

This publication is **not** for sale



**Kano State Government**

Produced with the  
support of

**esspin**

Education Sector  
Support Programme  
in Nigeria



**UKaid**

from the Department for  
International Development

**Numeracy  
lesson plans**  
Primary 2

**Term 1**  
Organising the  
classroom for  
effective learning

**Weeks**  
6—10

Type of lesson plans/  
Grade

Term/  
Learning theme

# Numeracy lesson plans Primary 2 Term 1

## Organising the classroom for effective learning

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



## Introduction

The quality of education is a key element to socio-economic development in any society. Perhaps the most critical element in ensuring quality of education is the teacher. Good teaching methodology, with the right textbooks, will quickly provide a good platform for a quality education system in Kano State.

The challenges are sometimes overwhelming when you have 5,335 schools with over 2.3 million children and 46,643 teachers. The Kano State Ministry of Education carried out a series of baseline surveys to assess classroom teachers, the role of the head teacher and the level of pupil learning outcomes.

The findings in most cases were alarmingly poor, with not much difference between qualified and unqualified teachers with respect to output. The majority of teachers were themselves victims of an education system that was in a serious downward slope.

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

This work has focused on classroom teaching skills – in particular how to make teaching child-centred – and the organisational structures needed for SUBEB and LGEA staff to provide effective support and advice to primary schools.

With many school leavers unable to read or write, a specific focus has been on improving the teaching of basic literacy and numeracy. To support this, Kano State has developed a benchmark for assessment and carefully designed literacy and numeracy lesson plans for Primary 1–3 teachers. These plans provide a step-by-step guide to teachers, while ensuring children become active learners.

The lesson plans, however, are not sufficient. Structures and processes have also been put in place so that teachers are continuously supported by both the State School Improvement Team and the LGEA-based school support officers.

We are sure that within a short time of these lesson plans being introduced, children's learning abilities will improve considerably. The materials will also enable teaching and learning to be more exciting – an important element in all classes, but in particular at the primary level. We are confident that these lesson plans will raise standards and improve the quality of children proceeding to higher levels of education.

We commend all those who have produced these lesson plans and trained our teachers to use them. We offer thanks to the UK Department for International Development (DFID) for its ongoing support to education reform in Kano State through its ESSPIN programme. Let's make every Kano school an improving school.



**Barister Farouq Iya Sambo**  
Honourable Commissioner  
of Education  
Kano State



**Wada Zakari**  
Executive Chairman  
SUBEB  
Kano State

---

**Numeracy  
lesson plans  
Primary 2**

---

**Term 1  
Organising the  
classroom for  
effective learning**

---

**Weeks  
6—10**

# Introduction

## ▶ Organising the classroom for effective learning

## Organising the classroom for effective learning

Your classroom is a flexible space. You can change it to suit the learning activities.

Pupils take part in many different activities during each week, eg: games, role plays, circle discussions, group tasks, copying from the chalkboard, using teaching aids, working with a partner, working alone. All these activities need different ways of organising your classroom, eg:

Tables arranged around the edge of the room so there is a space in the middle for games, songs or role play. Pupils can see each other and this helps communication.

Tables arranged in rows so that the pupils can see the chalkboard. This is useful when they need to see something you have written or drawn on the chalkboard.

Tables arranged in groups. This helps pupils to talk together and share ideas. They can see each other clearly and can easily work with one set of number cards or one sheet of paper to produce a joint end product.

Each time you start the day you should think about the activities you need to do and decide if your classroom needs to be arranged differently. Work with the other teachers in your school and cluster, your head teacher and SSO to discuss different ways of arranging your classroom for learning.

## Group and pair work

Group and pair work is the basis of a learner-centred classroom, they allow pupils to work together:

To discuss, solve problems or to play learning games.

To find their own way in their learning.

The main benefits of group and pair work are:

More pupils can be active at one time. Pupils can talk and listen to each other, or work on a problem together.

The teacher can walk around the room to monitor what groups and individuals are doing, and can stop with each group to help them with their task. Spending more time with the pupils helps teachers better understand what individual pupils know and can do.

Group work is also one of the best ways of teaching social skills to pupils. While working in groups, pupils are learning a variety of skills including:

Co-operation.

Taking turns.

Listening to others.

Sharing.

Working harmoniously with others.

Solving problems.

The development of these life skills is a major reason why group and pair work is undertaken in most modern classrooms.



---

**Numeracy  
lesson plans  
Primary 2**

---

**Term 1  
Organising the  
classroom for  
effective learning**

---

**Weeks  
6—10**

# Introduction

## ▶ Essential low-cost or free teaching aids

---

### Measuring correctly

---

Show pupils how to measure metre lengths using a stick or rope.

---

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

---

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

---

Repeat the process until they have finished measuring the length.

## Making a large Hundred square

Stick 10 empty, dry, water bags together in a row to make 10 rows.

Place a number card inside each bag to make a Hundred square, as shown below.

Hundred square

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Store the cards in a box below the square and ask the pupils to put them in the correct place each morning.

Display it somewhere in the classroom so that the pupils can see it.

## Metre sticks

Cut strips of card to the same size as a metre stick and carefully mark the centimetres (cms) on the card in the correct place.

These can then be used for measuring.

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

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

## Containers for capacity

Collect as many different types of cups, jugs or bottles as you can for the pupils to use to measure capacity.

If possible, find at least one container that is marked with a litre so you have one standard measure.

Allow pupils to pour the water between containers themselves, as this is how they will learn.



---

**Numeracy  
lesson plans  
Primary 2**

---

**Term 1  
Organising the  
classroom for  
effective learning**

---

**Weeks  
6—10**

# Introduction

▶ Songs and rhymes  
for the term

### 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...

### 5 long yams

5 long yams in  
a farmer's field /  
Round and fat, and ready  
to be picked /  
Along came (sing the  
name of a pupil) with a hoe  
one day /  
Picked a yam and took  
it away.

4 long yams...  
3 long yams...  
2 long yams...  
1 long yam...

### 5 little ducks

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

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

### 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.)

Week  
6  
Capacity



## Words/phrases

## Assessment

largest  
smallest  
most  
least  
container  
capacity  
total  
record  
table

How much do you think it holds?

Which container holds the most?

Which container holds the least?

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

# Containers

## Learning outcomes

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

Add two-digit numbers together.

Order containers according to size.

## Teaching aids

### Before the lesson:

Write the following sums on the chalkboard:

$$55 + 23 =$$

$$45 + 33 =$$

$$21 + 26 =$$

Bring in a selection of different sized pots, bottles, cups, calabashes or gourd buckets.

