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Type of lesson plans/

Grade

Term/
Learning theme

Numeracy lesson plans

**Primary 3** 

#### Term 2

Involving pupils in their learning

Weeks

11—15

Numeracy lesson plans
Primary 3 Term 2
Involving pupils
in their learning

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



#### Introduction

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

Throughout 2010 in Kaduna State, the Ministry of Education carried out baseline surveys to assess classroom teachers, head teachers and pupil learning outcomes. Sadly, the findings were alarmingly poor. It was clear that despite substantial inputs into education, the majority of teachers were themselves victims of an education system that was in a serious downward spiral.

Following this research, the State Ministry of Education, the State Universal Basic Education Board and local government education authorities, supported by the Education Sector Support Programme in Nigeria (ESSPIN), embarked on a series of reforms to strengthen schools.

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

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

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

#### **Mohammed Usman**



Honourable Commissioner of Education Kaduna State



Term 2 Involving pupils in their learning

# Introduction Involving pupils in their learning

Weeks 11—15





Learning must be an active process on the part of the learner.

#### How children learn

These lesson plans provide you with a variety of techniques to make learning faster, fun and more effective. The plans use activities that reflect the way in which pupils naturally learn, and attempt to bring the joy back into learning for children.

Every individual in your class responds to activities differently and learns their own way, but generally children learn best when they:

Have objects to see and hold.

Take part in the lesson.

Can talk to each other to share ideas and learning.

Practise what they have learned individually, in pairs and in groups.

Are given activities that challenge them and make them think.

Receive encouragement and praise.

Realise that making mistakes is an important part of the learning process.

This third set of lesson plans contains lots of activities to encourage learning through different methods.





Term 2 Involving pupils in their learning

# Introduction Essential low-cost or free teaching aids

Weeks 11—15





#### **Counters**

Ask the pupils to help you collect together as many bottle tops, small sticks and small stones as they can. Put them into jars to keep in the classroom and use to help with counting.

#### **Number cards**

Make sets of cards numbered from 1—200. Cut up cardboard cartons into squares and write numbers on them. Make as many sets as you can so the pupils can use them to play games.

#### **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.

Cut lengths of string to the same size as a metre stick, to be used for measuring.

#### **Measuring correctly**

Ask a local carpenter if they have any long ends of wood that can be turned into a metre length.

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

If you write the numbers from 1—100 on the other side, these can also be used as longer-lasting 1—100 number lines.

Show pupils how to measure the length in metres using their stick or rope.

Put one end of the rope/ stick right up against the end of the length and stretch it out until it reaches the metre mark.

Ask a pupil to put their finger on the floor at the metre mark, then lift up the rope/ stick and put the end right up against their finger to measure the next metre (there should be no space between the pupil's finger and the measuring tool).

Repeat the process until they have finished measuring the length.



Term 2 Involving pupils in their learning

# Introduction Essential low-cost or free teaching aids

Weeks 11—15



## Place value cards

#### Clocks

Use card to construct the cards below.

If possible, make one set per pair of pupils.

You could also make one large class set.

Collect old wall clocks that are no longer working for the cardboard. pupils to use.

Hang a working clock in vour classroom which the pupils can see. Use it to mention the times at different points in the day, eg: when they arrive in the morning, at the end of lessons, at break time, etc. Make clocks out of

Try to make at least one for each pair in your class, they will be used in literacy as well as numeracy lessons.

On a piece of cardboard, draw around a large circle and cut it out.

Find the middle of the circle and draw a dot.

Draw lines through the middle of the circle to divide it into quarters.

Write the numbers around the edge of the clock starting with 12, 6, 9 and 3 as they will be on the ends of the lines you have drawn.

Work out where the other numbers would be and write them on.

Make a hole in the middle of the circle.

Cut out two hands, a short one and a long one.

Attach them to the middle of the circle so they can move around.

Hundred card 1 set 100—900

Ten card 1 set 10—90

Unit card 1 set 1—9

3 0 0 4 0 5





Words/phrases

**Assessment** 

clock
half past
time
hour
half hour
minutes
subtract
take away
How many less than?
How many more than?
What's the difference
between?

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





Lesson title

Numeracy lesson plans Primary 3

Term 2
Involving pupils in their learning

Week 11 Subtracting three-digit numbers Day 1

## **Subtracting three-digit**

numbers

Learning outcomes

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

Explain how to tell the time on the hour and half hour.

Subtract three-digit numbers.

**Teaching aids** 

**Before the lesson:** 

Have ready a large clock with moveable hands.

Look at the weekly words, particularly the different terms for subtraction.

15 minutes

#### Daily practice

Whole class teaching

Show the pupils a clock and ask them to tell you anything they can about clocks and how to tell the time.

Write their ideas on the chalkboard.

Remind them that the long hand tells the hour and the short hand shows the minutes.

Make some o'clock and half past times on the clock and ask individual pupils to tell you the time they make.





25

minutes

minutes

#### Introduction

#### **Main activity**

#### Whole class teaching

Ask the pupils to list some of the terms used for subtraction, eg: How many more than?, take away, What's the difference?

Explain that you are going to the biggest number on the remind them how to subtract left hand end). three-digit numbers.

#### Whole class teaching

Write the following sum on the chalkboard. 245 - 123 =

Ask them what you do first (draw a number line, writing

Ask them the next step (expand the smallest number) 123 = 100 + 20 + 3.

Ask them what they do next. (use the number line to do the sum):

#### Pair task

Give pupils the following sums one at a time to complete in pairs:

#### **Plenary**

#### Whole class teaching

Ask four pupils to share what they have learned with the rest of the class.





Lesson

Numeracy lesson plans **Primary 3** 

Term 2 **Involving pupils in** their learning

Week 11 **Subtracting** three-digit numbers Day 2

title

## **Subtracting** three-digit numbers

#### Learning outcomes

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

Use a clock to tell the time on the hour and half hour.

Use a number line to subtract threedigit numbers.

#### **Teaching aids**

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

Find or make a dummy clock, with moveable hands to show the hours and minutes.

Read MAN Primary Mathematics 3, page 68, exercise G.

#### **Daily practice**

minutes

#### Whole class teaching

Show the pupils a dummy clock.

Make different times involving o'clock and half past on the clock and ask the pupils to write each time down in their exercise books.

After each question, tell them the answer and ask them to check if they are correct.







25 minutes MAN Primary Mathematics 3 10 minutes

#### Introduction

#### Whole class teaching

Write the following sum on the chalkboard and ask the pupils to remind you how to complete it: 642 - 521 =

#### **Main activity**

#### Pair task

Ask pupils to complete MAN Primary Mathematics 3, page 68, exercise G, using number lines.

Ask two or three pupils to explain how they did this to the rest of the class.

