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**Numeracy  
lesson plans**  
Primary 1

**Term 1**  
Creating an  
effective learning  
environment

**Weeks**  
1—5

Type of lesson plans/  
Grade

Term/  
Learning theme

# Numeracy lesson plans Primary 1 Term 1

## ▶ 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

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

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

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

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

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

**Professor Haruna Wakili**  
Honourable Commissioner,  
Ministry of Education,  
Science and Technology,  
Jigawa State

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**Numeracy  
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Primary 1**

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**Term 1  
Creating an  
effective learning  
environment**

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**Weeks  
1—5**

# Introduction

## ▶ Creating an effective learning environment

## An effective learning environment

The 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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# Introduction

▶ 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

Make 0—10 and 0—25 number lines out of cut up strips of cardboard.

## 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.



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# Introduction

## ▶ Songs and rhymes for the term

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### 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

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

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...

A photograph of a woman and children sitting on a wooden floor. The woman is on the left, looking towards the right. A child is in the center, wearing a patterned headscarf. Another child is on the right, with hands near some small objects on the floor. The entire image has an orange tint. A white text box is overlaid on the left side.

Week  
1  
Counting from  
1—5

### Words/phrases

one  
two  
three  
four  
five  
more  
less  
What day is today?

### Writing numbers

To write each number start at the dot and follow the direction of the arrow without taking the pencil off the paper.

When there are two dots it means that the pencil needs to leave the paper to finish the number.

### Assessment

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

0 1 2 3 4 5

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**Week 1  
Counting from  
1—5  
Day 1**

Lesson  
title

# Sorting objects

15  
minutes

Song

## Learning outcomes

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

Sort and classify a number of objects in a group.

Use fingers and number cards to count 1—5.

## Teaching aids

### 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.

## Daily practice

### Whole class teaching

Write the names of the days of the week on the chalkboard and read them to the pupils.

Ask the pupils:  
‘Does anyone know which day it is today?’

Sing ‘10 little fingers’ with the pupils.

10  
minutes

## Introduction

### 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.

As they count, point to the numbers written on the chalkboard.

25  
minutes

## Main activity

### Group task

Ask one pupil from each group to come and collect the sets of objects you prepared before the lesson.

Ask pupils to sort them into groups of the same object.

Ask them to touch the objects in each group and count as they touch.

Give each group a set of number cards from 1—5 and ask them to put the correct number by each group.

Ask each group questions, eg: 'How many pencils do you have?'

Ask one pupil to say the number and hold up the correct number card.

10  
minutes

## Plenary

### Whole class teaching

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.

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Creating an  
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**Week 1  
Counting  
from 1—5  
Day 2**

Lesson  
title

# Counting

15  
minutes

## Learning outcomes

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

Use objects to count 1—5.

Group objects.

Recognise written numbers 1—5.

## Teaching aids

### Before the lesson:

Write the days of the week on the chalkboard.

Have sets of counting objects and number cards from Day 1 ready for each group.

Read Macmillan New Primary Mathematics 1, pages 1—2.

## Daily practice

### Whole class teaching

Read the days of the week on the chalkboard to the pupils and ask them to say them with you.

Ask them:

‘Does anyone know which day it is today?’

Ask pupils to tell you how many fingers they have on each hand and how many toes they have on each foot.

Ask a pupil to come to the front and lead everyone in counting the fingers on each hand.

Ask pupils to all show you 4 fingers, 2 fingers, 5 fingers, etc.

10  
minutes

## Introduction

### Pair task

Give each pupil a number between 1 and 5 and check they can remember their number.

Ask all the class to go outside in pairs, count that number of objects, and remember what they have counted, eg: 3 trees.

When they return, ask them to tell you the groups of objects they found for their number.

25  
minutes

## Main activity

### Group task

Give each group a selection of different counters.

Ask them to use them to make sets of 1, 2, 3, 4 and 5.

Give each group a set of number cards to put with their groups of objects.

Macmillan  
New Primary  
Mathematics 1

### Individual task

Tell the pupils to open Macmillan New Primary Mathematics 1, pages 1—2.

Talk about the pictures and count the objects.

Tell pupils to count the sets of objects and draw them in their exercise books.

10  
minutes

## Plenary

### Whole class teaching

Say the rhyme '1, 2, buckle my shoe' with the pupils, showing them how to use their fingers while they are saying the rhyme.

