



THE PRESIDENT'S  
**RECOVERY**  
PRIORITIES

Education

Ministry of  
Education,  
Science and  
Technology

Lesson plans for  
**PRIMARY**  
*Mathematics*

**1**  
CLASS

**3**  
TERM



## Foreword

Our country's future lies in the education of our children. The Government of Sierra Leone is committed to doing whatever it takes to secure this future.

As Minister of Education, Science and Technology since 2007, I have worked every day to improve our country's education. We have faced challenges, not least the Ebola epidemic which as we all know hit our sector hard. The Government's response to this crisis – led by our President – showed first-hand how we acted decisively in the face of those challenges, to make things better than they were in the first place.

One great success in our response was the publication of the Accelerated Teaching Syllabi in August 2015. This gave teachers the tools they needed to make up for lost time whilst ensuring pupils received an adequate level of knowledge across each part of the curriculum. The Accelerated Teaching syllabi also provided the pedagogical resource and impetus for the successful national radio and TV teaching programs during the Ebola epidemic.

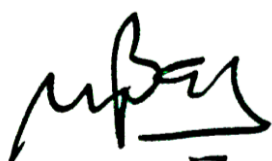
It is now time to build on this success. I am pleased to issue new lesson plans across all primary and JSS school grades in Language Arts and Mathematics. These plans give teachers the support they need to cover each element of the national curriculum. In total, we are producing 2,700 lesson plans – one for each lesson, in each term, in each year for each class. This is a remarkable achievement in a matter of months.

These plans have been written by experienced Sierra Leonean educators together with international experts. They have been reviewed by officials of my Ministry to ensure they meet the specific needs of the Sierra Leonean population. They provide step-by-step guidance for each learning outcome, using a range of recognised techniques to deliver the best teaching.

I call on all teachers and heads of schools across the country to make best use of these materials. We are supporting our teachers through a detailed training programme designed specifically for these new plans. It is really important that these Lesson Plans are used, together with any other materials you may have.

This is just the start of education transformation in Sierra Leone. I am committed to continue to strive for the changes that will make our country stronger.

I want to thank our partners for their continued support. Finally, I also want to thank you – the teachers of our country – for your hard work in securing our future.



Dr. Minkailu Bah

Minister of Education, Science and Technology

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# Introduction

## to the Lesson Plan Manual

These lesson plans are based on the National Curriculum and meet the requirements established by the Ministry of Education, Science and Technology.

- 1  The lesson plans will not take the whole term, so use spare time to review material or prepare for exams
  - 2  Teachers can use other textbooks alongside or instead of these lesson plans.
  - 3  Read the lesson plan before you start the lesson. Look ahead to the next lesson, and see if you need to tell pupils to bring materials for next time.
  - 4  Make sure you understand the learning outcomes, and have teaching aids and other preparation ready – each lesson plan shows these using the symbols on the right.
  - 5  Quickly review what you taught last time before starting each lesson.
  - 6  Follow the suggested time allocations for each part of the lesson. If time permits, extend practice with additional work.
  - 7  Lesson plans have a mix of activities for the whole class and for individuals or in pairs.
  - 8  Use the board and other visual aids as you teach.
  - 9  Interact with all students in the class – including the quiet ones.
  - 10  Congratulate pupils when they get questions right! Offer solutions when they don't, and thank them for trying.
-  Learning outcomes  
 Teaching aids  
 Preparation

|   |   |                         |
|---|---|-------------------------|
| <b>Lesson Title:</b> Estimate the Weight of Lighter Objects | <b>Theme:</b> Measurement and Estimation - Mass |                         |
| <b>Lesson Number:</b> M-01-121                              | <b>Class/Level:</b> Class 1                     | <b>Time:</b> 35 minutes |

|   |   |  |
|---|---|--|
|  <b>Learning Outcomes</b><br>By the end of the lesson, pupils will be able to estimate the weight of lighter objects by lifting. |  <b>Teaching Aids</b><br>A pencil, seed, stone and leaf. |  <b>Preparation</b><br>Gather a pencil, seed, stone and leaf. |
|---|---|--|

### Opening (2 minutes)

1. **Say:** In our previous lesson we learnt how to estimate the weight of 'heavier' objects.
2. **Say:** Today we are going to estimate the weight of 'lighter' objects.

### Introduction to the New Material (6 minutes)

1. **Ask:** What are some light objects here in the classroom?
2. Write pupil answers on the board.
3. **Ask:** Do you see anything lighter?
4. Write pupil answers on the board.

### Guided Practice (12 minutes)

1. **Say:** We will estimate the weight of lighter objects by lifting them.
2. **Ask:** Do you think a piece of paper or a pencil is lighter.
3. **Say:** Most of the class thinks the \_\_\_\_\_ is lighter.
4. **Ask:** Who would like to volunteer to help me find out?
5. Choose 1 pupil to try to lift the 2 items.
6. Have the pupil extend both arms out all the way.
7. Place one item in each hand and ask the pupil to feel the weight of both items.
8. **Ask:** Which items is lighter?
9. **Ask:** Do you think a seed is lighter or a stone?
10. **Say:** Most of the class thinks the \_\_\_\_\_ is lighter.
11. **Ask:** Who would like to volunteer to help me find out?
12. Choose 1 pupil to try to lift the 2 items.
13. Have the pupil extend both arms out all the way.
14. Place one item in each hand and ask the pupil to feel the weight of both items.
15. **Ask:** Which item is lighter?

### Independent Practice (13 minutes)

1. **Say:** You will now work on your own to estimate which items are lighter.
2. Write:




- a. leaf or seed (Answer: either)
  - b. leaf or pencil (Answer: leaf)
  - c. pencil or paper (Answer: paper)
  - d. paper or stone (Answer: paper)
  - e. stone or seed (Answer: seed)
  - f. stone or leaf (Answer: leaf)
3. **Say:** Draw pictures of the sets of items I have listed on the board.
  4. **Say:** The items are located here in the classroom.
  5. **Say:** Find the items and lift them.
  6. **Say:** Circle the item that is lighter.

**Closing** (2 minutes)

1. **Say:** Today we learnt how to estimate the weight of items that are 'lighter'.
2. **Say:** In the next lesson we will put objects in order according to their weight.



|   |   |                         |
|---|---|-------------------------|
| <b>Lesson Title:</b> Ordering Objects According to their Weight | <b>Theme:</b> Measurement and Estimation - Mass |                         |
| <b>Lesson Number:</b> M-01-122                                  | <b>Class/Level:</b> Class 1                     | <b>Time:</b> 35 minutes |

|   |  |   |
|---|--|---|
|  <p><b>Learning Outcomes</b><br/>By the end of the lesson, pupils will be able to order objects according to their weight.</p> |  <p><b>Teaching Aids</b><br/>A pencil, seed, book and a medium-sized stone.</p> |  <p><b>Preparation</b><br/>Gather a pencil, seed, book and a medium-sized stone.</p> |
|---|--|---|

### Opening (2 minutes)

1. **Say:** In our previous lessons we learnt how to estimate the weight of 'heavier' and 'lighter' objects.
2. **Say:** In today's lesson we will learn how to put the objects in order from 'lightest to heaviest'.