#### Plenary

#### Pair task

Give the pupils the following sums to answer orally, without using pencil and paper:

- 5 + 5
- 6 + 4
- 3 + 7
- 8 + 2
- 1 + 9
- 2 + 8





Lesson title

Numeracy lesson plans Primary 3

Term 2
Involving pupils in their learning

Week 11 Subtracting three-digit numbers Day 3

## Subtracting three-digit numbers

#### Learning outcomes

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

Tell the time on the hour and the half hour.

Use a number line to answer the question 'How many less than?'

#### **Teaching aids**

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

Collect dummy or cardboard clocks with moveable hands for each pair.

#### Daily practice

#### Pair task

minutes

Hand out the clocks with moveable hands to each pair.

Ask all pairs to make the different o'clock and half past times that you tell them and hold up their clocks for everyone to see.





10 minutes 25 minutes minutes

#### Introduction

#### **Main activity**

#### **Group task**

Ask each group to make as many sums as they can that make the number 50 in 5 minutes.

Time them carefully, telling them to stop as soon as the 5 minutes is finished.

#### Whole class teaching

Remind the pupils how to answer the question, 'How many less than?'

Ask them. 'How many less than 445 is 200?'

Ask them if they can remember how to do it.



200 is 245 less than 445

Give them a question to try in pairs, eg: 'How many less than 658 is 543?'

Come together and ask pupils how they answered it.

Give pupils some more auestions, one at a time to answer in pairs and discuss after each one has been completed:

'How many less than 563 is 232?'

'How many less than 777 is 444?'

'How many less than 569 is 343?'

#### **Plenary**

#### Pair task

Give pairs the following sums to answer without pencil and paper:

60 + 40

30 + 70

50 + 50

20 + 80

80 + 20

40 + 60

90 + 10

10 + 90





Lesson title

#### Numeracy lesson plans Primary 3

Term 2
Involving pupils in their learning

Week 11 Subtracting three-digit numbers Day 4

## Subtracting two-digit numbers, crossing the Ten

#### Learning outcomes

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

Tell the time in 5-minute intervals.

Use a number line to subtract two-digit numbers.

#### **Teaching aids**

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

Find a clock with moveable hands to use to make different times.

Make sure that you can easily explain the method below to subtract two-digit numbers when the Unit in the second number is larger than the first.

### Daily practice

minutes

#### Whole class teaching

Ask the pupils if they can remember how many minutes there are in an hour.

Explain that there are 60 minutes in an hour and that to tell the time people often talk in sets of 5 minutes; eg: 5 minutes past, 10 minutes past, etc.

Count in fives up to 60.

Repeat, this time moving the hands around the clock as you do so.





10 minutes

#### Introduction

#### Whole class teaching

Remind the pupils how to do the following sum, by expanding the smallest number and using the number line to work out the answer:

$$56 - 37 =$$
  $37 = 30 + 7$ 

Explain that you can break this down into steps further to make it easier.

To make the next jump easier, make a jump of 6 to 20.

Ask them,
'How many more do you need to take away so that you have taken 7 altogether?'

7 - 1 = 6

Complete the sum, 56 - 37 = 19

#### Pair task

**Main activity** 

Ask them to try the following in pairs, using the same method:

$$83 - 46$$
 $34 - 27$ 

Ask each pair to find another pair and compare answers.

#### **Plenary**

#### Pair task

Ask each pupil to say one thing they have learned from the lesson.



Lesson

Numeracy lesson plans **Primary 3** 

Term 2 **Involving pupils in** their learning

Week 11 **Subtracting** three-digit numbers Day 5

title

## **Subtracting** two-digit numbers

#### Learning outcomes

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

Use the clock to tell the time in 5-minute intervals.

Subtract two-digit numbers that cross the Ten.

#### **Teaching aids**

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

Have ready 0—9 number cards for each pair.

Find enough clocks with moveable hands for each pair to use.

Make sure that you can explain how to subtract two-digit numbers when the Unit is larger in the second number, using the method from Day 4.

### **Daily practice**

minutes

#### Whole class teaching

Give out dummy clocks to each pair.

Read out times in jumps of 5 minutes in order, and ask pupils to make those times on their clocks using the minute hand (the long hand), eg: 5 minutes past, 10 minutes past, 15 minutes past, etc.







25 minutes 10 minutes

#### Introduction

#### Main activity Plenary

## Whole class teaching

Ask the pupils to remind you how to subtract the following:

54 - 35 =

36 - 18 =

#### Pair task

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

Ask them to choose four cards and make two, two-digit numbers using those cards.

Tell them to take the smallest number away from the largest number, drawing a number line to help them.

Tell them to repeat the task until they have completed about 10 sums.

Ask one or two pupils to show the rest of the class the sums they have made.

#### Pair task

Stand the pupils in a circle.

Throw a ball to a pupil and ask them a simple addition or subtraction sum which they can do without pencil and paper.

Ask that pupil to throw the ball to someone else and say another sum.

Continue until about six or seven pupils have had a turn.









Lesson

Numeracy lesson plans Primary 3

Term 2
Involving pupils in their learning

Week 12 Subtracting three-digit numbers Day 1

## title

## Subtracting two- and three-digit numbers

#### Learning outcomes

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

State how many minutes there are in a quarter hour and a half hour.

Use a number line to subtract two-digit numbers from three-digit numbers.

#### **Teaching aids**

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

Find or make dummy clocks, with moveable hands to show hours and minutes, for each pair.

Make sure you can explain the method to subtract three-digit numbers as shown on the next page.

#### **Daily practice**

minutes

#### Whole class teaching

Ask the pupils to help you draw a clock on the chalkboard, including the numbers.

Ask them to help you divide the clock in half by drawing a line from the 12 to the six.

Label the right half 'past' and the left half 'to'.

Ask the pupils to explain why you have done this.

Ask them where the lines would be to divide the clock into quarters.

Ask them,

'How many minutes in one half?'
'How many minutes in one quarter?'

Leave the clock on the chalkboard for the rest of the week.



25 minutes 10 minutes

#### Introduction

#### **Main activity**

#### Whole class teaching

Write the following sum on the chalkboard and ask the pupils to remind you how to answer it: 75 - 69 =

#### Whole class teaching

Tell the pupils that you are going show them how to subtract two-digit numbers from three-digit numbers.

Write the following sum on the chalkboard:

$$245 - 27 =$$
 $27 = 20 + 7$ 

#### Pair task

Give pupils the following sums to complete in pairs, using the same method:

476 – 85 =

563 – 72 –

563 - 72 = 485 - 94 =

Ask if anyone found a quicker method to complete the sum.

#### **Plenary**

#### Whole class teaching

Ask the pupils to put their hands up when they have worked out the answers to the following questions:

$$120 - 40 =$$

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





Lesson

Numeracy lesson plans **Primary 3** 

Term 2 **Involving pupils in** their learning

Week 12 **Subtractina** three-digit numbers Day 2

title

## **Subtracting** two-digit numbers

#### Learning outcomes

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

Tell the time using quarter past and quarter to.

