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Numeracy
lesson plans Primary 2

Term 3
Assessment for
learning

## Numeracy lesson plans Primary 2 Term 3 <br> Assessment for learning

## Weeks

26-30


## Introduction

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

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

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

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

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

## Professor Haruna Wakili

 Honourable Commissioner, Ministry of Education, Science and Technology, Jigawa StateNumeracy lesson plans Primary 2

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## Weeks

26-30

## Introduction

D Assessment for learning

## Assessment for learning

Effective assessment supports learning, giving all pupils the chance to be successful learners.

Assessment in the classroom happens all the time, it is an ongoing process. It helps you to find out:

What your pupils have learned.
How well you are teaching.
How to plan your next steps of teaching.
What your pupils are doing well and what they need to practise.

In every lesson you should walk round the classroom and ask questions to see if the pupils clearly understand what you have taught them. If they do not, then you should help by explaining the idea to them again - maybe in a different way or with another example, or you could ask another pupil to help them.

Assessment used each day in the classroom gives you a much broader picture of your pupils' ability and progress. It also helps to give your pupils a sense of achievement, helping them to understand what they can do well and what they still need to practise.

There are many ways that you can assess your pupils' knowledge and understanding:

By observing
Using careful questioning.
Through discussion with individuals, pairs or groups of pupils.

When marking work produced by individual pupils.
Looking at exams at the end of a term.

In every classroom there will always be some pupils who learn faster than others. When you read the learning outcomes for each day, think about which of your pupils will achieve them at the end of the lesson and which of them will need more time to achieve the learning outcomes.
As you get to know your pupils you will be able to plan how you can help each pupil to do their best in every lesson.

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## Introduction

 Low-cost teaching aids for the term
## Weeks

26-30

Find a strip of card. Use a ruler to mark it in centimetre sections, as shown below.

Show the pupils how to measure using a centimetre ruler.

Put the end of the ruler at the end of the object you are measuring.

Read the number where the line ends, as shown below.

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, these can then be used for measuring.

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 cms, with longer marks for 10, 20, 30, up to 100, then write the numbers next to them.

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

| 1 cm | 2 cm | 3 cm | 4 cm | 5 cm | 6 cm | 7 cm | 8 cm | 9 cm | 10 cm |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Making the 2 times table

| 엿ㅇ | 2 | $1 \times 2=2$ |
| :---: | :---: | :---: |
| 웃ㅇㅇㅇㅇㅇ | $2 \times 2$ | $2 \times 2=4$ |
| 웃우숫우숫 | $2 \times 2 \times 2$ | $3 \times 2=6$ |
|  | $2 \times 2 \times 2 \times 2$ | $4 \times 2=8$ |
| 웃웃ㅇㅅ웃ㅇㅇㅅㅇㅇㅅㅇㅅㅇㅇ | $2 \times 2 \times 2 \times 2 \times 2$ | $5 \times 2=10$ |
|  | $2 \times 2 \times 2 \times 2 \times 2 \times 2$ | $6 \times 2=12$ |
|  | $2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2$ | $7 \times 2=14$ |
|  | $2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2$ | $8 \times 2=16$ |
| 웃웃ㅇㅇㅇㅇㅇㅇㅇ웅ㅇㅇㅅㅇㅇㅇㅇㅇㅇㅇㅇㅇㅇㅇㅇㅅㅇ | $2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2$ | $9 \times 2=18$ |
| 웃웃웃우웃웃웅웃웃웃웃우웃웃웃 | $2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2$ | $10 \times 2=20$ |

Which are subtraction Find my friend game problems?

1 Yusuf has 45 apples. Asabe buys 26 of them. How many apples has Yusuf got now?
2 Aliyu is 56 years old. Jacob is 38 years old. What is the difference in their ages?

3 There are 28 pupils in class A and 34 pupils class B. How many pupils are there altogether?
4 Mr Amedu has 46 pencils. He has 27 pupils in his class. He gives them each a pencil. How many pencils does he have left?

5 Idris has 55 hens. He sells 38. How many hens has he got now?

10 chunky chickens rhyme

10 chunky chickens, on cards. Make two number frying in a pan (x2) / 5 cards. Make enough cards for each pupil to have one card. If there is an odd number of pupils in the class, also make yourself a card.

Give out the cards and tell the pupils they need to find someone who has a card that will make 10 when added to the number on their own card.

One went pop and another went bang /
There were 8 chunky chickens frying in a pan...
(Continue to subtract two chickens each time, until there are no chickens left in the pan.)



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Week 26
Subtraction
crossing the Ten
Day 1

Lesson
title
Write two-digit
numbers in expanded form

|  | 15 minutes |
| :---: | :---: |
| Learning outcomes | Daily practice |
| By the end of the lesson, most pupils will be able to: | Group task |
|  | Show the pupils the lines on |
| Use a ruler to measure in centimetres. | the card and ask them to point to the longest and the shortest. |
| Write two-digit numbers in expanded form. | Ask how we can measure them accurately (using centimetre rulers). |
| Teaching aids | Give out the rulers and ask the pupils to point to the places on their ruler that show 5 cm , 13 cm and 7 cm . |
| Before the lesson: | Ask the pupils to point to 0 cm |
| Draw lines measuring 10cm, $15 \mathrm{~cm}, 20 \mathrm{~cm}$ and 25 cm on | on their ruler and tell them this is the starting point when measuring. |
| to a large piece of card for each group. | Ask each group to use their rulers to measure the lines on their card. |
| Find rulers for each pair or make the rulers as explained in the introduction. | Ask each group to say their measurements and ask if the others agree. |
| Read Macmillan New Primary Mathematics 2, page 34, Exercise 1. |  |



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Week 26
Subtraction
crossing the Ten
Day 2

Lesson

## Expanding numbers

15
minutes


By the end of the lesson, most pupils will be able to:
Measure shapes in centimetres.
Expand two-digit numbers.

## Teaching aids

## Before the lesson:

Have ready the rulers from yesterday.
Have ready rectangles measuring $5 \mathrm{~cm} \times 10 \mathrm{~cm}, 12 \mathrm{~cm} \times 8 \mathrm{~cm}$ and $15 \mathrm{~cm} \times 6 \mathrm{~cm}$ - enough for each pair to have one rectangle.

Make a set of cards for each group containing the numbers: '37', '23', '45', '51' and '69'.

Practise singing
'10 chunky chickens'.

## Daily practice

## Pair task

Ask if anyone can remember what we use to measure length.
Ask the pupils to show you how big a centimetre is with their thumb and first finger.
Write 'cm' on the chalkboard and tell the pupils this is how we write centimetres.

Give each pair a rectangle and a ruler.
Ask them to measure the sides of their rectangle in cm and write the answers in their exercise books.
Swap the rectangles around the pairs and repeat.