### Introduction to the New Material (6 minutes)

1. **Say:** When we put objects in order from 'lightest to heaviest', we compare 2 objects at a time to determine which order they go in.
2. **Say:** I am going to compare a pencil and a book.
3. Hold each in a different hand.
4. **Say:** Based on the weight, I would say that the pencil is lighter.
5. **Say:** If I was to compare 3 objects to put in order by weight from 'lightest to heaviest' I could compare a seed, a pencil and a book.
6. **Say:** I already know the book is heavier than the pencil.
7. **Say:** Then I will just have to compare the weight of a seed and the weight of a pencil.
8. Hold each in a different hand.
9. **Say:** Based on the weight, I would say that the seed is lighter.
10. **Say:** The seed is lighter than the pencil, therefore the seed is the lightest.
11. **Say:** In order from lightest to heaviest, the objects would go in the following order.
12. Write: seed, pencil, book.

### Guided Practice (8 minutes)

1. **Say:** Let's compare some objects together.
2. **Say:** We are going to compare a seed and a piece of paper.
3. Hold up a seed and a piece of paper.
4. **Ask:** Who would like to help me compare the weight of 2 objects?
5. Choose 1 pupil to lift the 2 items.
6. Have the pupil extend both arms out all the way.
7. Place one item in each hand and ask the pupil to feel the weight of both items.
8. **Ask the pupil:** Which is lighter? (Answer: the seed)
9. **Say:** Now we will compare paper and a stone.

10. Hold up paper and a stone.
11. Have the pupil extend both arms out all the way.
12. Place one item in each hand and ask the pupil to feel the weight of both items.
13. **Ask:** Which is lighter? (Answer: the paper)
14. **Say:** Now that we have weighed all 3 items, I can write them in order from 'lightest to heaviest'.
15. Write: seed, paper, stone.




### **Independent Practice** (12 minutes)

1. **Say:** Now it is your turn to compare items by weight and put them in order. You will be working with a partner.
2. **Say:** You may work inside or outside the classroom. You must stay where I can see you and do not go in any other classrooms.
3. **Say:** Begin by choosing 2 items to compare.
4. **Say:** Draw pictures of each item and then weigh them in your hands to determine which is lighter.
5. **Say:** Circle the item that is lighter.
6. **Say:** Pick 2 new items to compare and repeat the process.
7. **Say:** When it is time to come back to the classroom, you will hear my signal.

### **Closing** (5 minutes)

1. **Ask:** What 2 items did you compare? Which was lighter?
2. Record pupil responses on the board.

|  |   |                         |
|--|---|-------------------------|
| <b>Lesson Title:</b> Repeating Patterns Inside and Outside the Classroom | <b>Theme:</b> Algebra Number Pattern - Addition |                         |
| <b>Lesson Number:</b> M-01-123   | <b>Class/Level:</b> Class 1                     | <b>Time:</b> 35 minutes |

|  |  |   |
|--|--|---|
|  <p><b>Learning Outcomes</b><br/>By the end of the lesson, pupils will be able to recognise and describe repeating patterns inside and outside the classroom.</p> |  <p><b>Teaching Aids</b><br/>None</p> |  <p><b>Preparation</b><br/>Draw the circle and square pattern, in the Guided Practice, on the board.</p> |
|--|--|---|

**Opening** (1 minute)

1. Clap your hands 5 times, click your fingers, clap your hands 5 times, click your fingers.
2. **Say:** In today's lesson we will learn how to recognise and describe patterns.

**Introduction to the New Material** (5 minutes)

1. **Say:** Watch what I do.
2. Clap your hands 5 times. Stomp each of your feet. Clap your hands 3 times.
3. Repeat the same pattern again. Clap your hands 5 times, stomp each of your feet, clap your hands 3 times.
4. **Say:** Do it with me.
5. Clap your hands 5 times, stomp each of your feet, clap 3 times.
6. Repeat the pattern 3 times through.
7. **Say:** We have just created a pattern.
8. **Say:** A pattern is something that is arranged in a specific way and follows a certain rule.

**Guided Practice** (8 minutes)

1. Point to pattern on the board:



2. Point out to the pupils that the pattern you have created is: circle, square, circle square.
3. Tell the pupils that after the first 2 shapes the shapes repeat which is what makes it a pattern.
4. Draw the following pattern on the board and ask the pupils to copy it down on their paper:



5. **Ask:** Can you identify the pattern? (Answer: circle, square, triangle)
6. **Say:** A pattern is something that is arranged in a specific way and follows a certain rule.




### **Independent Practice** (14 minutes)

1. **Say:** We will now go on a hunt around the school for patterns but first I will give you some instructions.
2. **Say:** Your task is to find patterns in the school, outside the classroom.
3. **Say:** You must stay on the school grounds.
4. **Say:** You cannot enter another classroom without asking the teacher first. We do not want to disrupt other classes.
5. **Say:** Once you have identified a pattern, draw what you see on a piece of paper or in your notebook.
6. **Say:** You may work with a partner or on your own.
7. **Say:** When you hear my signal, return to the classroom.
8. **Say:** Remember not to disrupt other classes.
9. **Ask:** Are there any questions?
10. Answer any questions the pupils may have.
11. Walk around while pupils are identifying patterns and support as necessary.

### **Closing** (2 minutes)

1. **Say:** Today we learnt about patterns and went on a pattern hunt around the school.
2. **Say:** In the next lesson we will learn about repeating patterns in pictures.

|   |   |                         |
|---|---|-------------------------|
| <b>Lesson Title:</b> Repeating Patterns in Pictures | <b>Theme:</b> Algebra Number Pattern - Addition |                         |
| <b>Lesson Number:</b> M-01-124                      | <b>Class/Level:</b> Class 1                     | <b>Time:</b> 35 minutes |

|   |  |  |
|---|--|--|
|  <b>Learning Outcomes</b><br>By the end of the lesson, pupils will be able to recognise and describe repeating patterns in pictures. |  <b>Teaching Aids</b><br>None |  <b>Preparation</b><br>Draw the triangle and circle pattern, in the Introduction to the New Material, on the board. |
|---|--|--|

**Opening (4 minutes)**

1. Do the following: Clap clap, stomp stomp stomp, clap clap, stomp stomp stomp.
2. **Say:** Now it is your turn.
3. You may need to repeat the pattern before the pupils are able to repeat it.
4. **Ask:** What is the pattern? (Answer: 2 claps and 3 stomps)
5. **Say:** Today we will continue working on patterns.

