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Numeracy
lesson plans
Primary 1

## Term 1

Creating on
effective learning
environment

## Weeks

1-5

## Numeracy lesson plans Primary 1 Term 1 <br> Creating an effective learning environment

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


## Introduction

Quality education is a direct result of the quality of teaching and teachers, more than anything else. Unfortunately, it is in these most critical factors that Kwara State education has suffered the worst setback in recent years.
Reports showing that the majority of children completing the first six years of basic education are unable to read or write have raised serious concerns about the quality of teaching and teachers in our schools.

It was concluded that pupils failed because the teachers' basic education had also failed. In other words, they were all victims of an education system that has collapsed at all levels. Therefore, in seeking to address this serious problem, our intervention is holistic and delivered on a sustained basis.

These lesson plans have been described as a 'cookery book' approach to teacher training. As a teaching manual, they have been designed to provide a step-by-step guide to teachers of literacy and numeracy, while ensuring that children become active learners.

In using these lesson plans, teachers are continuously supported by both the State School Improvement Team and the school support officers who have been trained to provide such support.
I am delighted to note that within a very short time of these lesson plans being introduced into our schools, children's learning abilities have improved considerably. The lesson plans have also made learning and teaching a lot more exciting for both teachers and pupils.

I am confident that these lesson plans will raise standards in our schools and improve the quality of children proceeding to higher levels of education in the near future.

I commend all those who have worked very hard to produce these lesson plans and thank the UK Department for International Development (DFID) for its abiding support to Kwara's education reform through its ESSPIN project.

## Bolaji Abdullahi

Honourable Commissioner for Education, Science and Technology, Kwara State

Numeracy lesson plans Primary 1

## Term 1

Greating an
effective learning environment

## Introduction

Weeks
1-5

## An effective learning

 environmentThe school environment has to make pupils feel comfortable, and stimulate their minds for learning to take place. There is plenty you can do to improve the feel of the classroom for your pupils.

1
Teaching methodology
The lesson plans use a large variety of activities. If followed carefully, they will keep the pupils interested, motivated and will support effective learning in a structured way. These methods are designed to involve pupils in their learning and give them the opportunity to learn from each other.

2
Build good relationships
Learn all your pupils' names and use them frequently.
Find out about your pupils' lives and interests by listening to them and asking questions. Greet them individually in the mornings and encourage them to greet and talk to each other.

Tell them about yourself and your family. Pupils love finding out that teachers are 'human' too!

Notice when pupils are unhappy and make an extra effort to be friendly to them. Smile and make learning fun for the pupils.
Praise and encourage pupils for effort and achievement, instead of punishing them for 'laziness' or getting things wrong. Shouting and treating your pupils harshly, or beating them, will affect them emotionally and make them unable to learn.

3
Use classroom space

Arrange the seating in different ways. Look at the photographs in some of the lesson plans to help you think of different ways of working.

U-shaped formations mean all the pupils can see each other and there is a space in the middle for activities.
Pushing tables together means that four or six pupils can sit together.
If there is no space in your classroom, take the pupils outside to play circle games or do activities.

## 4

Display
Displaying pupils' work is motivating and helps them to remember things they have learned. The activities in these lesson plans encourage you to display pupils' work in different ways.

At the start of each week display the key words.

5
Teaching aids
There are lots of suggestions in the lesson plans for making
low- and no-cost teaching aids. Making these may take some time, but they can be used more than once and can last a long time if they are made carefully.

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Weeks
$1-5$

## Introduction <br> D Essential low-cost or free teaching aids

## Counters

Ask the pupils to help you collect together as many bottle tops, small sticks and small stones as they can. Put each set of counters into a jar to keep in the classroom so they are available when the pupils need them.
You should collect enough counters for each pupil to have at least 10.

## Number lines

Number lines from 1-10 and $1-25$ can be found on the fold-out chart at the back of MAN Primary Mathematics 1.

Number cards
Make sets of cards numbered from 1-10.
Cut up cardboard cartons into squares and write numbers on them. Make a set per pupil so they can use them to play games and help them recognise their numbers. Once the pupils can write their numbers you can give them blank cards and help them make their own set.

Display number cards from 1-20 on a number line string across the classroom so that they are there as a permanent resource. Some teachers have made a number line out of different shapes, eg: hands, feet, buses, goats, boats, etc to make them more interesting for the pupils to look at.
Have a number of the week. Display the number on a table in the classroom and ask pupils to help you collect sets of that number of objects and place them in groups by the number.

## Shapes

Use newspaper, the backs of calendars and old cardboard to cut out as many different sized triangles, squares, rectangles and circles as you can.

## Days of the week

Make cards of the days of the week and display them on a string across the classroom.

Read them with the pupils every day and ask them to find different days.

## Songs

Write out some of the songs and display them, so that the pupils can see both the numbers and the songs.

## Numeracy lesson plans Primary 1 <br> Term 1 <br> Creating on <br> effective learning environment <br> Introduction <br> Songs and rhymes for the term

Weeks
1-5

## 10 little fingers

## 1 little,

2 little,
3 little fingers /
4 little,
5 little,
6 little fingers /
7 little,
8 little,
9 little fingers /
10 little fingers,
(clap, clap, clap)

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...