Rhyme



# Ordering and counting

## Learning outcomes

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

Read the numbers 1—5.

Order numbers 1—5.

Count from 1—5.

## Teaching aids

### Before the lesson:

Make a set of number cards 1—5 for each pair.

Write numbers 1—5 in random order on the chalkboard.

Have ready enough counters for each pair to have five.

If possible, collect material for sticking number cards to the walls, eg: masking tape.

## Daily practice

### Whole class teaching

Tell the pupils the name of the day and write it on the chalkboard so they can see.

Take pupils outside and tell them you are going to play a game.

Tell them to walk around in a space, and you shout out a number.

Tell them to make themselves into groups of that number and stand still in their groups.

Any pupils who cannot join a group should come to you.

End the game outside by saying 'two'. Tell the pupils they will now be working in those pairs, and take them back inside the classroom.

10  
minutes

## Introduction

### Pair task

Show the number cards 1—5 to the pupils and ask them to tell you the number.

Give a set of number cards 1—5 to each pair.

Ask each pair to read the numbers on their cards to one another.

Point to a number on the chalkboard and ask the pupils to hold up that number so you can see.

25  
minutes

## Main activity

### Individual task

Give each pupil a number card.

Ask them to draw a matching number of objects on to it, eg: balls, leaves, etc.

Some pupils might have time to complete more than one number card each.

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.

10  
minutes

Song

## Plenary

### Whole class teaching

Ask one pupil to lead the class in singing '10 little fingers'. Ask the pupils to point to the number cards on the walls as they sing.

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Primary 1**

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Creating an  
effective learning  
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**Week 1  
Counting from  
1—5  
Day 4**

Lesson  
title

# Writing

15  
minutes

## Learning outcomes

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

Write numbers 1—5.

Count 1—5.

## Teaching aids

### Before the lesson:

Stick the number cards on to the walls, grouping the same number together.

Collect a selection of counters for the pupils to use.

Prepare a sand tray and a 0—10 number line for each group.

Draw the chart opposite on the backs of old calendars/posters, one for each group.

## Daily practice

### Whole class teaching

Ask the pupils:  
'What day is it today?'

Write the name of the day on the chalkboard and read it with the pupils.

Ask the pupils to look around the room and find each number 1—5.

Say the numbers 1—5 in turn and ask them to go and stand by each number as you say it.

If there are too many pupils for the space, half of them should stay seated while the other half move to the numbers, and then change over so everyone gets a turn.

## 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

### 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.

Number chart


## Plenary

### Whole class teaching

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

Ask them to draw a matching number of objects in the bottom row of their group’s chart.

Give pupils 0—10 number lines to help them.

Lesson  
title

15  
minutes

Rhyme

**Numeracy  
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Creating an  
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environment**

**Week 1  
Counting from  
1—5  
Day 5**

# More

## Learning outcomes

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

Know and use the term 'more'.

Identify groups with 'more' in.

## Teaching aids

### Before the lesson:

Collect different objects for counting.

Have a set of number cards from previous lessons for each group.

Have ready a set of number cards 1—5 for each group.

## Daily practice

### Whole class teaching

Say the names of the days of the week and ask the pupils to say them with you.

Ask them:

'What day is it today?'

Say each day of the week and ask them if they can tell you one thing they did on that day this week.

Teach the pupils the words and actions to '5 little monkeys.'

10  
minutes

## Introduction

### 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.'

25  
minutes

## 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.

Macmillan  
New Primary  
Mathematics 1

10  
minutes

Rhyme

## Plenary

### Whole class teaching

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



Week  
2  
Shapes



**Words/phrases**

circle  
square  
rectangle  
triangle  
shape  
side  
corner  
sort  
label

**Assessment**

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



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Creating an  
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**Week 2  
Shapes  
Day 1**

# Sorting shapes

## Learning outcomes

**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.

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.

## 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.

10  
minutes

## Introduction

### Whole class teaching

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.

### Group task

Go to each group in turn and tell them what their shape is called, pointing out where it is written on their sign. Ask them to repeat their shape's name back to you and ensure they can all say it.

Help the pupils to stand in groups of four so that there is one circle, one square, one triangle and one rectangle in each group.

Ask the pupils in their groups to tell one another what their shapes are called.