Subtract two-digit numbers using a number line.

#### **Teaching aids**

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

Find or make dummy clocks, with moveable hands to show hours and minutes, for each pair.

Read MAN Primary Mathematics 3, page 180.

Read MAN Primary Mathematics 3, page 74. Exercise D.

#### **Daily practice**

minutes

#### Whole class teaching

**MAN Primary** 

Mathematics 3

Review yesterday's work, by looking at the clock and asking the pupils to tell you what the time is when the long hand is on the six (half past) and the 12 (o'clock).

Explain that when the long hand is on the three it is 'quarter past' and when it is on the nine it is 'quarter to'.

Read MAN Primary Mathematics 3, page 180, Unit 1, Exercise A with the pupils and ask them to tell you the answers.







25 minutes MAN Primary Mathematics 3 10 minutes

#### Introduction

#### Whole class teaching

Recap yesterday's work by asking the pupils to do the following sum in their exercise books using a number line to help them: 564 - 72 =

Ask the pupils to look at each other's work and discuss how they found their answer.

#### **Main activity**

#### Pair task

Ask pupils to complete MAN Primary Mathematics 3, page 74, Exercise D, using the method they practised on Day 1.

#### Plenary

#### Whole class teaching

Ask some pupils to share their answers with the rest of the class.





Lesson title

Numeracy lesson plans Primary 3

Term 2
Involving pupils in their learning

Week 12 Subtracting three-digit numbers Day 3

## Making 100

#### Learning outcomes

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

Recognise quarter to and quarter past on the clock.

Make up their own subtraction sums.

Identify number facts about the number 100.

#### **Teaching aids**

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

Find or make dummy clocks, with moveable hands to show hours and minutes, for each pair.

#### Daily practice

minutes

#### Whole class teaching

Use a clock to make different times using quarter to and quarter past.

Ask pupils to tell the class what times you have made.

Give each pair a clock with moveable hands.

Tell them to make the following times: quarter past 6

quarter to 5 quarter to 7 quarter past 4



25 minutes

minutes

#### Introduction

#### **Main activity**

#### Whole class teaching

Write the number 100 on the chalkboard.

Ask the pupils to tell you anything they know about the number 100 and record their ideas around the number, eg:

100 is the same as 10 times 10.

100 is a very large number.

I can jump 100 times in 1 minute, etc.

#### **Group task**

Ask the pupils to work in groups to see how many subtraction sums they can write whose answer equals 100, eg: 101 - 1 = 100137 - 37 = 100

Tell the pupils they have 20 minutes to finish the task.

#### Whole class teaching

Ask the pupils to tell you how many sums they have.

Tell the group with the most sums to read out their sums to the rest of the class.

Ask other groups to check they are correct and mark any of their sums that match.

Tell other groups to read out any that they have not marked which are different from the other groups' sums.

#### **Plenary**

#### Whole class teaching

Song

Sing '100 green bottles' with the pupils, stopping when you reach 90.





Lesson

Numeracy lesson plans

**Primary 3** 

Term 2

**Involving pupils in** their learning

Week 12 **Subtractina** three-digit numbers Day 4

title

## **Subtracting** three-digit numbers

#### Learning outcomes

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

Draw guarter to and guarter past on a clock.

Subtract three-digit numbers.

#### **Teaching aids**

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

Find or make dummy clocks, with moveable hands to show hours and minutes, for each pair.

Read MAN Primary Mathematics 3, page 181, Exercise B.

Read MAN Primary Mathematics 3, page 75, Exercise F, numbers 1—5.

## **Daily practice**

minutes

**MAN Primary** 

Mathematics 3

#### Pair task

Explain that some people also use the word 'after' instead of 'past', so quarter past 3 can also be quarter after 3.

Ask pupils to complete MAN Primary Mathematics 3, page 181, Exercise B. using the clocks with moveable hands to help them and drawing clocks in their exercise books to record the answers.







25 minutes **MAN Primary** Mathematics 3

minutes

#### Introduction

#### **Main activity**

#### Whole class teaching

Write the following numbers on the chalkboard: 145 232

787 985 436

563

Ask the pupils to explain how to expand them.

#### Whole class teaching

Explain how to subtract two, three-digit numbers using the following example: 675 - 248 =248 = 200 + 40 + 840 200 8

675

Complete the sum, 675 - 248 = 427

427 435 475

#### **Pair task**

Ask the pupils to complete **MAN Primary Mathematics** 3, page 75, Exercise F, numbers 1—5 in pairs.

#### **Plenary**

#### Whole class teaching

Ask pupils to explain how they completed the sums.





Lesson

Numeracy lesson plans

**Primary 3** 

Term 2

**Involving pupils in** their learning

Week 12 **Subtractina** three-digit numbers Day 5

title

## What's the difference?

#### Learning outcomes

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

Write the time in two different ways.

Answer the question 'What's the difference?'

#### **Teaching aids**

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

Find or make dummy clocks, with moveable hands to show hours and minutes, for each pair.

### **Daily practice**

minutes

#### Whole class teaching

Ask pupils to move the long hand on their clock around the numbers. counting in intervals of 5 minutes as they do so.

Remind them that each number means 5 minutes have passed.

Ask the pupils if they can tell you how many minutes there are in quarter of an hour.

Explain that quarter past can also be expressed as 15 minutes past.

Ask them to make the following times on their clocks:

15 minutes past 1

15 minutes past 2

15 minutes past 3

15 minutes past 4, etc

Repeat these times, saying them in a random order, to check the pupils understand.



25 minutes

minutes

#### Introduction

#### **Main activity**

#### Whole class teaching

Ask the pupils to answer the following questions without using pencil and paper:

- 25 3
- 32 7
- 45 + 8
- 57 6
- 23 + 16
- 16 + 17
- 65 34
- 43 27

#### Individual task

Remind the pupils how to answer the question, 'What's the difference between 35 and 52?

Start at the lowest number.

Jump to the nearest Ten.

Jump up in Tens.

Count on until you reach the largest number, ie:

5	5	10	2
35	40		50 52

Add up the number of jumps.

Remind them to answer the question, 'The difference between 35 and 52 is 17.'

#### Pair task

Ask pupils to answer the following questions, using the above method. What's the difference between: 67 and 45

82 and 94 96 and 43

120 and 102 103 and 85?

#### **Plenary**

#### Whole class teaching

Ask the pupils to tell you something they have learned during the past week about time or subtraction.