1, 2, buckle my shoe

1, 2, buckle my shoe / 3, 4, knock on the door /
5, 6, pick up sticks /
7, 8, lay them straight /
9,10 , a big fat hen.

## 10 currant buns

10 currant buns in the baker's shop / round and fat with sugar on the top / Along came (sing the name of a pupil) with a penny one day / bought a currant bun and took it away.
9 currant buns...
8 currant buns...
7 currant buns...
6 currant buns... 5 currant buns... 4 currant buns...

## 10 green bottles

5 little monkeys

10 green bottles standing
on the wall (x2) /
If 1 green bottle should accidentally fall /
There'd be 9 green bottles standing on the wall / 9 green bottles standing on the wall...
(Repeat until no more bottles are left standing.)

5 little monkeys jumping on the bed / 1 fell off and bumped his head/
Mummy called the doctor,
The doctor said /
'No more monkeys jumping on the bed'.

4 little monkeys...
3 little monkeys...
2 little monkeys...
1 little monkey...



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Week 1
Counting from
1-5
Day 1
environment

Lesson

## Sorting objects

| Learning outcomes | Daily practice |
| :---: | :---: |
| By the end of the lesson, most | Whole class teaching |
| Sort and classify a number of objects in a group. | Write the names of the days of the week on the chalkboard and read them to the pupils. |
| Use fingers and number cards to count 1-5. | Ask the pupils: 'Does anyone know which day it is today?' |
| Teaching aids | Sing '10 little fingers' with the pupils. |
| Before the lesson: |  |
| Collect sets of different objects to be counted. Make sure there is more than one of each object. |  |
| Write the numbers $1-5$ clearly on the chalkboard. |  |
| Make number cards 1-5, one set for each group. |  |


| 10 minutes | 25 <br> minutes |  | 10 minutes |
| :---: | :---: | :---: | :---: |
| Introduction | Main activity |  | Plenary |
| Whole class teaching | Group task |  | Whole class teaching |
| Ask the pupils to count out loud the number of fingers they have on each hand, and the number of toes they have on each foot, counting 1-5 each time. | Ask one pupil from each group to come and collect the sets of objects you prepared before the lesson. <br> Ask pupils to sort | Give each group a set of number cards from $1-5$ and ask them to put the correct number by each group. <br> Ask each group questions, | Ask pupils if they can count any other objects in the classroom and tell you how many there are, eg: 2 windows, 1 door, etc. |
| As they count, point to the numbers written on the chalkboard. | them into groups of the same object. <br> Ask them to touch the objects in each group and count as they touch. | eg: 'How many pencils do you have?' <br> Ask one pupil to say the number and hold up the correct number card. |  |

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Primary 1

## Term 1

Creating an
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Week 1
Counting
from 1-5
Day 2

Lesson
title

## Counting

| $\left\lvert\, \begin{aligned} & 10 \\ & \text { minutes } \end{aligned}\right.$ | 25 minutes | MAN Primary Mathematics 1 | 10 minutes | Rhyme |
| :---: | :---: | :---: | :---: | :---: |
| Introduction | Main activity |  | Plenary |  |
| Pair task | Group task | Individual task | Whole class teaching |  |
| Give each pupil a number between 1 and 5 and | Give each group a selection of different counters. | Tell the pupils to open MAN Primary Mathematics 1, page 3. | Say the rhyme '1, 2, buckle my shoe' with the pupils, showing them how to use their fingers while they are saying the rhyme. |  |
| check they can remember their number. | Ask them to use them to make sets of 1, 2, 3, 4 and 5. |  |  |  |
| Ask all the class to go |  | Ask them to find sets of objects that are the same, count the number in each set and draw them in their exercise books, eg: footballs. |  |  |
| outside in pairs, count that number of objects, and remember what they have counted, eg: 3 trees. | Give each group a set of number cards to put with their groups of objects. |  |  |  |
| When they return, ask them to tell you the groups of objects they found for their number. |  | Ask them to use a counter to cover up the objects that are different in the second exercise. |  |  |

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environment

Week 1
Counting from
1-5
Day 3

## Ordering and counting

Lesson

| 10 minutes |  | 25 minutes | $\left\|\begin{array}{l}10 \\ \text { minutes }\end{array}\right\|$ Song |
| :---: | :---: | :---: | :---: |
| Introduction |  | Main activity | Plenary |
| Pair task |  | Individual task | Whole class teaching |
| Show the number cards $1-5$ to the pupils and ask them to tell you the number. | Ask the pairs to put the correct number of counters by each number card. <br> Ask the pairs to put the | Give each pupil a number card. <br> Ask them to draw a matching number of | Ask one pupil to lead the class in singing '10 little fingers'. Ask the pupils to point to the |
| Give a set of number cards 1-5 to each pair. | number cards in the correct order from 1-5. | objects on to it, eg: balls, leaves, etc. | number cards on the walls as they sing. |
| Ask each pair to read the numbers on their cards to one another. | Ask them to mix the numbers up and do the same again. | Some pupils might have time to complete more than one number |  |
| Point to a number on the chalkboard and ask the pupils to hold up that number so you can see. |  | If possible, stick the number cards with drawings on to a wall or the chalkboard keeping numbers together, eg: all the ones in one place, all the twos in another place, etc. |  |