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

25  
minutes

## 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.

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

10  
minutes

## 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.

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**Week 2  
Shapes  
Day 2**

Lesson  
title

# Counting

15  
minutes

## Learning outcomes

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

Count from 1—5.

Sort similar shapes.

## Teaching aids

**Before the lesson:**

Have ready number cards 1—5.

Have ready enough counters for each pupil to have five.

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.

## Daily practice

**Whole class teaching**

Give each pupil five counters.

Ask two pupils to come to the front.

Shuffle the number cards and ask one pupil to pick one of them and hold it up so everyone can see it.

Ask the other pupil to read out the number, and draw it in the air with their hand.

Ask the rest of the pupils to make a group of that number of counters.

Repeat with at least three more pairs of pupils.

10  
minutes

## Introduction

### Whole class teaching

Bring out the different shapes and ask pupils to call out their names.

Ask the pupils to identify the shapes of some objects in the classroom, eg: windows, door.

25  
minutes

## Main activity

### Group task

Give each group a set of mixed up shapes and ask them to sort them into groups by shape.

Groups that finish quickly can try to sort each set of shapes by size.

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.

# Counting sides and corners on a shape

## Learning outcomes

**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.

10  
minutes

## Introduction

### Group task

Explain that a **side** is one line or edge of a shape.

Show the class a side on a shape, and ask them to say the word with you.

Give each group a square, a rectangle, a triangle and a circle.

Ask them to use their fingers to count the number of **sides** on each shape.

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.

25  
minutes

## Main activity

### 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.

10  
minutes

## 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.

Lesson  
title

15  
minutes

Song

**Numeracy  
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**Week 2**  
**Shapes**  
**Day 4**

# Drawing and labelling 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 every-  
one to see.

10  
minutes

## Introduction

### Whole class teaching

Take the pupils outside and divide them into three groups.

Tell each group to move together and make the shape you call out.

After the groups have made all of the shapes, tell one group to make a square, the second group to make a rectangle and the third to make a triangle.

25  
minutes

## Main activity

### Group task

Draw a large rectangle with a stick in the sand.

Ask the pupils, one at a time to run around the shape, calling out '1, 2, 3, 4' as they reach each **corner** or complete each **side**.

While you are outside, ask the groups to collect a selection of sticks, stones and leaves.

Take the class back inside, and tell them to work in small groups.

Ask each group to use the objects they have collected to make a square, a rectangle, a triangle and a circle.

10  
minutes

## Plenary

### Whole class teaching

Ask the class if anyone can tell you anything they know about a square. Help them to do this, reminding them about the number of sides and corners, and the length of the sides.

Repeat the exercise for rectangles and circles.



# Working with shapes

## Learning outcomes

**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.

## 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

## Introduction

### Whole class teaching

Show the class your picture and ask them what it looks like.

Explain that it is made from simple shapes.

Ask pupils to come up and show you the different shapes in the picture and say their names.

25  
minutes

## Main activity

### Pair task

Explain that each pair will be making their own picture using the simple shapes.

Give out the shapes to each pair.

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.

10  
minutes

## Plenary

### Whole class teaching

Ask the pupils questions about shapes, eg:  
'Who can tell me which shape has three sides?'



Week  
3  
Counting from  
6—9

### Words/phrases

six  
seven  
eight  
nine  
more than  
less than  
number lines  
How many more than?  
How many less than?

### Writing numbers

To write each number start at the dot and follow the direction of the arrow without taking the pencil off the paper.

When there are two dots it means that the pencil needs to leave the paper to finish the number.

### Assessment

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

6 7 8 9

**Numeracy  
lesson plans  
Primary 1**

**Term 1  
Creating an  
effective learning  
environment**

**Week 3  
Counting from  
6—9  
Day 1**

Lesson  
title

# Numbers 6 and 7

15  
minutes

Macmillan  
New Primary  
Mathematics 1

## Learning outcomes

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

Write numbers 1—5.

Count numbers from 1—7.

Read numbers 6 and 7.

Use the term 'more than'.

## Teaching aids

**Before the lesson:**

Read Macmillan New Primary Mathematics 1, page 7.

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.

## Daily practice

**Group task**

Ask all pupils to show you their fingers, and use them to count with you from 1—5. Do this once with each hand.

Ask one pupil to come to the front and point to the numbers on the chalkboard as the class counts.

Count 1—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 Macmillan New Primary Mathematics 1, page 7 and ask individual pupils to tell you how many objects are in each group.