Check that they are measuring accurately.

| 10 minutes | 25 minutes |  | $\left\|\begin{array}{l}10 \\ \text { minutes }\end{array}\right\|$ Song |
| :---: | :---: | :---: | :---: |
| Introduction | Main activity |  | Plenary |
| Whole class teaching | Whole class teaching | Group task | Whole class teaching |
| Demonstrate how to expand the number 54 on the chalkboard. | Demonstrate how to expand the Tens in the following numbers on the chalkboard: | Give each group a set of number cards. <br> Ask them to expand | Tell the pupils to sing '10 chunky chickens' with you. |
| $\begin{aligned} & 54=5 \text { Tens } 4 \text { Units } \\ & =50+4 \end{aligned}$ | $\begin{aligned} & 35=30+5 \\ & =10+10+10+5 \end{aligned}$ | the numbers in their exercise books. | Ask them to say what kind of sum they are doing |
| Write ' 33 ' on the chalkboard. <br> Invite a pupil to the chalkboard to explain each stage of expanding | $\begin{aligned} & 46=40+6 \\ & =10+10+10+10+6 \end{aligned}$ | Call out the numbers and ask one person from each group to say the answers. | in the song. |

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learning

Week 26
Subtraction
crossing the Ten Day 3

Lesson
title

## Subtracting numbers using the expanded form

15 minutes

| Learning outcomes | Daily practice |
| :--- | :--- |
| By the end of the lesson, most <br> pupils will be able to: | Pair task |
| Draw measurements accurately. | Give each pair a ruler. <br> Expand Units to subtract <br> numbers that cross a Ten. |
| Ask them to point to 0 cm on <br> their ruler and remind them <br> that this is the starting point <br> when measuring. |  |
| Teaching aids | Demonstrate on the chalkboard <br> how to use a ruler to draw a straight <br> line 5 cm long. |
| Before the lesson: | Ask the pupils to draw lines <br> of $5 \mathrm{~cm}, 10 \mathrm{~cm}$ and 15 cm in their <br> exesterday. |
| exave ready a number line for | Ask them to check each other's <br> measurements. |
| each pair. |  |


| 10 minutes | 25 <br> minutes |  |
| :---: | :---: | :---: |
| Introduction | Main activity |  |
| Whole class teaching | Whole class teaching | On the chalkboard, demonstrate crossing the Ten to solve 44-7 in the same way. |
| Ask the pupils to tell you as many addition sums as they can that add up to 5 . | Demonstrate on the chalkboard how to solve 33 - 5 by expanding the Units. |  |
| Write them on the chalkboard in a list. | Cross the Ten by counting back 3 to the nearest 10 (30), then counting back another 2, as shown below. |  |
| Ask the pupils to tell you as many addition sums as they can that add |  |  |
| up to 7 and write them | $33-5=$ |  |
| in a separate list on the chalkboard. | $33-3-2=$ |  |
|  |  |  |
|  | $33-3-2=28$ |  |

## Pair task

Write the following sums on the chalkboard:
$22-5=$
36-7=
$54-7=$
$63-7=$
$35-5=$
Ask the pairs to complete the sums in their exercise books by using number lines to count back to the nearest Ten and then expand the Units.

10
minutes

## Plenary

Whole class teaching
Sing '10 chunky chickens' with the class.

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Week 26
Subtraction
crossing the Ten
Day 4

15
minutes

Subtracting numbers using the expanded form

Lesson


By the end of the lesson, most pupils will be able to:
Measure objects accurately in centimetres.

Expand Units to subtract numbers that cross a Ten.

## Teaching aids

## Before the lesson:

Copy the 'Measure in centimetres grid' shown left on to a piece of paper for each group.
Have ready a ruler.
Have ready a number line for each pair.

Daily practice

## Group task

Hold up the ruler.
Ask the pupils to name objects that are small enough to measure with a ruler, eg: pencils, books.
Give each group a 'Measure in centimetres grid', read and explain it to them.
Ask if anyone can remember what 'estimate' means.

Ask the pupils to estimate the measurements and write them in the grid in cm .

Ask each group to say their estimates and ask the other groups if they agree.

Keep the grids for the next day.

| 10 minutes | 25 minutes |  | $\left\lvert\, \begin{aligned} & 10 \\ & \text { minutes } \end{aligned}\right.$ |
| :---: | :---: | :---: | :---: |
| Introduction | Main activity |  | Plenary |
| Pair task | Whole class teaching | Pair task | Whole class teaching |
| Ask the pupils to tell you some addition sums that make 6. | Remind the pupils that expanding the Units can make it easier to subtract. | Write the following sums on the chalkboard: $21-7=$ | Choose some pupils to quickly draw their number lines on the chalkboard. |
| $\overline{\text { Write their sums as a list }}$ on the chalkboard. | On the chalkboard, demonstrate crossing the | $\begin{aligned} & 34-7= \\ & 62-8= \\ & 73-7= \end{aligned}$ |  |
| Ask the pupils to tell you some addition sums that make 8. | Write '65-6 =' on the chalkboard. | $45-6=$ <br> Ask the pupils to complete the sums in their exercise |  |
| Write these sums as a list on the chalkboard. | Tell the pupils to use the addition sums on the chalkboard to help them complete the sum. | books using number lines. <br> Remind them to count back to the nearest Ten, then expand the Units. |  |

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Primary 2

## Term 3

Assessment for
learning

Week 26
Subtraction
crossing the Ten Day 5

Lesson

## Subtracting numbers

|  | 15 <br> minutes |
| :--- | :--- |
| Learning outcomes | Daily practice |
| By the end of the lesson, most <br> pupils will be able to: | Group task |
| Measure objects accurately <br> in cm. <br> centimetres grids' and rulers. |  |
| Subtract two-digit numbers <br> that involve crossing the Ten. | Demonstrate how to use a ruler <br> to measure an object accurately. <br> Remind the pupils that Ocm is the |
| Teaching aids | Ask the groups to measure <br> the objects in the grid and <br> write the measurements in cm <br> in the grid. |
| Before the lesson: | Ask each group to say their <br> measurements and ask the <br> other groups if they are correct. |
| Have ready the grids from <br> yesterday and a ruler for <br> each pair. | Ask the groups if any of their <br> estimates were the same as, <br> or near to, their measurements. |
| Have ready a number line for |  |
| each pair. |  |


| $\left\lvert\, \begin{aligned} & 10 \\ & \text { minutes } \end{aligned}\right.$ | 25 minutes |  | 10 minutes |
| :---: | :---: | :---: | :---: |
| Introduction | Main activity |  | Plenary |
| Pair task | Whole class teaching |  | Pair task |
| Remind the pupils that when we subtract numbers | Write '43-25' on the chalkboard. | Expand the 5, ie: $3+2=5$, and jump back 2, | Write '32-28' and '41-25' on the chalkboard. |
| it can help to expand the numbers. | Demonstrate expanding: $25=20+5$ | as shown below. $\begin{array}{llll} -2 & -3 & -10 & -10 \end{array}$ | Ask the pupils to work out the sums in their |
| On the chalkboard, | $=10+10+5$. |  | exercise books by |
| demonstrate how to expand the Tens in the following numbers: | Demonstrate counting back in 2 jumps of 10. | $\frac{\text { Repeat with 48-26 and }}{\text { 2 }}$ | expanding the numbers and using a number line. |
| $\begin{aligned} & 44=40+4 \\ & =10+10+10+10+4 \end{aligned}$ | To cross the Ten, jump back 3 to the nearest Ten. | 35-28. |  |
| $\begin{aligned} & 36=30+6 \\ & =10+10+10+6 \end{aligned}$ |  |  |  |
| Ask the pupils to expand 24,38 and 46 in their exercise books. |  |  |  |