## Daily practice

### Whole class teaching

Look at the first sum. Ask the pupils which number they would start with to add these two numbers together, ie: the largest number.

Remind them that in order to add 23 they should **expand** it, eg:

$$23 = 20 + 3$$

$$= 10 + 10 + 3$$

Write 55 at the start of the number line, then ask pupils to use their knowledge of adding 10 to complete the sum.



Run through the other sums using the same method.

10  
minutes

## Introduction

### Whole class teaching

Ask the pupils to tell you the names of any container which can be used to store liquid, sand or food, eg: rice.

Ask some pupils to draw their suggestions on the chalkboard.

Ask them to write what their container is used for underneath the picture.

25  
minutes

## Main activity

### Whole class teaching

Stand the pupils in a circle, with the pots you brought placed in the middle.

Ask one or two pupils to put the containers in order of their size, helped by the rest of the pupils.

Take the pupils outside and ask them to use sticks to draw the containers in order of size on the ground.

10  
minutes

## Plenary

### Whole class teaching

Have a look at the pictures the class has drawn and ask the pupils the following questions to help them think about capacity:

‘Which is the biggest container?’

‘Which is the smallest container?’

‘Which container holds the most water?’

‘Which container holds the least water?’

‘Which container would be the easiest to carry if it was full of water, and why?’

‘Which container would be the best to carry rice?’

# Which container holds the most?

## Learning outcomes

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

Add two-digit numbers together.

Measure the capacity of a container for sand and water.

## Teaching aids

### Before the lesson:

Collect a selection of cups of different sizes.

Collect a container for each pair, eg: buckets or bowls.

Fill one bowl with sand and one bowl with water for each group.

Draw a table like the one opposite on the chalkboard.

## Daily practice

### Whole class teaching

Write '25 + 34 =' on the chalkboard.

Ask individuals the following questions to make sure they understand the method. Do each stage on the chalkboard as they tell you:

'Which number do we work with first?' (The largest, 34.)

'What do we do with this number?' (Write it on a number line.)

'What do we do with the smallest number, 25?' (Expand it into Tens and Units.)

'When we have expanded it, what do we do with it?' (Use the number line to add it to 34.)

Ask the pupils to complete the following sum in their exercise books using the same method:  
 $26 + 22 =$



10  
minutes

## Introduction

### Whole class teaching

Stand the pupils in a circle and put the selection of pots and containers in the middle, along with a bowl of water.

Choose a container and draw it in the table on the chalkboard.

Use a cup to fill the container and ask the pupils to count the number of cups it takes to fill it.

Table

Container	Cups of water	Total

25  
minutes

## Main activity

### Group task

Give each group a bowl of water, a bowl of sand, a container and a cup.

Ask the pupils to fill the cup with water and pour it, one cupful at a time, into their container.

Ask them to count how many cups it takes to fill the container.

Ask them to copy the table from the chalkboard and complete it, using their container.

Ask them to repeat the task, but this time filling the container with sand.

10  
minutes

## Plenary

### Whole class teaching

Ask each group:

‘How many cups of sand does your container hold?’

‘How many cups of water does your container hold?’

‘Does the container hold more cups of sand or more cups of water?’

# Measuring capacity

## Learning outcomes

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

Add together two-digit numbers using a number line.

Measure the capacity of a container.

Explain why the containers hold different quantities of the same object.

## Teaching aids

**Before the lesson:**

Have ready the selection of pots and bowls, calabashes and bottles. You will need one cup or container for each pair.

## Daily practice

**Whole class teaching**

Ask the pupils to quickly remind you how to do the following sum using a number line:

$$63 + 32 =$$

Read out the sums below, one at a time, and ask the pupils to complete them using the number line:

$$23 + 46 =$$

$$45 + 34 =$$

$$62 + 25 =$$

After each sum, stop and ask individuals to explain how they worked out the answer.

If there is time, ask them to put their hands up if they can say the answers to the following, without writing them down:

$$5 + 5 =$$

$$3 + 7 =$$

$$6 + 4 =$$

$$2 + 8 =$$

$$1 + 9 =$$

10  
minutes

## Introduction

### Pair task

Give each pair a cup and ask them to fill their cup with as many stones or leaves as they can in 5 minutes.

25  
minutes

## Main activity

### Whole class teaching

Ask the class to record the number of stones or leaves they have collected by making a table in their exercise books, like the one on Day 2.

Write two columns on the chalkboard, one labelled 'stones' and one labelled 'leaves'.

10  
minutes

## Plenary

### Whole class teaching

Ask the pupils to exchange their exercise books and compare their answers.

Ask each pair to tell you their total and record it on the chalkboard.

Ask the pair who had the most to show you their collection and ask if anyone can think of any reasons why they were able to collect more than the others.

Accept all the answers, but try to encourage pupils to think about the size of the stones or leaves, and whether the leaves were flat or folded.

**Numeracy  
lesson plans  
Primary 2**

**Term 1  
Organising the  
classroom for  
effective learning**

**Week 6  
Capacity  
Day 4**

Lesson  
title

# Estimating capacity

15  
minutes

## Learning outcomes

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

Add together two-digit numbers using a number line.

Estimate capacity using non-standard measures.

## Teaching aids

**Before the lesson:**

Draw four targets in chalk in different places, on the floor of the classroom or on the ground outside. Write the numbers 25, 33, 41, 50, 13 in each target.

Collect eight small stones.

Have ready a bowl or container and a cup for each group.

Have ready a bucket full of water or sand to use for measuring.

## Daily practice

**Group task**

Divide the pupils into four groups and ask each group to stand around one of the targets, with their pencils and exercise books.

Give each group two stones and ask them to throw them on to the target and record the two numbers they land on, or closest to.

Ask them to add the two numbers together using a number line and write it in their exercise books.

Ask the pupils to compare their answers in their groups, and help each other if they have different answers.

Repeat two or three times.

10  
minutes

## Introduction

### Pair task

Put a bowl and a cup on a table in the front of the class so that everyone can see.

Ask the pupils to discuss with a partner and guess how many cups of water they think will fill the bowl.

Tell them to write down their guess, but not tell anyone else what their number is.

Ask one pupil to come out and fill the bowl using the cup, while the rest of the pupils count.

25  
minutes

## Main activity

### Group task

Hand out a selection of containers and cups to each group and ask them to repeat the activity you have just demonstrated in their groups.

Ask each group to think of a method they can use to record each individual's guess and the correct total for each container.

Ask them to record their guesses and the correct total.

10  
minutes

## Plenary

### Whole class teaching

Ask the groups to tell you which pupil was the closest in their guesses.