10  
minutes

## Introduction

### Whole class teaching

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.

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.

Ask if anyone can tell you how many 'more than' 5 this new number is.

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.

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.

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.

25  
minutes

## Main activity

### Group task

Give each group a set of number cards 1—7 and a set of counting objects.

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 1—7 and put the correct number of counters on each number.

Ask them to take six counters and five counters and put them in pairs.

Ask them questions, eg:

'How many have you got left over?'

'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.

Lesson  
title

15  
minutes

Dance

**Numeracy  
lesson plans**  
Primary 1

**Term 1**  
**Creating an  
effective learning  
environment**

**Week 3**  
**Counting from  
6—9**  
**Day 2**

# Numbers 8 and 9

## Learning outcomes

**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).

## 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.

10  
minutes

## Introduction

### Whole class teaching

Explain that you will be counting **more than** 7 today. Ask the class to show you 7 fingers, and show them 7 of your own fingers.

Raise one more finger and ask them to do the same. Tell them that this number is called 8 and show them the number on the chalkboard. Ask them to say 'eight' with you.

Ask if anyone can tell you how many more than 7 this new number is. Ask if anyone can say how many more than 5 this new number is.

Ask the class to show you 8 fingers, and show them your own.

Raise one more finger and ask them to do the same. Tell them that this number is called 9, show them the number on the chalkboard, and ask them to say 'nine' with you.

Ask if anyone can tell you how many more than 8 this new number is, then ask if anyone can tell you how many more than 5 this number is.

Lead the class in counting all the way from 1—9, pointing to the numbers on the chalkboard as you do so and encouraging them to show you their fingers.

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.



**Numeracy  
lesson plans  
Primary 1**

**Term 1  
Creating an  
effective learning  
environment**

**Week 3  
Counting from  
6—9  
Day 3**

Lesson  
title

# Writing 6—9

15  
minutes

## Learning outcomes

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

Write numbers 1—9.

## Teaching aids

**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.

## 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.

10  
minutes

## Introduction

### Whole class teaching

Explain that the class will be drawing all of the numbers they have learned today. Draw numbers 6—9 on the chalkboard.

Tell all of the pupils to stand and copy you.

Lead them in drawing numbers 6—9 in the air with your hands, feet, head, etc. Encourage them to say the names of the numbers as they draw them.

25  
minutes

## 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.

Number chart


10  
minutes

Dance

## 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.

# Making sets of 6—9

## Learning outcomes

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

Group objects in sets of 6—9.

Match each group of objects to its correct number.

## Teaching aids

### 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.

Have 0—10 number lines ready for each pupil, or each pair.

## 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

## Introduction

### Group task

Make sure each group has a set of 30 objects and number cards 6—9.

Tell them to put the number cards 6, 7, 8 and 9 and their objects in the correct order.

25  
minutes

## Main activity

### Group task

Give each group their number chart from the previous day.

Tell them that they will draw a set of objects underneath each number.

Give pupils 0—10 number lines to help them.

Display the number charts around the room.

10  
minutes

## Plenary

### Whole class teaching

Repeat the dance from yesterday's plenary.

Dance

# Number lines

## Learning outcomes

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

Count using a number line.

## Teaching aids

**Before the lesson:**

Have counters ready.

Make a set of large number cards 1—9.

Write 1—9 on the chalkboard.

## Daily practice

**Whole class teaching**

Invite nine pupils to stand at the front of the room.

Give each one a large number card from 1—9.

Show the rest of the class the objects or counters.

Ask who thinks they can count four objects.

Invite that pupil to come to the front, collect four objects, and stand 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.

10  
minutes

## Introduction

### Whole class teaching

Ask the pupils holding the numbers and objects to stand in the correct order, from 1—9.

Explain that you have made a number line, showing the numbers in order.

Bring individual pupils out to walk along the line, saying the numbers as they move.

With the number line still in place, ask the pupil holding two objects to show them to the class.

Ask:  
'Who has more objects than him/her?'

Step along the line from 2 to 8, asking the pupils to count as you move.

Ask them:  
'How many steps have I taken?'

Repeat with different numbers, asking pupils to come out and do the stepping.

25  
minutes

## Main activity

### Whole class teaching

Draw a number line on the chalkboard, from 0—10, as below and bring individual pupils out to make jumps with their fingers along it.