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Primary 1

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Week 1
Counting from
1-5
Day 4

Writing

| 10 <br> minutes | MAN Primary <br> Mathematics 1 |
| :--- | :--- |

## Introduction

Whole class teaching
Tell all of the pupils to stand in their places and copy you. Lead them in drawing numbers 1-5 in the air with your hands, feet, head, etc. Remember to stand with your back to the class so that you draw the numbers the correct way round.

Ask pairs to use their fingers to draw the numbers 1 -5 on the back of their partner, saying them out loud as they draw.

## Main activity

Find the number chart at the back of MAN Primary Mathematics 1 and ask the pupils to touch the numbers from 1-5 and count the objects by the numbers at the top of the page.

## Group task

Give a sand tray to each group.

Ask them to take turns to use their fingers to write $1-5$ in the sand trays.

Give each group a number chart like the one below and ask them to write the numbers $1-5$ in the top row. Each pupil should write at least one number

MAN Primary Mathematics 1

10
minutes

Ask them to draw a matching number of objects in the bottom row of their group's chart.
Tell them to use the foldout number charts at the back of MAN Primary Mathematics 1 to help them.

Say the rhyme '1, 2, buckle my shoe' with the pupils.

## Number chart



Numeracy
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Primary 1

## Term 1

Creating an
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Week 1
Counting from
1-5
Day 5

Lesson
title

## More

(

25

MAN Primary
Mathematics 1

Whole class teaching
Ask one pair to come to the front.

Give one pupil five objects and the other one object.

Tell them to decide which of them has more than the other.

Tell the pupils what they
have done, using 'more', eg:
'Abiodun has 5 and Hadiza
has 1. Abiodun has more
than Hadiza.'

## Main activity

## Pair task

Give each pair a set of 1-5 number cards and 10 counters.

Ask them to place the cards face down in front of them and each pick one.
Ask them to make a group of that number of counters and put the number and the counters on the table in front of them.

Ask each pair to say which of them has more counters than the other.

Ask them to repeat the game three times.

## Individual task

Ask the pupils to open
MAN Primary Mathematics
1, page 5 and count
the number of objects in each box.

Ask them to put a counter over the group of objects in each box that has more than the other.

Whole class teaching
Say the counting rhyme '1, 2, buckle my shoe' with the pupils.


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Primary 1

## Term 1

Creating an
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## Week 2

Shapes
Day 1

Lesson

## Sorting shapes



By the end of the lesson, most pupils will be able to:
Count from 1—5.
Know and identify squares, rectangles, triangles and circles.

## Teaching aids

Before the lesson:
Have ready a pile of counters and number cards $1-5$.

Read MAN Primary Mathematics 1, page 143.
Cut out a square, rectangle, circle and triangle for each pupil.

Cut out one large circle, square, triangle and one large rectangle. Write the words 'circle', 'square', 'triangle' and 'rectangle' to label each shape and display them in the corners of the classroom.

15
minutes

Daily practice

Whole class teaching
Sing '10 little fingers' with the class.

Give several pupils a number card each, from 1-5.

Ask other pupils to give the correct number of counters to each pupil holding a number.

Ask pupils with number cards to stand in the correct order from $1-5$, holding their cards so everyone can see.

Ask individual pupils to come out and count from $1-5$, pointing to each number as they say it.

Repeat with different pupils.

## Introduction

Whole class teaching
Group task
Give pupils one shape each.
Ask all of the pupils to go to the place in the classroom where you have put the sign with their shape.

When they have all found their shape, allow them to compare the shapes they have and check they are standing in the correct place.

## Main activity

## Individual task

Ask the pupils to return to their places and draw a circle, a square, a triangle and a rectangle in their exercise books. They can use MAN Primary Mathematics 1, page 143 to help them.

Ask any pupils who finish quickly to try and write the names of the shapes next to their drawings.

## Plenary

Whole class teaching
Take all the pupils outside. Ask them to move around, and when you call 'freeze' they must stop, listen and then each make the shape that you call using their bodies.
Practise by asking them to each make a circle with their body, eg: by holding their arms in a circle.

Call out the different shapes, giving the pupils enough time to form each shape.

Once the shape is made, tell them to move around again before calling out the next shape.

Ask them to make sure
that everyone in their group can say the different shape names.