Week
27
Subtraction of
two-digit numbers


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## Term 3

Assessment for
learning

Week 27
Subtraction of
two-digit numbers
Day 1

## Subtracting two-digit numbers

|  | 15 <br> minutes |
| :--- | :--- |
| Learning outcomes | Daily practice |
| By the end of the lesson, most <br> pupils will be able to: | Group task |
| Use a tape measure to measure the pupils that they have <br> in centimetres. <br> been learning how to measure in <br> centimetres. |  |
| Subtract two-digit numbers. | Write 'cm' on the chalkboard. |
| Teaching aids | Show the class the tape measure <br> and tell them it is used to measure <br> around things. |
| Before the lesson: | Ask them to estimate how many <br> centimetres it is around their wrists <br> and ankles. |
| Have ready a tape measure. | Choose some pupils to measure <br> five pupils' wrists and ankles and <br> write the measurements on the <br> chalkboard. |
| Read Macmillan New Primary <br> Mathematics 2, page 50. | Discuss who has the largest wrist <br> and the smallest ankle. |



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## Term 3

Assessment for
learning

Week 27
Subtraction of two-digit numbers Day 2

Lesson
title
(

15
minutes

Learning outcomes

By the end of the lesson, most pupils will be able to:
Say how many centimetres equal a metre.

Subtract two-digit numbers.

## Teaching aids

Before the lesson:
Read Macmillan New Primary Mathematics 2, page 55 , Exercise 6.

Have ready metre sticks,
or prepared sticks measuring 100 cm with 10 cm spaced markings, for each group.

Have ready the rulers from last week.

Daily practice

## Group task

Give each group a metre stick and a ruler.

Ask the pupils how many centimetres they can see on the ruler.
Tell them that the stick is measured in spaces of 10 centimetres.

Ask the pupils to count the Tens to find out how many centimetres there are on the stick.
Write '100cm = 1m' on the chalkboard.

Tell the pupils the stick is called a metre stick and is used to measure larger things.
Ask them to say something that is bigger than the metre stick and something that is smaller than the ruler.

| 25 | Macmillan | 10 |
| :--- | :--- | :--- |
| minutes | New Primary | minutes |
|  | Mathematics 2 |  |



## Whole class teaching

Remind the pupils that they have been learning ways to subtract using a number line.

Ask the pupils to help you work out $96-47$, using the method you have learned during the week.

## Main activity

Pair task
Ask the pupils to look in Macmillan New Primary Mathematics 2, page 55, Exercise 6.
Tell the pairs to choose five sums and complete them in their exercise books.
Go round and check
they are using number lines correctly.

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## Term 3

Assessment for
learning

Week 27
Subtraction of two-digit numbers Day 3

## Subtraction word problems

|  | 15 <br> minutes |
| :--- | :--- | :--- |
| Learning outcomes | Daily practice |
| By the end of the lesson, most |  |
| pupils will be able to: | Group task |
| Estimate using metres. | Ask the pupils to say how many <br> centimetres there are in a metre. |
| Solve subtraction word problems. | Write '100cm = 1m' on the <br> chalkboard and ask the puils to <br> copy it in their exercise books. |
| Teaching aids | Ask the groups to estimate <br> how long and how wide the <br> classroom floor is. |
| Before the lesson: | Tell them to write their estimates <br> in their books. |
| Have ready the metre sticks <br> from yesterday. | Show them how to use the metre <br> sticks to measure the floor. |
| Write the folllowing words <br> on large flash cards: 'minus', <br> 'subtract from', 'take away', <br> 'difference between', 'less than'. | Ask the pupils to write their <br> measurements in m in their books. |
| Read Macmillan New Primary <br> Mathematics 2, page 55, <br> Exercise 7. | Ask each group to say their <br> measurements and ask the others <br> if they agree. |


| 10 minutes | 25 minutes | Macmillan <br> New Primary <br> Mathematics 2 |  | $\begin{array}{\|l\|l} 10 \\ \text { minutes } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: |
| Introduction | Main activity |  |  | Plenary |
| Pair task | Whole class teaching |  | Individual task | Whole class teaching |
| Ask the pupils to discuss different words and phrases that mean subtraction. | Tell the pupils to look in Macmillan New Primary Mathematics 2, page 55, Exercise 7, questions 1-5. |  | Ask the pupils to complete the first five problems in Exercise 7 in their exercise books. | Say a number between 0 and 10. <br> Ask the pupils to shout |
| Choose some pairs to say some of their words. |  |  | out the number needed to make your number |
| Show and read the flash cards. | Read and explain each question. |  |  | Tell the pupils to draw number lines for each one. | add up to 10 , eg: if you say ' 8 ', they need to shout ' 2 '. |
| Put them on display in the classroom. | Choose some pupils to come and write the sum needed to solve each problem on the chalkboard. |  | Repeat with other numbers between 0 and 10. |  |
|  | Remind them that they can expand the numbers to make them easy to subtract. |  |  |  |
|  | Choose some pupils to expand 46 and 26. |  |  |  |

## Numeracy

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## Term 3

Assessment for
learning

Week 27
Subtraction of two-digit numbers Day 4

Lesson

## Estimate and check answers

|  | 15 minutes |
| :---: | :---: |
| Learning outcomes | Daily practice |
| By the end of the lesson, most | Group task |
|  | Ask the pupils to name some |
| Estimate and measure in metres. | things we could measure |
| Estimate and check answers to two-digit subtraction sums. | in metres and some things we could measure in centimetres. |
| Teaching aids | Give each group a metre stick and go outside. |
| Before the lesson: | Look at one side of the school and ask some of the pupils to estimate how long it is. |
| Have ready the metre sticks from yesterday. | Let them measure it with the metre stick and say the |
| Practise singing '10 chunky chickens'. | measurement. <br> Discuss how near their estimate was to the measurement. |
|  | Ask them to estimate a distance from the school, eg: from a wall to a tree and measure it with the metre stick. |
|  | Discuss if their estimates are improving. |


| 10 minutes | 25 minutes |  |  | 10 minutes | Song |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Introduction | Main activity |  |  | Plenary |  |
| Whole class teaching | Whole class teaching |  | Pair task | Whole class teaching |  |
| Ask the pupils to tell you as many addition sums with the answer 8 or 9 as they can. | Write the following on the chalkboard: | Ask the class to guess which they think are the correct answers. | Ask the pupils how we can find out which is the correct answer. | Sing '10 chunky chickens' with the class. |  |
| Write them in a list on the chalkboard. | $50-37=1331$ | Choose some pupils to say which answer they have chosen and why. | Ask the pairs to complete the rest of the sums on the chalkboard in their exercise books. |  |  |
|  | $62-18=4424$ | Remind the pupils that these are all subtraction sums and the answers will be less than the biggest number in the sum. |  |  |  |
|  | of the answers in each pair of boxes is correct and one is wrong. |  | Tell them to check that their answer is the same as one of the answers in the boxes. |  |  |

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Week 27
Subtraction of two-digit numbers Day 5

Lesson
title

## Using a number line

15
minutes

## Learning outcomes <br> By the end of the lesson, most pupils will be able to:

Measure objects in centimetres and metres.