Give pupils 0—10 number lines to help them.

Ask them to use their fingers to count forwards and backwards along the number line.

Number line




10  
minutes

Dance

## Plenary

### Whole class teaching

Repeat the dance from yesterday's plenary.



Week  
4  
Counting from  
0—10



**Words/phrases**

**zero  
ten  
after  
before**

**Assessment**

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



**Numeracy  
lesson plans  
Primary 1**

**Term 1  
Creating an  
effective learning  
environment**

**Week 4  
Counting from  
0—10  
Day 1**

Lesson  
title

# Zero

15  
minutes

## Learning outcomes

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

Draw a shape.

Recognise that 'zero' is an empty set.

Order numbers from 0—9.

## Teaching aids

### Before the lesson:

Have some of the objects from previous weeks ready.

Read Macmillan New Primary Mathematics 1, pages 8—9.

## Daily practice

### Whole class teaching

Ask pupils to stand up.

Tell the class that you will say the names of some shapes and they must draw the shape with their hands.

Demonstrate by saying 'square' and drawing it in the air with your hands.

Say the names of some two-dimensional shapes, eg: 'rectangle', 'circle'.

10 minutes | Rhyme

## Introduction

### Whole class teaching

Lead the class in saying a counting rhyme that goes to zero, eg: '10 green bottles'.

Ask a pupil to come out and stand in front of the class, and give him or her nine objects.

Ask a pupil to come and take an object from the first pupil, and ask: 'How many are left?'

Continue, each time asking a new pupil to come and take an object away and asking how many are left.

Continue until the pupil has no objects left.

Explain that 'no objects' is called **zero** and draw a '0' on the chalkboard.

Lead the class in drawing a zero in the air with your hand.

25 minutes | Rhyme

## Main activity

### Whole class teaching

Hand out number cards from 1—9 to individual pupils.

Ask those pupils to come out and make a number line using their cards from 1—9.

Hold up the '0' card and ask if anyone can tell you where it sits on the number line.

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.

Macmillan  
New Primary  
Mathematics 1

10 minutes | Dance

## 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

15  
minutes

## Learning outcomes

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

Identify simple properties of shapes.

Order numbers 1—10.

Count to 10.

## Teaching aids

### Before the lesson:

Have the objects from previous lessons ready in sets of 10.

Write '10' and 'ten' on the chalkboard.

Have ready a set of 0—10 number cards for each pair.

Read Macmillan New Primary Mathematics 1, page 24.

## Daily practice

### Whole class teaching

Tell the pupils that you are thinking of a shape and they have to try and guess its name, by asking you questions.

Tell them to put up their hand and ask you three questions about a shape, eg:

'How many sides does it have?'

After the third question ask if anyone can guess which shape it is.

When they have guessed the shape choose a pupil to think of a shape and answer pupils' questions as above.

Continue until four or five pupils have had a turn.

10  
minutes

Song

25  
minutes

Macmillan  
New Primary  
Mathematics 1

10  
minutes

Dance

## Introduction

### Whole class teaching

Teach the pupils to sing '10 currant buns' and do the actions.

Explain that you will be counting 'more than' 9 today.

Lead the class by counting up to 9 with your fingers, asking them to show you their fingers as they count.

Raise one more finger and ask them to do the same. Tell them that this number is called 10 and show them the number on the chalkboard.

Ask them to say 'ten' with you.

## Main activity

### Group task

Give out a selection of counters and a set of 0—10 number cards.

Ask pupils to count 10 counters and put the number card underneath.

Ask them to put the cards in order from 0—10.

Ask one of the pair to say a number and the other to put the correct number of counters on the number.

Ask them to continue taking it in turns to do this for 10 minutes.

## Plenary

### Whole class teaching

Do the dance as in yesterday's plenary. This time, for move 9 put your right hand high in the air and to the right of your body.

Add in move 10, moving your left hand into the air to the left of your body.

Lead the pupils in the dance at least twice, encouraging them to say the numbers as they dance.

# Writing 10

## Learning outcomes

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

Identify properties of shapes.

Write the number 10.

Draw a number line from 0—10.

## Teaching aids

### Before the lesson:

Prepare sand trays for each group.

Find the number tables 6—9 that each group made in the previous week.

## Daily practice

### Whole class teaching

Put a selection of shapes in a bag and ask pupils to come out and choose a shape in the bag, and without showing it to the rest of the class, describe the shape.

