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Type of lesson plans/
Grade

Term/
Learning theme

Numeracy lesson plans
Primary 3

Term 2
Creating opportunities for classroom talk

Weeks
16—20

Numeracy lesson plans Primary 3 Term 2 Creating opportunities for classroom talk

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

Introduction

Over the years, the citizens of Lagos have benefited from a government orchestrated free basic education programme. This has resulted in mass enrolment of school-age children in public primary institutions across the state, and significant expense on education facilities and continuous teacher improvement programmes.

However, the learning outcomes of these public primary schools have not justified the colossal amount of money that has been spent on education in the state. The school system has inadequately equipped our school leavers for everyday life. A baseline assessment of teachers revealed a general weakness around effective teaching methodologies to improve learning outcomes in our schools.

The State Government, with the support of the Education Sector Support Programme in Nigeria (ESSPIN) and with funding from UK Aid from the Department for International Development, has recently introduced pilot literacy and numeracy lesson plans in public primary schools (starting with Primary 1—3) to improve classroom teachers' capacity. These lesson plans sought to address the challenges by offering step-by-step guidance to teachers on how to deliver good quality literacy and numeracy lessons effectively.

Now, the hard work of all our personnel – the State School Improvement Team, the school support officers and technical partners from ESSPIN – has brought about the production of a complete module of lesson plans.

I am convinced that the use of these complete versions of the literacy and numeracy lesson plans by teachers in all our 1,003 public primary schools will further raise the standards of education to which we are wholly committed.

Mrs Olayinka Oladunjoye
Honourable Commissioner
for Education
Lagos State

Numeracy lesson plans
Primary 3

Term 2
Creating opportunities for classroom talk

Weeks
16—20

Introduction
Creating opportunities for classroom talk

Classroom talk

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

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

Having conversations between themselves and with adults in the school.

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

Answering questions.

Expressing opinions.

Explaining how to do something.

Giving instructions.

Solving problems.

Designing ways of recording findings.

Carrying out investigations into numbers.

Sharing ideas.

Singing songs.

Saying rhymes.

These are all included in the numeracy lesson plans.

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

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

When you ask a question, count to 15 in your head before you choose someone to answer. This gives all pupils the chance to think of something to say, not just the 'quick thinkers'.

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

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

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

Numeracy lesson plans
Primary 3

Term 2
Creating opportunities for classroom talk

Weeks
16—20

Introduction

Essential low-cost or free teaching aids

The balance scale

Balance scales are needed in Week 19 so that the pupils can explore weight.

You could try and borrow some from the local market.

You can also try to make your own using:
two empty plastic cartons
string
a nail
a wooden frame.

Put them together to make a balance.

Counters

For Weeks 16—20 you will need a great many counters. One way of collecting counters is to ask a local shopkeeper to put a container by the crates of soft drinks and ask people to put their bottle tops in them when they take them off the bottle. Once a week, or once a month collect the container, wash the tops and store them to use as counters. Replace the container in the shop to collect more.

This should provide you with a regular supply.

Numeracy lesson plans
Primary 3

Term 2
Creating opportunities for classroom talk

Weeks
16—20

Introduction

Songs and rhymes for the term

Peas

5 fat peas in a pea
pod pressed /
1 grew, 2 grew
and so did all the rest /
They grew and grew
and did not stop /
Until one day the pod
went pop.

1 finger 1 thumb

1 finger, 1 thumb
keep moving /
1 finger, 1 thumb
keep moving /
1 finger, 1 thumb
keep moving /
We'll all be merry and bright.

1 finger, 1 thumb, 1 arm
keep moving...

1 finger, 1 thumb, 1 arm,
1 leg keep moving...

1 finger, 1 thumb, 1 arm,
1 leg, 1 nod of the head
keep moving...

1 potato, 2 potatoes

1 potato, 2 potato,
3 potato, 4 /
5 potato, 6 potato,
7 potato more.

5 little speckled frogs

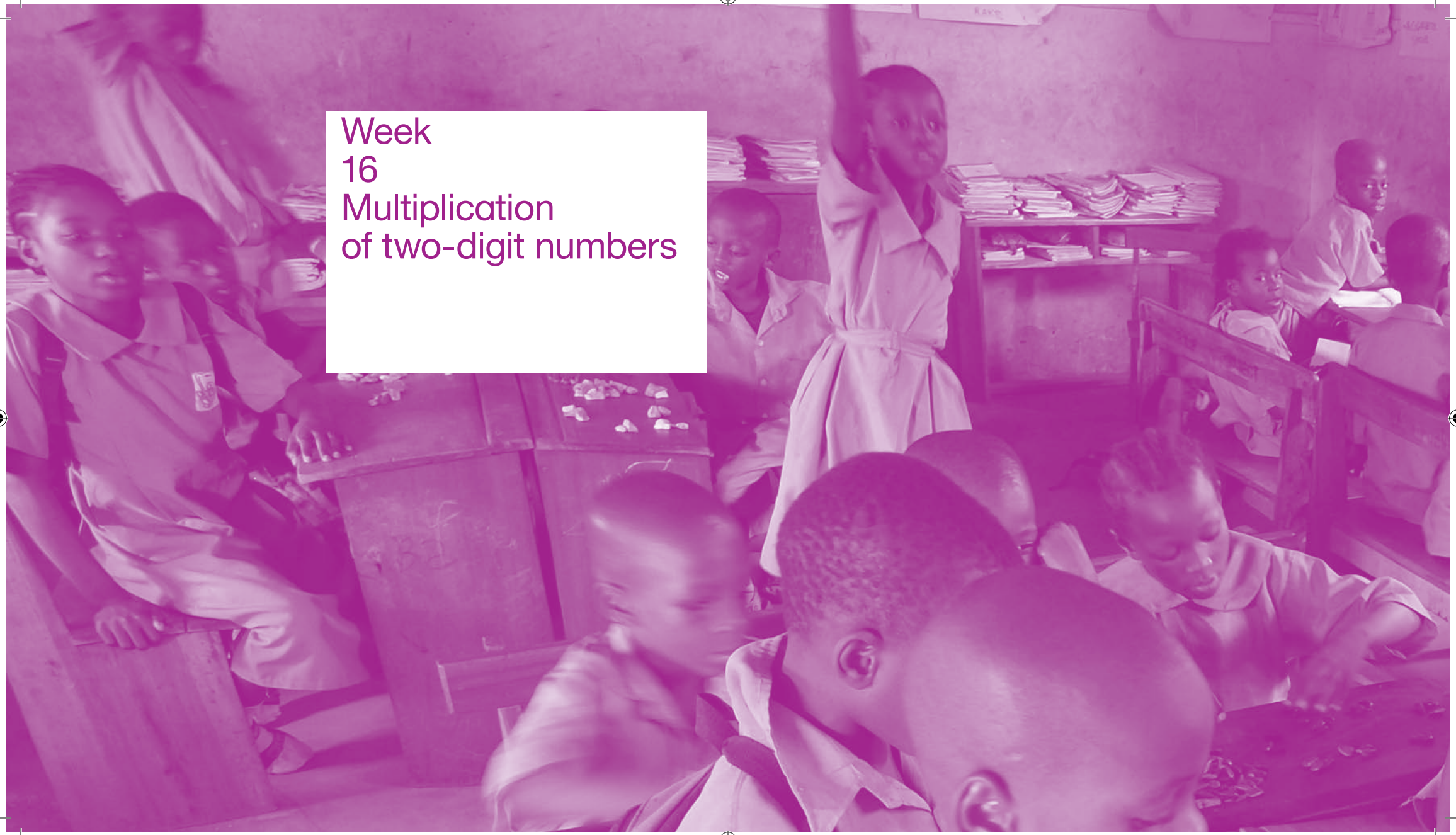
5 little speckled frogs
sat on a speckled log /
eating the most delicious
bugs, yum, yum /
1 jumped into the pool /
where it was nice
and cool /
then there were 4 green
speckled frogs, glub, glub.

4 little speckled frogs...
3 little speckled frogs...
2 little speckled frogs...
1 little speckled frog...