Ask them if anyone got better at guessing as they filled more containers.

Ask them why they think that happened.

Lesson  
title

# Ordering containers by capacity

15  
minutes

## Learning outcomes

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

Write sums.

Work as a team to design a way to order containers based on their capacity.

## Teaching aids

**Before the lesson:**

Have ready three containers, a cup or teaspoon and a bucket or bowl of water or sand for each group.

## Daily practice

**Pair task**

Write the number 24 on the chalkboard and ask each pair to see how many sums they can write down in 10 minutes that give that answer.

Ask each pair how many correct sums they think they have.

Ask the pair with the most to read them out and write them on the chalkboard as they read.

Go round each pair and ask them to say any sums that they have which are not written on the chalkboard.

Write the total number of sums that you have collected.

Check the answers with the pupils, using a number line to help if necessary.

10  
minutes

## Introduction

### Whole class teaching

Remind the pupils that at the beginning of the week they were given a selection of containers and asked to decide, by looking at them, which held the most water or sand and to place them in order of size.

Explain that today they are going to put the containers in order from the one that holds the most to the one that holds the least by measuring their capacity.

25  
minutes

## Main activity

### Group task

Give each group three containers, a cup or teaspoon and a bucket or bowl of water/sand.

Ask them to use these items to help them put the containers in the correct order according to their capacity.

Ask each group to record their answer using any method they have learned, eg: putting the pots in a line in the correct order with a number card by them or drawing a table.

10  
minutes

## Plenary

### Whole class teaching

Sit or stand the pupils in a circle.

Ask each of them to say one thing they have learned about capacity from the week's activities.





Week  
7  
Subtracting two-  
digit numbers from  
0—99



**Words/phrases**

**odd  
even  
subtract  
take away  
minus  
count  
expand**

**What's the difference  
between...?**

**Start with the  
largest number**

**Expand the  
smallest 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.**

**Numeracy  
lesson plans  
Primary 2**

**Term 1  
Organising the  
classroom for  
effective learning**

**Week 7  
Subtracting  
two-digit numbers  
from 0—99  
Day 1**

Lesson  
title

# Number lines

15  
minutes

## Learning outcomes

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

Find numbers on a Hundred square.

Use a number line to subtract numbers from 0—99.

## Teaching aids

**Before the lesson:**

Have ready a Hundred square for each pair of pupils.

## Daily practice

**Whole class teaching**

Ask the pupils to count forwards from any given starting point within 0—99, using their Hundred square.

Call out different numbers between 0—99 and ask pupils to touch the numbers.

Ask them to touch the number that is **10 more than** and the number that is **10 less than** the number you mentioned.

Repeat for different numbers.

10  
minutes

## Introduction

### Whole class teaching

Write the following subtraction sum on the chalkboard:  
 $19 - 3 =$

25  
minutes

## Main activity

### Pair task

Write the following subtraction sums on the chalkboard for the pairs to complete using the same method:  
 $19 - 8 =$   
 $15 - 9 =$   
 $14 - 3 =$   
 $17 - 12 =$

If pupils complete these sums early, give them a number lower than 20 and ask them to make up as many sums as they can which make that number.

10  
minutes

## Plenary

### Whole class teaching

Ask individual pupils to tell you how they completed the tasks.



**Numeracy  
lesson plans  
Primary 2**

**Term 1  
Organising the  
classroom for  
effective learning**

**Week 7  
Subtracting  
two-digit numbers  
from 0—99  
Day 2**

Lesson  
title

# Odd and even

15  
minutes

## Learning outcomes

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

Explain the meaning of the terms 'odd' and 'even'.

Use a number line to subtract two-digit numbers.

Answer simple addition and subtraction sums orally.

## Teaching aids

### Before the lesson:

Have ready at least 20 counters and a Hundred square per pair.

## Daily practice

### Whole class teaching

Ask the pupils if they can tell you what **odd** and **even** numbers are.

Give each pair 20 counters.

Call out a number between 1 and 20 and ask the pupils to find that number of counters and group them in pairs.

Tell them that if there is a pair for each counter it is an **even number** but if there is one left over then it is an **odd number**.

Write a list of numbers from 1 to 20 on the chalkboard and ask the pupils to use their counters to work out whether they are odd or even.

10  
minutes

## Introduction

### Whole class teaching

Remind the pupils that on Day 1 they looked at ways of subtracting numbers less than 20.

Explain that this week they will be learning how to subtract numbers from 0—99 using a number line.

25  
minutes

## Main activity

### Whole class teaching

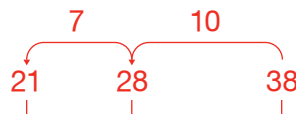
Write the following sum on the chalkboard:  
 $38 - 17 =$

Show the pupils how to do this sum.

Draw a line on the chalkboard and write 38 on the right-hand end.

Expand the number 17 into Tens and Units, eg:  
 $17 = 10 + 7$

Jump backwards on the number line as in the diagram. Remind pupils that they can use their Hundred square to help jump **backwards** in Tens.



10  
minutes

## Plenary

### Whole class teaching

Call out addition and subtraction sums using numbers from 1—20 and ask the pupils to tell you the answers orally.

Read out the following sums one at a time, asking pupils to complete them using the number line:  
 $28 - 14 =$   
 $43 - 12 =$   
 $85 - 13 =$

Stop after pupils have had the chance to complete each one and go through the method on the chalkboard with the pupils.

**Numeracy  
lesson plans  
Primary 2**

**Term 1  
Organising the  
classroom for  
effective learning**

**Week 7  
Subtracting  
two-digit numbers  
from 0—99  
Day 3**

Lesson  
title

# Subtracting numbers from 0—99

15  
minutes

New Method  
Mathematics 2

## Learning outcomes

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

Identify odd and even numbers.

Subtract two-digit numbers using a number line.

## Teaching aids

### Before the lesson:

Read New Method Mathematics 2, page 10, Exercise A.

Have ready at least 20 counters per pair.

## Daily practice

### Whole class teaching

Write the words 'odd' and 'even' on the chalkboard.

Ask someone to count how many pupils there are in the class and write the number on the chalkboard so everyone can see.

Ask each individual pupil to say whether that number is odd or even.

Ask everyone to find a partner and stand with them.

Ask them again if there is an odd or even number of pupils in the class at that time, and how they know.

Ask each pair to complete New Method Mathematics 2, page 10, Exercise A, questions 1—5.



10  
minutes

## Introduction

### Group task

Write the following sum on the chalkboard and ask the pupils to explain how to complete it using the number line:

$$45 - 23 =$$

Write the largest number on the number line.