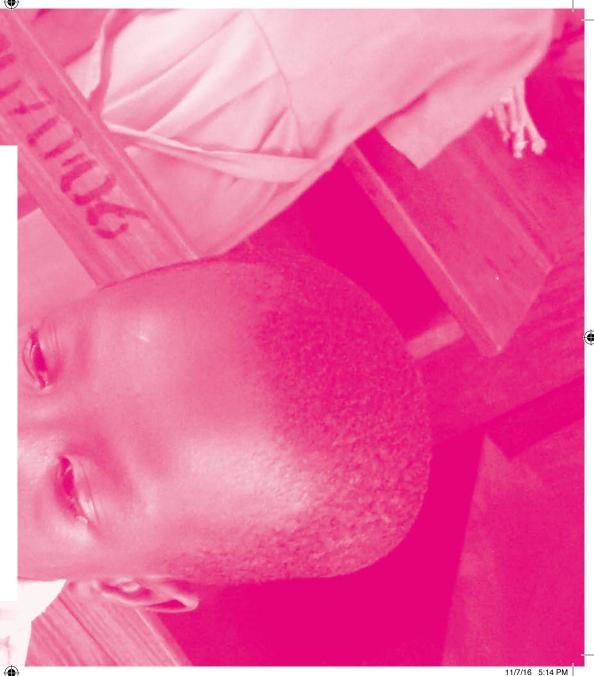


#### **Words/phrases**

estimate length metres centimetres cms record table measure width length units of measurement

#### **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.





Lesson

Numeracy lesson plans **Primary 3** 

Term 2 **Involving pupils in** their learning

Week 13 **Metres and** centimetres Day 1

title

# **Estimating length** and width

### **Learning outcomes**

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

Add three-digit numbers.

Use the vocabulary 'width' and 'length' to estimate and measure.

### **Teaching aids**

### **Before the lesson:**

Have ready a metre ruler for each pair.

Draw the following table on the chalkboard.

### **Daily practice**

minutes

### Whole class teaching

Give the pupils the following sums to answer using a number line:

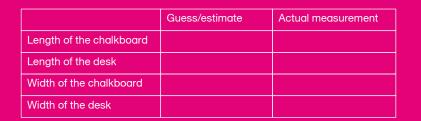
140 + 162

236 + 471

489 + 143

186 + 233

818 + 191





25

minutes

minutes

### Introduction

### Whole class teaching

Write the words 'width' and 'length' on the chalkboard.

Ask the pupils to look at their bench and tell you which part is the width and which is the length.

When measuring, the width is always the short side, and the length is always the long side.

Show the pupils a metre stick and explain that the measurement is a metre and they are going to estimate, or guess the length and width of classroom objects in metres.

Read through the table with the pupils and ask, 'How many metres long do you think the length of the chalkboard is?'

Write their guess/estimate in the first column.

Repeat the question for each object in the list.

### **Main activity**

### Pair task

Show the pupils a metre ruler and ask them if they know what it is used for.

Show them how to measure accurately with the ruler.

Put the end of the metre stick at the end of the object they want to measure and make a small mark at the other end of the ruler.

Move the metre stick so that the 0 is against the mark and repeat as above.

Count how many metre lengths the space that you are measuring is.

Provide each pair with a metre ruler.

Ask the pupils to use the metre ruler to measure the objects in the table and record the answer in the second column.

Ask them to look at their quess/estimate and see if they were correct.

### **Plenary**

### Whole class teaching

Ask pupils to use the tips of their fingers to measure the length and width of their table.





### Numeracy lesson plans Primary 3

# Term 2 Involving pupils in their learning

Week 13 Metres and centimetres Day 2

# Measuring in centimetres

### Learning outcomes

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

Subtract three-digit numbers.

Explain why we need centimetres to measure objects.

### **Teaching aids**

### **Before the lesson:**

Have ready a metre ruler, with the centimetres clearly marked, for each pair.

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

### **Daily practice**

### Pair task

minutes

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

Ask them to each choose three numbers.

Tell one pupil to make the largest number they can with their cards.

Tell the other pupil to make the smallest number they can with their numbers.

Tell the pairs to add their two numbers together using a number line.

Ask them to repeat this process four or five times.



### Introduction

### **Main activity**

### Whole class teaching

Ask the pupils to remind you how to use a metre stick to measure the length and width of objects.

Ask.

'How many metres long is the classroom?'

Make sure they measure correctly according to the instructions from Day 1.

Ask them what they do if the metre stick is too long for the last measurement.

Explain that on the stick there are smaller measurements called centimetres and these can be used to measure smaller lengths.

### **Pair task**

Give each pair a metre stick and ask, 'How many centimetres are there in one metre?'

Tell them they can find out by counting the number of marks on the ruler.

When they have told you the answer ask, 'Did anyone find an easier way of counting such a large number?'

Explain that the centimetres are broken into Tens so that they are easier to count.

Ask them to point to each Ten and count as they do, 10, 20, 30, 40, etc.

Tell each pair to measure their pencil.

Tell them to put the ruler flat on the table and put the end of the pencil right up against the 0.

Ask them to look at the place where the tip of the pencil finishes and count the number of centimetres to that point.

Record their answer on the chalkboard, eg: 15cms.

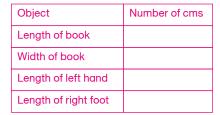
Explain that cms can be used instead of writing out the whole word.

Ask them to use their metre rulers to measure the following objects in cms, and record their answers in a table like the one below.

### **Plenary**

### Whole class teaching

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





**Numeracy** lesson plans **Primary 3** 

Term 2 **Involving pupils in** their learning

Week 13 **Metres and** centimetres Day 3

# **Metres and** centimetres

### **Learning outcomes**

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

Add three-digit numbers.

Measure in centimetres.

### **Teaching aids**

### **Before the lesson:**

Read MAN Primary Mathematics 3, page 145, unit 3.

Have ready a metre ruler, with the centimetres clearly marked, for each pair.

Have ready a small centimetre ruler for each pair.

minutes

### **Daily practice**

### Individual task

Give the pupils the following sums to do, in any way they can:

521 + 294 =

232 + 118 =

362 + 151 =

481 + 309 =

Ask some pupils to tell you how they answered the sums.









minutes

**MAN Primary** Mathematics 3

minutes

### Introduction

### Whole class teaching

Ask the pupils, 'What is the smaller measurement than metres that we learned yesterday?'

Ask them to explain how to measure their finger using Ask: a metre ruler.

Explain that when you are measuring small things it is easier to use a smaller ruler.

Give each pair a centimetre ruler and a metre ruler.

Ask them to compare the centimetres on both and check that the measurements are the same size.

'How many cms on the smaller ruler?'

'How many small rulers are the same as one metre ruler?'

'How many cms is the same as one metre?'

## **Main activity**

### Pair task

Ask the pupils to measure the lines in MAN Primary Mathematics 3, page 145, unit 3.

Ask them to record their answers in the table below (not the one in the book).