Ask the rest of the pupils to guess which shape they are describing.

Call out the names of different shapes and ask the class to make those shapes with their fingers.

10  
minutes

Song

25  
minutes

10  
minutes

## Introduction

### Whole class teaching

Sing '10 currant buns' with the class.

Demonstrate how to write the number 10 on the chalkboard.

Lead the class in writing '10' as large as possible in the air with each hand, each foot, your head, etc.

## Main activity

### Group task

Give each group a sand tray.

Ask them to practise writing '10' in the sand tray.

Ask each group to find their number chart, which you displayed on the wall in the previous week.

Ask them to write the number 10 in the final box, and to draw 10 objects in the box underneath it.

If you do not still have the number chart, ask them to write the number 10 in their exercise books and draw 10 objects.

### Pair task

Ask the pupils to write the number '10' on each other's backs.

Remind the pupils how to draw a number line, by drawing one from 0—10 on the chalkboard.

Ask each pair to try and copy the number line from 0—10 in their exercise books, in the way you showed them on Day 1.

## Plenary

### Whole class teaching

Ask one or two pupils to show their number lines to the class.

Ask pupils to use their number lines to count from 0—10, making jumps with their fingers.

# Ordering numbers

## Learning outcomes

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

Match a shape to its name.

Order numbers from 0—10.

Write the numbers 0—10.

## Teaching aids

**Before the lesson:**

Have ready a set of number cards from 0—10.

Write the numbers 1—10 on the chalkboard in random order.

Have sand trays for each group.

## Daily practice

**Whole class teaching**

Take the class outside and ask them to each collect a long stick.

Call out the name of a shape and ask them to draw that shape in the ground.

Draw four different shapes in the ground, making sure they are a good distance apart from each other.

Call out the name of one of the shapes and ask the pupils to run to that shape. The last pupil to arrive at the shape is out for one turn.

Repeat four or five times.

10  
minutes

Rhyme

## Introduction

### 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.

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.

25  
minutes

## Main activity

### Group task

Give each group a sand tray.

Ask them to draw a 1, and put one object in the sand tray with the number.

Ask them to add one more object to the sand tray and then write the number '2' next to it.

Ask them to continue this until they reach 10.

Make sure all of the pupils have a chance to write a number in the sand tray.

Help groups to say the names of the numbers as they write them.

10  
minutes

## Plenary

### Whole class teaching

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.



# Number lines to 10

## Learning outcomes

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

Identify shapes.

Count along a number line from 0—10.

Count objects from 0—10.

## Teaching aids

### Before the lesson:

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.

## Daily practice

### Group task

Give each group a selection of shapes and ask them to make a group picture using those shapes.

Ask them to write down, in the following way the number of each shape they have used in their picture, eg:

○ 5

△ 3

10  
minutes

## Introduction

### Group task

Draw the numbers 0—10 in the air.

Give each group a set of number cards from 0—10.

Take the pupils outside and ask them to place the number cards on the floor in order, and then collect the correct number of objects to put by each number.

Ask the groups to look at each other's number lines and check that they have the correct number of objects by the number.

25  
minutes

## Main activity

### Individual task

Give pupils 0—10 number lines to use.

Ask them to use their finger to count from 0—10 along the number line.

Give each pupil 10 counters and tell them that you are going to call out a number and they have to make a group of that number.