**Introduction to the New Material (8 minutes)**

1. Point to the pattern on the board:



2. **Say:** Here is a picture with a pattern.
3. Draw the next part in the pattern, the circle.
4. **Say:** I have drawn a circle because it is the next picture in the pattern. Triangle, circle, triangle, circle, triangle, circle.
5. Draw the next pattern:



6. **Say:** Here is another pattern.
7. Draw the next part in the pattern, the rectangle.
8. **Say:** The rectangle is the next shape in the pattern. The pattern is star, rectangle, star, rectangle, star, rectangle.  
**Say:** Now we will work together.

**Guided Practice (10 minutes)**

1. Draw the following pattern on the board:



2. **Say:** Draw this pattern on your paper.
3. **Say:** Now draw what comes next in the pattern.
4. **Ask:** What comes next in the pattern? (Answer: star)

5. **Ask:** How do you know the answer is star? (Answer: The pattern is triangle, circle, star.)
6. Draw the following pattern on the board:



7. **Ask:** What is the next picture in the pattern? (Answer: flower)
8. **Ask:** How do you know that is the next picture? (Answer: The pattern is flower, butterfly, flower, butterfly.)




**Independent Practice** (12 minutes)

1. **Say:** Now it is your turn to create your own patterns from the examples I have shown you.
2. **Say:** Once you have created a pattern, trade with your neighbour and continue the pattern they have started.
3. **Say:** You may create as many patterns to trade with your neighbour as time allows.
4. Walk around the room and support pupils.

**Closing** (1 minute)

1. **Say:** Today we have learnt to make repeated patterns using pictures. Tomorrow we will learn how to add addition to our patterns.

|  |   |                         |
|--|---|-------------------------|
| <b>Lesson Title:</b> Repeating Patterns in Pictures Involving Addition | <b>Theme:</b> Algebra Number Pattern - Addition |                         |
| <b>Lesson Number:</b> M-01-125   | <b>Class/Level:</b> Class 1                     | <b>Time:</b> 35 minutes |

|  |  |  |
|--|--|--|
|  <b>Learning Outcomes</b><br>By the end of the lesson, pupils will be able to recognise and describe repeating patterns in pictures involving addition. |  <b>Teaching Aids</b><br>None |  <b>Preparation</b><br>Draw the pattern, in the Introduction to the New Material, on the board. |
|--|--|--|

**Opening (4 minutes)**

1. Do the following: Clap (pause) clap clap (pause) clap clap clap (pause) clap clap clap clap.
2. **Say:** Now it is your turn.
3. You may need to repeat the pattern before the pupils are able to repeat it.
4. **Ask:** What is the pattern? (Answer: The claps increase by one.)
5. **Say:** Today we will continue working on patterns.

**Introduction to the New Material (8 minutes)**

1. Point to the drawing on the board:



2. **Say:** Here is a picture with a pattern.
3. Draw the next part in the pattern: 5 girls.
4. **Say:** I have drawn 5 girls because the pattern is an increase in one girl.
5. **Say:** This is one example of a pattern. This is a growing pattern. It is also known as an 'addition pattern'. As you can see, the number of girls grows larger.
6. Draw the following pattern on the board:



7. Now draw the next part of the pattern: 8 boys.
8. **Say:** We know the next part of the pattern is 8 boys because the boys increase by 2. 2, 4, 6, 8.
9. **Say:** These are addition patterns.

**Guided Practice** (10 minutes)

1. **Say:** Draw this pattern on your paper:



2. **Say:** Now draw what comes next in the pattern.
3. **Ask:** What comes next in the pattern? (Answer: building with 4 levels)
4. **Ask:** How do you know the answer is 4? (Answer: because the levels increase by 1)
5. Draw the following pattern on the board:



6. **Ask:** What comes next in the pattern? (Answer: 7 triangles)
7. **Ask:** How do you know the answer is 7? (Answer: The numbers increase by 2.)

**Independent Practice** (12 minutes)




1. **Say:** Now it is your turn to create your own addition patterns from the examples I have shown you.
2. **Say:** Once you have created a pattern, trade with your neighbour and continue the pattern they have started.
3. **Say:** You may create as many patterns to trade with your neighbour as time allows.
4. Walk around the room and assist pupils needing help.

**Closing** (1 minute)

1. **Say:** Today we have learnt to make repeated patterns using pictures and addition. Next we will learn about patterns with sound.



|   |   |                         |
|---|---|-------------------------|
| <b>Lesson Title:</b> Repeating Patterns Using Sound | <b>Theme:</b> Algebra Number Pattern - Addition |                         |
| <b>Lesson Number:</b> M-01-126                      | <b>Class/Level:</b> Class 1                     | <b>Time:</b> 35 minutes |

|   |  |  |
|---|--|--|
|  <p><b>Learning Outcomes</b><br/>By the end of the lesson, pupils will be able to recognise and describe repeating patterns that involve addition using sound.</p> |  <p><b>Teaching Aids</b><br/>None</p> |  <p><b>Preparation</b><br/>None</p> |
|---|--|--|

### Opening (2 minutes)

1. **Say:** In the last few lessons we have used pictures to identify patterns and to create patterns.
2. **Say:** In past lessons I have showed you some patterns with sound, today you will be learning more about them.
3. **Say:** Today we will focus on identifying and repeating patterns using sound.

### Introduction to the New Material (5 minutes)

1. **Say:** I am going to make some sounds and actions that create a pattern. Watch carefully and see if you can spot the pattern. Once you spot the pattern, please join in.
2. Do the following: clap, stomp.
3. Repeat until all pupils are performing the pattern.
4. **Ask:** What was the pattern? (Answer: clap, stomp)
5. **Say:** Remember that it is only a pattern if it is repeated.
6. **Ask:** What does the word repeat mean? (Answer: When something is done the same way multiple times in a row.)

### Guided Practice (10 minutes)

1. **Say:** Now I will show you a new pattern. Watch carefully to spot the pattern. Once you spot the pattern, please join in.
2. Do the following: Clap, clap, slap knees.
3. Repeat the pattern until all pupils have joined in.
4. **Ask:** What was the pattern? (Answer: clap, clap, slap knees)
5. **Ask:** Who would like to share a pattern with the class?
6. Have all the pupils repeat the pattern the pupil created.
7. **Ask:** What was the pattern?
8. **Ask:** Who else would like to share a pattern with the class?
9. Have all the pupils repeat the pattern the pupil created.
10. **Ask:** What was the pattern?