Numeracy
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Primary 1

## Term 1

Creating an
effective learning
environment

## Week 2

Shapes
Day 2

## Counting

|  | 15 minutes |
| :---: | :---: |
| Learning outcomes | Daily practice |
| By the end of the lesson, most pupils will be able to: | Whole class teaching |
| Count from 1-5. <br> Sort similar shapes. | Ask two pupils to come to the front. |
| Teaching aids | Shuffle the number cards and ask one pupil to pick one of them and hold it up so everyone can see it. |
| Before the lesson: | Ask the other pup |
| Have ready number cards 1-5. | the number, and draw it in the air |
| Have ready enough counters for each pupil to have five. | with their hand. <br> Ask the rest of the pupils to |
| Prepare sets of cut-out squares, rectangles, triangles and circles for each group - as many as possible but at least 10 shapes in each set. They do not have to be the same size. | of counters. <br> Repeat with at least three more pairs of pupils. |
| Read MAN Primary Mathematics 1, page 142. |  |


| 10 minutes | 25 MAN Primary <br> minutes Mathematics 1 |  |
| :---: | :---: | :---: |
| Introduction | Main activity |  |
| Whole class teaching | Group task | Individual task |
| Bring out the different shapes and ask pupils to call out their names. | Give each group a set of mixed up shapes and ask them to sort them into groups by shape. | Ask the pupils to copy MAN Primary Mathematics 1, page 142, unit 2 into |
| Ask the pupils to identify the shapes of some objects in the classroom, eg: windows, door. | groups by shape. <br> Groups that finish quickly can try to sort each set of shapes by size. | their books. Ask them to draw lines connecting the same shapes in each box. If possible, ask them to shade similar shapes with the same colours. |

| 10
minutes

## Plenary

## Pair task

Ask pairs to tell each other about some squares, rectangles or circles that they see every day around school and home. If there is time, ask for examples of each shape to be shared with the whole class.

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## Week 2

Shapes
Day 3

## Counting sides and corners on a shape



By the end of the lesson, most pupils will be able to:
Order numbers from $1-5$.
Identify the number of sides and corners on different shapes.

## Teaching aids

Before the lesson:
Have ready number cards
from $1-5$ and 20 counters for each group.
Have ready the cut-out shapes from Day 1.
Write the words 'side' and 'corner' on the chalkboard.

Daily practice

## Group task

Lead the class in singing '10 little fingers'.
Give each group a set of number cards from 1-5 and 20 counters.

Tell the class that you are looking for the first group to put their number cards in the correct order.

Ask them to place the correct number of counters on each number, and check they have the numbers in the right order.

## Introduction

## Main activity

Ask a group to share their results, and ask if the other groups agree.

Ask for one person to take a number card and place it by the correct shape, according to how many sides it has, eg: the number 3 will be placed by the triangle.
fingers to count the number of sides on each shape.

## Pair task

Explain that a corner is where two sides meet. Show the class a corner on a shape and ask them to say the word with you.

Ask each pair to look at either a square or a rectangle, and count the number of corners.

Ask pairs to share their results with another pair, and to all agree on the number of corners on both squares and rectangles.

## Whole class teaching

Show the class a circle, and ask if anyone can say how many corners it has. Agree that a circle doesn't have any corners.

## Plenary

Whole class teaching
Ask the class if any of them can tell you one thing that is the same and one thing that is different about a square, a rectangle and a triangle.

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Primary 1

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effective learning environment

Week 2
Shapes
Day 4

## Drawing and <br> Iabelling shapes

Learning outcomes

By the end of the lesson, most pupils will be able to:
Write numbers 1-5.
Draw squares, rectangles, triangles and circles.

Know the words square, rectangle, triangle and circle.

Teaching aids

Before the lesson:
Draw a square, rectangle, triangle and circle on the chalkboard. Write the name next to each shape.

Daily practice

## Whole class teaching

Teach the class ' 5 little speckled frogs' and show them the actions.

Call out random numbers
from $1-5$ and ask the pupils to write that number in their exercise books and hold it up for everyone to see.


Numeracy
lesson plans
Primary 1

## Term 1

Creating an
effective learning
environment

Lesson
title

## Working with shapes



By the end of the lesson, most pupils will be able to:
Recognise numbers $1-5$.
Identify and use shapes confidently.

## Teaching aids

## Before the lesson:

Have as many squares, rectangles, triangles and circles of different sizes cut out as possible. There should be at least one of each shape for each pupil.
Draw a simple picture on the chalkboard using just these shapes, such as a car.

Next to your drawing, write how many of each shape you have used.

15
minutes

Daily practice

## Whole class teaching

Sing '5 little speckled frogs' with the class and do the actions.
Write the numbers $1-5$ randomly on the chalkboard.
Ask individual pupils to come out, point to a number and say its name.
Ask pupils to get into groups of that number.