Solve subtraction word problems.


Before the lesson:
Draw a tree, a door, a pencil, a book, a shoe and a wall on the chalkboard.

Copy 'Which are subtraction problems?' from the introduction on to the chalkboard.

Daily practice

Pair task Write

on the chalkboard and choose some pupils to fill in the gaps.

Ask the pupils to look at the pictures on the chalkboard and say which they would measure in centimetres and which they would measure in metres.

Tell them to fold a page in their exercise books in half.

On one half tell them to write 'cm' and draw the objects they would measure in cm .

On the other half ask them to write ' $m$ ' and draw the objects they would measure in m .

| 10 minutes | 25 minutes |  | $\begin{array}{\|l\|} 10 \\ \text { minutes } \end{array}$ |
| :---: | :---: | :---: | :---: |
| Introduction | Main activity |  | Plenary |
| Pair task | Whole class teaching | Individual task | Whole class teaching |
| Read through the word problems written on the chalkboard. | Look at the first sum on the chalkboard, 45-26. | Ask the pupils to complete problems 2, 4, and 5 in their exercise books, using a number line. | Ask the pupils to say any words they know that mean the same as subtract. |
| Ask the pupils to discuss which problems need subtraction sums (1, 2, 4 and 5 ). | they have been expanding two-digit numbers and subtracting numbers by crossing the Ten. |  | Choose some pupils to say how many Tens and Units there are in 48. <br> Ask them to expand 48. |
| Ask them what sum is needed for number 3 (addition). | Choose some pupils to help you draw a number line and work out the answer. |  | Repeat with other two-digit numbers. |
| Ask them to say the sums needed for problems $1,2,4$ and 5. |  |  |  |
| Choose some pairs to come and write the sums on the chalkboard. |  |  |  |



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.
ter pas
quarter to
estimate
How long will it take to...?

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Week 28
Time
Day 1

Lesson
title

## Minutes

## Learning outcomes <br> By the end of the lesson, most pupils will be able to:

Subtract two-digit numbers.
Identify where minutes are on a clock.

## Teaching aids

## Before the lesson:

Read Macmillan New Primary Mathematics 2, page 22.
Have ready a real clock with a second hand and a large clock with moveable hands.

15 minutes

|  | 15 <br> minutes |
| :--- | :--- |
| Learning outcomes | Daily practice |
| By the end of the lesson, most <br> pupils will be able to: | Pair task |
| Subtract two-digit numbers. | Ask some pupils to call out two <br> numbers from 0-9. Write the <br> numbers on the chalkboard. |
| Identify where minutes are <br> on a clock. | Ask the pupils to say the biggest <br> and smallest two-digit numbers <br> they can make with the numbers. |
| Teaching aids | Write these two, two-digit <br> numbers on the chalkboard. |
| Before the lesson: | Ask the pairs to subtract the <br> smaller number from the bigger <br> number in their exercise books. |
| Read Macmillan New Primary <br> Mathematics 2, page 22. | Remind them to draw a <br> number line and expand the <br> smallest number. |
| Have ready a real clock with <br> a second hand and a large clock |  |
| with moveable hands. |  |


| $\begin{array}{\|l\|l} 10 \\ \text { minutes } \end{array}$ | Macmillan New Primary Mathematics 2 | 25 minutes |  | 10 minutes |
| :---: | :---: | :---: | :---: | :---: |
| Introd | ction | Main activity |  | Plenary |
| Whole class teaching |  | Whole class teaching |  | Whole class teaching |
| Ask the pupils to find the Hundred square in Macmillan New Primary Mathematics 2, page 22. |  | Ask the pupils to discuss in pairs why we need to tell the time. | Tell the pupils it is half past because the big hand has gone half way round the clock. | Tell the pupils the long hand counts the minutes. <br> Move the long hand around the clock, pointing to the 5 minute sections. |
| Ask th fingers | m to put their on 5 and count in | $\overline{\text { Ask them to share any times }}$ that they already know, eg: playtime, home time. | Move the hands clockwise, make different o'clock times, and choose pupils to say the times shown. |  |
| Ask them to count forwards again and then backwards in 5 s from 60. |  | Show the pupils the clock with moveable hands. |  | in 5 s and say there are 60 minutes in an hour. |
|  |  | Choose a pupil to move the hands to make 4 o'clock. | Write, '8 o'clock', '3 o'clock' and ' 5 o'clock' on the chalkboard. |  |
|  |  | Remind the class that the short hand is the hour hand. | Ask the pupils to draw pictures in their exercise books to show things they do at each time. |  |
|  |  | When the big hand points to 12 it is o'clock. |  |  |
|  |  | Move the hands to make half past 4 and ask if anyone can say the time shown. | Tell them to write the time under each picture. |  |

Numeracy
lesson plans
Primary 2

## Term 3

Assessment for
learning

Week 28
Time
Day 2

Lesson
title

## Minutes past the hour

## Learning outcomes <br> By the end of the lesson, most pupils will be able to:

Find the difference between two numbers using a number line.

Read the minutes past the hour on a clock.

## Teaching aids

## Before the lesson:

Have ready a set of 12 blank cards for each group.
Have ready a set of 1-12 number cards for each group.

Have ready the large clock from yesterday.
Make card clocks with moveable hands for each pair.
minutes

| 10 minutes | 25 minutes |  | 10 minutes |
| :---: | :---: | :---: | :---: |
| Introduction | Main activity |  | Plenary |
| Group task | Group task |  | Whole class teaching |
| Use the large clock to show the pupils 3 o'clock. | Ask each group to stand in a circle and count in 5 s . | Choose one pupil in each group to be the 'hour hand' and one to be the 'minute hand'. | Make different times on the large clock up to half past. |
| Ask, 'What is the time?' | Give each group a set of blank cards and a set of number cards from 1-12. |  | Choose some pupils to say the times. |
| Then ask, 'How do you know?' |  | Tell them to move around the number cards as you |  |
| Repeat with 'half past' times. | Ask them to arrange the number cards in the shape of a clock. | say the time, eg: ' 3 o'clock', ' 5 minutes past 3', up to half past. | Repeat this activity until most pupils have said a time. |
|  | Ask the groups to use their blank cards to make minute cards that count in 5 s from $0-60$, eg: 0, 5, 10, 15. | Repeat, choosing different pupils and different times. <br> Give each pair a card clock. |  |
|  | Ask them to place the minute cards around the circle like clock numbers. | Ask the pupils to make the following times: 15 minutes past 3 , half past 3,5 minutes past 3,10 minutes past 5, 25 minutes past 2, 20 minutes past 1 . |  |