Expand the smallest number:

$$\begin{aligned} 23 &= 20 + 3 \\ &= 10 + 10 + 3 \end{aligned}$$

25  
minutes

## Main activity

### Individual task

Ask the pupils to complete the following sums in their exercise books using a number line:

$$35 - 14 =$$

$$48 - 23 =$$

$$62 - 31 =$$

$$47 - 46 =$$

$$36 - 25 =$$

$$39 - 35 =$$

Move around the class and help the pupils.

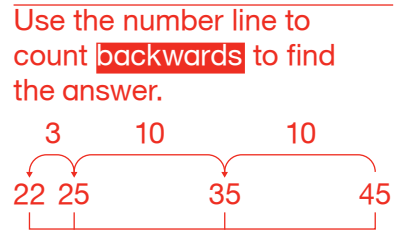
If any pupils finish early, ask them to choose any number from 0—99 and make up some addition and subtraction sums that have that number as the answer.

10  
minutes

## Plenary

### Whole class teaching

Ask individual pupils to say how they completed the sums.



Lesson  
title

# Subtracting numbers from 0—99

15  
minutes

New Method  
Mathematics 2

## Learning outcomes

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

Identify odd and even numbers.

Subtract two-digit numbers using  
a number line.

## Teaching aids

### Before the lesson:

Read New Method Mathematics  
2, page 10, Exercise A.

Have ready a Hundred square  
for each pair of pupils.

## Daily practice

### Whole class teaching

Ask the pupils to look at the  
Hundred square and say any even  
numbers that they can find.

Ask them to look closely and  
see if there is any pattern  
in the numbers, ie: all the even  
numbers end with 0, 2, 4, 6 or 8.

Ask them to complete New  
Method Mathematics 2, page 10,  
Exercise A, questions 6—10.

10  
minutes

## Introduction

### Whole class teaching

Ask four pupils to call out numbers from 0—9.

Write the four numbers on the chalkboard and ask the pupils to make two, two-digit numbers using those four numbers.

Ask them to use a number line to add these numbers together and subtract them from each other.

Ask some pupils to explain how they did it.

25  
minutes

## Main activity

### Pair task

Write the following on the chalkboard and ask the pupils to complete them in their exercise books:

1. From 28, take away 13.
2. Take away 17 from 19.
3. Subtract 42 from 64.
4. From fifty seven take away thirty two.

10  
minutes

## Plenary

### Whole class teaching

Ask some pairs to explain the method they used to find the answer.

# Subtracting numbers from 0—99

## Learning outcomes

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

Identify odd and even numbers.

Subtract two-digit numbers using a number line.

## Teaching aids

### Before the lesson:

Write the word 'odd' on one side of the room and the word 'even' on the other side of the room.

## Daily practice

### Whole class teaching

Call out any number and ask the pupils to move to the correct side of the room, according to whether it is an odd or even number.

Those pupils that are standing on the wrong side of the room should sit down.

Repeat until there is only one pupil left standing. That pupil is the winner.

Share this example with the pupils:  
 $6 + 4 = 10$  is an even number  
 $7 + 6 = 13$  is an odd number.

Ask them to complete the following and say whether the answers are odd or even:

$$8 + 8$$

$$10 + 6$$

$$3 + 6$$

$$5 + 5$$

$$8 + 9$$

even + even

odd + odd

10  
minutes

## Introduction

### Whole class teaching

Ask the pupils to remind you how to subtract two-digit numbers.

Give them the following sum and ask them to tell you step by step what they have to do:  
 $54 - 22 =$

25  
minutes

## Main activity

### Individual task

Give the pupils the following sums to try in their exercise books:

$$33 - 21 =$$

$$65 - 43 =$$

$$87 - 65 =$$

$$74 - 52 =$$

$$48 - 35 =$$

$$99 - 67 =$$

While they are doing them, move around the class and check which pupils understand.


Write down the names of those pupils who don't understand so that you can give them extra help in the following week.

10  
minutes

## Plenary

### Whole class teaching

Ask the pupils to tell you something they know about subtracting two-digit numbers.



Week  
8  
Subtracting two-  
digit numbers





**Words/phrases**

**Assessment**

**count in Tens  
subtract from  
minus  
take away**

**What's the difference  
between...?**

**Start with the  
largest number**

**Expand the  
smallest number**

**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 2

**Term 1**  
**Organising the  
classroom for  
effective learning**

**Week 8**  
**Subtracting  
two-digit numbers**  
Day 1

Lesson  
title

# Subtracting numbers from 0—99

15  
minutes

## Learning outcomes

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

Count in Tens from 0—100.

Subtract two-digit numbers using  
a number line.

## Teaching aids

### Before the lesson:

Have ready a Hundred square  
for each pair of pupils.

## Daily practice

### Whole class teaching

Ask the pupils to look at their  
Hundred squares.

Ask them to put their fingers on  
0 and count **forwards** in Tens until  
they reach 100.

Draw a number line on the  
chalkboard, as shown opposite,  
and ask the pupils to use it to  
count in Tens.

Ask them:  
'How many is each jump?'

Ask the class to count **backwards**  
in Tens from 100, using first the  
Hundred square and then the  
number line.

Leave the number line on the  
chalkboard for use in the plenary.



10  
minutes

## Introduction

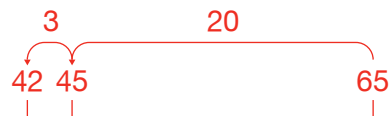
### Whole class teaching

Write the sum:  
 $65 - 23 =$

Explain to the class that you are going to show them a quicker way of doing these sums.

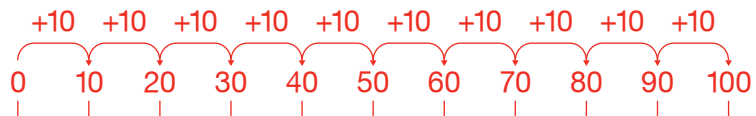
Ask them to expand the smallest number, eg:  
 $23 = 20 + 3$

Explain that instead of making two jumps of 10 they should now try make a jump of 20 on the number line, eg:



Remind them they can use the Hundred square to help them count in Tens.

Daily practice number line



25  
minutes

## Main activity

### Pair task

Ask the pupils to complete the following in their exercise books:

$$\begin{aligned} 55 - 32 &= \\ 26 - 11 &= \\ 43 - 23 &= \\ 37 - 6 &= \end{aligned}$$

10  
minutes

## Plenary

### Whole class teaching

Ask the pupils questions that they can answer using the number line, eg:

'Which number is 20 more than 10?'

'Which number is 40 more than 10?'

'If I add 40 and 20, what is the answer?'