If there are any pupils left over, ask them to stand in a separate group and point to the number in their group on the chalkboard.
Repeat three or four times, using different numbers.

| 10 minutes | 25 minutes | 10 minutes |
| :---: | :---: | :---: |
| Introduction | Main activity | Plenary |
| Whole class teaching | Pair task | Whole class teaching |
| Show the class your picture and ask them what it looks like. | Explain that each pair will be making their own picture using the simple shapes. | Ask the pupils questions about shapes, eg: <br> 'Who can tell me which |
| Explain that it is made from simple shapes. | Give out the shapes to each pair. | ape has three sid |
| Ask pupils to come up and show you the different shapes in the picture and say their names. | Ask them to make a picture of something simple, eg: a house or a face, by arranging the shapes. |  |
|  | When they have made their pictures, ask them to count how many of each shape they have used. |  |
|  | Invite the pupils to carefully walk around the classroom to look at one another's pictures. |  |




Numeracy
lesson plans
Primary 1

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Week 3
Counting from
6-9
Day 1

## Numbers 6 and 7



## Before the lesson:

Read MAN Primary Mathematics
1, page 26, unit 5 .
Write numbers 1-7 on the chalkboard, as large as possible, with their names written underneath in words. Keep them for the week, as you will use them each day.
-5 again, but this time ask one pupil to lead the class in drawing the numbers $1-5$ in the air with their fingers, their feet, their heads, their noses etc.
Pupils at the front should do this standing with their backs to the class, so they show them the correct way.

Ask the pupils to look at MAN Primary Mathematics 1, page 26 and ask individual pupils to tell you how many objects are in each group.

| 10 minutes |  | 25 minutes |  |
| :---: | :---: | :---: | :---: |
| Introduction |  | Main activity |  |
| Whole class teaching |  | Group task |  |
| Explain that you will be counting more than 5 today. Ask the class to show you 5 fingers, and show them 5 of your own fingers. <br> Raise 1 more finger and ask them to do the same. Tell them that this number is called 6 and show them the number on the chalkboard. Ask them to say 'six' with you. <br> Ask if anyone can tell you how many 'more than' 5 this new number is. <br> Ask the class to show you 6 fingers, and show them your own. | Raise 1 more finger and ask them to do the same. Tell them that this number is called 7 , show them the number on the chalkboard, and ask them to say 'seven' with you. <br> Ask if anyone can tell you how many 'more than' 6 this new number is, and then ask if anyone can tell you how many 'more than' 5 this number is. <br> Lead the class in counting all the way from 1-7, pointing to the numbers on the chalkboard as you do so, and encourage them to use their fingers. | Give each group a set of number cards 1-7 and a set of counting objects. <br> Ask them to make one set of six objects and one set of seven objects, and to label them with the cards for 6 and 7. | Ask them to put the numbers in order from <br> $1-7$ and put the correct number of counters on each number. <br> Ask them to take six counters and five counters and put them in pairs. <br> Ask them questions, eg: <br> 'How many have you got left over?' <br> 'How many more than 5 is 6?' | | 10 |
| :--- |
| minutes | Song

Plenary

Whole class teaching
Sing a counting song, such as '10 little fingers' up to the number 7 .

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Week 3
Counting from
6-9
Day 2

Lesson
title

## Numbers 8 and 9

By the end of the lesson, most pupils will be able to:
Write numbers $1-5$.
Count numbers from 1-9.
Read numbers 8 and 9.

## Teaching aids

Before the lesson:
Write numbers 1-9 on the chalkboard with their names underneath, ie: 'one', 'two', etc.

Have ready sets of number cards $1-9$ and 20 counting objects for each group.

Familiarise yourself with the 'Haka' dance (see Daily practice).

15
minutes

## Learning outcomes

Daily practice

## Group task

Tell the class that you will be dancing numbers, in a dance called the 'Haka' from a far away country called New Zealand.
Lead them in putting your right hand on the left side of your head, then left hand on the right side of your head.

Then move your right hand to your right hip, then your left hand to your left hip.

Then move your right hand to your left shoulder, then your left hand to your right shoulder.

Then lift both hands into the air.
Lead them in the dance again, this time saying a number with each hand movement.

## Introduction

$\mid 25$
minutes

## Main activity

## Group task

Give each group the number cards 1-9 and a set of objects.

Ask them to put the numbers in order from $1-9$ and put the correct number of counters on each number.

Ask them to take seven counters and eight counters and put them in pairs.

Ask them questions, eg:
'How many have you got left over?’
'How many more than 7 is 8?'

Repeat with different pairs
of numbers from 1-9.

10
minutes
Dance

Plenary

Whole class teaching
Repeat the dance from the daily practice.

This time, after both hands are on your shoulders (moves 5 and 6), move your right hand to the right side of your head, and your left hand to the left side of your head (moves 7 and 8).

Then, raise both hands in the air (move 9).
Repeat the dance at least twice, making sure that all pupils are moving their hands and saying the numbers with you.

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Week 3
Counting from
6-9
Day 3

Writing 6-9


By the end of the lesson, most pupils will be able to:
Write numbers 1—9.


## Before the lesson:

Write numbers 1-5 on the chalkboard, and leave space to write numbers 6-9.

Stick number cards 1-9 on to the walls.

Prepare a sand tray for each group.
Prepare a rectangular chart as shown opposite for each group on large pieces of card or paper. If these are not available, draw it on the chalkboard and help the pupils copy it into their exercise books.