## Numeracy

lesson plans
Primary 2

## Term 3

Assessment for
learning

Week 28
Time
Day 3

Lesson
title

## Minutes past the hour

|  | 15 minutes |
| :---: | :---: |
| Learning outcomes | Daily practice |
| By the end of the lesson, most pupils will be able to: | Group task |
| Use different terms for subtraction. | Ask one group to stand in front of the class and take away two pupils. |
| Use a clock to say minutes past the hour. | two pupils. <br> Ask the class to say a sum to describe what has happened, eg: '6-2 = 4'. |
| Before the lesson: | Write the '-' sign on the chalkboard and ask the pupils to say some names for it, eg: minus, subtract. |
| Have ready flash cards containing subtraction words: 'take away', 'minus', 'difference', 'subtract from'. | eg: minus, subtract. <br> Display and read the subtraction word cards. |
| 'subtract from'. | Bring another group of pupils out and take some away. |
| with moveable hands for each pair and the large clock. | Ask the rest of the class to describe what has happened using the word 'minus'. |
| Read Macmillan New Primary |  |
| Mathematics 2, pages 113-114. | Repeat, using other words for subtract. |


| $\begin{array}{\|l\|l} 10 \\ \text { minutes } \end{array}$ | 25 Macmillan <br> minutes <br> New Primary  <br> Mathematics 2  |  |  | 10 minutes |
| :---: | :---: | :---: | :---: | :---: |
| Introduction | Main activity |  |  | Plenary |
| Pair task | Individual task | Pair task |  | Whole class teaching |
| Give out the card clocks. | Ask the pupils to look in Macmillan New Primary Mathematics 2, page 113-114. | Demonstrate moving the hands on the large clock to show 5 minute intervals. | Choose some pupils to say the times they have made. | Make 10 past 6 on the large clock and choose someone to say the time. |
| Ask the pupils to make some o'clock times. |  |  |  |  |
| Ask them what number the big hand points to when it has gone half way round the clock. | Ask them to say some of the times in the exercise and write the answers in their exercise books. | Show the pupils 4 o'clock. <br> Say each time as you move the hands to make 5 minutes past 4, 10 minutes past 4. | Repeat with minutes past other hours, asking the pupils to follow you with their clocks. | Repeat with other times, eg: 5 past 8, 25 past 7. (Do not go beyond half past). |
| Remind them this is called 'half past'. |  | past 4. <br> Continue changing the time by 5 minutes until half past the hour. |  |  |
|  |  | Repeat, and ask the pairs to do the same with their clocks. |  |  |

## Numeracy

lesson plans
Primary 2

## Term 3

Assessment for
learning

Week 28
Time
Day 4

Lesson
title

## Minutes to <br> the hour

|  | 15 minutes |
| :---: | :---: |
| Learning outcomes | Daily practice |
| By the end of the lesson, most pupils will be able to: | Group task |
|  | Give each group a subtraction flash card. |
| Subtract two-digit numbers. |  |
| Use a clock to say minutes to the hour. | Ask each group to make up a sum with two, two-digit numbers using that term, eg: 46 minus 15. |
| Teaching aids | Write their sums on the chalkboard. |
| Before the lesson: | Give each group a sum to complete in their exercise books. |
| Have ready the card clocks with moveable hands for each pair and the large clock. | Remind the pupils that they can expand the numbers and use a number line. |
| Have ready the subtraction word cards from yesterday. | Share the answers as a class and check they are correct. |

## Introduction

## Main activity

## Pair task

Remind the pupils how
to show minutes past on a clock.

Write on the chalkboard:
5 minutes past 2
25 minutes past 6
15 minutes past 8
20 minutes past 3
25 minutes past 4
10 minutes past 10
5 minutes past 5
Read the times and ask the pairs to make them on their card clocks.

## Plenary

## Whole class teaching

Move the hands on the large clock to make different times showing minutes to.

Choose some pupils to say the times shown.
Repeat this activity until most pupils have said a time.

Numeracy
lesson plans
Primary 2

## Term 3

Assessment for
learning

Week 28
Time
Day 5

Lesson

## Telling the time

| Learning outcomes | Daily practice |
| :---: | :---: |
| By the end of the lesson, most pupils will be able to: | Whole class teaching |
|  | Stand the pupils in a circle and explain they are going to play a game that involves counting in 5 s. |
| Count forwards and backwards in 5 s . |  |
| Say the time on a clock. |  |
| Teaching aids | Throw the ball to a pupil across the circle and say ' 5 '. |
|  | Ask them to add 5 and say the answer. |
| Before the lesson: | Tell them to throw it to the next |
| Have ready a ball or object to throw and catch. | pupil and ask them to add 5 to the new answer. |
| Have ready a clock with moveable | Continue until you reach 50 |
| Copy the 'Hours and minutes clock' from the introduction on to a piece of card for each group. | Repeat, this time going backwards from 50. |


| 10 minutes | 25 minutes |  | 10 minutes |
| :---: | :---: | :---: | :---: |
| Introduction | Main activity |  | Plenary |
| Group task | Group task |  | Whole class teaching |
| Give each group an 'Hours and minutes clock'. | Ask them how many minutes there are in an hour. | Ask the groups to show the class their completed clocks and check they are correct. | Give each pair a clock. |
| Ask them to write in the missing numbers for the hours. | Remind the pupils that we count in 5 s as we say minutes past. | and check they are correct. <br> Demonstrate 4 o'clock with the large clock. | Ask them to make the following times as you say them and hold up their clocks for you to see: half past 4 |
|  | Ask them what happens when we get to half past. | Make each time between 4 o'clock and 5 o'clock, going round the clock in 5-minute intervals and choosing some pupils to say the time. | 20 minutes past <br> 10 minutes to 9 <br> 15 minutes to 7 |
|  | Ask the groups to put in the missing numbers for the minutes. |  |  |
|  | Tell the pupils that 15 minutes past is also called 'quarter past' and 15 minutes to is also called 'quarter to'. | Tell the groups to use the 'Hours and minutes clock' to help them. |  |
|  | Remind them that 60 minutes is called 'o'clock'. | Make different times on the clock and ask 'What time is it?' |  |




Numeracy
lesson plans
Primary 2

## Term 3

Assessment for
learning

Week 29
Multiplication using repeated addition
Day 1

Lesson

## Repeated addition

|  | 15 minutes |
| :---: | :---: |
| Learning outcomes | Daily practice |
| By the end of the lesson, most pupils will be able to: | Whole class teaching |
| Order numbers up to 99. | Write a list of two-digit numbers on the chalkboard. |
| Count equal sets of objects. | Ask the pupils to tell you the value of each digit, eg: 54 = 5 Tens and 4 Units. |
| Teaching aids | Ask them to draw an empty number line in their exercise books. |
| Before the lesson: | Tell them to arrange the numbers in order on the number line, from the lowest to the highest. |
| Have ready a large selection of counters or bottle tops and sets of $0-9$ number cards for each group. |  |
| Write the following sums on the chalkboard: |  |
| $4 \times 2=$ |  |
| $2 \times 3=$ |  |
| $4 \times 3=$ |  |
| $5 \times 4=$ |  |
| $5 \times 3=$ |  |
| $3 \times 3=$ |  |



## Numeracy

lesson plans
Primary 2

## Term 3

Assessment for
learning

Week 29
Multiplication using repeated addition
Day 2

Lesson
title

## Multiplication using a number line

15
minutes


By the end of the lesson, most pupils will be able to:
Expand two-digit numbers.
Multiply numbers using
repeated addition.