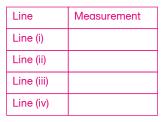
Make sure that they write cms after each measurement recorded.

### **Plenary**

### Pair task

Ask the pupils to find another pair and see if their results are the same.

Tell them to check that cms is written after each measurement.





Numeracy lesson plans **Primary 3** 

Term 2 **Involving pupils in** their learning

Week 13 **Metres and** centimetres Day 4

## **Metres and** centimetres

### Learning outcomes

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

Add three-digit numbers.

Measure in centimetres and metres.

### **Teaching aids**

### **Before the lesson:**

Have ready a metre ruler, with the centimetres clearly marked, for each pair.

Have ready a small centimetre ruler for each pair.

### **Daily practice**

minutes

### Whole class teaching

Write the following sums one at a time on the chalkboard and ask the pupils to answer them without using pencil or paper:

100 + 145

200 + 145

300 + 145

400 + 145

500 + 145

600 + 145

700 + 145

800 + 145

Write down the answers as the pupils say them and ask if anyone can notice a pattern.

Ask if anyone can tell you why the answers have that pattern.





25 minutes MAN Primary Mathematics 3

10 minutes

### Introduction

### Whole class teaching

Remind the class that estimate means to guess and the reason why we estimate is to help us if numbers are too big to count or if we don't have anything to measure with.

Practise using the word estimate so they understand its meaning.

### Ask:

'Can you estimate the number of pupils in the class today?'

'Can you estimate the number of chairs/benches in the room?'

'Can you estimate the height of the door in metres?'

'Can you estimate the width of the door in centimetres?'

Record their answers on the chalkboard in a table like the one below.

Ask a pupil to count the number of pupils and the number of chairs and record their answers on the table on the chalkboard.

# Main activity

### Pair task

Ask pupils to copy and complete the table at the bottom of MAN Primary Mathematics 3, page 143 using a centimetre ruler to measure the lines.

Explain that first they have to estimate the length in centimetres and then measure it.

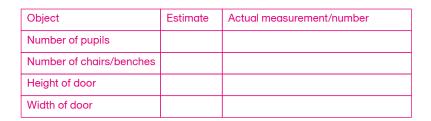
Remind them that they should make their best estimate but shouldn't change it if they find they are not correct when they measure the lines.

### **Plenary**

### Whole class teaching

Ask the pupils to say how close to the correct measurement their estimate was.

Ask them to compare answers to check they are correct.





Numeracy lesson plans Primary 3

Term 2
Involving pupils in

their learning

Week 13 Metres and centimetres Day 5

# Metres and centimetres

### Learning outcomes

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

Add three-digit numbers.

Measure in metres and centimetres and record the measurement.

### **Teaching aids**

### **Before the lesson:**

Have ready a metre ruler, with the centimetres clearly marked, for each pair.

Have ready a small centimetre ruler for each pair.

Have ready some large blank paper for each group to draw and write on.

### **Daily practice**

minutes | Mathematics 3

### Whole class teaching

**MAN Primary** 

Ask pupils to complete MAN
Primary Mathematics 3, page 65,
questions 1—5 using a number line.

Ask them to write the sum as a horizontal sum first and then draw a number line to answer the questions, eg: 251 + 486 =







25 minutes 10 minutes

### Introduction

### **Main activity**

### ∖ Ple

### Whole class teaching

### Ask.

'Can someone tell me what we do when we estimate a length?'

### Ask:

'Which two units of measurement have we been using this week?' (Metres and centimetres)

'Which is the largest unit of measurement?'

'Which would we use to measure the length of the classroom?'

'Which would we use to measure the width of a book?'

### **Group task**

Give each group a large sheet of paper, and tell them they will need both their metre rulers and centimetre rulers.

Explain that they are going to measure some objects and draw a table to record their measurements.

Write the following list:
Length of the book
Width of the classroom
Width of your chair seat
Length of your table

Tell them to draw a table on the back of their paper like the ones they have been completing all week. Remind them to think carefully which objects they will measure in metres and which they will measure in centimetres.

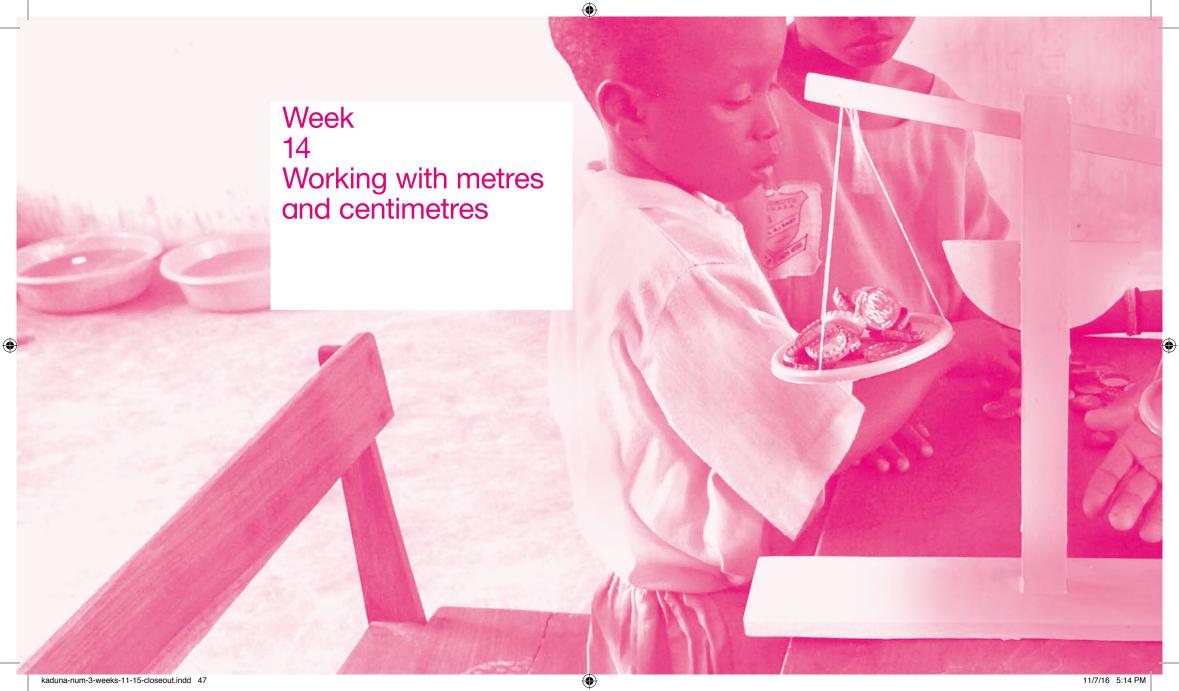
Ask them to complete their table together.

### Plenary

### Whole class teaching

Ask each group to show the rest of their class their tables and then display them in the classroom.