### Independent Practice (12 minutes)




1. **Say:** Now you will work in pairs. Take turns sharing patterns with your partner. One of you will create a pattern and the other will join in when they figure out the pattern.

2. **Say:** Once you have each taken a turn showing a pattern, choose one pattern to add words to. Practise so you can show the class.

**Closing** (*6 minutes*)

1. Ask groups to come to the front of the class and show the patterns with sounds and words that they have created.

|  |   |                         |
|--|---|-------------------------|
| <b>Lesson Title:</b> Drawing Patterns for Number Sequences that Involve Addition | <b>Theme:</b> Algebra Number Pattern - Addition |                         |
| <b>Lesson Number:</b> M-01-127   | <b>Class/Level:</b> Class 1                     | <b>Time:</b> 35 minutes |

|  |  |  |
|--|--|--|
|  <b>Learning Outcomes</b><br>By the end of the lesson, pupils will be able to draw patterns for number sequences that involve addition. |  <b>Teaching Aids</b><br>None |  <b>Preparation</b><br>None |
|--|--|--|

### Opening (2 minutes)

- Say:** In the previous lesson we learnt how to recognise and make repeating patterns using sound. Today we will use numbers and addition to create patterns.

### Introduction to the New Material (5 minutes)

- Write the following on the board: 1, 2, 3, 4
- Say:** Here is an example of a number pattern involving addition.
- Say:** In this pattern, I have added 1 to each number.
- Say:** I'm going to draw a pattern that matches this number sequence.
- Draw:



- Say:** I have drawn 1 square, then 2 squares, then 3 squares, then 4 squares.
- Say:** The repeating pattern involving addition is to add 1.

### Guided Practice (10 minutes)

- Say:** Now we will complete the next pattern together.
- Write: 4 8 12 16
- Ask:** Can anyone tell me what the pattern is? (Answer: adding 4)
- Ask:** What is the next number in the pattern? (Answer: 20)
- Write 20 in the sequence.
- Say:** In this pattern we added 4 to the previous number to continue our pattern.
- Say:** I'm going to draw a pattern to match this number sequence. I'm going to use stars.
- Ask:** How many stars should I draw first? (Answer: 4)
- Draw 4 stars on the board.
- Ask:** How many stars should I draw next? (Answer: 8)
- Draw 8 stars on the board.
- Ask:** How many stars should I draw next? (Answer: 12)
- Draw 12 stars on the board.
- Ask:** Who would like to draw the last set of stars in my pattern?
- Ask:** How many stars should our friend draw next? (Answer: 16)
- Guide the pupil to draw 16 stars on the board.
- Say:** We've drawn a pattern to match our number sequence.

### Independent Practice (17 minutes)




- Say:** You will complete this activity on your own.

2. Write the following number sequences on the board:
  - a) 1, 3, 5, 7, 9 (Answer: adding 2)
  - b) 3, 6, 9, 12, 15 (Answer: adding 3)
  - c) 2, 5, 8, 11 (Answer: adding 3)
3. **Say:** Draw a pattern involving addition to match each number sequence.
4. **Say:** Work out what the pattern is for each number sequence.

**Closing** (1 minute)

1. **Say:** Today we learnt how to draw patterns to match number sequences.

|   |  |                         |
|---|--|-------------------------|
| <b>Lesson Title:</b> Multiplication by 2 as Repeating Addition Using Counters | <b>Theme:</b> Everyday Arithmetic - Multiplication |                         |
| <b>Lesson Number:</b> M-01-128  | <b>Class/Level:</b> Class 1                        | <b>Time:</b> 35 minutes |

|  |   |   |
|--|---|---|
|  <b>Learning Outcomes</b><br>By the end of the lesson, pupils will be able to multiply by 2 using counters and repeated addition. |  <b>Teaching Aids</b><br>Counters (beads/stones) |  <b>Preparation</b><br>Gather enough counters for each pupil to have 10. |
|--|---|---|

### Opening (1 minute)

1. **Say:** In the previous lesson we learnt about patterns. Patterns are a kind of multiplication.
2. **Say:** Today we will start learning about multiplication.

### Introduction to New Material (10 minutes)

1. **Say:** Multiplication is when a number is added to itself multiple times.
2. Write: 2.
3. **Say:** This is the number 2.
4. Hold up 2 fingers.
5. **Say:** Here are 2 more fingers.
6. Write:  $2 + 2 =$
7. **Say:** 2 plus 2 equals 4.
8. Write:  $2 + 2 = 4$
9. **Say:** Now that I have 4, I am going to add another 2.
10. Write:  $2 + 2 + 2 =$
11. **Say:** Now I will count the number of fingers we are holding up. 1, 2, 3, 4, 5, 6.
12. Write:  $2 + 2 + 2 = 6$
13. **Say:** What I am doing, adding the same number over and over, is called multiplication.
14. **Say:** A multiplication sum is written differently than an addition sum.

### Guided Practice (8 minutes)

1. **Say:** I will show you how multiplication works and how it is the same number over and over.
2. Hold two counters up.
3. **Say:** Here are 2 counters.
4. **Say:** Now I'm going to multiply the number of counters I have by 2.
5. Write:  $2 \times 2 =$
6. **Say:** This sum says I have 2 counters, 2 times.
7. **Ask:** How many counters do I have all together? (Answer: 4)
8. Write:  $2 \times 2 = 4$
9. **Say:**  $2 \times 2 = 4$
10. **Say:** Now I'm going to add another set 2 counters so that I have 2 counters, 3 times.
11. Write:  $2 \times 3 =$
12. **Say:** This sum says I have 2 counters, 3 times.

13. **Ask:** How many counters do I have all together? (Answer: 6)
14. Write:  $2 \times 3 = 6$
15. **Say:**  $2 \times 3 = 6$
16. **Say:** Now I'm going to add another set of 2 counters so that I have 2 counters, 4 times.
17. Write:  $2 \times 4 =$
18. **Say:** This sum says I have 2 counters, 4 times.
19. **Ask:** How many counters do I have all together? (Answer: 8)
20. Write:  $2 \times 4 = 8$
21. **Say:**  $2 \times 4 = 8$




**Independent Practice** (15 minutes)

1. Give 10 counters to each pupil.
2. **Say:** You will be working with a partner.
3. Write these sums on the board:
  - a.  $2 \times 2 =$  (Answer: 4)
  - b.  $2 \times 3 =$  (Answer: 6)
  - c.  $2 \times 4 =$  (Answer: 8)
  - d.  $2 \times 8 =$  (Answer: 16)
  - e.  $2 \times 7 =$  (Answer: 14)
  - f.  $2 \times 10 =$  (Answer: 20)
4. **Say:** Copy the sums onto your paper.
5. **Say:** Work with your partner and your counters to solve for each sum by placing the counters into sets and counting the total.
6. Walk around the class and assist when necessary.