## Teaching aids

Before the lesson:
Have ready sets of $0-9$ number cards and a large selection of counters for each pair.

Write: 'lots of', 'times' and
'multiplied by' on large flash cards
and display them in the classroom.

## Daily practice

## Pair task

Give each pair a set of 0-9 number cards.
Ask the pairs to pick 3 number cards.
Ask them to make as many two-digit numbers as possible with the number cards and record them in their exercise books.
Tell the pairs to write the expanded number next to each number they have written, eg: $25=20+5$.

Introduction

## Pair task

Write ' $2 \times 4$ ' on the
chalkboard. Ask a pupil
to read it out and explain what it means.
$\overline{\text { Ask if anyone can remember }}$ some of the words for ' $x$ '.

Hold up the flash cards and read them with the pupils.

Write ' $3 \times 6$ ', ' $5 \times 2$ ' and
' $4 \times 5$ ' on the chalkboard.
Choose some pupils to say what each one means, eg
' $3 \times 6$ ' means 3 lots of 6 .
Tell the pupils to complete the sums in
their exercise books
using piles of counters.

25
minutes

## Main activity

Pair task
Write ' $4 \times 3$ ' on the chalkboard.

Remind the pupils that it is a quick way of writing
' $3+3+3+3$ '.
Show them how to use a number line to work this out, starting at 0 and adding 3 on each time, as shown below.
$\underbrace{+3+3+3+3}$
$0 \quad 3 \quad 6 \quad 912$ 136912

Numeracy
lesson plans
Primary 2

## Term 3

Assessment for
learning

Week 29
Multiplication using repeated addition
Day 3

Lesson
title

## Counting in 2s

|  | $\begin{array}{\|l} 15 \\ \text { minutes } \end{array}$ |
| :---: | :---: |
| Learning outcomes | Daily practice |
| By the end of the lesson, most pupils will be able to: | Whole class teaching |
|  | Remind the pupils how to subtract using the expanded method. |
| Subtract two-digit numbers. |  |
| Count in 2s. | Demonstrate how to subtract 28 from 36. |
| Teaching aids | Write, '42-27' and '51-26' on the chalkboard. |
| Before the lesson: | Ask the pupils to complete these sums in their exercise books using a number line. |
| Draw a number line on the chalkboard. |  |
| Have ready a number line for each pair. |  |
| Draw a Hundred square on a large piece of card and display it in the classroom. |  |


| $\left\lvert\, \begin{aligned} & 10 \\ & \text { minutes } \end{aligned}\right.$ | 25 minutes |  | $\begin{array}{\|l\|l} 10 \\ \text { minutes } \end{array}$ |
| :---: | :---: | :---: | :---: |
| Introduction | Main activity |  | Plenary |
| Whole class teaching | Whole class teaching | Individual task | Whole class teaching |
| Show pupils the Hundred square and count in 2 s , pointing out all the multiples of two. | Tell the class that we can use a number line to find 8 lots of 2. <br> Choose someone to write the sign for 'lots of', ie: ' $\mathbf{X}$ '. | Write '6 x 2', '9 x 2' and ' $4 \times 2$ ' on the chalkboard. <br> Ask the pupils to complete the sums in their exercise books using number lines. <br> Ask them to check each other's work to make sure they have the same answers. | Remind the pupils of the words we use for the sign ' $x$ '. |
| Stand them in a circle. |  |  | three ways, ie: '6 lots of 2', |
| Say 'zero' (0) and go round the circle encouraging each pupil to count in 2 s , saying the next multiple of 2 when it is their turn. |  |  | '6 times 2', '6 multiplied by 2 '. <br> Repeat with the other sums they have just done. |
| Tell them to look at the Hundred square if they need to. |  |  |  |
| Continue until each pupil has given a multiple of 2. |  |  |  |
| Repeat, starting with a different pupil. |  |  |  |

## Numeracy

lesson plans
Primary 2

## Term 3

Assessment for
learning

|  |
| :--- |
| Week 29 |
| Multiplica |

Multiplication using repeated addition
Day 4
正

Lesson

## Using sets

|  | 15 <br> minutes$\|$Macmillan <br> New Primary <br> Mathematics 2 |
| :--- | :--- | :--- |
| Learning outcomes | Daily practice |
| By the end of the lesson, most <br> pupils will be able to: | Pair task |
| Order numbers to 100. | Ask the pupils to look at the <br> Hrimary Mathematics 2, page 22. |
| Multiply numbers using sets. | Ask them to say some numbers <br> that are less than 50. |
| Teaching aids | Ask them to say some numbers <br> that are more than 50. |
| Before the lesson: Draw two circles on the <br> chalkboard. <br> Read Macmillan New Primary <br> Mathematics 2, page 56. Write 'more than 50' above one <br> and 'less than 50' above the other. <br> Have ready the multiplication  <br> words on flash cards. Ask the pupils to copy this into <br> their exercise books and write <br> 5 numbers in each circle.  |  |


| 10 minutes | 25 minutes | Macmillan New Primary Mathematics 2 |  | $\begin{array}{\|l\|} 10 \\ \text { minutes } \end{array}$ | Macmillan <br> New Primary <br> Mathematics 2 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Introduction | Main activity |  |  | Plenary |  |
| Whole class teaching | Whole class teaching |  | Pair task | Whole class teaching |  |
| Write '6 x 2' on the chalkboard and ask the pupils to say what it means. | Tell the pupils to look in Macmillan New Primary Mathematics 2, page 56. |  | Tell the pupils to look at the next three sets of pictures. | Choose some pupils to read out the sums in Macmillan New Primary Mathematics 2, page 56 , activity A , questions $1-6$ and give the answers. |  |
| Flash the multiplication | Explain the first picture. |  | Ask them to discuss how many groups of small balls are in each series of pictures. |  |  |
| cards and ask the pupils to say them with you. | Tell the class to look at the small balls and say how many groups of 3 they can see. |  |  |  |  |
| Tell them we can also say 'groups of' and 'sets of'. |  |  |  |  |  |
|  | Choose a pupil to write this as a multiplication sum on the chalkboard. |  | Choose some pairs to say their answers and ask the others if they agree. |  |  |
|  |  |  | Tell the pupils to look at Macmillan New Primary Mathematics 2, page 56, activity A . |  |  |
|  |  |  | Ask the pairs to complete activity A, questions 1-6 in their exercise books. |  |  |

## Numeracy

lesson plans
Primary 2

## Term 3

Assessment for
learning

Week 29
Multiplication using repeated addition
Day 5

## Lesson

## Sets and number lines

15
minutes

## Learning outcomes <br> By the end of the lesson, most pupils will be able to:

Daily practice

Solve subtraction word problems.
Solve multiplication word problems.