### Numeracy lesson plans Primary 3

# Term 2 Involving pupils in their learning

Week 14
Working with
metres and
centimetres
Day 1

# Measuring in metres and centimetres

### Learning outcomes

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

Subtract three-digit numbers.

Measure in centimetres.

### **Teaching aids**

### **Before the lesson:**

Have ready a centimetre and a metre ruler for each group.

Have ready a large sheet of blank paper for each group.

## Daily practice

minutes

### Whole class teaching

Give the pupils the following sums to answer using a number line:

162 - 140 =

471 - 236 =

489 - 143 =

237 - 186 =

818 - 191 =

Walk around the room and help pupils who are finding it difficult.







25 minutes 10 minutes

### Introduction

### **Main activity**

### Whole class teaching

Ask,

'Show me the length, width and height of your table.'

Ask the pupils to tell you something they learned about measurement the previous week.

## Group task

Give each group a metre ruler and a small centimetre ruler. Ask them to tell you how many centimetres there are in a metre (100).

Ask them to measure the length of the classroom in centimetres (using the metre ruler, not the small ruler).

Remind them that the easiest way is to count a Hundred for each metre they measure.

Ask them to record their measurement in

Ask them to measure the following in centimetres and record their answers in a table:

centimetres, eg: 750cms.

Width of the classroom Height of the window Width of the door Height of the teacher's table

### **Plenary**

### Whole class teaching

Ask groups to report their measurements back to the rest of the class.





Numeracy lesson plans Primary 3

Term 2
Involving pupils in their learning

Week 14
Working with
metres and
centimetres
Day 2

# Measuring in metres and centimetres

Learning outcomes

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

Subtract three-digit numbers.

Measure in metres and centimetres and record those measurements in a table.

### **Teaching aids**

### **Before the lesson:**

Have ready metre rulers and centimetre rulers for each group.

Have ready a large sheet of blank paper for each group.

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

minutes

### **Daily practice**

### Whole class teaching

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

Ask them to each choose three numbers.

Tell one member of each pair to make the largest number they can with their numbers.

Tell the other member of each pair to make the smallest number they can with their numbers.

Tell pupils to subtract the smallest number from the largest number.

Ask them to repeat this process four or five times.





Ask them to record this

in the correct place on

example below.

their table as shown in the

### Introduction

### Whole class teaching

Ask.

'How did you measure in centimetres yesterday?'

Remind them that instead of counting all the centimetres separately they counted each metre length as 100 because they know that one metre is the same as 100cms.

Ask them to find the tables recording their measurements from yesterday.

Ask them to repeat the measurements.

Explain that this time they are going to measure in metres and centimetres and record it on the table.

Ask them to make an extra column in their table headed 'metres and centimetres', so their table should look like the one below, with the 'centimetres' column already completed.

### **Main activity**

### **Group task**

Tell the groups to measure in metres, using their metre ruler and write down the number of full metres.

If the final measurement is not a full metre they should measure it in centimetres.

This means they will have a measurement that is written in metres and centimetres, eg: 7 metres 50 centimetres or 7m 50cms.

### **Plenary**

### Whole class teaching

Tell pupils to compare the two columns where they have recorded the measurements in centimetres and then in metres and centimetres.

Ask if there is any connection between the numbers.

	Centimetres	Metres and centimetres
Width of the classroom	750cms	7m 50cms
Height of the window		
Width of the door		
Height of the teacher's table		



Numeracy lesson plans Primary 3

Term 2
Involving pupils in their learning

Week 14
Working with
metres and
centimetres
Day 3

# Recording measurements

Learning outcomes

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

Subtract three-digit numbers.

Measure in metres and centimetres.

Record measurements in a table.

**Teaching aids** 

**Before the lesson:** 

Have ready metre rulers and centimetre rulers for each pair.

minutes

**Daily practice** 

Whole class teaching

Give the pupils the following sums to do, in any way they can:

<u>52</u>1 – 294 =

232 - 118 =

362 - 171 =

481 - 300 =

Ask some pupils to tell you how they answered the sums.





25 minutes 10 minutes

### Introduction

### Whole class teaching

Ask the pupils if they can remember what they learned on Day 2 about metres and centimetres.

Tell the position following:
Length of

Explain that sometimes it is easier to write a measurement in centimetres and sometimes it is easier to write a measurement in metres and centimetres.

### **Main activity**

### Pair task

Tell the pairs to measure the following:

Length of their arm
Width of their foot
Height to the top of the
window in the classroom
Length of two desks/tables
joined together
Length of the school
building they are in

Ask them to record their measurements on a table in centimetres, and in metres and centimetres.

### **Plenary**

### Whole class teaching

Ask if anyone found an easy way of converting/changing centimetres to metres and centimetres.

Explain that if they look at the digit in the Hundreds column when they have measured in centimetres, that will tell them how many metres there are in the measurement.

The digits in the Tens and Units columns will tell them how many centimetres, eg:

HTU

234cms can be written as 2m 34cms.

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Numeracy lesson plans Primary 3

Term 2
Involving pupils in their learning

Week 14 Working with metres and centimetres Day 4

# Converting centimetres into metres

### **Learning outcomes**

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

Subtract Hundreds from a three-digit number.

Convert centimetres into metres and centimetres.

### **Teaching aids**

### **Before the lesson:**

Read MAN Primary Mathematics 3, page 146, exercise B.

## Daily practice

minutes

### Whole class teaching

Write the following sums one at a time on the chalkboard and ask the pupils to answer them without using pencil or paper:

973 - 100

973 - 200

973 - 300

973 - 400

973 - 500

973 - 600

973 – 700

973 - 800

Write down the answers as pupils say them and ask if anyone can notice a pattern.

Ask if anyone can tell you why the numbers have that pattern.





MAN Primary Mathematics 3

25 minutes MAN Primary Mathematics 3

10 minutes

### Introduction

### Whole class teaching

Remind the pupils that 1 metre = 100 centimetres.

Ask them if they can remember what they learned on Day 3 about converting centimetres into metres and centimetres.

Remind them that if they look at the centimetres the number of Hundreds will tell them how many metres.

Ask.

'Can you tell me why?'
(There are 100 centimetres in a metre)

Go through the first two examples in MAN Primary Mathematics 3, page 146, exercise B with the class.

### **Main activity**

### Pair task

Ask the pupils to copy the table in MAN Primary Mathematics 3, page 146, exercise B into their exercise books.

Tell the pairs to complete the table in their exercise books.

### **Plenary**

### Whole class teaching

Ask the pupils to share their work and see who has understood it.





Numeracy lesson plans **Primary 3** 

Term 2 **Involving pupils in** their learning

Week 14 **Working with** metres and centimetres Day 5

## **Converting metres** into centimetres

### **Learning outcomes**

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

Add and subtract three-digit numbers.

