Teaching aids**

### **Before the lesson:**

Have a clock large enough for the class to see.

Have ready your selection of priced, recycled items.

#### **Daily practice**

minutes

#### Whole class teaching

Show the pupils some times on the clock and ask the pupils to say them.

Ask a few individuals to come out and make a time on the clock for the rest of the class to say.

Ask pupils to write out the days of the week in the correct order in their books.







25 minutes 10 minutes

#### Introduction

### Whole class teaching

Remind pupils how they added three two-digit numbers on Day 4, using the number line.

Ask a pupil to select three items from your collection.

Write the price of the three items on the chalkboard as an addition sum.

Demonstrate adding two of the numbers together, then adding on the third number.

#### **Main activity**

#### Pair task

Provide each group with a selection of the priced items.

Ask pairs to select three items, record the addition sum and solve it using a number line.

Ask them to repeat this process until they have done six different sums.

#### Plenary

#### Whole class teaching

Ask a selection of mixed addition and subtraction sums for the pupils to answer orally.





#### **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.

#### Special thanks go to:

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

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

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