Lesson  
title

# Subtracting two- digit numbers

15  
minutes

## Learning outcomes

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

Count in Tens from any  
given number.

Subtract two-digit numbers.

## Teaching aids

**Before the lesson:**

Have ready a Hundred square  
for each pair of pupils.

## Daily practice

**Whole class teaching**

Ask the pupils to look at their  
Hundred squares.

Ask them to put their fingers  
on 5 and count in Tens until they  
reach 95.

Draw a number line on the  
chalkboard, as shown opposite,  
and ask the class to use it to  
count in Tens from 5.

Ask pupils:  
'How many is each jump?'

Ask them to count backwards  
in Tens from 95, using first  
the Hundred square and then  
the number line.

10  
minutes

## Introduction

### Whole class teaching

Write the sum:  
 $55 - 33 =$

Ask the pupils to show you how to do it, using as few jumps as they can.

25  
minutes

## Main activity

### Pair task

Give the pupils the following sums to do in pairs:

$64 - 22 =$   
 $85 - 34 =$   
 $76 - 35 =$   
 $92 - 61 =$

Ask each pair to practise counting in Tens from different starting points, using a number line and the Hundred square to help them.

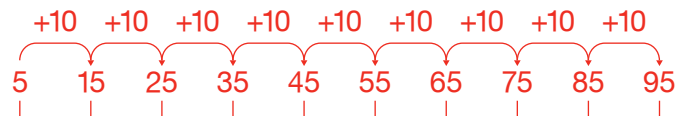
10  
minutes

## Plenary

### Whole class teaching

Write each sum on the chalkboard and ask individual pupils to tell you how many their first jump in each sum was, eg: 20, 30.

Daily practice number line



**Numeracy  
lesson plans**  
Primary 2

**Term 1**  
**Organising the  
classroom for  
effective learning**

**Week 8**  
**Subtracting  
two-digit numbers**  
Day 3

Lesson  
title

# Subtraction

15  
minutes

## Learning outcomes

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

Count in Tens from any number between 0—100.

Identify different words for subtraction: 'take away', 'minus' and 'difference between'.

## Teaching aids

**Before the lesson:**

Provide flash cards containing the following terms: 'take away', 'minus', 'difference between', 'subtract from'.

Have ready a set of 10 blank cards for each group.

Have ready a long stick for each group.

## Daily practice

**Whole class teaching**

Give each group a number between 0 and 10.

Give each group a set of blank cards and a long stick.

Ask them to make number cards that count in Tens from their group number, eg: 3, 13, 23... to 100.

Ask the groups to make a number line that counts in Tens using their cards and the large stick.

Remind them to use the Hundred square to help them if they need to.

Choose one pupil as the 'expert' to stay with their number line and ask the other groups to move around and visit each number line in turn and count with the 'expert'.

10  
minutes

## Introduction

### Group task

Ask a group of pupils to come out and stand in front of the class.

Take away one or two pupils.

Ask the rest of the class to say words which describe what has happened to the missing group members, eg: 'subtracted' or 'taken away'.

Write the '-' sign on the chalkboard and ask the pupils if they can tell you any names for the symbol, eg: 'minus' or 'subtract'.

25  
minutes

## Main activity

### Individual task

Write the following on the chalkboard for the pupils to complete in their exercise books, using a number line:

$$87 - 35 =$$

$$58 - 24 =$$

$$71 - 20 =$$

$$93 - 42 =$$

$$65 - 44 =$$

Ask pupils to swap books and compare their answers with a partner.

Ask them to check that they have used the smallest number of jumps possible to complete the sum.

10  
minutes

Song

## Plenary

### Group task

Sing a counting song that the pupils enjoy.

**Numeracy  
lesson plans  
Primary 2**

**Term 1  
Organising the  
classroom for  
effective learning**

**Week 8  
Subtracting  
two-digit numbers  
Day 4**

Lesson  
title

# Subtracting two-digit numbers

15  
minutes

Game

## Learning outcomes

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

Identify and use words or terms that mean 'take away'.

Subtract two-digit numbers using a number line.

## Teaching aids

**Before the lesson:**

Have ready a ball or another object to throw and catch.

Have ready these flash cards: 'take away', 'minus', 'What's the difference between?', 'subtract from', '-', enough for each group to have one card.

## Daily practice

**Whole class teaching**

Stand the pupils in a circle and tell them that you are going to play a game that involves counting in Tens.

Throw the ball to someone across the circle and say a number from 1—10.

Ask them to add 10 to the number and throw it to the next pupil to do the same.

Continue until someone drops the ball or you reach 100.

Repeat, this time going backwards from 100, taking away 10 each time.

10  
minutes

## Introduction

### Whole class teaching

Hold up the flash cards with the different words for subtraction on them.

Ask pupils to give you a simple sum using each term so that everyone is clear about their meaning.

25  
minutes

## Main activity

### Group task

Give each group a flash card with a different term for take away on them.

Ask each group to make up a sum using that term for other pupils to answer, eg: subtract 22 from 35.

Write all the sums on the chalkboard and ask the groups to work together to answer them.

Share the answers as a class and check they are correct.

Ask if there were any sums the pupils had any problems with and couldn't answer.

10  
minutes

## Plenary

### Group task

Ask groups to count to 100 in 10s, 20s and 50s, and record them on a number line, eg: 20, 40, 60, 80, 100.



**Numeracy  
lesson plans  
Primary 2**

**Term 1  
Organising the  
classroom for  
effective learning**

**Week 8  
Subtracting  
two-digit numbers  
Day 5**

Lesson  
title

# Writing instructions

15  
minutes

## Learning outcomes

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

Count in Tens forwards and  
backwards to 100.

Explain how to complete  
a subtraction sum using a  
number line.

## Teaching aids

**Before the lesson:**

Have ready six strips of paper  
and something to write with.

## Daily practice

**Individual task**

Ask the pupils to copy the  
following into their exercise books  
and fill in the blank spaces:

10, , , 40, , , , 80, 90,

10, , 30, , , 60, , , , 100

10  
minutes

## Introduction

### Group task

Remind the pupils that over the last week they have been learning about subtraction of two-digit numbers.

Tell them that you want to write some instructions for how to do this, so they can remember next time.

Write the following sum on the chalkboard:  
 $67 - 35 =$

25  
minutes

## Main activity

### Individual task

Ask the pupils to work on their own to complete the sums below in their exercise books, using a number line.

Ask them to follow the instructions you have all written together to do these sums:

$26 - 13 =$   
 $48 - 25 =$   
 $56 - 32 =$   
 $87 - 66 =$   
 $99 - 98 =$   
 $57 - 44 =$

Go around the class and check which pupils have not understood this work.