Convert metres and centimetres into centimetres.

### **Teaching aids**

### **Before the lesson:**

Read MAN Primary Mathematics 3, page 77, questions 2 and 3.

Have ready a metre ruler and a centimetre ruler for each pair.

### **Daily practice**

minutes | Mathematics 3

### Whole class teaching

**MAN Primary** 

Ask pupils to complete MAN Primary Mathematics 3, page 77, questions 2 and 3, writing them in numerals first.

Ask pupils to explain how they got the answers.







25 minutes MAN Primary Mathematics 3

10 minutes

### Introduction

### **Main activity**

### Pair task

Give each pair a centimetre ruler and a metre ruler.

Ask them to write down the number of centimetres there are in the following:

- 1 metre = (100cms)
- 2 metres = (200cms)
- 3 metres
- 4 metres
- 5 metres
- 6 metres
- b metres
- 7 metres
- 8 metres
- 9 metres
- 10 metres

Share their answers and check that they are correct.

### **Individual task**

Explain that they can change metres and centimetres back to centimetres by using their knowledge of metres and centimetres and Hundreds, Tens and Units, eg: 'How many centimetres are there in 2m 40cms?'

Explain that to get that answer you need to expand the metres and then put the number together, eg: 2m 40cms = 200 + 40

= 240cms

Ask the class,

'How many centimetres

are there in:

3m 20cms

2m 50cms

5m 43cms?'

## Pair task

Ask pupils to complete MAN Primary Mathematics 3, page 146, Exercise A.

Go through the answers with them and check they are correct.

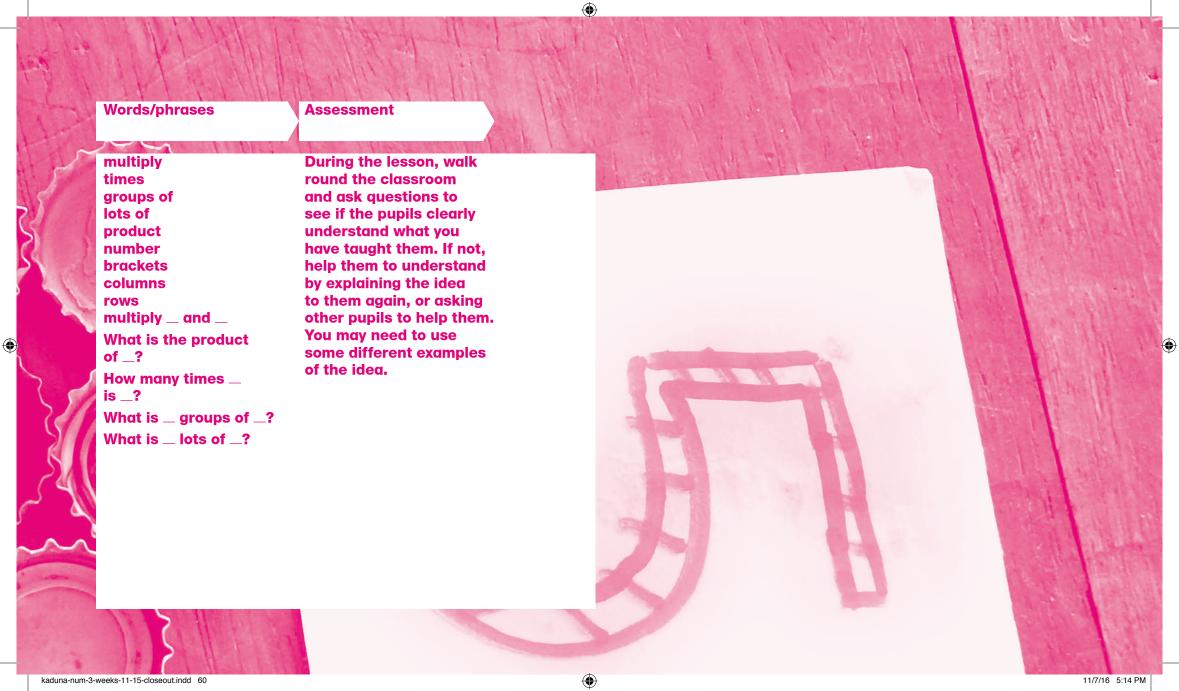
### **Plenary**

### Whole class teaching

Ask each pupil to tell you one thing they have learned about measuring during the past two weeks.









Numeracy lesson plans Primary 3

Term 2
Involving pupils in their learning

Week 15
Multiplying
two-digit numbers
by single digit
numbers
Day 1

# Revisiting multiplication of single digit numbers

Learning outcomes

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

Know different terms for multiplication.

Multiply single digit numbers using repeated addition.

**Teaching aids** 

**Before the lesson:** 

Have ready a set of large flash cards with the following questions:

Multiply \_ and \_

What is the product of \_\_?

What is \_ times \_?

What is groups of \_\_?

What is \_\_ lots of \_\_?

Have ready a set of number cards from 1—25 for each pupil.

Daily practice

minutes

Whole class teaching

Show the pupils the flash cards and read them out, putting numbers in the spaces, eg:

'Multiply 2 and 3',

'What is the product of 4 and 2?'

'What is 5 times 3?'

'What is two groups of 2?'

'What is three lots of 1?'

Put the number cards 1—5 on the table and ask a pupil to come out and pick two.

Tell them to hold up the numbers, while another pupil reads the question flash card, inserting those numbers in the correct places.

Ask pupils to show you the answer to each question by holding up their number cards.

Repeat with different numbers.





25 minutes 10 minutes

### Introduction

### Main activity

### Whole class teaching

Ask the pupils to remind you how to do the following sum using a number line, 6 x 7 =

As they explain, work it through on the chalkboard with them.

### Whole class teaching

Explain that they are going to learn another way of doing multiplication which will be easier when the sums they are doing get more difficult.

Draw the table below on the chalkboard and ask the pupils to count the number of squares.

Explain that a table is easier to understand if you break it up into rows and columns. The rows go across and the columns go down.

# row

Ask them.

'How many rows?' (3)
'How many columns?' (2)

Tell them that this can be written as  $3 \times 2 = 6$ 

Explain that they can multiply the rows by the columns and they will get the same answer as counting the squares.

Repeat this for the table below.

### Pair task

Tell pupils to work in pairs and repeat what you have just done on the chalkboard, with the following pairs of numbers:

- 4 columns 2 rows
- 3 columns 3 rows
- 2 columns 3 rows
- 5 columns 2 rows
- 3 columns 5 rows

Explain that they should draw the squares in their exercise books to help them.

Tell them to check that the answer to their sums and the number of squares are the same.

### **Plenary**

### Whole class teaching

Ask some pupils to share what they have learned and demonstrate to the rest of the class how they got their answers.