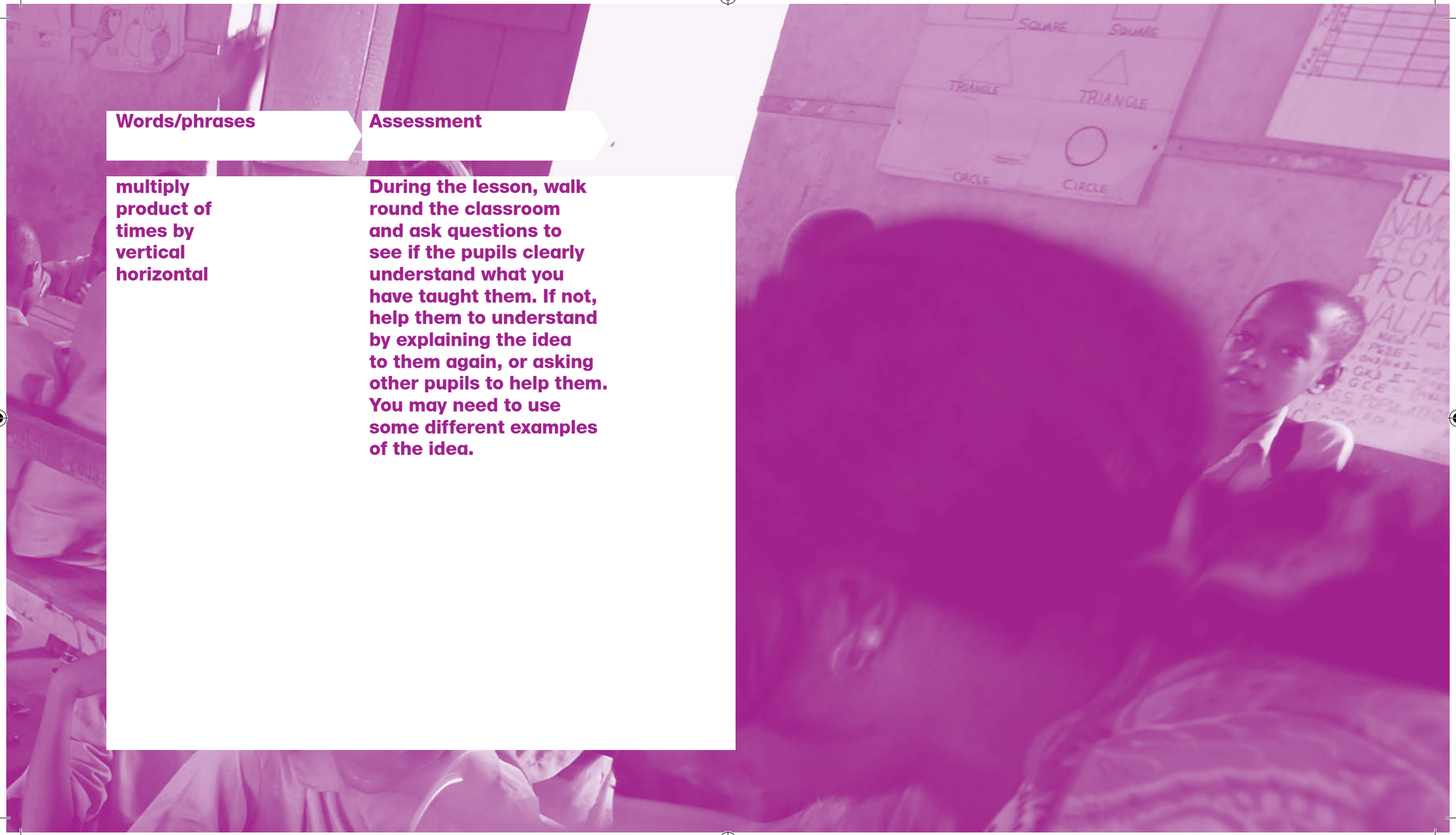
5 little ducks

5 little ducks went
swimming one day /
Over the hills and far away /
Mummy duck called, 'quack,
quack, quack, quack' /
But only 4 little ducks
came back.

4 little ducks...
3 little ducks...
2 little ducks...
1 little duck...



Week 16 Multiplication of two-digit numbers



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

Numeracy lesson plans
Primary 3

Term 2
Creating opportunities for classroom talk

Week 16
Multiplication of two-digit numbers
Day 1

Lesson title

Multiplication of two-digit numbers

15 minutes

Learning outcomes

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

Multiply two-digit numbers by one-digit numbers using repeated addition.

Count in fives from any given number up to 100.

Teaching aids

Before the lesson:

Read the lesson plans carefully, trying a few sums so that you understand the method.

Read Macmillan New Primary Mathematics 3, pages 70—71.

Daily practice

Whole class teaching

Ask pupils to sit in a circle and ask one of them to say a number between 1 and 30.

Ask them to count round the circle in fives, starting from that number and finishing at or near to 100.

Write the numbers in a vertical list on the chalkboard as they say them.

Ask the pupils if they can see any patterns in the numbers.

10 minutes	25 minutes	Macmillan New Primary Mathematics 3	10 minutes

Introduction

Whole class teaching

Briefly revise the addition of two-digit numbers, by giving the pupils the following sums to do in their exercise books:

24 + 13 =
32 + 21 =
46 + 23 =

Ask the pupils to exchange their books and mark the sums.

Main activity

Whole class teaching

Explain to the pupils the relationship between multiplication and repeated addition with this example:

3 x 24 = 24 + 24 + 24
= 72

Ask the pupils to complete Macmillan New Primary Mathematics 3, page 71, questions 1—5 using repeated addition.

Plenary

Whole class teaching

Ask the pupils to explain how they worked out the sums.

Lesson title

15 minutes | Macmillan New Primary Mathematics 3

Numeracy lesson plans
Primary 3

Term 2
Creating opportunities for classroom talk

Week 16
Multiplication of two-digit numbers
Day 2

Multiplication of two-digit numbers

Learning outcomes

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

Use a multiplication table.

Multiply two-digit numbers by a one-digit number, using expansion.

Teaching aids

Before the lesson:

Read the lesson plans carefully, trying out a few sums using that method so you understand it clearly.

Read Macmillan New Primary Mathematics 3, page 70, and make sure you understand the method.

Daily practice

Whole class teaching

Ask the pupils to find the multiplication table in Macmillan New Primary Mathematics 3, page 65.

Explain that the place where the horizontal and the vertical lines meet gives the answer.

Ask the class some questions and tell them to find the answer using the table, eg:
1 x 1 =
5 x 4 =
10 x 1 =
7 x 8 =

Ask one or two pupils to show how they found each answer, using the multiplication table.

Tell pupils to ask each other questions they can answer using the table.

10 minutes	25 minutes	10 minutes

Introduction

Whole class teaching

Ask the pupils to expand these numbers:
12
23
35
52
29
17
32

Ask them to explain how they worked out the answers.

Main activity

Whole class teaching

Show the pupils the following examples on the chalkboard:

12 x 2 = (10 + 2) x 2
= (10 x 2) + (2 x 2)
= 10 + 10 + 2 + 2
= 20 + 4
= 24

13 x 3 = (10 + 3) x 3
= (10 x 3) + (3 x 3)
= 30 + 9
= 39

Give the pupils the following sums, one at a time, to do in their exercise books using the same method:
34 x 2 =
22 x 3 =
11 x 4 =
15 x 2 =
12 x 5 =

After each sum, ask different pupils to explain how they did it.

Plenary

Whole class teaching

Call out a number and ask the pupils to tell you as many ways as they can to make that number.

Lesson title

15 minutes | Macmillan New Primary Mathematics 3

Numeracy lesson plans
Primary 3

Term 2
Creating opportunities for classroom talk

Week 16
Multiplication of two-digit numbers
Day 3

Multiplication of two-digit numbers

Learning outcomes

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

Say the 7 and 8 times tables.

Multiply two-digit numbers by one-digit numbers.

Teaching aids

Before the lesson:

Find the multiplication chart in Macmillan New Primary Mathematics 3, page 65.

Read Macmillan New Primary Mathematics 3, pages 71—72.

Daily practice

Whole class teaching

Ask the class to say their 7 and 8 times tables all together, using the multiplication chart in Macmillan New Primary Mathematics 3, page 65 to help them.

Ask the pupils to look at the multiplication chart in Macmillan New Primary Mathematics 3, page 65 and use them to answer the following questions:

6 x 7 =
6 x 6 =
7 x 8 =
6 x 8 =
8 x 3 =
7 x 8 =

10 minutes	25 minutes	Macmillan New Primary Mathematics 3	10 minutes

Introduction

Whole class teaching

Ask the pupils to do the following sums in their exercise books using the method they learned on the previous day:

33 x 3 =
21 x 4 =
32 x 3 =
25 x 2 =
45 x 2 =

Main activity

Pair task

Ask pupils to look at Macmillan New Primary Mathematics 3, pages 71—72, questions 6—10.

Explain that many books write multiplication as a vertical sum, ie:

$$\begin{array}{r} 23 \\ \times\ 3 \\ \hline \end{array}$$

When you find a vertical sum first write it horizontally, ie:
23 x 3 =

After that, follow the method you know.

Ask the pupils to complete Macmillan New Primary Mathematics 3 page 72, B, questions 6—10.

Plenary

Whole class teaching

Ask some pupils to explain how they completed the task.

Lesson title

15 minutes | Macmillan New Primary Mathematics 3

Numeracy lesson plans
Primary 3

Term 2
Creating opportunities for classroom talk

Week 16
Multiplication of two-digit numbers
Day 4

Multiplication of two-digit numbers

Learning outcomes

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

Complete a multiplication chart.

Multiply two-digit numbers by one-digit numbers using the vertical method.