**Closing** (1 minute)

1. **Say:** Today we learnt how to multiply by 2 using counters.
2. **Say:** In the next lesson we will learn how to multiply by 2 using objects.

|  |  |                         |
|--|--|-------------------------|
| <b>Lesson Title:</b> Multiplication by 2 as Repeating Addition Using Objects | <b>Theme:</b> Everyday Arithmetic - Multiplication |                         |
| <b>Lesson Number:</b> M-01-129   | <b>Class/Level:</b> Class 1                        | <b>Time:</b> 35 minutes |

|   |   |   |
|---|---|---|
|  <b>Learning Outcomes</b><br>By the end of the lesson, pupils will be able to multiply by 2 using objects and repeated addition. |  <b>Teaching Aids</b><br>20 leaves |  <b>Preparation</b><br>Gather 20 leaves. |
|---|---|---|

### Opening (1 minute)

1. **Say:** In the previous lesson we learnt how to multiply by 2 using objects.
2. **Say:** In today's lesson we will learn how to multiply by 2 using leaves.

### Introduction to the New Material (10 minutes)

1. **Say:** As you will remember, multiplication is when a number is added to itself multiple times.
2. Write: 2
3. **Say:** Here are 2 leaves.
4. Hold up 2 leaves and place them on the table.
5. **Say:** Here are 2 more leaves.
6. Hold them up and place them on the table apart from the first leaves.
7. Write:  $2 \times 2 =$
8. **Say:** Let's count how many we have. 1, 2, 3, 4.
9. Write:  $2 \times 2 = 4$
10. **Say:**  $2 \times 2 = 4$
11. **Say:** Now that I have 4, I am going to add another 2.
12. Place a third set of 2 leaves on the table.
13. Write:  $2 \times 3 =$
14. **Say:** Now I have 2 leaves, 3 times.
15. **Say:** I will count the number of leaves I have. 1, 2, 3, 4, 5, 6.
16. Write:  $2 \times 3 = 6$
17. **Say:**  $2 \times 3 = 6$

### Guided Practice (8 minutes)

1. **Say:** I will show you how multiplication works and how it is the same number over and over.
2. Hold 2 leaves up.
3. **Say:** Here are 2 leaves
4. **Say:** Now I'm going to multiply the number of leaves I have by 2.
5. Write:  $2 \times 2 =$
6. **Say:** This sum says I have 2 leaves, 2 times.
7. **Ask:** How many leaves do I have all together? (Answer: 4)
8. Write:  $2 \times 2 = 4$
9. **Say:**  $2 \times 2 = 4$

10. **Say:** Now I'm going to add another set of 2 leaves so that I have 2 leaves, 3 times.
11. Write:  $2 \times 3 =$
12. **Say:** This sum says I have 2 leaves, 3 times.
13. **Ask:** How many leaves do I have all together? (Answer: 6)
14. Write:  $2 \times 3 = 6$
15. **Say:**  $2 \times 3 = 6$
16. **Say:** Now I'm going to add another set of 2 leaves so that I have 2 leaves, 4 times.
17. Write:  $2 \times 4 =$
18. **Say:** This sum says I have 2 leaves, 4 times.
19. **Ask:** How many leaves do I have all together? (Answer: 8)
20. Write:  $2 \times 4 = 8$
21. **Say:**  $2 \times 4 = 8$

### **Independent Practice** (15 minutes)




1. **Say:** Now you will be working with a partner.
2. **Say:** We will have 5 minutes to go outside to collect leaves and stones to use. Collect 20 leaves or stones between you and your partner.
3. **Say:** When you hear my signal it is time to come back in.
4. Write these problems on the board:
  - a.  $2 \times 2 =$  (Answer: 4)
  - b.  $2 \times 3 =$  (Answer: 6)
  - c.  $2 \times 4 =$  (Answer: 8)
  - d.  $2 \times 5 =$  (Answer: 10)
  - e.  $2 \times 6 =$  (Answer: 12)
  - f.  $2 \times 7 =$  (Answer: 14)
  - g.  $2 \times 8 =$  (Answer: 16)
  - h.  $2 \times 9 =$  (Answer: 18)
  - i.  $2 \times 10 =$  (Answer: 20)
5. **Say:** Copy the sums onto your paper.
6. **Say:** Working with your partner and your stones, solve each sum by placing the stones into sets and counting the total.
7. Walk around the class and support pupils when.
8. Write the answers on the board.
9. **Say:** Check your answers. Give yourself a clap for each question you answered correctly.

### **Closing** (1 minute)

1. **Say:** Today we learnt how to multiply by 2 using objects.
2. **Say:** In the next lesson we will multiply by 4 using counters.



|   |  |                         |
|---|--|-------------------------|
| <b>Lesson Title:</b> Multiplication by 4 Using Counters | <b>Theme:</b> Everyday Arithmetic – Multiplication |                         |
| <b>Lesson Number:</b> M-01-130                          | <b>Class/Level:</b> Class 1                        | <b>Time:</b> 35 minutes |

|   |   |   |   |   |   |
|---|---|---|---|---|---|
|  | <b>Learning Outcomes</b><br>By the end of the lesson, pupils will be able to multiply by 4 using counters as repeated addition. |  | <b>Teaching Aids</b><br>20 counters (beads, stones) |  | <b>Preparation</b><br>Gather enough counters for each pupil to have 20. |
|---|---|---|---|---|---|

### Opening (2 minutes)

1. **Say:** We have learnt in an earlier lesson how to use counters to multiply by 2.
2. **Say:** Today we are going to practise using counters to multiply by 4.

### Introduction to the New Material (8 minutes)

1. Write:  $4 \times 5 =$
2. **Say:** This says 4 times 5 equals.
3. **Say:** I will use my objects to make 5 groups with 4 objects in each group.
4. Make 5 groups of 4 objects.
5. **Say:** Now I will count all the objects I have by 2s.
6. **Say:** 2, 4, 6, 8, 10, 12, 14, 16, 18, 20.
7. Write:  $4 \times 5 = 20$
8. **Say:**  $4 \times 5 = 20$
9. Write:  $4 \times 3 =$
10. **Say:** This says 4 times 3 equals.
11. **Say:** I will use my objects to make 3 groups with 4 objects in each group.
12. Make 3 groups of 4 objects.
13. **Say:** Now I will count all the objects I have by 2s.
14. **Say:** 2, 4, 6, 8, 10, 12.
15. Write:  $4 \times 3 = 12$
16. **Say:**  $4 \times 3 = 12$

### Guided Practice (10 minutes)

1. Give each pupil 20 counters.
2. **Say:** We will multiply together using the counters I have given you.
3. Write:  $4 \times 2 =$
4. **Say:** This says 4 times 2 equals.
5. **Say:** Begin by separating 4 counters from the rest. This is a group of 4. Now we will make 2 groups of 4.
6. **Say:** Separate another group of 4 counters.
7. **Ask:** How many counters do you have now? Count by 2s. (Answer: 8)
8. Write:  $4 \times 2 = 8$
9. **Say:**  $4 \times 2 = 8$
10. Write:  $4 \times 3 =$
11. **Say:** Now create 3 groups of 4.