Make a note of their names.

10  
minutes

## Plenary

### Individual task

Ask the pupils to tell you one thing they know about subtraction using number lines.



Week  
9  
Non-standard  
measures



## Words/phrases

length  
arm span  
stride  
hand span  
foot  
elbow to the tip of  
the finger  
longer than  
longest  
shorter than  
shortest  
metre  
measure  
table  
record  
distance  
length

## 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.

# Measuring length using feet and arms

## Learning outcomes

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

Subtract two-digit numbers.

Measure length using non-standard measurements.

## Teaching aids

### Before the lesson:

Have ready two sets of flash cards for each group with the following units of measurement: 'foot', 'hand span', 'arm span', 'finger', 'finger tip to elbow', 'stride', 'rope', 'short stick', 'long stick', 'metre', 'centimetre'.

Read New Method Mathematics 2, pages 95—97.

## Daily practice

### Whole class teaching

Divide the chalkboard into two columns. Label one column 'numbers greater than 55' and the other 'numbers less than 55'.

Ask pupils to call out numbers greater than 55 and write them in the correct column.

Ask pupils to call out numbers less than 55 and write them in the correct column.

Ask the pupils to take a number from each column and subtract the lowest number from the highest.

Repeat with different pairs of numbers.

10  
minutes

Game

## Introduction

### Group task

Give each group two sets of flash cards.

Tell them to turn the cards face down and spread them out over the table.

The first player picks a card and turns it face up.

They must try to pick another card that has the same measuring unit on it as the first card.

If they succeed, they keep the two cards.

If not, they turn the cards face down on the same spot and the next pupil tries.

The pupil who has the most cards at the end of the game has won.

25  
minutes

New Method  
Mathematics 2

## Main activity

### Group task

Explain the meaning of the words on the flash cards.

Ask the pupils to look at the example of foot, arm and stride measurements in New Method Mathematics 2, page 95.

Ask one or two groups to measure the distance from one edge of their chair to the other using their hand span.

Ask different groups to measure the distance from one end of the classroom to the other using their stride.

Ask other groups to measure the distance between one edge of their table to the other using their arm span.

Ask a representative of each group to say the how long their measurement was.

10  
minutes

## Plenary

### Whole class teaching

Ask pupils to estimate the length and distance of the chalkboard using their hand span and arm span.

# Comparing length

## Learning outcomes

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

Subtract two-digit numbers.

Measure with non-standard units.

Record measurements.

Identify which length is longer.

## Teaching aids

**Before the lesson:**

Have ready a set of number cards from 0—20.

Have ready a short stick, a long stick and two pieces of rope.

## Daily practice

**Whole class teaching**

Spread out the number cards face down on your table.

Ask a pupil to pick a card and hold it up for the class to see.

Ask the class:  
'How many more do you need to make 20?'

Ask pupils to tell you how they worked it out.

Repeat five or six times with different number cards.

10  
minutes

## Introduction

### Group task

Divide the pupils into four groups.

Ask each group to measure any distance in the classroom using their arm length, hand span, stride or foot.

Ask pupils to tell you the length of the object they measured.

Repeat the task with three or more pupils in the classroom.

25  
minutes

## Main activity

### Group task

Ask each group to discuss the various objects that can be measured and that can be used to measure.

Write their ideas on the chalkboard.

Ask the pupils in group one to measure each side of the chalkboard with rope.

Ask group two to measure each side of your table with a short stick.

10  
minutes

## Plenary

### Whole class teaching

Ask the pupils if the measuring instrument they used was a good one for their task, and why or why not.

Ask group three to measure each side of the classroom with a rope.

Ask group four to measure each side of the classroom door with a long stick.

Ask them to write down the measurement of each side so they don't forget.

Ask each group to look at their results and say which side is longer than the other.

Ask the pupils from each group to mention the number of units measured.



**Numeracy  
lesson plans**  
Primary 2

**Term 1**  
**Organising the  
classroom for  
effective learning**

**Week 9**  
**Non-standard  
measures**  
Day 3

Lesson  
title

# Measuring with a metre stick

15  
minutes

## Learning outcomes

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

Subtract two-digit numbers  
without using pencil and paper.

Measure using different objects.

Record measurements in  
a simple table.

## Teaching aids

**Before the lesson:**

Have ready a short stick, a long  
stick and two pieces of rope.

Have ready the flash cards from  
Day 1.

Have ready a flash card for  
each pair with a different object  
in the classroom to measure.

## Daily practice

**Pair task**

Ask the pupils to work in pairs to  
write down three subtraction sums,  
using numbers below 50.

Go round the class asking  
pupils to read out their sums with-  
out the answers.

Ask pupils to put their hands up  
when they know the answer.

10  
minutes

## Introduction

### Whole class teaching

Spread out the two sets of flash cards on the floor and ask each pair to come out and pick one from each pile.

Explain that one card is the object they have to measure and the other card is the object they will use to measure with.

25  
minutes

## Main activity

### Pair task

Ask each pair to measure their object and write/record their answers in a table like the one shown below.

Ask them to choose another card with an object to measure and record it in the same way.

Measurement table

Object	Number of hand spans
Table	12

10  
minutes

## Plenary

### Whole class teaching

Ask each pair to read out their sentences to the class.

Ask them to tell you how writing their answers in a table helped them.

Ask them to continue until they have measured four or five different objects.

Ask the pairs to tell you which was the longest object they measured and which was the shortest object they measured.

Ask them to write a sentence to describe what they found, using the words on the cards to help them:  
'The \_\_ is longer than the \_\_.'  
'The \_\_ is shorter than the \_\_.'

# The metre

## Learning outcomes

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

Subtract two-digit numbers without using pencil or paper.

Use a metre stick to measure objects.

Record results in a table.

## Teaching aids

### Before the lesson:

Have ready a metre stick and some centimetre rulers.

Have ready pieces of rope, long sticks and long strips of paper or card which are longer than a metre.

Read the instructions in the teaching aids section of this booklet which tell you how to measure correctly.

## Daily practice

### Whole class teaching

Ask the pupils to take the following numbers away from 99: 33, 57, 49, 22, 45, 87, 98, 1, 50.

Remind them they can use a number line to help them if they wish.

When the pupils have finished, ask them to tell you the answers.

10  
minutes

## Introduction

### Whole class teaching

Ask four different pupils to measure the length of the classroom with their stride.

Record their measurements in a table like the one shown below.

Ask the pupils to tell you why the number of strides is different for each pupil.