Teaching aids

Before the lesson:

Have the following sums ready on the chalkboard:
36 x 7 =
24 x 7 =
31 x 5 =
38 x 4 =

Daily practice

Whole class teaching

Ask the class to look at Macmillan New Primary Mathematics 3, page 64.

Ask the pupils to copy and complete the tables in their exercise books.

10 minutes	25 minutes	10 minutes
Introduction	**Main activity**	**Plenary**
Whole class teaching Explain to pupils how to complete this calculation using the method they learned the previous day: 39 x 8 = Write the instructions clearly on the chalkboard as you explain.	**Pair task** Look together at the sums written on the chalkboard. Ask the pupils to complete the calculations using the method they learned the previous day.	**Whole class teaching** Ask a few pupils to explain how they worked out the sums to the rest of the class.

Lesson title

Multiplication problem solving

15 minutes

Numeracy lesson plans
Primary 3

Term 2
Creating opportunities for classroom talk

Week 16
Multiplication of two-digit numbers
Day 5

Learning outcomes

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

Answer multiplication questions orally.

Solve word problems leading to multiplication of two-digit numbers by single digit numbers.

Teaching aids

Before the lesson:

Read Macmillan New Primary Mathematics 3, page 75.

Daily practice

Group task

Ask each group random multiplication questions.

When they have the answer, one member of each group should come out and write it on the chalkboard.

The first group to write the answer on the chalkboard gets a point.

Record their points and declare the first group to reach 10 the winners.

10 minutes	25 minutes	Macmillan New Primary Mathematics 3	10 minutes

Introduction

Whole class teaching

Ask the pupils to tell you how many words they can think of to describe multiplication, eg:
multiply
times by
product of

Give the pupils an example of a multiplication problem:

'If 1 packet of biscuits contains 44, how many biscuits are there in 2 packets?'

'If 1 packet contains 44, 2 packets contain 44 + 44 which is the same as 44 x 2.'

Work out 44 x 2 with the class using the method they have learned during the week.

Main activity

Pair task

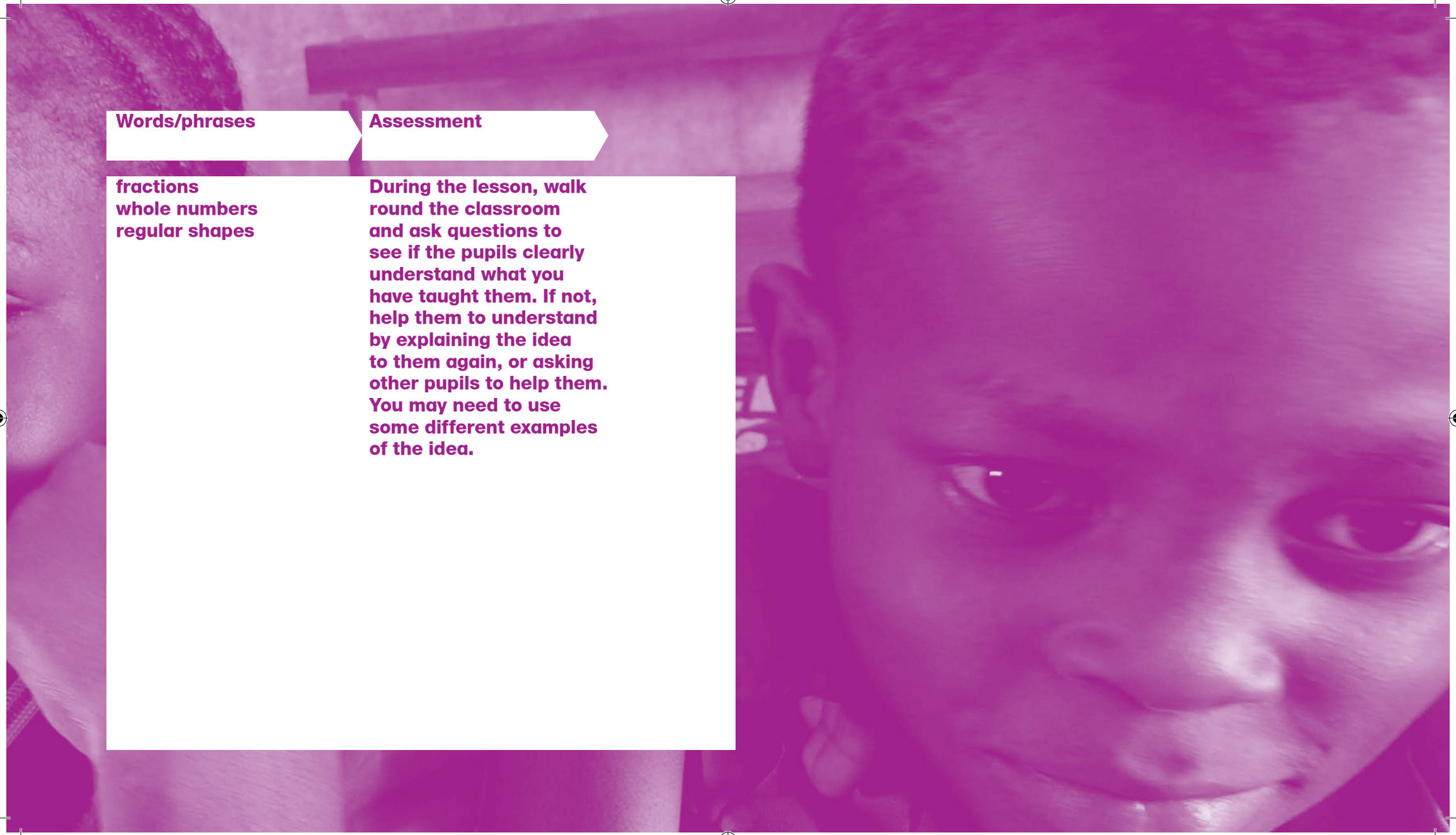
Ask the pupils to complete Macmillan New Primary Mathematics 3, page 75, questions 6—10.

Plenary

Whole class teaching

Ask some pairs to tell the rest of the class how they got their answers.

Week 17 Fractions



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

Numeracy lesson plans
Primary 3

Term 2
Creating opportunities for classroom talk

Week 17
Fractions
Day 1

Lesson title

Fractions of objects

15 minutes

Learning outcomes

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

Use number lines to multiply two-digit numbers by single digit numbers.

Cut objects into various fractions.

Teaching aids

Before the lesson:

Collect plenty of ground nuts, kola nuts and sugar cane pieces.

Daily practice

Whole class teaching

Ask the pupils to draw separate number lines to answer the following sums:

20 x 4 =
12 x 5 =
13 x 5 =
32 x 3 =
46 x 2 =

10 minutes	25 minutes	10 minutes
Introduction	**Main activity**	**Plenary**
Group task Give each group a set of either kola nuts, ground nuts or sugar cane pieces. Ask them to tell you what the object is. Explain that you are going to look at fractions and will use these objects to help.	**Group task** Ask each group to discuss what they understand by the word fraction. Ask the groups to write down any fractions that they know, and share them with the rest of the class. Ask the pupils to cut one of their objects in half, (two pieces) one into quarters (four pieces) and one into thirds (three pieces). Ask them to draw and label their objects, using the following vocabulary: whole, one half, one quarter, two halves, three quarters.	**Whole class teaching** Ask each group to choose one person to tell everyone else what they have learned.

Lesson title

15 minutes

Numeracy lesson plans
Primary 3

Term 2
Creating opportunities for classroom talk

Week 17
Fractions
Day 2

Fractions of rectangles and squares

Learning outcomes

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

Identify fractions of shapes in rectangles and squares.

Cut different sets of paper into squares and rectangles.

Teaching aids

Before the lesson:

Cut paper or newspaper into different sized squares and rectangles.

Read Macmillan New Primary Mathematics 3, pages 13 and 16.

On the chalkboard, draw examples of shapes with two thirds and three quarters shaded.

Daily practice

Whole class teaching

Ask pupils to do the following sums using any method they have learned.

Explain that they can use different methods for each sum if they wish:
4 x 6 =
23 x 5 =
65 x 7 =
8 x 12 =
10 x 3 =
54 x 9 =

Ask different pupils to explain the method they used.

10 minutes	25 minutes	Macmillan New Primary Mathematics 3	10 minutes

Introduction

Whole class teaching

Give each pupil paper squares and rectangles.

Look together at the shapes on the chalkboard with two thirds and three quarters shaded.

Explain to the class how many parts the shapes have been divided into and how many parts have been shaded.

Main activity

Group task

Give each group two pieces of paper.

Ask each group to fold the paper shapes into two, three and four equal parts.

Tell each group to draw the opened up shapes in their exercise books.

Ask them to shade one section of each shape and say what fraction of the shape they have shaded.

Ask them to write the fraction next to the shape, eg:

$\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{4}$

Individual task

Ask pupils to complete Macmillan New Primary Mathematics 3, page 16, exercise F, questions 1—6, copying the shapes into their exercise books and writing the fraction shaded underneath.

Plenary

Pair task

Ask the pupils to compare their answers with a classmate.