Numeracy lesson plans Primary 3

Term 2
Involving pupils in their learning

Week 15
Multiplying
two-digit numbers
by single digit
numbers
Day 2

# Multiplying single digit numbers

### **Learning outcomes**

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

Multiply single digit numbers from memory.

### **Teaching aids**

### **Before the lesson:**

Read through the instructions carefully and practise using this method of multiplication so that you understand it.

15 minutes

### Daily practice

### **Group task**

Give each group a number from 1—5 and ask them to multiply that number by all numbers from 1—10, eg:

2 x 1 =

 $2 \times 2 =$ 

 $2 \times 3 =$ 

 $2 \times 4 =$ 

Ask them to write each sum in their exercise books.





10 minutes

### Introduction

### **Main activity**

### Whole class teaching

Draw a table on the chalkboard as you did yesterday.

Ask the pupils to show you the columns and the rows.

Ask them:

'How many columns?'
'How many rows?'

Ask pupils to tell you how to do the following sum by drawing a table, 5 x 3 =

### Whole class teaching

Explain that you are going to show them how to multiply a two-digit number by a single digit number.

Write the following sum on the chalkboard, 11 x 2 =

Explain that they could draw a table or a number line to help them do the multiplication, but when the sum gets more difficult it will take too long to use those methods so you are going to show them another way.

First of all they should expand the number 11, 11 = 10 + 1

Explain that they then need to multiply both numbers by 2.

# Tell them that it can get confusing so to help them they should draw brackets

they should draw brackets around each sum as follows:  $(10 \times 2) = 20$ 

$$(1 \times 2) = 2$$

Explain that they still haven't finished the sum as they need to add the answers together,

20 + 2 = 22and write the completed sum,

 $11 \times 2 = 22$ 

Repeat for the following sum:

 $12 \times 3 = 10 + 2 \times 3$ 

Which should be written as:

$$(10 \times 3) = 30$$

$$(2 \times 3) = 6$$

$$30 + 6 = 36$$

$$12 \times 3 = 36$$

### Pair task

Leave the sum on the chalkboard and ask pupils to follow the steps to complete these sums:

14 x 2 15 x 3

12 x 5

16 x 4

14 x 5

16 x 2

### **Plenary**

### Whole class teaching

Ask five pupils to share with the rest of the class what they have learned and how they did their sums using the chalkboard.





Numeracy lesson plans Primary 3

Term 2
Involving pupils in their learning

Week 15
Multiplying
two-digit numbers
by single digit
numbers
Day 3

# Multiplying two-digit numbers by single digit numbers

Learning outcomes

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

Multiply single digit numbers from memory.

Multiply two-digit numbers by a single digit number.

### **Teaching aids**

### **Before the lesson:**

Have ready a set of number cards from 1—100.

Read MAN Primary Mathematics 3, page 101, exercise A.

15 minutes

### Daily practice

### **Group task**

Give each group a set of cards between 1 and 100, eg: Group 1 (3 to 28) Group 2 (29 to 40), etc.

Call out a number between one and five and ask each group to place their lowest number card on the table.

Ask them to add on the number you have just given them until they have finished all their numbers, eg: If you call out the number five, group 2 would lay these cards on the table, 29, 34, 39.

Repeat, calling out different numbers each time.







25 minutes MAN Primary Mathematics 3

10 minutes

### Introduction

### Whole class teaching

Write the following sums on the chalkboard and ask the pupils to complete them in the way that they learned on Day 2:

13 x 5 =

11 x 6 =

14 x 5 =

When they have completed the sums, ask the class to tell you their answers.

Take a note of those pupils who did not understand and put them in a group together.

### **Main activity**

### Individual task

Ask pupils to complete MAN Primary Mathematics 3, page 101, exercise A.

Sit with any pupils who are struggling to understand how to do the sum and help them.

Go through each sum step by step with them.

Once a pupil has understood the method they can carry on alone.

### Plenary

### Whole class teaching

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





Lesson

Numeracy lesson plans **Primary 3** 

Term 2 **Involving pupils in** their learning

Week 15 Multiplying two-digit numbers by single digit numbers Day 4

title

# Multiplying two-digit numbers by single digit numbers

**Learning outcomes** 

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

Multiply single digit numbers from memory.

Multiply two-digit numbers by single digit numbers.

**Teaching aids** 

**Before the lesson:** 

Have ready two sets of number cards from 1—100.

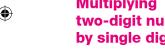
Read MAN Primary Mathematics 3, page 101, Exercise B, questions 1 and 2 (a-f).

minutes

### **Daily practice**

### Pair task

Repeat the activity from Day 3, giving number cards to pairs.











25 minutes MAN Primary Mathematics 3 10 minutes

### Introduction

### **Main activity**

### Plenary

### Pair task

Pair the pupils who are struggling to multiply single digit and two-digit numbers with those who understand it well.

Write the following sums on the chalkboard and ask the pairs to work out the answers together:

12 x 2 =

14 x 3 =

22 x 4 =

### Pair task

In the same pairs, ask the pupils to complete MAN Primary Mathematics 3, page 101, Exercise B, questions 1 and 2 (a—f).

### Whole class teaching

Read out the following sums one at a time and ask pupils to quickly tell you the answers, without using pencil and paper to work them out:

4 x 5

2 x 3

5 x 5

3 x 3

2 x 2

4 x 4

2 x 10

2 X IC

4 x 10





Numeracy lesson plans Primary 3

Term 2
Involving pupils in their learning

Week 15
Multiplying
two-digit numbers
by single digit
numbers
Day 5

# Word problems

### **Learning outcomes**

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

Multiply single digit numbers from memory.

Multiply two-digit numbers by a single digit number.

### **Teaching aids**

### **Before the lesson:**

Write the following sequences of numbers on the chalkboard:

2 4 8 10

3 6 9 12 18 21

8 12 16 24

12 16 18

7 10 16

Have ready the flash cards from Day 1.

# Daily practice

minutes

### Whole class teaching

Read out the first number sequence on the chalkboard and ask pupils to help you find the missing number.

Ask them to work out the missing numbers for each sequence of numbers on the chalkboard.







25 minutes 10 minutes

### Introduction

### Whole class teaching

Flash the cards with different questions for multiplication and ask the pupils to read them.

Put the cards face down on the floor and ask one pupil to come out, choose a card, and read it out to the class.

Ask individual pupils to make up a sum using that word for the rest of the class to answer.

### **Main activity**

### **Group task**

Give each group a flash card and ask them to make up three sums using the multiplication term on that card and write their sums on the back of the card.

Ask them to pass the card on to the next group who should also write three sums (not the answers) on the back.

Continue until each group has had each card.

The cards should now be back with the first group.

Ask them to work together to answer all the sums on the card and write the answers on the back.

### **Plenary**

### Whole class teaching

Ask the pupils to tell you everything they have learned about multiplication this week.



### **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.