Measurement table

Name	Number of strides

25  
minutes

## Main activity

### Group task

Show the class a metre stick and ask them if they can tell you what it is.

Explain that a **metre** is a way of measuring longer lengths so that you always get the same measurement.

Give out a stick or a rope to each group and ask them to put it against the metre stick and use it to measure a metre.

Ask them to mark the metre on their stick/rope.

10  
minutes

## Plenary

### Whole class teaching

Ask a few pupils to tell the class about their work.

Ask the pupils to measure the length of the classroom, using their metre stick/rope and record their result in a table.

Ask each group to say how many metres the length of the classroom is.

Ask the pupils to measure and record the following:

My class door is  m long.

A piece of chalk is  cm long.

The length of my pencil is  cm.

**Numeracy  
lesson plans  
Primary 2**

**Term 1  
Organising the  
classroom for  
effective learning**

**Week 9  
Non-standard  
measures  
Day 5**

Lesson  
title

# Measuring with metres

15  
minutes

## Learning outcomes

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

Subtract two-digit numbers with-  
out using paper or pencil.

Measure accurately using  
a metre measure.

## Teaching aids

### Before the lesson:

Have ready a set of number cards:  
10, 20, 30, 40, 50.

Have ready the metre measures  
from Day 4.

Have ready the measure flash  
cards from Day 1, adding another  
two cards with the word 'metre'.

Read the instructions in the  
teaching aids section, which explain  
how to measure accurately.

## Daily practice

### Whole class teaching

Give each pair a number card  
with one of the following numbers  
on it: 20, 50, 30, 10, 40.

Read the following sums and  
ask those with the number  
card showing the correct answer  
to hold up their cards for  
everyone to see:

$$50 - 20 =$$

$$30 - 10 =$$

$$100 - 60 =$$

$$40 - 30 =$$

$$100 - 50 =$$

$$40 - 10 =$$

$$50 - 30 =$$

$$70 - 30 =$$

10  
minutes

Game

25  
minutes

10  
minutes

## Introduction

### Group task

Play the matching game from Day 1, this time including the extra 'metre' flash cards.

## Main activity

### Group task

Ask each group to nominate one person to be the 'recorder'.

Ask them to help the recorder write the table shown below in their exercise books.

Ask them which they think will be the longest distance and which they think will be the shortest distance.

Explain that an **estimate** is a guess. Before they measure they should guess which distance is the longest and which distance is the shortest and mark them on the table. It doesn't matter if this guess is wrong.

Ask one or two pupils to tell or show you how to use a metre measure to measure accurately.

Take the pupils outside and ask each group to use their metre measure to measure the items listed in the table.

Ask them to make a sensible estimate first and write it in the table.

Ask them to carefully measure each distance and record it on their table.

## Plenary

### Whole class teaching

Ask each group to compare their measurements, asking the following questions:

'Which were the longest and shortest distances?'


'Did you guess the longest and shortest distances correctly?'

'Were the measurements of each distance the same for each group? Why, or why not?'

Table

Object	Estimated distance	Measurement
Along the side of one school block		metres
From one end of the school block to the other		metres
From a tree back to the building		metres
From the head teacher's office to your classroom		metres





Week  
10  
Adding and  
subtracting  
0—99



## Words/phrases

**add**  
**subtract**  
**equals**  
**plus**  
**take away**  
**minus**

**What's the difference?**  
**How many more than?**  
**How many less than?**  
**How many altogether?**  
**Find the sum of**

## 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 2**

**Term 1  
Organising the  
classroom for  
effective learning**

**Week 10  
Adding and  
subtracting 0—99  
Day 1**

Lesson  
title

# Addition of two-digit numbers

15  
minutes

## Learning outcomes

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

Add two-digit numbers.

Add and subtract two-digit numbers using a number line.

## Teaching aids

### Before the lesson:

Have ready a set of number cards from 0—5.

Have ready flash cards with different terms for addition and subtraction, eg: 'add', 'subtract', 'take away', 'plus' and 'equals'.

## Daily practice

### Whole class teaching

Write the following sums on the chalkboard for the pupils to complete, using a number line:

$$24 + 11 =$$

$$15 + 13 =$$

$$29 + 0 =$$

$$32 + 15 =$$

$$25 + 62 =$$

$$33 + 22 =$$

Ask pupils to tell you how they found the answers.

10  
minutes

## Introduction

### Whole class teaching

Quickly flash the cards at the pupils, asking them to read the different terms for addition and subtraction.

Show them again more slowly, asking pupils to give you an example of a sum for each card.

25  
minutes

## Main activity

### Whole class teaching

Explain to the pupils that they are going to have a mixture of addition and subtraction sums to complete.

Remind them to look closely at the sign so they know whether they are addition or subtraction sums.

Ask six pupils to come out. Ask four of them to take a number card between 0 and 5 and use them to make two, two-digit numbers. Ask another pupil to hold the word 'equals' and the final pupil to pick a card with a term for addition or subtraction.

10  
minutes

## Plenary

### Individual task

Ask some pupils to tell you the answers to the sums they have completed and check that they chose the correct operation, ie: add or subtract.

Ask the pupils to stand at the front of the class and hold the cards in order, to make a sum, eg: 43 take away 21 equals

Ask the pupils if it is an addition or subtraction sum.

Ask the rest of the pupils to write that sum in their exercise books.

Repeat until you have five sums.

Ask the pupils to answer the sums, using a number line to help them.

**Numeracy  
lesson plans  
Primary 2**

**Term 1  
Organising the  
classroom for  
effective learning**

**Week 10  
Adding and  
subtracting 0—99  
Day 2**

Lesson  
title

# Addition and subtraction

15  
minutes

## Learning outcomes

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

Add together two-digit  
numbers without using pencil  
and paper.

Add and subtract two-  
digit numbers.

## Teaching aids

### Before the lesson:

Have ready a set of number  
cards from 0—5 for each group.

Have ready flash cards for  
each group, with different terms  
for addition and subtraction,  
eg: 'add', 'subtract', 'take away',  
'plus' and 'equals'.

## Daily practice

### Whole class teaching

Ask the pupils an addition  
sum with an answer of less  
than 50.

Tell them to try and answer it  
without using pencil and paper.

Ask two or three pupils to  
tell you how they worked out  
the sum.

Repeat with different sums,  
stopping after each one for the  
pupils to tell you their answer.

Ask each pupil to write down  
a new addition sum with an answer  
up to 50.

Tell each pupil to ask their  
sum for the rest of the class to  
answer. It doesn't matter how  
easy or difficult it may be.

10  
minutes

## Introduction

### Whole class teaching

Repeat the activity from the Day 1 main activity.