Lesson title

15 minutes | Macmillan New Primary Mathematics 3

Numeracy lesson plans
Primary 3

Term 2
Creating opportunities for classroom talk

Week 17
Fractions
Day 3

Fractions of regular shapes

Learning outcomes

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

Find factors of different numbers.

Identify fractions of regular shapes.

Teaching aids

Before the lesson:

Cut paper or newspaper into different sized squares and rectangles.

Read Macmillan New Primary Mathematics 3, pages 12—13.

Draw on the chalkboard:

1 circle divided into 8 equal parts with 1 part shaded

1 square divided into 4 equal parts with 1 part shaded

1 triangle divided into 3 equal parts with 1 part shaded.

Daily practice

Whole class teaching

Ask the pupils to find the multiplication square in Macmillan New Primary Mathematics 3, page 65.

Give them the following numbers and ask them to find the pairs of numbers which make that number when they are multiplied together, eg: 36 = 6 x 6 and 12 x 3.

Ask pupils to go through the same process with the following numbers:
28
42
117
99
108
64

10 minutes

25 minutes

10 minutes

Introduction

Whole class teaching

Give each pupil a paper square and rectangle.

Ask the pupils if they can say anything about the shapes.

Tell the pupils to fold their shapes into two equal parts.

Ask them what they have learned from doing the paper folding.

Main activity

Pair task

Give each pair two pieces of rectangular paper.

Help them fold their shapes equally into eight.

Ask them to open it up and write how many sections they can count, ie: 8.

Ask each pair to draw the shape into their exercise book, numbering each section.

Ask them to shade three sections and describe what they have done in the following words: 'I have shaded 3 out of 8 sections'.

Explain that this can be written as a fraction and write it on the chalkboard for everyone to see: $\frac{3}{8}$

Ask pupils to write the fraction next to the shaded shape in their exercise books.

Ask them to draw the shape again and colour five sections.

Ask them to write the fraction they have shaded next to the shape, ie: $\frac{5}{8}$

Repeat similar exercises with the numbers 4, 6 and 7, using different fractions.

Plenary

Individual task

Look together at the shapes on the chalkboard.

Explain that the pupils need to identify which fraction is shaded in each shape.

Tell them to write the answer to each question before moving on to the next question.

Lesson title

Fractions of whole numbers

15 minutes

Learning outcomes

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

Answer multiplication questions orally.

Identify the numerator and denominator in a given fraction.

Identify fractions of whole numbers.

Teaching aids

Before the lesson:

Collect enough counters for each pair to have 12.

Write the following on the chalkboard:

Circle the numerators

$\frac{2}{5}$ $\frac{1}{6}$ $\frac{2}{3}$ $\frac{3}{6}$ $\frac{5}{6}$

Circle the denominators

$\frac{2}{6}$ $\frac{3}{4}$ $\frac{4}{6}$ $\frac{2}{4}$ $\frac{3}{5}$

Daily practice

Whole class teaching

Ask the pupils to answer the following questions orally, one sum at a time:

2 x 5 =
12 x 3 =
16 x 4 =
18 x 4 =
7 x 6 =
14 x 8 =
20 x 3 =
35 x 2 =

Write down all the different answers that they give you.

Ask all the pupils to check the answers, by completing the sum in their exercise books using any method they like.

Ask the pupils which answer is correct and ask them to explain how they did it.

10 minutes

Introduction

Whole class teaching

Draw and label on the chalkboard:
$\frac{2}{3}$ 2 is the numerator
3 is the denominator

Explain to the class which number is the numerator and which number is the denominator.

Read it through with them, explaining it in their local language if necessary.

Draw a rectangle on the chalkboard and explain to the pupils that this shape is a whole.

Divide the rectangle into seven equal sections and colour three sections.

Ask the pupils to tell you what fraction of the rectangle you have coloured: $\frac{3}{7}$

Remind pupils that the top number is called the numerator and the bottom number the denominator.

Ask them to complete the activity on the chalkboard in their exercise books.

25 minutes

Main activity

Pair task

Give each pair 12 counters.

Ask them to divide the 12 counters into four.

Explain that you have divided them into quarters and this is written as $\frac{1}{4}$

Ask them how many are in each pile.

Write this as a fraction sum on the chalkboard:
$\frac{1}{4}$ of 12 = 3

Repeat the exercise, asking them to divide their pile of 12 into two equal piles, six equal piles and 12 equal piles.

Ask pupils to try and write a fraction sum for each:

$\frac{1}{2}$ of 12 = 6

$\frac{1}{6}$ of 12 = 2

$\frac{1}{12}$ of 12 = 1

10 minutes

Plenary

Whole class teaching

Ask different pairs to explain their answers to the rest of the class.

Lesson title

15 minutes | Macmillan New Primary Mathematics 3

Numeracy lesson plans
Primary 3

Term 2
Creating opportunities for classroom talk

Week 17
Fractions
Day 5

Fractions of whole numbers

Learning outcomes

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

Solve multiplication word problems.

Find fractions of whole numbers.

Teaching aids

Before the lesson:

Read Macmillan New Primary Mathematics 3, pages 68—69, exercise H, questions 5—8.

Collect enough counters for each pair to have 20 counters.

Write the questions in the main activity on the chalkboard.

Daily practice

Pair task

Ask the pupils to complete the word problems in Macmillan New Primary Mathematics 3, pages 68—69, exercise H, questions 5—8.

Ask each pair to explain how they found the answer to one of the questions.

10 minutes

Introduction

Pair task

Ask the pupils to tell you what they learned the previous day about fractions of whole numbers.

Give each pair a set of 20 counters and ask them to divide them into four equal piles.

Ask if anyone can answer the question:
'How many is one quarter of 20?'

Remind them that to find the answer they have to count the number of counters in each pile.

Ask them to divide 20 counters again into two equal piles and ask the question:
'How many is one half of 20?'

Ask pupils how they found the answer.

25 minutes

Main activity

Individual task

Look together at the questions written on the chalkboard:

1. Divide 16 oranges into 2 equal parts.
2. Divide 15 oranges into 3 equal parts.
3. Divide 30 kernels into 6 equal parts.
4. What is one quarter of 24?
5. What is one tenth of 50?

Walk round the classroom and explain it again to those pupils who are finding it difficult to understand.

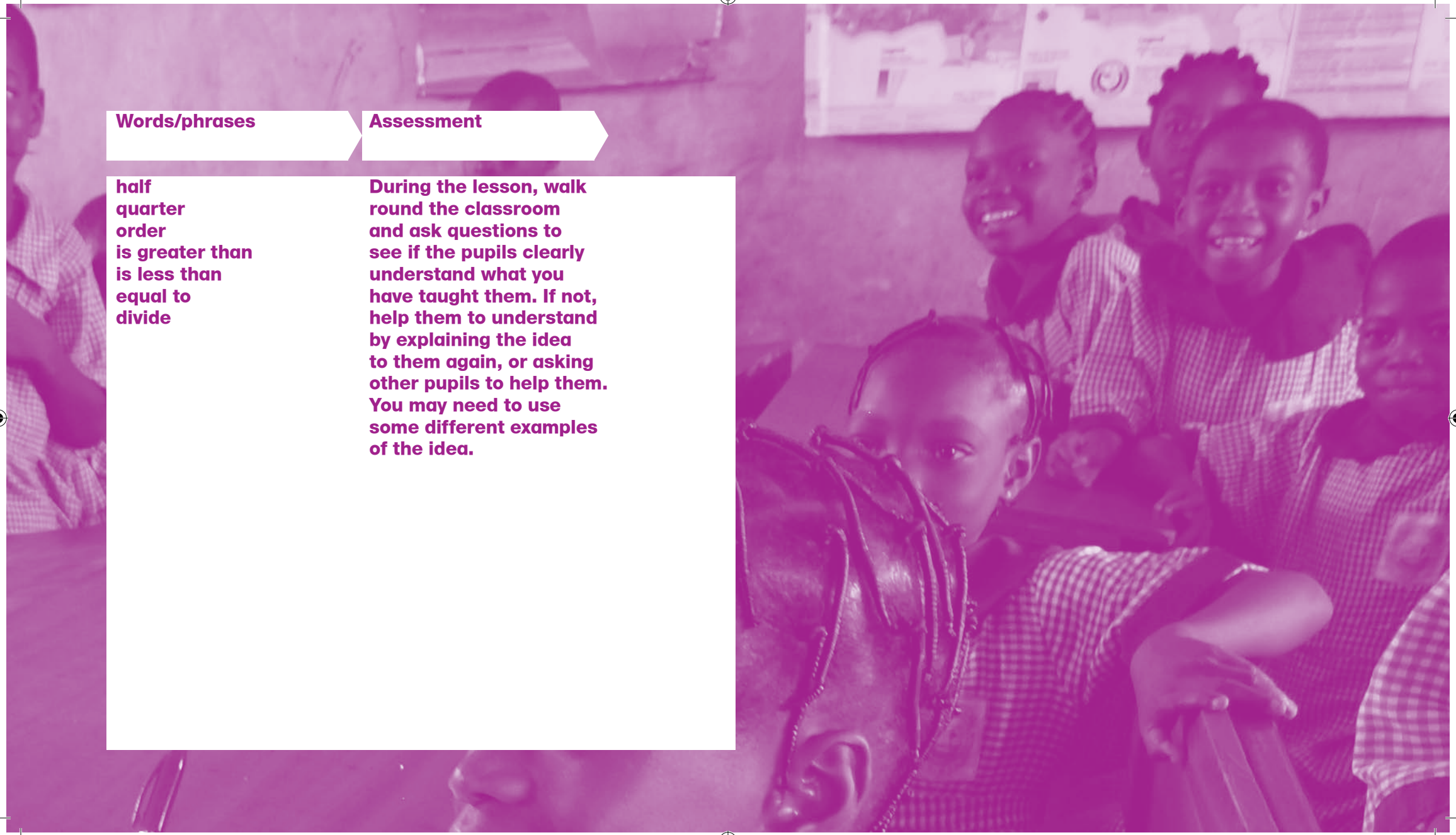
10 minutes

Plenary

Whole class teaching

Ask a few pupils to show, on the chalkboard, the rest of the class how they got their answer.