## Teaching aids

## Before the lesson:

Write the following problems on the chalkboard:
1 There are 2 sweets in 4 bowls. How many sweets are there altogether?
25 pupils have 2 exercise books each. How many exercise books are there altogether?
3 There are 8 pens with 3 hens in each. How many hens are there altogether?

## Whole class teaching

Stand the pupils in a circle and ask them to count to 100.
Say 'zero' and go round the circle in a clockwise direction, encouraging each pupil to count in 1 s .
Repeat, starting with a different pupil.

Write on the chalkboard: 'There are 42 pupils in class A and 28 pupils in class B. Which class has the least pupils? How many less pupils do they have?'
Read and explain this problem.
Ask the pupils to solve it in their exercise books using a number line.

| 10 minutes | 25 minutes | 10 minutes |
| :---: | :---: | :---: |
| Introduction | Main activity | Plenary |
| Whole class teaching | Pair task | Whole class teaching |
| Ask the pupils the following word problem: 'If a goat has 4 legs and there are 5 goats, how many legs are there altogether?' | Read the problems on the chalkboard to the class. <br> Choose some pupils to come and write the sum for each one. | Ask the pupils to help you draw sets on the chalkboard to solve the problems. <br> Ask if they got the same answers using |
| Ask them how they can work out the answer. | Ask the pupils to solve the sums in their exercise books | a number line. <br> If they did not, check |
| Ask if anyone can write the sum on the chalkboard, ie: '5 x $4=$ '. |  | that they counted correctly on the number line. |
| Demonstrate the sum, drawing five sets of legs and ask the pupils to count the legs to find the answer. |  |  |
| Demonstrate the sum by drawing a number line. |  |  |
| Ask the pupils to count in $4 s$ to find the answer. |  |  |


| Words/phrases | Assessment |
| :--- | :--- |
|  | During the lesson, walk <br> round the classroom |
| multiply | and ask questions to <br> see if the pupils clearly <br> times |
| understand what you |  |
| multiplication by | have taught them. If not, <br> lots of <br> help them to understand |
| broups of | by explaining the idea <br> sets of them again, or asking <br> repeated addition <br> other pupils to help them. <br> You may need to use <br> some different examples <br> of the idea. |
|  |  |

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ng the lesson, walk and ask questions to see if the pupils clearly what you have taught them. If not, by explaining the idea to them again, or asking other pupils to help them. some different examples of the idea.

Numeracy
lesson plans
Primary 2
Term 3
Assessment for
learning

Week 30
Multiplication
tables
Day 1

## The 2 times table



By the end of the lesson, most pupils will be able to:
Count in 2 s .
Say the 2 times table.

## Teaching aids

## Before the lesson:

Have ready the Hundred square from last week and some counters for each pair.
Copy 'Making the 2 times table' from the introduction on to the chalkboard.

Read Macmillan New Primary Mathematics 2, page 57, activity B.

15
minutes

Lesson

## Daily practice

## Whole class teaching

Remind the pupils that they have been counting in 2 s .
Show pupils the Hundred square and count in 2 s with them, pointing out all the multiples of two.
Stand the pupils in a circle.
Say 'zero' and go round the circle, encouraging the pupils to say the next multiple of 2 when it is their turn.

Tell the pupils to look at the Hundred square if they need to.

Continue until each pupil has given a multiple of 2 .

| 10 minutes |  | 25 minutes | Macmillan <br> New Primary <br> Mathematics 2 |  | 10 minutes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Introduction |  | Main activity |  |  | Plenary |
| Whole class teaching |  | Pair task |  | Whole class teaching | Whole class teaching |
| Ask the pupils how we can multiply two numbers together, ie: use a number line or draw sets. | Say, <br> 'We now have 2 sets of 2 .' | Tell the pupils to look at Macmillan New Primary Mathematics 2, page 57, activity B. |  | Ask the pupils to say the sums and the answers with you. <br> Tell them it is important | Read out the sums they have just completed and ask different pupils to tell you the answers. |
| Ask 2 pupils to come out to the front. | Point to the second row on the table and show the pupils the picture. | Tell them to use counters to make sets of 2 and complete questions 1-9 in their exercise books. |  | Tell them it is important to know these times tables really well. |  |
| Say, 'This is 1 set of 2.' | Explain that ' $2+2$ ' is the same as ' $2 \times 2$ '. |  |  | Ask them to find the |  |
| Point to the first row of 'Making the 2 times table' and show the pupils the picture. | Repeat, calling pupils out in sets of 2 until you have 10 sets. |  |  | answers to $4 \times 2,8 \times 2$ and $10 \times 2$, using counters. |  |
| Explain that ' 2 ' is the same as ' $1 \times 2$ '. | Tell the pupils they have just made the 2 times table. |  |  |  |  |
| Ask 2 more pupils to come and stand by the first set. |  |  |  |  |  |

Numeracy
lesson plans
Primary 2
Term 3
Assessment for
learning

Week 30
Multiplication
tables
Day 2

Lesson
title

## The 3 times table

By the end of the lesson, most pupils will be able to:
Say the 2 times table.
Count in 3 s .

Teaching aids

## Before the lesson:

Display the Hundred square in the classroom.
Write the 3 times table on the chalkboard without the answers.

Have ready enough counters for each pair to have 30 .

Daily practice

## Whole class teaching

Ask the pupils to help you write the 2 times table on the chalkboard.

Tell them to say the 2 times table with you.
Say it, but miss out the answers and ask the pupils to shout them out.

| 10 minutes | 25 minutes |  | 10 minutes |
| :---: | :---: | :---: | :---: |
| Introduction | Main activity |  | Plenary |
| Whole class teaching | Pair task |  | Whole class teaching |
| Show the pupils the Hundred square and count in 3s, pointing out all the multiples of three. | Tell the pupils that yesterday they counted in sets of 2 to make the 2 times table. | Tell the pupils to add them up, ie: ' $3+3=6$ '. | Ask the pupils to say the sums and the answers with you. |
| Stand the pupils in a circle. | Tell them they are going to make sets of 3 today to make the 3 times table. | Point to ' $3 \times 3$ ' and ask the pairs to make 3 sets of 3 with their counters. | Tell them it is important to know these times tables really well. |
| Say 'zero' and go round the circle, encouraging each pupil to say the next multiple of 3 when it is their turn. | Point to ' $1 \times 3$ ' on the chalkboard and explain that this is 1 set of 3 so the answer is 3 . | Tell the pupils to add them up, ie: ' $3+3+3=9$ '. <br> Tell them to copy the 3 times table into their | Ask them to find the answers to multiples of 3 , eg: $4 \times 3,8 \times 3,10 \times 3$. |
| Tell the pupils to look at the Hundred square if they need to. | answer is 3 . <br> Point to ' $2 \times 3$ ' and explain that this means 2 sets of 3 . | Tell them to use their counters to work out the answers. |  |
| Continue until each pupil has given a multiple of 3 . | Ask the pairs to make 2 sets of 3 with their counters. |  |  |
| Go round again, starting with a different pupil. |  |  |  |