10  
minutes

Song

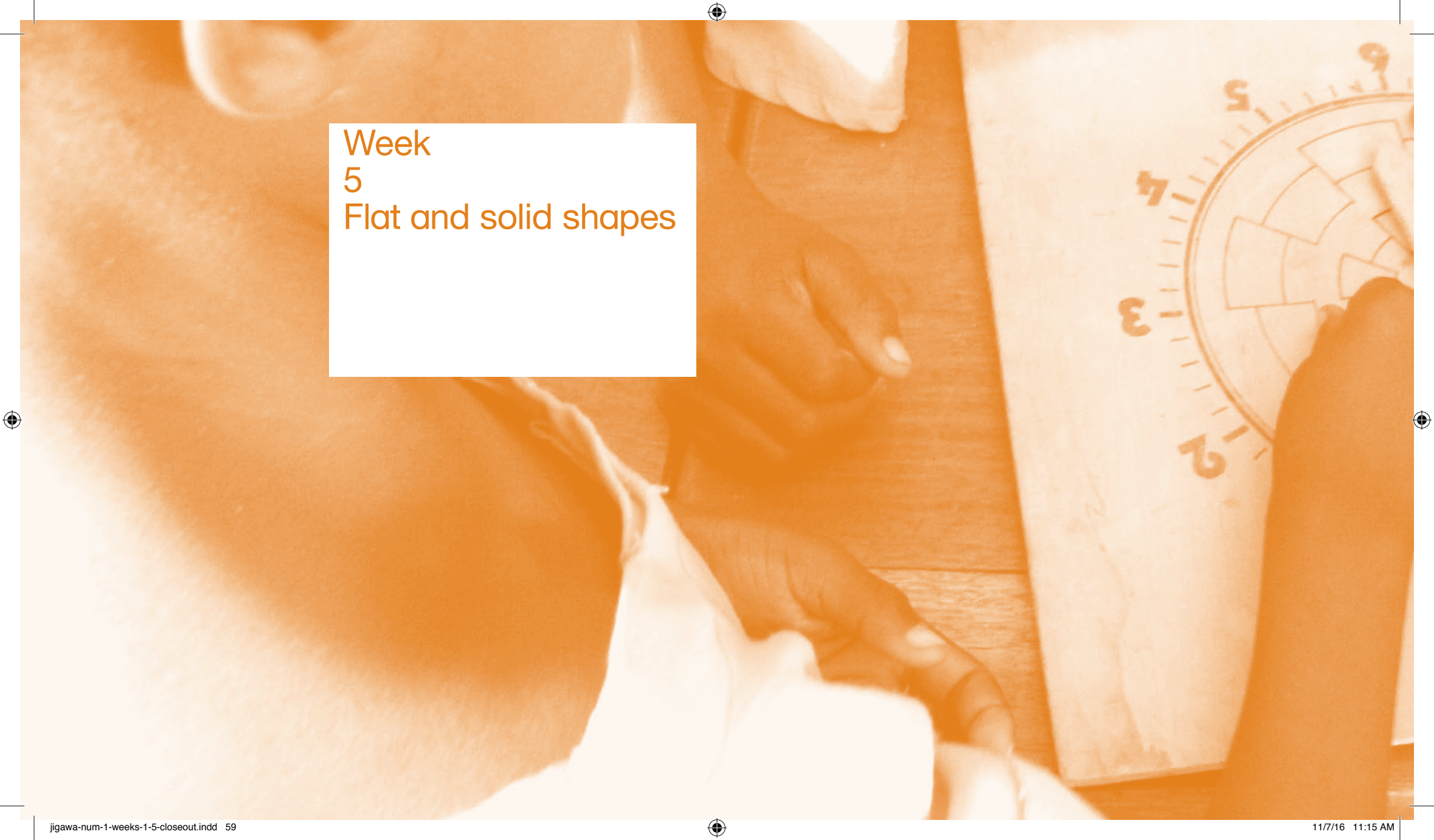
## Plenary

### Whole class teaching

Ask the pupils to tell you anything they can about the number 10, eg: 'there are 10 fingers on my hands'.

Sing '10 green bottles'.

Display the 10 bottles you made. As you count down the number of bottles, ask a pupil to come and take one away.

The background image is a warm, orange-toned photograph. It shows a close-up of hands working on a wooden surface. On the right side, there is a circular diagram or scale with numbers 2, 3, 4, 5, and 6 visible. The hands appear to be manipulating a piece of paper or a tool related to the diagram. The overall scene suggests a hands-on learning or measurement activity.

Week  
5  
Flat and solid shapes

## Words/phrases

**cube  
cuboid  
cylinder  
side  
corner  
solid  
flat  
sphere  
roll  
build  
tower**

## Assessment

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

Lesson  
title

# Identifying solid shapes

15  
minutes

Song

## Learning outcomes

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

Identify cubes, cuboids  
and cylinders.

## Teaching aids

**Before the lesson:**

Collect examples of cubes (dice),  
cuboids (a book or box), cylinders  
(Bournvita tin). You need one  
object for each group.

Write the names of the shapes  
on the chalkboard.

## Daily practice

**Whole class teaching**

Sing '10 little fingers' with  
the class.

Ask pupils to write as many  
numbers as they can in their  
exercise books.