Week 18 Fractions



Words/phrases	Assessment
half quarter order is greater than is less than equal to divide	During the lesson, walk round the classroom and ask questions to see if the pupils clearly understand what you have taught them. If not, help them to understand by explaining the idea to them again, or asking other pupils to help them. You may need to use some different examples of the idea.

Lesson title

15 minutes

Numeracy lesson plans
Primary 3

Term 2
Creating opportunities for classroom talk

Week 18
Fractions
Day 1

Comparison of fractions

Learning outcomes

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

Use a number line to add together three-digit numbers.

Use the symbol < or > to order fractions.

Teaching aids

Before the lesson:

Prepare two flash cards as below.

Cut four strips of paper for each pair.

Daily practice

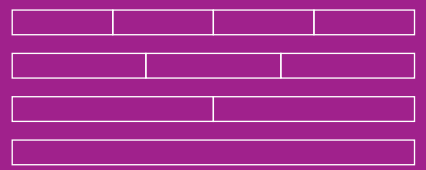
Whole class teaching

Ask the pupils to do the following questions by drawing their own number line:
432 + 245 =
234 + 351 =

Flash cards

< is less than	> is greater than

Strips of paper



10 minutes

Introduction

Whole class teaching

Show the pupils the flash cards with < and > signs and ask if anyone can tell you what they mean.

Write a pair of numbers on the chalkboard and ask a pupil to place the correct card between them, eg:

>

23 is greater than 18

Write pairs of numbers and ask pupils to copy them and write the correct sign between the two numbers.

25 minutes

Main activity

Pair task

Give each pair four strips of paper.

Ask each pair to put one strip down on the table.

Ask them to fold another strip in half and label each side: $\frac{1}{2}$

Ask pupils to tear the strip along the fold and put the two halves next to the whole strip to show they are the same size.

Ask them to take the next strip, fold it into thirds and label each section: $\frac{1}{3}$

Tell pupils to tear the strips along the folds and put them next to the other two strips as shown in the diagram.

Ask them to take the last strip, fold it into quarters and label each section: $\frac{1}{4}$

Tear the strips along the folds and put them next to the other strips as shown in the diagram.

Ask them to arrange 1 $\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{4}$ in order of size.

Ask them to use the strips to show which of the following pairs of fractions is greater than, less than or equal to the other:

$\frac{1}{3}$ $\frac{1}{4}$

$\frac{1}{2}$ $\frac{1}{3}$

$\frac{2}{3}$ $\frac{2}{4}$

$\frac{3}{4}$ $\frac{2}{3}$

10 minutes

Plenary

Whole class teaching

Look at the different fractions and see if they have them in the correct order.

Ask pupils if anyone can notice anything about the order of the denominator (bottom number) in the fraction number line.

Lesson title

Fractions

15 minutes

Macmillan New Primary Mathematics 3

Numeracy lesson plans
Primary 3

Term 2
Creating opportunities for classroom talk

Week 18
Fractions
Day 2

Learning outcomes

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

Add three-digit numbers.

Describe fractions of whole numbers.

Teaching aids

Before the lesson:

Read Macmillan New Primary Mathematics 3, page 29.

Read Macmillan New Primary Mathematics 3, pages 14—15, exercise B, questions 15—20.

Have ready enough counters for each pair to have 12 counters.

Daily practice

Whole class teaching

Ask the pupils to answer the questions in Macmillan New Primary Mathematics 3, page 29, exercise E, questions 9—12 in any way that they can.

Ask them to explain which method they used to answer the questions.

10 minutes	25 minutes	Macmillan New Primary Mathematics 3	10 minutes

Introduction

Pair task

Give each pair 12 counters.

Ask each pair to divide those counters into four piles and say how many counters are in each pile.

Ask them to write it as a fraction, ie:

$\frac{1}{4}$ of 12 is 3

Ask them to say how many counters are in two piles and explain that this can be written as:

$\frac{2}{4}$ of 12 is 6

Ask them if they can work out the answer to:

$\frac{3}{4}$ of 12 =

Ask each pair to repeat this by dividing the pile of 12 into three piles and say how many counters are in each pile.

Ask them to do the following sums:

$\frac{1}{3}$ of 12 =

$\frac{2}{3}$ of 12 =

$\frac{3}{3}$ of 12 =

Main activity

Group task

Ask the pupils to read and discuss Macmillan New Primary Mathematics 3, page 15, exercise B, questions 15—20.

Ask them to complete Macmillan New Primary Mathematics 3, page 15, exercise B, questions 15—20.

Walk round and help each group.

Plenary

Whole class teaching

Ask one person from each group to explain what they have understood from the lesson.

Numeracy lesson plans
Primary 3

Term 2
Creating opportunities for classroom talk

Week 18
Fractions
Day 3

Lesson title

Ordering fractions

15 minutes

Learning outcomes

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

Add three-digit numbers.

Order fractions along a number line.

Teaching aids

Before the lesson:

Write the questions in the introduction on the chalkboard.

Draw the following fraction number line on the chalkboard:

$\frac{1}{12}$ $\frac{2}{12}$ $\frac{3}{12}$ $\frac{4}{12}$ $\frac{5}{12}$ $\frac{6}{12}$ $\frac{7}{12}$ $\frac{8}{12}$ $\frac{9}{12}$ $\frac{10}{12}$ $\frac{11}{12}$ $\frac{12}{12}$

Draw blocks on the chalkboard to match the fraction sizes:

1 whole

$\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{4}$ $\frac{1}{5}$ $\frac{1}{6}$ $\frac{1}{7}$ $\frac{1}{8}$ $\frac{1}{9}$ $\frac{1}{10}$ $\frac{1}{11}$ $\frac{1}{12}$

Daily practice

Whole class teaching

Ask pupils to answer the following questions in their exercise books:

255 + 413 =

400 + 225 =

340 + 120 =

Ask them how they worked out the answer.

10 minutes	25 minutes		10 minutes
Introduction	**Main activity**		**Plenary**
Whole class teaching	**Whole class teaching**	**Group task**	**Whole class teaching**
Look together at the following questions: Divide 16 eggs into 4 equal parts. What is $\frac{1}{4}$ of 16? Divide 18 eggs into 3 equal parts. What is $\frac{1}{3}$ of 18? Divide 20 kernels into 5 equal parts. What is $\frac{1}{5}$ of 20? Tell the pupils to work out the answers.	Explain to the pupils that fractions can be ordered on a number line in the same way as whole numbers can. Ask them to look at the blocks you have drawn on the chalkboard. Ask: 'Which is the largest number?' 'Which is the smallest number?' Ask them what they notice about the denominators from the smallest fraction to the greatest (they get larger as the fraction gets smaller).	Give a set of fraction cards to each group and ask them to make a number line of fractions on their table. Ask them to look at the chalkboard and see if they are correct.	Ask each group to identify one thing they have found out about fractions from this activity.

Lesson title

Finding out about fractions

15 minutes

Numeracy lesson plans
Primary 3

Term 2
Creating opportunities for classroom talk

Week 18
Fractions
Day 4

Learning outcomes

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

Add three-digit numbers.

Order fractions according to their size.

Identify fractions which are equal in value to each other.

Teaching aids

Before the lesson:

Collect enough counters for each pair to have 12.

Collect the 'greater than' and 'less than' flash cards.

Draw the table shown right on the chalkboard (Table 1).

Daily practice

Whole class teaching

Ask the pupils to answer the following questions in their exercise books:
190 + 251 =
230 + 145 =
150 + 104 =

Ask them to show on the chalkboard how they worked out the answer.

Table 1

numerator	denominator	counters
3	6	
2	4	
1	2	

10 minutes

Introduction

Whole class teaching

Put the fraction number cards face down in a pile.