25  
minutes

## Main activity

### Group task

Give each group a set of cards and ask them to place the numbers face down in one pile on the table and the cards with the addition and subtraction terms face down on the other side of the table.

Ask them to take it in turns to pick cards from each pile to make addition and subtraction sums, as they did in the introduction.

Ask all the pupils in the group to copy the sum into their exercise book, then work on their own to answer it.

Ask all the pupils in the group to compare their answers and help each other if they have different answers.

Ask them to repeat the activity until each group has completed 10 sums.

10  
minutes

## Plenary

### Whole class teaching

Ask each group to show the rest of the class one sum and tell them the answer.

Lesson  
title

# Addition and subtraction

15  
minutes

## Learning outcomes

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

Add and subtract two-  
digit numbers.

Solve problems involving addition  
and subtraction.

## Teaching aids

**Before the lesson:**

Bring string or rope and pegs or  
paper clips to the class.

Have ready a set of flash cards  
for each pair with a '+', '-' and '='  
sign on them.

Have ready a set of number  
cards from 0—5.

## Daily practice

**Group task**

Give each group a number  
bigger than 50 and ask them  
to write as many addition  
sums as they can where the  
answer is the number you  
have given them.

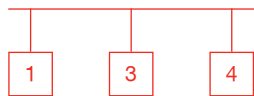
10  
minutes

## Introduction

### Whole class teaching

Hang the string from wall to wall or between two chairs.

Attach the numbers 0—5 on the string to make problems, but don't hang the flash cards with them, as below:



25  
minutes

## Main activity

### Pair task

Give the pupils the following problems to solve, in the same way, in their exercise books:

$$4 \square 6 = 10$$

$$5 \square 4 = 1$$

$$9 \square 7 = 2$$

$$9 \square 7 = 16$$

$$20 \square 5 = 15$$

$$14 \square 6 = 20$$

$$15 \square 1 = 14$$

$$1 \square 15 = 16$$

Ask the pupils to decide which type of sum this is and place the appropriate flash cards so the sum is correct.

A horizontal line representing a string. Three vertical lines hang from it, each ending in a square box. The boxes contain the numbers 1, 3, and 4. A plus sign and an equals sign are placed between the boxes.

Hang up the following sums, one at a time, and ask pupils to place the appropriate flash card so the sums are correct:

$$4 \square 1 = 3$$

$$5 \square 0 = 5$$

(+ and – are both correct for this sum)

$$3 \square 2 = 5$$

$$1 \square 4 = 5$$

$$5 \square 3 = 2$$

10  
minutes

## Plenary

### Whole class teaching

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

**Numeracy  
lesson plans**  
Primary 2

**Term 1**  
**Organising the  
classroom for  
effective learning**

**Week 10**  
**Adding and  
subtracting 0—99**  
Day 4

Lesson  
title

# Addition and subtraction

15  
minutes

## Learning outcomes

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

Add and subtract two-  
digit numbers.

Solve problems involving addition  
and subtraction.

## Teaching aids

**Before the lesson:**

Bring string or rope and pegs or  
paper clips to the class.

Have ready a set of flash cards  
for each pair with different terms  
for addition and subtraction,  
eg: 'add', 'subtract', 'take away',  
'plus' and 'equals'.

Have ready a set of number  
cards from 10—99.

## Daily practice

**Pair task**

Do the same activity as in  
the Day 3 daily practice, but  
this time in pairs.



10  
minutes

## Introduction

### Whole class teaching

Play the washing line game as yesterday, using the following sums:

$$10 \square 5 = 5$$

$$20 \square 20 = 0$$

$$45 \square 30 = 15$$

$$33 \square 64 = 97$$

$$72 \square 12 = 84$$

Encourage pupils to use pencils and paper to work out the answers.

25  
minutes

## Main activity

### Individual task

Give pupils the following sums to complete in their exercise books:

$$35 \square 23 = 58$$

$$24 \square 4 = 20$$

$$56 \square 32 = 24$$

$$41 \square 20 = 21$$

$$55 \square 23 = 78$$

$$55 \square 23 = 32$$

$$46 \square 54 = 100$$

$$54 \square 25 = 79$$

Ask them to find a partner and compare their answers to see if they are both correct.

10  
minutes

## Plenary

### Whole class teaching

Ask some of the pupils to explain how they worked out the answers.

**Numeracy  
lesson plans  
Primary 2**

**Term 1  
Organising the  
classroom for  
effective learning**

**Week 10  
Adding and  
subtracting 0—99  
Day 5**

Lesson  
title

# Addition and subtraction

15  
minutes

## Learning outcomes

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

Add and subtract two-  
digit numbers.

## Teaching aids

### Before the lesson:

Write the following sums on  
the chalkboard:

Add 23 and 32

28 take away 14

Subtract 36 from 58

42 plus 33

Find the sum of 45 and 22

What's the difference  
between 48 and 34?

How many more than  
52 is 64?

## Daily practice

### Individual task

Call out the following numbers  
and ask pupils to put up their  
hands when they can tell you  
what number they have to add  
to each to make 20:

19, 10, 5, 16, 12, 18, 7, 14, 9.

10  
minutes

Song

## Introduction

### Whole class teaching

Sing any counting song that the pupils enjoy such as '5 little monkeys', or '10 green bottles'.

25  
minutes

## Main activity

### Individual task

Ask pupils to look at the sums you have written on the chalkboard.

Ask them to decide which sums are subtraction and which are addition.

Ask them to answer the questions in their exercise books.

Ask pupils to compare their answers with a partner to see if they both agree.

If partners have different answers, ask them to think about which one is correct.

10  
minutes

## Plenary

### Whole class teaching

Ask pupils to tell you something they have learned this week about addition and subtraction.

## Credits

---

In 2008, Kwara State carried out a Teachers' Development Needs Assessment for all primary school teachers. This showed that most teachers in Kwara State did not have strong literacy and numeracy skills. The Kwara State Government responded by developing a strategy to support existing teachers and improve new teachers' pre-service training.

---

These literacy and numeracy lesson plans, developed by the Kwara State School Improvement Team, were part of that strategy. Two years after introducing these plans alongside the training and support programme, Kwara State began to see strong improvements in teachers' teaching skills and pupils' learning outcomes.

## Special thanks go to:

---

The Honourable Commissioner and staff of the Kwara State Ministry of Education and Human Capital Development, as well as the Kwara State Universal Basic Education Board for their support and valuable input and for agreeing to share these plans with other states.

---

The UK's Department for International Development (DFID) and the DFID-funded ESSPIN programme for their input, focus, guidance and constructive criticism throughout the development of the plans.

---

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