12. **Ask:** How many counters do you have now? Count by 2s. (Answer: 12)
13. Write:  $4 \times 3 = 12$
14. **Say:**  $4 \times 3 = 12$
15. Write  $4 \times 5 =$
16. **Say:** Now create 5 groups of 4.
17. **Ask:** How many counters do you have now? Count by 2s. (Answer: 20)
18. Write:  $4 \times 5 = 20$
19. **Say:**  $4 \times 5 = 20$




**Independent Practice** (14 minutes)

1. Write the following sums on the board:
  - a.  $4 \times 3 =$  (Answer: 12)
  - b.  $4 \times 4 =$  (Answer: 16)
  - c.  $4 \times 5 =$  (Answer: 20)
  - d.  $4 \times 6 =$  (Answer: 24)
  - e.  $4 \times 2 =$  (Answer: 8)
2. **Say:** Write the sums in your book.
3. **Say:** Use your counters to solve the sums and write the answer to each problem.

**Closing** (1 minute)

1. **Say:** Today we practised using counters to multiply by 4s.
2. **Say:** In the next lesson we will learn to multiply by 4 using objects.

|  |  |                         |
|--|--|-------------------------|
| <b>Lesson Title:</b> Multiplication by 4 Using Objects | <b>Theme:</b> Everyday Arithmetic – Multiplication |                         |
| <b>Lesson Number:</b> M-01-131                         | <b>Class/Level:</b> Class 1                        | <b>Time:</b> 35 minutes |

|   |   |   |  |   |   |
|---|---|---|--|---|---|
|  | <b>Learning Outcomes</b><br>By the end of the lesson, pupils will be able to multiply by 4 using objects. |  | <b>Teaching Aids</b><br>Counters (beads, stones) |  | <b>Preparation</b><br>Gather 30 counters. |
|---|---|---|--|---|---|

### Opening (1 minute)

1. **Say:** We have learnt in an earlier lesson how to use counters to multiply by 4.
2. **Say:** Today we are going to practise using objects to multiply by 4.

### Introduction to the New Material (6 minutes)

1. Write:  $4 \times 6 =$
2. **Say:** This says 4 times 6 equals.
3. **Say:** I will use my objects to make 6 groups with 4 objects in each group.
4. Make 6 groups of 4 objects.
5. **Say:** Now I will count all the objects I have by 2s.
6. **Say:** 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24.
7. Write:  $4 \times 6 = 24$
8. **Say:**  $4 \times 6 = 24$
9. Write:  $4 \times 2 =$
10. **Say:** This says 4 times 2 equals.
11. **Say:** I will use my objects to make 2 groups with 4 objects in each group.
12. Make 2 groups of 4 objects.
13. **Say:** Now I will count all the objects I have by 2s.
14. **Say:** 2, 4, 6, 8.
15. Write:  $4 \times 2 = 8$
16. **Say:**  $4 \times 2 = 8$

### Guided Practice (15 minutes)

1. **Say:** We are now going to go outside for 3 minutes and gather small objects to help us with multiplication.
2. **Say:** Gather 20 small stones or small leaves each.
3. Take the pupils outside and give them 3 minutes to gather small objects and then take them back inside the classroom.
4. **Say:** Find a partner to work with.
5. **Say:** We will practice multiplying using the objects you and your partner have gathered.
6. Write:  $4 \times 2 =$
7. **Say:** 4 times 2 equals.
8. **Say:** Work with your partner to create 2 groups of 4 objects each.
9. **Ask:** How many objects do you have in total? Count by 2s. (Answer: 8)
10. Write:  $4 \times 4 =$

11. **Say:** 4 times 4 equals.
12. **Say:** Work with your partner to create 4 groups of 4 objects each.
13. **Ask:** How many objects do you have in total? Count by 2s. (Answer: 16)
14. Write:  $4 \times 5 =$
15. **Say:** 4 times 5 equals
16. **Say:** Work with your partner to create 5 groups of 4 objects each.
17. **Ask:** How many objects do you have in total? Count by 2s. (Answer: 20)
18. Write:  $4 \times 9 =$
19. **Say:** 4 times 9 equals
20. **Say:** Work with your partner to create 9 groups of 4 objects each.
21. **Ask:** How many objects do you have in total? Count by 2s (Answer: 36)




### **Independent Practice** (12 minutes)

1. Write the following sums on the board:
  - a.  $4 \times 9 =$  (Answer: 36)
  - b.  $4 \times 4 =$  (Answer: 16)
  - c.  $4 \times 7 =$  (Answer: 28)
  - d.  $4 \times 6 =$  (Answer: 24)
  - e.  $4 \times 2 =$  (Answer: 8)
  - f.  $4 \times 8 =$  (Answer: 32)
  - g.  $4 \times 5 =$  (Answer: 20)
  - h.  $4 \times 4 =$  (Answer: 16)
  - i.  $4 \times 10 =$  (Answer: 40)
2. **Say:** Write the sums in your book.
3. **Say:** Working with your partner, use the objects you collected to solve the sums and write the answer to each problem.

### **Closing** (1 minute)

1. **Say:** Today we practised multiplying by 4 using different objects.
2. **Say:** In the next lesson we will learn to multiply by 5 using counters.

|   |  |                         |
|---|--|-------------------------|
| <b>Lesson Title:</b> Multiplication by 5 Using Counters | <b>Theme:</b> Everyday Arithmetic – Multiplication |                         |
| <b>Lesson Number:</b> M-01-132                          | <b>Class/Level:</b> Class 1                        | <b>Time:</b> 35 minutes |

|   |  |   |  |   |   |
|---|--|---|--|---|---|
|  | <p><b>Learning Outcomes</b><br/>By the end of the lesson, pupils will be able to multiply by 5 using counters.</p> |  | <p><b>Teaching Aids</b><br/>1. 100 chart at the end of the plan.<br/>2. Counters (beads, stones)</p> |  | <p><b>Preparation</b><br/>1. Draw a 100 chart, at the end of the plan, on the board.<br/>2. Gather enough counters for each pupil to have 25.</p> |
|---|--|---|--|---|---|

### Opening (2 minutes)

1. **Say:** We learnt in our previous lessons how to multiply by 4 using counters and objects.
2. **Say:** Today we are going to practice using counters to multiply by 5.