Ask a pupil to come out and hold one up for the class to see.

Ask the rest of the class to say the name of the fraction.

Ask them to guess whether the next fraction will be greater than or less than the one that is being held up.

Ask another pupil to come out and turn over the next card and show it to the class.

Ask one of the pupils to come out and choose the correct sign to go in the middle of the two fractions, ie:

$\frac{1}{2} > \frac{1}{5}$

Repeat two or three times.

Table 2

numerator	denominator	counters
3	6	
2	4	**6**
1	2	

25 minutes

Main activity

Whole class teaching

Write the fraction $\frac{2}{4}$ on the chalkboard.

Ask pupils to say which number is the denominator (4), and which number is the numerator (2).

Ask them to look at the denominator and divide their 12 counters into that number of piles (4).

Ask them to look at the numerator and combine that number of piles together (2).

Ask pupils to count the number of counters in those two piles.

On the table on the chalkboard record their answers as shown in the diagram (Table 2).

Give out 12 counters to each pair.

Explain to them that they are going to find out something about fractions.

Pair task

Ask them to copy the table into their exercise books and complete it, using the method you have just explained.

10 minutes

Plenary

Whole class teaching

Ask the pairs what they found out about the fractions.

Lesson title

Equivalent fractions

15 minutes

Macmillan New Primary Mathematics 3

Numeracy lesson plans
Primary 3

Term 2
Creating opportunities for classroom talk

Week 18
Fractions
Day 5

Learning outcomes

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

Add three-digit numbers.

Teaching aids

Before the lesson:

Read Macmillan New Primary Mathematics 3, page 29, exercise F, questions 1—3.

Read Macmillan New Primary Mathematics 3, pages 18—19.

Write the questions in the main activity on the chalkboard.

Daily practice

Pair task

Ask the pupils to complete Macmillan New Primary Mathematics 3, page 59, exercise D, questions 1—3 in their exercise books.

Ask them to explain how they arrived at the answers.

10 minutes	Macmillan New Primary Mathematics 3	25 minutes	10 minutes

Introduction

Whole class teaching

Give each pupil six counters.

Ask them to look at the table at the top of Macmillan New Primary Mathematics 3, page 18, and put a counter on top of: $\frac{1}{2}$ $\frac{1}{4}$ $\frac{1}{8}$

Ask them to compare the size of the fractions they have covered, telling you which is biggest and which is smallest.

Main activity

Pair task

Ask the pupils to use the table at the top of Macmillan New Primary Mathematics 3, page 18 to answer the following questions:

How many $\frac{1}{2}$s make 1?

How many $\frac{1}{4}$s make $\frac{1}{2}$?

When they have answered the questions ask them to put their answers in order of size.

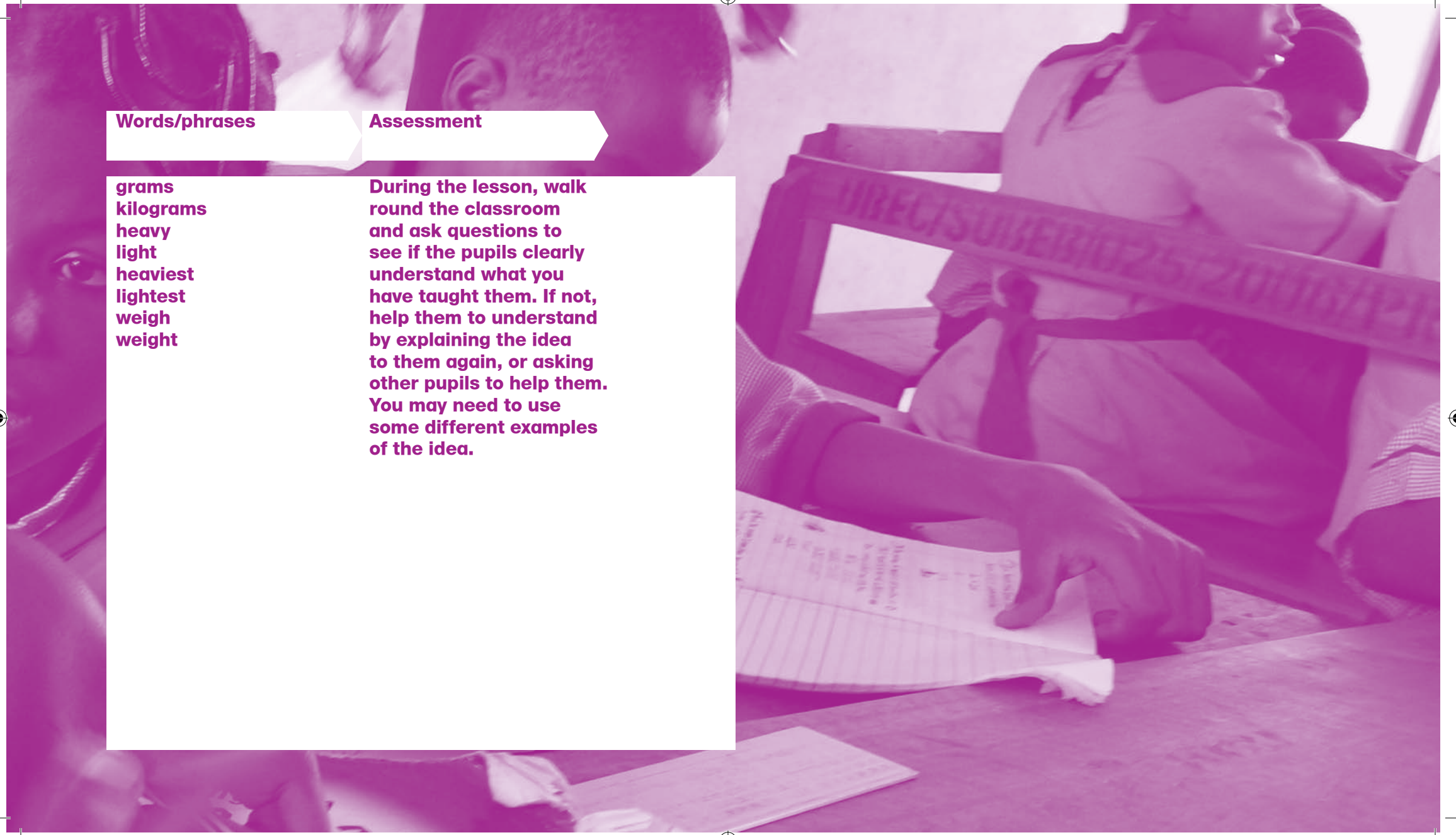
When they have completed the task, ask them if they can tell you anything they have noticed about the fractions.

Plenary

Whole class teaching

Ask the pupils to tell you everything they have learned about fractions in the last two weeks and write their ideas on the chalkboard.

Week 19 Weight



Words/phrases	Assessment
grams kilograms heavy light heaviest lightest weigh weight	During the lesson, walk round the classroom and ask questions to see if the pupils clearly understand what you have taught them. If not, help them to understand by explaining the idea to them again, or asking other pupils to help them. You may need to use some different examples of the idea.

Lesson title

15 minutes

Heavy and light

Numeracy lesson plans
Primary 3

Term 2
Creating opportunities for classroom talk

Week 19
Weight
Day 1

Learning outcomes

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

Count forwards/backwards in twos, threes and fours, from and up to 300.

Identify units of measurement used for weighing objects.

Guess the weights of different objects.

Teaching aids

Before the lesson:

Find a selection of six objects of different sizes and weights.

Daily practice

Group task

In groups of four or five, ask pupils to count forwards/backwards in twos, fours, etc from any given number up to 300.

10 minutes

Introduction

Whole class teaching

Explain to the class that this week they are going to do some measuring.

Ask them to tell you some units of measurement that they know, eg: metres and centimetres.

If they say grams and kilograms ask them where they have heard them used and what for.

If they don't mention them, tell them that we use grams and kilograms to measure the weight of different things.

Explain that the next time they go to the market they should listen to see if the sellers use grams and kilograms, or different terms.

25 minutes

Main activity

Group task

Put a selection of objects on the table and ask the pupils to guess the order according to their weight.

Ask them to draw a line in their exercise books and draw the objects on it in order from the heaviest to the lightest, as shown below:

heaviest lightest

10 minutes

Plenary

Whole class teaching

Ask each group to say the order they put the objects in and see if the rest of the groups agree.

If they do not, ask them to explain the reasons for their answers.

Lesson title

15 minutes

Numeracy lesson plans
Primary 3

Term 2
Creating opportunities for classroom talk

Week 19
Weight
Day 2

Comparing the weight of objects

Learning outcomes

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

Compare the weights of different objects.

Count forwards/backwards in threes and fours.

Teaching aids

Before the lesson:

Make simple balance scales.

Collect the objects which you used on Day 1.

Bring in as many empty packets as you can find which have grams and kilograms on them.

Draw the table shown right on the chalkboard.

Daily practice

Group task

In groups of four or five ask pupils to count forwards/backwards in threes and fours, from any given number up to 300.