15
minutes

## Daily practice

## Whole class teaching

Tell the pupils that they have to go to the place in the room with the number that you say. Say the different numbers in turn.
Test the pupils by counting the numbers in order once, then mixing the order up.
If there are too many pupils for the space, half of the pupils should stay seated while the other half move to the numbers, and then swap over.

## Introduction

## Main activity

## Group task

Give a sand tray to each group.

Ask pupils to write 6-9 in the sand trays with their fingers.

Give each group one of the rectangular charts you prepared.

Ask them to draw a picture of themselves on the back of the chart so they can identify it later.

## Plenary

## Whole class teaching

Repeat the dance from yesterday's plenary, making sure all of the pupils copy you and say the names of the numbers as they dance.

## Number chart



Numeracy
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Primary 1

## Term 1

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Week 3
Counting from
6-9
Day 4

## Making sets of 6-9



Before the lesson:
Have a sand tray ready for each group.

Have ready the number charts from yesterday.
Have ready sets of 30 objects and number cards 1-9 for each group.
Find the fold-out number charts at the back of MAN Primary Mathematics 1.

## Daily practice

## Group task

Ask pupils to count around the class, from $1-9$. They must each remember the number they said, as this is their group number.
Give each group a sand tray, a set of number cards from $1-9$ and 30 counting objects. Ask each pupil to write their number on the sand tray, supported by the rest of their group.
If needed, help the pupils by leading them in writing the numbers in the air.

As they write the numbers ask the rest of the group to collect that number of objects and put them with their number by the sand tray.

| 10 minutes | 25 minutes | MAN Primary Mathematics 1 | 10 minutes | Dance |
| :---: | :---: | :---: | :---: | :---: |
| Introduction | Main activity |  | Plenary |  |
| Group task | Group task |  | Whole class teaching |  |
| Make sure each group has a set of 30 objects and number cards 6-9. | Give each group their number chart from the previous day. |  | Repeat the d yesterday's |  |
| Tell them to put the number cards 6, 7, 8 and 9 and their objects in the | Tell them that they will draw a set of objects underneath each number. |  |  |  |
| rect order. | Tell the numbe charts MAN P 1 to he | $m$ to look at th rs on the foldat the back of rimary Mathem p them. |  |  |
|  | Displa around | the number ch the room. |  |  |

Numeracy
lesson plans
Primary 1

## Term 1

Creating an
effective learning
environment

Week 3
Counting from
6-9
Day 5

## Number lines

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|  | 15 minutes |
| :---: | :---: |
| Learning outcomes | Daily practice |
| By the end of the lesson, most | Whole class teaching |
|  | Invite nine pupils to stand at |
| Count using a number line. | the front of the room. |
| Teaching aids | Give each one a large number card from 1-9. |
| Before the lesson: | Show the rest of the class the objects or counters. |
| Have counters ready. | Ask who thinks they can count four objects. |
| Make a set of large number cards 1-9. | Invite that pupil to come to the front, collect four objects, and stand |
| Write 1-9 on the chalkboard. | with the pupil holding 4. |
|  | Congratulate them, then lead the rest of the class in drawing a large 4 in the air. |
|  | Repeat with the other numbers, but not in order. |

## Plenary

Whole class teaching
Repeat the dance from yesterday's plenary.

$$
\begin{aligned}
& \text { Week } \\
& 4 \\
& \text { Counting from } \\
& 0-10
\end{aligned}
$$


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zero ten after before

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

Numeracy
lesson plans
Primary 1

## Term 1

Creating an
effective learning
environment

Week 4
Counting from
0-10
Day 1
者

## Zero

Lesson
title

| $\begin{array}{l\|l} 10 & \text { Rhyme } \\ \text { minutes } \end{array}$ |  | $\left\|\begin{array}{l\|l} 25 \\ \text { minutes } \end{array}\right\| \text { Rhyme }$ | MAN Primary <br> Mathematics 1 |
| :---: | :---: | :---: | :---: |
| Introduction |  | Main activity |  |
| Whole class teaching |  | Whole class teaching | Individual task |
| Lead the class in saying a counting rhyme that goes to zero, eg: '10 green bottles'. | Continue, each time asking a new pupil to come and take an object away and asking how | Hand out number cards from 1-9 to individual pupils. <br> Ask those pupils to come | Ask pupils to use their fingers to do the matching exercise in MAN Primary Mathematics 1, page 29. |
| Ask a pupil to come out and stand in front of the class, and give him or her nine objects. | many are left. <br> Continue until the pupil has no objects left. <br> Explain that 'no objects' | out and make a number line using their cards from 1-9. <br> Hold up the ' 0 ' card and |  |
| Ask a pupil to come and take an object from the first pupil, and ask: 'How many are left?' | is called zero and draw a ' 0 ' on the chalkboard. <br> Lead the class in drawing a zero in the air with your hand. | ask if anyone can tell you where it sits on the number line. <br> Say '5 little monkeys', but this time make it '9 little monkeys' and ask the person holding the number card to sit down when their number is said at the end of a verse, until everyone is sitting down. |  |

## Plenary

Whole class teaching
Do the dance from Week 3, but start with both hands folded in front of your waist. This is move 0 .