### Introduction to the New Material (10 minutes)

1. **Say:** We will start with a review using the 100-chart to help us count by 5s.
2. **Say:** Say the number along with me. 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100.
3. **Say:** Now I will show you how to multiply by 5s.
4. Write:  $5 \times 3 =$
5. **Say:** This says 5 times 3 equals.
6. **Say:** I will use my objects to make 3 groups with 5 objects in each group.
7. Make 3 groups of 5 objects.
8. **Say:** Now I will count all the objects I have by 5s.
9. **Say:** 5, 10, 15
10. Write:  $5 \times 3 = 15$
11. **Say:**  $5 \times 3 = 15$
12. Write:  $5 \times 5 =$
13. **Say:** This says 5 times 5 equals.
14. **Say:** I will use my objects to make 5 groups with 5 objects in each group.
15. Make 5 groups of 5 objects.
16. **Say:** Now I will count all the objects I have by 5s.
17. **Say:** 5, 10, 15, 20, 25
18. Write:  $5 \times 5 = 25$
19. **Say:**  $5 \times 5 = 25$

### Guided Practice (10 minutes)

1. Give each pupil a handful of counters.
2. **Say:** Find a partner to work with.
3. Write:  $5 \times 2 =$
4. **Say:** 5 times 2 equals.
5. **Say:** Work with your partner to create 2 groups of 5 objects each.
6. **Ask:** How many objects do you have in total? Count by 5s. (Answer: 10)

7. Write:  $5 \times 4 =$
8. **Say:** 5 times 4 equals.
9. **Say:** Work with your partner to create 4 groups of 5 objects each.
10. **Ask:** How many objects do you have in total? Count by 5s. (Answer: 20)
11. Write:  $5 \times 6 =$
12. **Say:** 5 times 6 equals
13. **Say:** Work with your partner to create 6 groups of 5 objects each.
14. **Ask:** How many objects do you have in total? Count by 5s. (Answer: 30)

**Independent Practice** (14 minutes)

1. Write the following sums on the board:
  - a.  $5 \times 9 =$  (Answer: 45)
  - b.  $5 \times 4 =$  (Answer: 20)
  - c.  $5 \times 5 =$  (Answer: 25)
  - d.  $5 \times 2 =$  (Answer: 10)
  - e.  $5 \times 3 =$  (Answer: 15)
2. **Say:** Write the following sums in your book. Working with your partner, use the counters you have to solve the sums and write the answer to each sum.




**Closing** (1 minute)

1. **Say:** Today we practiced using counters to multiply by 5s.
2. **Say:** In the next lesson we will learn to multiply by 5s using objects.

[100 CHART]

|    |    |    |    |    |    |    |    |    |     |
|----|----|----|----|----|----|----|----|----|-----|
| 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 |

|  |  |                         |
|--|--|-------------------------|
| <b>Lesson Title:</b> Multiplication by 5 Using Objects | <b>Theme:</b> Everyday Arithmetic – Multiplication |                         |
| <b>Lesson Number:</b> M-01-133                         | <b>Class/Level:</b> Class 1                        | <b>Time:</b> 35 minutes |

|   |   |   |  |   |   |
|---|---|---|--|---|---|
|  | <b>Learning Outcomes</b><br>By the end of the lesson, pupils will be able to multiply by 5 using objects. |  | <b>Teaching Aids</b><br>Counters (beads, stones) |  | <b>Preparation</b><br>Gather 50 small counters. |
|---|---|---|--|---|---|

### Opening (1 minute)

1. **Say:** We have learnt in an earlier lesson how to use counters to multiply by 5.
2. **Say:** Today we are going to practise using objects to multiply by 5.

### Introduction to the New Material (6 minutes)

1. Write:  $5 \times 2 =$
2. **Say:** This says five times 2 equals.
3. **Say:** I will use my objects to make 2 groups with 5 objects in each group.
4. Make 2 groups of 5 objects.
5. **Say:** Now I will count all the objects I have by 5s.
6. **Say:** 5, 10.
7. Write:  $5 \times 2 = 10$
8. **Say:**  $5 \times 2 = 10$
9. Write:  $5 \times 6 =$
10. **Say:** This says 5 times 6 equals.
11. **Say:** I will use my objects to make 6 groups with 5 objects in each group.
12. Make 6 groups of 5 objects.
13. **Say:** Now I will count all the objects I have by 5s.
14. **Say:** 5, 10, 15, 20, 25, 30.
15. Write:  $5 \times 6 = 30$
16. **Say:**  $5 \times 6 = 30$

### Guided Practice (15 minutes)

1. **Say:** We are now going to go outside for 3 minutes and gather small objects to help us with multiplication.
2. **Say:** Gather 25 small stones or small leaves.
3. Take the pupils outside and give them 3 minutes to gather small objects and then take them back inside the classroom.
4. **Say:** Find a partner to work with.
5. **Say:** We will practice multiplying using the objects you and your partner have gathered.
6. Write:  $5 \times 3 =$
7. **Say:** 5 times 3 equals.
8. **Say:** Work with your partner to create 3 groups of 5 objects each.
9. **Ask:** How many objects do you have in total? Count by 5s. (Answer: 15)
10. Write:  $5 \times 4 =$

11. **Say:** 5 times 4 equals.
12. **Say:** Work with your partner to create 4 groups of 5 objects each.
13. **Ask:** How many objects do you have in total? Count by 5s. (Answer: 20)
14. Write:  $5 \times 5 =$
15. **Say:** 5 times 5 equals.
16. **Say:** Work with your partner to create 5 groups of 5 objects each.
17. **Ask:** How many objects do you have in total? Count by 5s. (Answer: 25)

### **Independent Practice** (12 minutes)




1. Write the following sums on the board:
  - a.  $5 \times 9 =$  (Answer: 45)
  - b.  $5 \times 4 =$  (Answer: 20)
  - c.  $5 \times 7 =$  (Answer: 35)
  - d.  $5 \times 6 =$  (Answer: 30)
  - e.  $5 \times 2 =$  (Answer: 10)
  - f.  $5 \times 8 =$  (Answer: 40)
  - g.  $5 \times 5 =$  (Answer: 25)
  - h.  $5 \times 3 =$  (Answer: 15)
  - i.  $5 \times 10 =$  (Answer: 50)
2. **Say:** Write the sums in your book.
3. **Say:** Working with your partner, use the objects you collected to solve the sums and write the answer to each sum.
4. Give pupils 11 minutes to work, then write the answers on the board.
5. **Say:** Check your partner's answers. Give them a clap for every question they answered correctly.