Weights of objects table

item	weight
Sugar packet	2 kilograms

10 minutes	25 minutes	10 minutes
Introduction	**Main activity**	**Plenary**
Whole class teaching	**Group task**	**Whole class teaching**
Ask the pupils if they found out the units of measurement that are used in the market to weigh different items and write their answers on the chalkboard. Explain that on Day 1 they guessed which were the heaviest and lightest objects. Ask them if they can tell you how to find out the weight of objects more accurately.	Ask the pupils to come out, one group at a time, to use the balance scales to find the order of the weight of the objects, from the heaviest to the lightest. Ask them to put the objects in the correct order. Ask them to look at the scale from heaviest to lightest that they drew on Day 1 and see if they had guessed the order correctly. While each group is doing this, give out some empty packets to the other groups. Ask them to complete the table on the chalkboard to show the different measurements of weight written on the packet. Ask pupils to go outside and fill the packet with small stones, and let everyone in the group feel it. Then empty it, fill it with leaves and let everyone feel it again. When they do this, ask them to discuss the difference in weight.	Ask each group to say one thing that they found out from their activities.

Lesson title

Non-standard measurements

15 minutes

Numeracy lesson plans
Primary 3

Term 2
Creating opportunities for classroom talk

Week 19
Weight
Day 3

Learning outcomes

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

Count numbers in fours and fives up to 300.

Use non-standard measures to find the weight of objects.

Draw a table to record the weight of different objects.

Teaching aids

Before the lesson:

Find the objects that you brought in on Days 1 and 2.

Collect plenty of bottle tops.

Collect flash cards with numbers up to 100.

Daily practice

Group task

Ask each group to count forward in fours and fives from any given number up to 300.

10 minutes	25 minutes	10 minutes
Introduction	**Main activity**	**Plenary**
Whole class teaching Sit the pupils in a circle and go round the circle, asking each pupil to say one thing they know about weighing objects. Encourage them to speak, even if it is only to say something very small.	Put the balance scales, number cards, objects and bottle tops in the middle of the circle and show the pupils how to weigh each object, ie: put the object on one side of the scales and see how many bottle tops need to go on the other side to make the scales level. Ask one pupil to count the number of bottle tops and then put a number card next to the object to show how many bottle tops it weighed.	**Group task** Ask each group to draw a table to record the weight in bottle tops of each object. While they are doing this, ask each group to come out in turn and weigh the objects you have brought in, using the balance scales and bottle tops. Ask them to write their answers in the table they have drawn. Ask pupils to write the name of the heaviest object and the name of the lightest object underneath their table.	**Whole class teaching** Ask each group to say what they found out about the weight of the objects.

Numeracy lesson plans
Primary 3

Term 2
Creating opportunities for classroom talk

Week 19
Weight
Day 4

Lesson title

Comparison of non-standard measurements

15 minutes

Learning outcomes

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

Multiply two-digit numbers by single digit numbers.

Find the collective weight of a group of objects.

Find which group has the heaviest set of objects.

Teaching aids

Before the lesson:

Collect as many bottle tops as possible.

Read Macmillan New Primary Mathematics 3, page 126.

Daily practice

Whole class teaching

Ask the pupils to answer these multiplication questions in their exercise books:

$$\begin{array}{r} 23 \\ \times\ 8 \end{array} \qquad \begin{array}{r} 17 \\ \times\ 6 \end{array}$$

Ask the pupils to compare their findings.

Ask them to explain how they found the answers.

10 minutes	25 minutes	10 minutes
Introduction	**Main activity**	**Plenary**
Group task Ask each group to collect six objects from within the school premises that they can weigh on the balance scales, using non-standard measurements (bottle tops).	**Group task** Ask the pupils if anyone can suggest a way of finding out which group has the heaviest set of objects. If the pupils' suggestions are not successful, ask them to: 'Weigh each object, using bottle tops and record its weight in their exercise books.' 'Add up the total weight of all the objects collected.'	**Whole class teaching** Record the weight from each group. Ask which group has the heaviest objects altogether.

Lesson title

15 minutes

Units of weight

Numeracy lesson plans
Primary 3

Term 2
Creating opportunities for classroom talk

Week 19
Weight
Day 5

Learning outcomes

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

Count backwards/forwards in fives and sixes.

Measure and record weights in grams and kilograms.

Compare and order weights from the heaviest to the lightest.

Teaching aids

Before the lesson:

Find something that the pupils can use to weigh themselves.

Read Macmillan New Primary Mathematics 3, page 126.

Daily practice

Group task

In groups of four or five, ask the pupils to count forwards in fives and sixes from any number up to 500, and then backwards.

10 minutes | Macmillan New Primary Mathematics 3

Introduction

10 minutes

Whole class teaching

Remind the pupils that at the start of the week they discussed that standard measurements were grams and kilograms.

Ask them to look in Macmillan New Primary Mathematics 3, page 126, to find out the answers to the following questions:

'How many grams are in 1 kilogram?'

'How many grams are in half a kilogram?'

'How many grams are in a quarter of a kilogram?'

When they have found the answers ask them to tell you.

Main activity

25 minutes

Pair task

Explain to the pupils that they are going to weigh themselves using grams and kilograms.

Ask them to write down a guess in their exercise books about how many kilograms and grams they weigh.

Bring the pupils out in pairs and help them to weigh each other.

Ask them to record their weight next to their guess.

Ask them if they were close to their guess.

Set the following questions for pupils to complete while their classmates are being weighed:

250g + 500g =

1kg – 250g =

245g + 423g =

$\frac{3}{4}$ kg = ☐ g

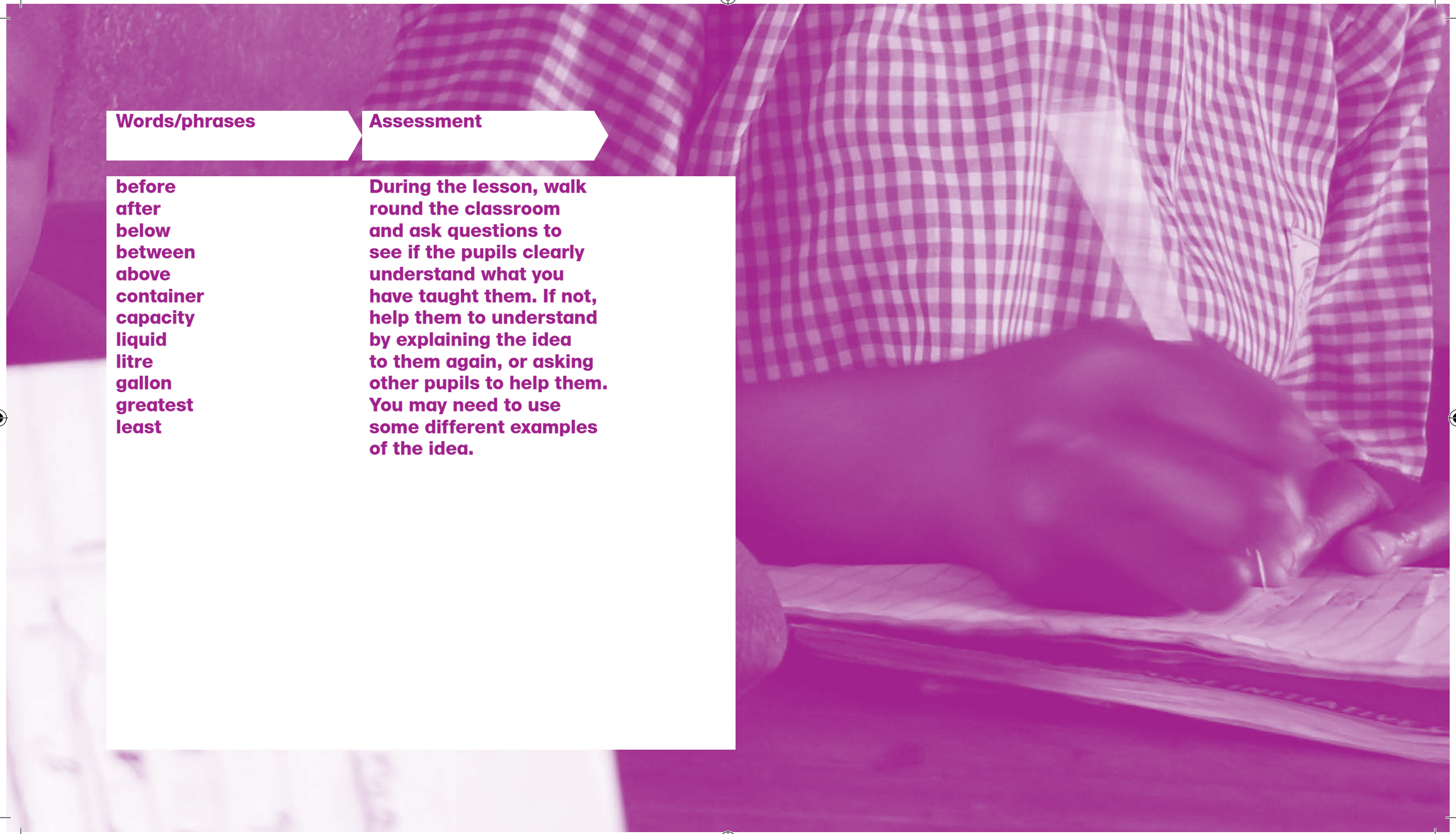
Plenary

10 minutes

Whole class teaching

When you have weighed everyone, ask the pupils to use the results to arrange themselves in order of weight.