Numeracy
lesson plans
Primary 2
Term 3
Assessment for
learning

Week 30
Multiplication
tables
Day 3

Lesson
title

## Counting in 5s

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|  | $\begin{array}{\|l\|} 15 \\ \text { minutes } \end{array}$ |
| :---: | :---: |
| Learning outcomes | Daily practice |
| By the end of the lesson, most pupils will be able to: | Pair task |
|  | Write '24' on the chalkboard. |
| Use addition and subtraction facts. | Give out counters to each pair. |
| Count in 5s. | Tell them they have 5 minutes |
| Teaching aids | to write down as many addition and subtraction sums as they can that have the answer 24. |
| Before the lesson: | Choose some pupils to say some of their facts and write |
| Have ready lots of counters for each pair. | them on the chalkboard under the number 24. |
| Write the 5 times table up to ' $5 \times 5$ ' on the chalkboard, without the answers. |  |
| Have ready the Hundred square. |  |


| 10 minutes | 25 minutes |  | $\left\|\begin{array}{l\|l}10 \\ \text { minutes }\end{array}\right\|$ Game |
| :---: | :---: | :---: | :---: |
| Introduction | Main activity |  | Plenary |
| Whole class teaching | Individual task |  | Whole class teaching |
| Ask the pupils to help you write the 2 times table on the chalkboard. | Show the pupils the Hundred square and count in 5 s with them, pointing out all the multiples of 5 . | Continue until each pupil has given a multiple of 5 . | Stand the pupils in a circle and explain that they are going to count around the circle up to 50. |
| Say it, but miss out the answers and ask the pupils to shout them out. | Stand the pupils in a circle. | Ask them to complete the sums from the 5 times table on the chalkboard. |  |
| Repeat with the 3 times table. | circle, encouraging each pupil to say the next multiple of 5 when it is their turn. | Tell them they can use the Hundred square or their counters to count in 5 s . | Explain that every second number they have to say 'fizz' instead of the number, eg: ‘1, fizz, 3, fizz, 5, fizz, 7, fizz'. |
|  | Tell the pupils to look at the Hundred square if they need to. |  | Tell them that they have to concentrate so they don't miss the number. |

Numeracy
lesson plans
Primary 2
Term 3
Assessment for
learning

Week 30
Multiplication
tables
Day 4

Lesson
title

## The 5 times table

## Learning outcomes <br> By the end of the lesson, most pupils will be able to:

Use addition and subtraction facts.
Use a number line for multiplication sums.

## Teaching aids

## Before the lesson:

Write the 5 times table from $6 \times 5$ to $10 \times 5$ on the chalkboard, without the answers.
Have ready lots of counters for each pair.

15
minutes

## Daily practice

## Pair task

Write '16' on the chalkboard.
Give out the counters to each pair.
Give the pupils 5 minutes to write as many number facts as they can with the answer of 16 , using addition and subtraction.

Ask them to discuss with another pair,
'How many sums did you make?',
'How many are addition sums?',
'How many are subtraction sums?'

| 10 minutes | 25 minutes |  | 10 minutes |
| :---: | :---: | :---: | :---: |
| Introduction | Main activity |  | Plenary |
| Whole class teaching | Pair task |  | Whole class teaching |
| Ask the pupils to help you write the 2 times table on the chalkboard. | Remind the pupils that they started to write the 5 times table yesterday. <br> Show them how to draw a number line to work out ' $6 \times 5$ ', as shown below. | Ask the pairs to complete the 5 times table in their exercise books using number lines. | Ask the pupils to get into groups of 5. <br> Ask 'How many groups |
| Tell them to say it with you. |  |  | of 5 are there?' |
| Say it, but miss out the answers and ask the pupils |  | When they have finished, choose different pairs to quickly fill in the answers on the chalkboard. | Write this as a sum on the chalkboard. |
| to shout them out. <br> Ask if anyone knows the answer to '2 x $0=$ '. |  |  | Repeat, asking the pupils to get into groups of 3 . |
| Tell the pupils to show you 2 sets of zero counters. |  |  |  |
| Ask them what ' $3 \times 0$ ' and ' $5 \times 0$ ' equal. |  |  |  |

Numeracy
lesson plans
Primary 2

## Term 3

Assessment for
learning

Week 30
Multiplication
tables
Day 5


By the end of the lesson, most pupils will be able to:
Know some of the times tables.
Use a number line for
multiplication sums.

## Teaching aids

## Before the lesson:

Read Macmillan New Primary Mathematics 2, page 60.
Read the instructions for the 'Find my friend' game in the introduction.

Have ready cards for the sums and answers in the 3 times table.

## Daily practice

## Whole class teaching

Ask the pupils to look at the multiplication table in Macmillan New Primary Mathematics 2, page 60.
Tell them to find the 2 times table and say it with you.
Repeat with the 3 and 5 times tables.
Ask the pupils some questions
from the chart to help them become familiar with it, eg:
'What is $4 \times 2$ ?',
'What is $4 \times 5$ ?',
'What is $7 \times 3$ ?'

| 10 <br> minutes | 25 <br> minutes | Game | Macmillan New Primary Mathematic |  | 10 minutes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Introduction | Main activity |  |  |  | Plenary |
| Pair task | Whole class teaching |  |  | Individual task | Whole class teaching |
| Ask 4 pupils to come to the front of the class. | Play 'Find my friend'. |  |  | Write the following sums on the chalkboard and ask the pupils to complete them in their exercise books: $\begin{aligned} & 6 \times 3= \\ & 5 \times 5= \\ & 9 \times 3= \\ & 4 \times 5= \\ & 9 \times 2= \end{aligned}$ <br> When they have finished, tell the pupils to look at the multiplication table in Macmillan New Primary Mathematics 2, page 60 and check if their answers are correct. | Say the 2, 3 and 5 times tables with the class. |
| Ask the rest of the class, 'How many legs do they have altogether?' |  |  |  |  |  |
| Ask the pupils to share their |  |  |  |  |  |
| answer with their partner. |  |  |  |  |  |
| Write this as a sum on the chalkboard. |  |  |  |  |  |
| Remind the pupils that multiplication is a quick way of doing addition. |  |  |  |  |  |
| Demonstrate how to work out $8 \times 3$. |  |  |  |  |  |

## Credits

In 2008, Kwara State carried out a Teachers' Development Needs Assessment for all primary school teachers. This showed that most teachers in Kwara State did not have strong literacy and numeracy skills. The Kwara State Government responded by developing a strategy to support existing teachers and improve new teachers' pre-service training.
These literacy and numeracy lesson plans, developed by the Kwara State School Improvement Team, were part of that strategy. Two years after introducing these plans alongside the training and support programme, Kwara State began to see strong improvements in teachers' teaching skills and pupils' learning outcomes.

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