Numeracy
lesson plans
Primary 1

## Term 1

Creating an
effective learning
environment

Week 4
Counting from
0-10
Day 2

Lesson
title

## Ten



Numeracy
lesson plans
Primary 1

## Term 1

Creating an
effective learning
environment

Week 4
Counting from
0-10
Day 3

Writing 10
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Numeracy
lesson plans
Primary 1

## Term 1

Creating an
effective learning
environment

Week 4
Counting from
0—10
Day 4

## Ordering numbers

## Lesson

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| $\begin{array}{l\|l} 10 & \text { Rhyme } \\ \text { minutes } \end{array}$ |  | $\begin{array}{\|l\|l} 25 \\ \text { minutes } \end{array}$ | 10 minutes |
| :---: | :---: | :---: | :---: |
| Introduction |  | Main activity | Plenary |
| Whole class teaching |  | Group task | Whole class teaching |
| Give 11 pupils a number card from 0-10 and ask them to come and stand at the front in the correct order. | Ask the class to show you 10 with their fingers. <br> Give them random numbers from 1-10 and | Give each group a sand tray. <br> Ask them to draw a 1, and put one object in the sand tray with the number. | Ask the pupils if they can tell you anything they know about the number 6, eg: 'I am 6’, 'There are 6 children in our family', etc. |
| Say the rhyme '10 little monkeys' with the class, asking each 'monkey' to sit down at end of their number, until there is only 'zero' left standing. | number with their fingers. <br> Call out a number and ask the pupils to put up their hand if they can come and circle that number on the chalkboard. | Ask them to add one more object to the sand tray and then write the number ' 2 ' next to it. <br> Ask them to continue this until they reach 10. <br> Make sure all of the pupils have a chance to write a number in the sand tray. <br> Help groups to say the names of the numbers as they write them. |  |

Numeracy
lesson plans
Primary 1

## Term 1

Creating an
effective learning
environment

Week 4
Counting from
0-10
Day 5

## Number lines <br> to 10



Make 10 large bottle shapes from card and number them from 1-10.

Cut out different sized squares, rectangles, triangles and circles.
Collect 10 counters for each pupil.
String a washing line across
the classroom and display the
numbers 0-10.



Numeracy lesson plans Primary 1

## Term 1

Creating an
effective learning environment

Week 5
Flat and
solid shapes
Day 1

Lesson
title

## Identifying solid shapes

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| 10 minutes | 25 minutes | $\left\lvert\, \begin{aligned} & 10 \\ & \text { minutes } \end{aligned}\right.$ |
| :---: | :---: | :---: |
| Introduction | Main activity | Plenary |
| Whole class teaching | Group task | Whole class teaching |
| Show the class the objects you have collected, telling them the names of the shapes as you do so. | Give one object to each group and ask them to name the shape from looking at it. | Ask if anyone can think of examples of the shapes from home or elsewhere. |
| Ask them to find one difference between the shapes. | Ask each group to say what shape it is. | Support the pupils to use the objects' names in their answers, pointing to them on the chalkboard and repeating them if necessary. |
| Ask the pupils to share what they have found with the rest of the class. | Point to the name of the shape on the chalkboard and read it. |  |
| Tell the pupils the names of the shapes again. | Ask each group to go outside and look around for examples of their shape in the school grounds. |  |
|  | Explain that they might not find examples of all of them. |  |
|  | Bring the groups back, and ask them to share their examples with the class. |  |

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Introduction

## Whole class teaching

Show the class the telling them the names of the shapes as you do so.

Ask them to find one difference between
the shapes.
Ask the pupils to share what they have found with
rest of the class.
of the shapes again.

Group task
Give one object to each group and ask them to name the shape from

Ask each group to say what shape it is.

Point to the name of the shape on the chalkboard and read it.

Ask each group to go outside and look around in the school grounds.

Explain that they might not find examples of all

Bring the groups back, and ask them to share their examples with the class.

Whole class teaching
Ask if anyone can think from home or elsewhere

Support the pupils to their ansers, pointing their answers, pointing halkboara and repeating them f necessary.

Numeracy
lesson plans
Primary 1

## Term 1

Creating an
effective learning environment

Week 5
Flat and
solid shapes
Day 2

## Flat and solid shapes

Lesson
Lesson
title

| Learning outcomes | Daily practice |
| :---: | :---: |
| By the end of the lesson, most pupils will be able to: | Whole class teaching |
|  | Ask a pupil to lead the class in dancing numbers $0-10$ as in Week 3. |
| Explain some differences between flat and solid shapes. |  |
| Order numbers from 1-10. | Ask the pupils to look at the number line in the fold-out chart at the back of MAN Primary Mathematics 1 and use their fingers to count along the line. |
| Teaching aids |  |
| Before the lesson: | Ask the pupils questions about the numbers, eg: |
| Stick the square, rectangle, triangle and circle cards from Week 2 on the chalkboard. | 'Which number comes before _?' |
| Stick number cards up on the walls, or draw $1-5$ clearly | 'Which number comes after _?' <br> 'Start counting from 1 and count up to 7 ', etc. |
| on the chalkboard. |  |
| Have ready the objects from Day 1. |  |