Week 20 Capacity



Words/phrases	Assessment
before after below between above container capacity liquid litre gallon greatest least	During the lesson, walk round the classroom and ask questions to see if the pupils clearly understand what you have taught them. If not, help them to understand by explaining the idea to them again, or asking other pupils to help them. You may need to use some different examples of the idea.

Lesson title

15 minutes | Macmillan New Primary Mathematics 3

Numeracy lesson plans
Primary 3

Term 2
Creating opportunities for classroom talk

Week 20
Capacity
Day 1

Measuring capacity

Learning outcomes

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

Use a multiplication table to answer questions.

Explain the meaning of capacity.

Explain how to use containers to measure in litres.

Teaching aids

Before the lesson:

Bring in a selection of containers, eg: cylinders, bottles, tins, tea cups, cooking pots.

Read Macmillan New Primary Mathematics 3, pages 121 and 124—125.

Daily practice

Whole class teaching

Give the following sums to the pupils and ask them to use the multiplication table in Macmillan New Primary Mathematics 3, page 65 to find the answers:

10 x 3 =
5 x 5 =
7 x 8 =
6 x 9 =
8 x 6 =
9 x 3 =
4 x 9 =

10 minutes	25 minutes	10 minutes
Introduction	**Main activity**	**Plenary**
Whole class teaching	**Whole class teaching**	**Whole class teaching**
Ask pupils to give examples of some liquids and the sort of containers they come in.	Ask the pupils if they know a measurement of liquid, eg: litre.	Ask one pupil to arrange the containers in the order in which they put them and ask the rest of the class if they agree.
Write their ideas on the chalkboard.	Ask them to say what they buy in litres, eg: kerosene, milk, water, etc.	
Explain that the liquid in these containers can be measured so that everyone knows how much they are getting.	Show them the containers you have brought in.	
Explain that capacity describes the amount which a container can hold.	Ask them to draw the containers in order on a line, from the one which they think holds the most to the one which they think holds the least.	

Lesson title

15 minutes | Macmillan New Primary Mathematics 3

Numeracy lesson plans
Primary 3

Term 2
Creating opportunities for classroom talk

Week 20
Capacity
Day 2

Comparison of capacity

Learning outcomes

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

Use a multiplication table to carry out a simple investigation.

Measure capacity using non-standard measurements.

Compare the capacity of two containers.

Teaching aids

Before the lesson:

Look at Macmillan New Primary Mathematics 3, page 65.

Bring in the selection of containers from the previous day.

Read Macmillan New Primary Mathematics 3, pages 124—125

Daily practice

Whole class teaching

Ask the pupils to use the multiplication table in Macmillan New Primary Mathematics 3, page 65. Ask them to use counters to cover all the numbers in the textbook that are made when you multiply a number by itself, eg:
1 x 1 = 1
2 x 2 = 4
3 x 3 = 9

Ask pupils if they can tell you anything they found out from doing this.

10 minutes	25 minutes	10 minutes
Introduction	**Main activity**	**Plenary**
Whole class teaching	**Group task**	**Whole class teaching**
Ask pupils to find the work they did on Day 1 about capacity. Ask them whether the method they used was an accurate way of comparing capacities of containers. Explain that they are going to use a different method to order the capacity of containers.	Give each group four containers that are of different sizes. Ask them to fill one of the containers with sand or water. Ask pupils to pour the water or sand from one container into the other and see if holds more, less, or the same amount as the first one. Do the same thing for each of the containers and use the results to put them in order of capacity.	Ask the groups to compare their results.

Lesson title

15 minutes | Macmillan New Primary Mathematics 3

Numeracy lesson plans
Primary 3

Term 2
Creating opportunities for classroom talk

Week 20
Capacity
Day 3

Measuring capacity, using non-standard measurements

Learning outcomes

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

Use a multiplication table to answer questions.

Measure the capacity of containers using non-standard measurements.

Teaching aids

Before the lesson:

Bring in a selection of containers of different shapes and sizes including spoons, small cups, etc.

Fill a bowl with water, sand or soil.

Collect number cards from 1—100.

Daily practice

Whole class teaching

Ask the pupils to look at the multiplication table in Macmillan New Primary Mathematics 3, page 65, and write down the sums which give these answers:
8
16
24
32
40
48
56
64
72
80

Ask them if they can tell you anything about the sums.

10 minutes	25 minutes	10 minutes
Introduction	**Main activity**	**Plenary**
Whole class teaching Sit the pupils in a circle and go round the circle, asking each pupil to say one thing they know about capacity. Encourage them to speak, even if it is to say something very small. Put a selection of containers in the middle of the circle. Ask one pupil to fill the smallest container with water, sand or soil and pour it into one of the other containers. Ask them to continue doing this until the larger container is full. Ask the rest of the class to count how many small containers it took to fill the large container and then put a number card next to the object to record the answer.	**Group task** Give each group some containers and tell them to draw a table to record the capacity of the containers. Ask the groups to measure the capacity of their containers in the way you demonstrated. Ask them to write their answers in the table they have designed. Ask pupils to write the name of the object with the greatest capacity and the name of the object with the least capacity.	**Whole class teaching** Ask each group to say what they found out about the capacity of the objects.

Lesson title

15 minutes

Numeracy lesson plans
Primary 3

Term 2
Creating opportunities for classroom talk

Week 20
Capacity
Day 4

Estimating capacity in litres

Learning outcomes

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

Use a multiplication table to answer questions.

Estimate the capacity of containers in litres.

Teaching aids

Before the lesson:

Find number cards from 1—30.

Bring in containers that are larger than a litre, eg: a bucket, a large bottle, a cooking pot, a jerry can.

Bring in a litre container.

Daily practice

Whole class teaching

Ask the pupils to find the following numbers on the multiplication table:

'The number that comes above 77.'

'A number that comes before 104.'

'A number that comes after 168.'

'A number that comes below 42.'

'Any number that comes between 60 and 84.'

Tell the pupils, in pairs, to ask each other questions about the multiplication table, similar to the ones above.

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

Whole class teaching

Show the class a litre container and fill it with water.

Ask them to estimate (guess) how many litres it will take to fill the largest container.

Write their answer on the chalkboard.

Give each of the pupils a number card.

Ask the pupil holding number 1 to come out and pour the first litre into the container, then the pupil holding number 2, then the pupil holding number 3, etc.

Continue until the container is full of water.

Ask the pupils to say which number they reached and see if it matches their estimates on the chalkboard.

Pair task

Explain to the pupils that they are going to do the same activity in pairs, to estimate and measure the capacity of the other containers.

Ask them to draw a table to record their estimates and their actual answers.

Ask each pair to come and measure the capacity of each container in litres and record it on their table.

Ask them to see what the difference is between their estimate and the actual amount.

Group task

Ask each pair to compare their results with those of another pair.

Lesson title

15 minutes

Macmillan New Primary Mathematics 3

Numeracy lesson plans
Primary 3

Term 2
Creating opportunities for classroom talk

Week 20
Capacity
Day 5

Measuring in litres

Learning outcomes

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

Use a multiplication table.

Measure the number of litres a container holds.

Teaching aids

Before the lesson:

Read Macmillan New Primary Mathematics 3, page 124, Exercise 1.

Bring in the items that are listed in Macmillan New Primary Mathematics 3, page 124.

Find bottles that hold one litre of water.

Daily practice

Whole class teaching

Ask the pupils to write as many multiplication sums that make 30 as they can in 5 minutes.

Ask the pupils to check their answers using the multiplication square in their textbooks.

10 minutes	25 minutes	Macmillan New Primary Mathematics 3	10 minutes

Introduction

Whole class teaching

Explain that they are going to do an individual task which will help you see how well each of them understands the work you have taught them.

Main activity

Individual task

Ask the pupils to complete Exercise 1 in Macmillan New Primary Mathematics 3, page 124.

When they have completed their estimate, ask them to come out on their own and measure the capacity of each container.

While they are waiting for their turn, ask them to complete the following questions:

1. Give two examples of containers that are 1 litre in size.
2. How many half litres of water can you get from a 6 litre bucket?
3. How many quarter litres of water are there in 10 litres?
4. How many half litre bowls can be filled from a 3 litre bucket of water?

Ask one of the pupils to explain how they did it.

Plenary

Whole class teaching

Sit the pupils in a circle.

Go round the circle and ask the pupils what they have learned this week about measuring capacity.

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.