10  
minutes

## Introduction

### Whole class teaching

Show the class the objects you have collected, 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 the rest of the class.

Tell the pupils the names of the shapes again.

25  
minutes

## Main activity

### Group task

Give one object to each group and ask them to name the shape from looking at it.

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 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.

10  
minutes

## Plenary

### Whole class teaching

Ask if anyone can think of examples of the shapes from home or elsewhere.

Support the pupils to use the objects' names in their answers, pointing to them on the chalkboard and repeating them if necessary.

# Flat and solid shapes

## Learning outcomes

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

Explain some differences between flat and solid shapes.

Order numbers from 1—10.

## Teaching aids

### Before the lesson:

Stick the square, rectangle, triangle and circle cards from Week 2 on the chalkboard.

Stick number cards up on the walls, or draw 1—5 clearly on the chalkboard.

Have ready the objects from Day 1.

## Daily practice

### Whole class teaching

Ask a pupil to lead the class in dancing numbers 0—10 as in Week 3.

Give the pupils 0—10 number lines and tell them to use their fingers to count along the line.

Ask the pupils questions about the numbers, eg:

‘Which number comes before \_\_\_?’

‘Which number comes after \_\_\_?’

‘Start counting from 1 and count up to 7’, etc.

10  
minutes

## Introduction

### Whole class teaching

Ask pupils to look at the square, rectangle, triangle and circle on the chalkboard.

Ask them to remind one another about the shapes.

Ask different pupils to explain each shape to the class, and support them in explaining clearly what the shapes are.

25  
minutes

## Main activity

### Whole class teaching

Show the class a cube and hold it next to the square on the chalkboard. Remind them of the names of each shape.

Ask pupils to tell you any differences they notice between the square and the cube.

Tell them that the objects are **solid** and the shapes are **flat**.

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.

### Group task

Give one object to each group.

Ask the groups to look at their objects, name it and draw the different flat shapes they can see on it.

10  
minutes

## Plenary

### Whole class teaching

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.



Lesson  
title

# Describing solid shapes

15  
minutes

Rhyme

## Learning outcomes

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

Explain what a cube, cuboid  
and cylinder look like.

## Teaching aids

**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.

## Daily practice

**Whole class teaching**

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

10  
minutes

## Introduction

### 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.

25  
minutes

## Main activity

### Individual task

Give each group one object.

Ask them to count the number of sides on their object.

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.

10  
minutes

## Plenary

### Whole class teaching

Ask pupils to tell you one thing they have learned about shapes. Write what they say on the chalkboard.

**Numeracy  
lesson plans  
Primary 1**

**Term 1  
Creating an  
effective learning  
environment**

**Week 5  
Flat and  
solid shapes  
Day 4**

Lesson  
title

# Spheres

15  
minutes

Song

## Learning outcomes

**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.

Write 'sphere' on the chalkboard.

## Daily practice

**Whole class teaching**

Sing a counting song, such as '10 little fingers' with the class.

10  
minutes

## Introduction

### Group task

Give each group a sphere.

Ask them to look carefully at their sphere and say anything they can about it.

Write their ideas on the chalkboard.

25  
minutes

## Main activity

### Whole class teaching

Show the class the word 'sphere' on the chalkboard and read it out to them.

Help them to say it with you. They may need to say it several times because it is a hard word.

Ask pairs to say where they have seen a sphere in everyday life.

Ask pupils to share their examples with the class.

Encourage them to use the word 'sphere' in their answers, eg: 'A ball is a sphere'.

10  
minutes

## Plenary

### Whole class teaching

Call out the names of the different solid and flat shapes the pupils have learned and ask them to give an example of an object of that shape.

Ask pupils to bring in a sphere from home if they can, as they will be using them the next day.

**Numeracy  
lesson plans  
Primary 1**

**Term 1  
Creating an  
effective learning  
environment**

**Week 5  
Flat and  
solid shapes  
Day 5**

Lesson  
title

# Spheres

15  
minutes

Rhyme

## Learning outcomes

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

Identify properties of shapes.

## Teaching aids

**Before the lesson:**

Have as many spheres as possible ready.

Have one cube, one cuboid and 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'.

10  
minutes

## Introduction

### 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.

25  
minutes

## Main activity

### 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.

10  
minutes

## Plenary

### Whole class teaching

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

## Credits

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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.

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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:

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