| 10 minutes | 25 minutes |  |  |
| :---: | :---: | :---: | :---: |
| Introduction | Main activity |  |  |
| Whole class teaching | Whole class teaching |  | Group task |
| Ask pupils to look at the square, rectangle, triangle and circle on the chalkboard. <br> Ask them to remind one another about the shapes. <br> Ask different pupils to explain each shape to the class, and support them in explaining clearly what the shapes are. | Show the class a cube and hold it next to the square on the chalkboard. Remind them of the names of each shape. <br> Ask pupils to tell you any differences they notice between the square and the cube. <br> Tell them that the objects are solid and the shapes are flat. <br> Show the class that the cube has a square on each side, and explain that a solid shape has sides that are all flat shapes. | Ask one pupil to hold up another object and name the flat shapes they can see on the object. | Give one object to each group. <br> Ask the groups to look at their objects, name it and draw the different flat shapes they can see on it. | all flat shapes.

Whole class teaching
$\overline{\text { Ask the pupils to stand up }}$ in their places. Show them how they can draw the shapes in the air.

Lead them in drawing a square, rectangle, triangle and circle in the air and in saying the names of the shapes as they draw them.
Using both hands, lead
the pupils in making three-dimensional shapes
in the air, showing the sides of a cube, cuboid and cylinder.

Lead them in saying the names of the shapes as they make them.

Numeracy
lesson plans
Primary 1

## Term 1

Creating an
effective learning environment

Week 5
Flat and
solid shapes
Day 3

## Describing solid shapes



Daily practice pupils will be able to:
Explain what a cube, cuboid and cylinder look like.

Before the lesson:
Have the objects of different shapes ready from Day 1. You will need one for each group.

Have the square, rectangle,
triangle and circle cards on the chalkboard.

Read MAN Primary Mathematics
1, page 141.


Whole class teaching
Sing or say a counting song or rhyme, such as '1, 2 , buckle my shoe' with the class.

| 10 minutes | 25 minutes |  | $\left\lvert\, \begin{aligned} & 10 \\ & \text { minutes } \end{aligned}\right.$ |
| :---: | :---: | :---: | :---: |
| Introduction | Main activity |  | Plenary |
| Whole class teaching | Individual task |  | Whole class teaching |
| Show the groups the objects from Day 2 and ask if anyone can remember their names, or tell you anything they know about the shape. | Give each group one object. <br> Ask them to count the number of sides on their object. | When they have had time to do this, tell them to return to their own experts. <br> Tell them to share with their own experts how many sides each shape has. | Ask pupils to tell you one thing they have learned about shapes. Write what they say on the chalkboard. |
|  | Ask each group to choose $1-2$ pupils who will be the experts on their shape. They will stay in their seats. |  |  |
|  | Ask the rest of the pupils in each group to go around the room to ask other experts about their shapes. |  |  |
|  | Tell pupils that they need to find out how many sides each shape has and that one pupil should remember these details. |  |  |

Numeracy
lesson plans
Primary 1

## Term 1

Creating an
effective learning environment

Week 5
Flat and
solid shapes
Day 4

Lesson
title
(

## Spheres



Daily practice

By the end of the lesson, most pupils will be able to:
Identify a sphere.

Teaching aids

Before the lesson:
Have some different examples
of spheres ready, at least one for each group, eg: a ball, an orange.
Read MAN Primary Mathematics
1, page 144.
Write 'sphere' on the chalkboard.


Numeracy
lesson plans
Primary 1

## Term 1

Creating an
effective learning environment

Week 5
Flat and
solid shapes Day 5

## Spheres

$\qquad$
15
minutes


By the end of the lesson, most pupils will be able to:
Identify properties of shapes.

Have one cube, one cuboid and

Teaching aids

Before the lesson:
Have as many spheres as possible ready. one cylinder ready.

Daily practice

## Whole class teaching

Lead the class in singing or saying a counting song or rhyme, such as '5 little monkeys'.

## Introduction

## Main activity

Pair task
Say the words side
and corner
Ask pupils to explain to their partner what a side is and what a corner is.

Pairs who finish quickly can try to remember how many sides and corners a cube, cuboid and cylinder have.

Group task
If you have enough, give each group a selection of shapes including a sphere.
Ask them to build a tower using all their shapes.

When they have built it ask them to tell you which shapes they used and which they didn't use, and why.

Whole class teaching
Ask the pupils to share their answers. Write their ideas on the chalkboard.

Ask them if the sphere was good to build with, and why, or why not.

Explain that a sphere has no corners and this makes spheres special.

Take the pupils outside and ask them to stand in a circle.

Give out all the shapes, including the cube, cuboid and cylinder to pupils and ask them to roll them across the circle one at a time.

## Plenary

Whole class teaching
Go round the circle and ask each pupil to say what they can do with their shape.

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