### **Closing** (1 minute)

1. **Say:** Today we practised multiplying by 5 using different objects.
2. **Say:** In the next lesson we will learn to multiply by 10 using counters.



|  |  |                         |
|--|--|-------------------------|
| <b>Lesson Title:</b> Multiplication by 10 Using Counters | <b>Theme:</b> Everyday Arithmetic - Multiplication |                         |
| <b>Lesson Number:</b> M-01-134                           | <b>Class/Level:</b> Class 1                        | <b>Time:</b> 35 minutes |

|   |   |   |  |   |   |
|---|---|---|--|---|---|
|  | <p><b>Learning Outcomes</b><br/>By the end of the lesson, pupils will be able to multiply by 10 using counters.</p> |  | <p><b>Teaching Aids</b><br/>1. 100 chart at the end of the plan.<br/>2. Counters (beads, stones)</p> |  | <p><b>Preparation</b><br/>1. Draw the 100 chart, at the end of the plan, on the board.<br/>2. Gather enough counters for each pupil to have 30.</p> |
|---|---|---|--|---|---|

### Opening (2 minutes)

1. **Say:** We have learnt in earlier lessons how to use counters to multiply by 2, 4 and 5.
2. **Say:** Today we are going to practice using counters to multiply by 10.

### Introduction to the New Material (6 minutes)

1. **Say:** We will start by using the 100 chart to help us learn how to multiply by 10.
2. **Say:** We start on 10. We add 10 more to 10.
3. Point to the numbers on the 100 chart.
4. **Say:** 11, 12, 13, 14, 15, 16, 17, 18, 19, 20.
5. **Say:** We are on 20. Then we add 10 more.
6. Point to the numbers on the 100 chart.
7. **Say:** 21, 22, 23, 24, 25, 26, 27, 28, 29, 30.
8. **Say:** We end up on 30. Then we add 10 more.
9. Point to the numbers on the 100 chart.
10. **Say:** 31, 32, 33, 34, 35, 36, 37, 38, 39, 40.
11. **Say:** We end up on 40.

### Guided Practice (10 minutes)

1. Give each pupil 30 counters.
2. **Say:** We will work in pairs to multiply together using the counters I have given you.
3. **Say:** Begin by separating 10 counters from the rest. This is a group of 10. Now we will make 2 groups of 10.
4. **Say:** Separate another group of 10 counters.
5. **Ask:** How many counters do you have now? (Answer: 20)
6. Write:  $10 \times 2 = 20$
7. **Say:** 2 groups of 10 equals 20.
8. **Say:** Now create 3 groups of 10.
9. **Ask:** How many counters do you have now? Count by 10s. (Answer: 30)
10. Write:  $10 \times 3 = 30$
11. **Say:** 3 groups of 10 = 30
12. **Say:** Now create 4 groups of 10.
13. **Ask:** How many counters do you have now? Count by 10s. (Answer: 40)
14. Write:  $10 \times 4 = 40$

### Independent Practice (16 minutes)

- Write the following sums on the board:
  - $10 \times 3 =$  (Answer: 30)
  - $10 \times 5 =$  (Answer: 50)
  - $10 \times 4 =$  (Answer: 40)
  - $10 \times 6 =$  (Answer: 60)
  - $10 \times 2 =$  (Answer: 20)
- Say:** Work with your partner. Write the sums in your books then use your counters to solve the sums and write the answer to each sum.
- Give pupils 15 minutes to work then write the answers on the board.
- Say:** Check your partner's answers. Give them a thumbs up if they worked well today.




### Closing (1 minute)

- Say:** Today we practised using counters to multiply by 10s.
- Say:** In the next lesson we will be multiplying by 10s using objects.

[100 CHART]

|    |    |    |    |    |    |    |    |    |     |
|----|----|----|----|----|----|----|----|----|-----|
| 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 |

|   |  |                         |
|---|--|-------------------------|
| <b>Lesson Title:</b> Multiplication by 10 Using Objects | <b>Theme:</b> Everyday Arithmetic – Multiplication |                         |
| <b>Lesson Number:</b> M-01-135                          | <b>Class/Level:</b> Class 1                        | <b>Time:</b> 35 minutes |

|   |  |   |  |   |  |
|---|--|---|--|---|--|
|  | <b>Learning Outcomes</b><br>By the end of the lesson, pupils will be able to multiply by 10 using objects. |  | <b>Teaching Aids</b><br>Counters (beads, stones) |  | <b>Preparation</b><br>Gather 30 small beads or stones. |
|---|--|---|--|---|--|

### Opening (1 minute)

1. **Say:** We have learnt in an earlier lesson how to use counters to multiply by 10.
2. **Say:** Today we are going to practise using objects to multiply by 10.

### Introduction to the New Material (6 minutes)

1. Write:  $10 \times 2 =$
2. **Say:** This says 10 times 2 equals.
3. **Say:** I will use my objects to make 2 groups with 10 objects in each group.
4. Make 2 groups of 10 objects.
5. **Say:** Now I will count all the objects I have by 10s.
6. **Say:** 10, 20
7. Write:  $10 \times 2 = 10$
8. **Say:**  $10 \times 2 = 10$
9. Write:  $10 \times 3 =$
10. **Say:** This says 10 times 3 equals.
11. **Say:** I will use my objects to make 3 groups with 10 objects in each group.
12. Make 3 groups of 10 objects.
13. **Say:** Now I will count all the objects I have.
14. **Say:** 10, 20, 30
15. Write:  $10 \times 3 = 30$
16. **Say:**  $10 \times 3 = 30$

### Guided Practice (15 minutes)

1. **Say:** We are now going to go outside for 3 minutes and gather small objects to help us with multiplication.
2. **Say:** Gather 50 small stones or small leaves.
3. Take the pupils outside and give them 3 minutes to gather small objects and then take them back inside the classroom.
4. **Say:** You will work in pairs.
5. **Say:** We will practice multiplying using the objects you and your partner have gathered.
6. Write:  $10 \times 4 =$
7. **Say:** 10 times 4 equals
8. **Say:** Work with your partner to create 4 groups of 10 objects each.
9. **Ask:** How many objects do you have in total? Count by 10s to find out. (Answer: 40)
10. Write:  $10 \times 6 =$

11. **Say:** 10 times 6 equals
12. **Say:** Work with your partner to create 6 groups of 10 objects each.
13. **Ask:** How many objects do you have in total? Count by 10s to find out. (Answer: 60)
14. Write:  $10 \times 5 =$
15. **Say:** 10 times 5 equals.
16. **Say:** Work with your partner to create 5 groups of 10 objects each.
17. **Ask:** How many objects do you have in total? Count by 10s to find out. (Answer: 50)




**Independent Practice** (12 minutes)

1. Write the following sums on the board:
  - a.  $10 \times 4 =$  (Answer: 40)
  - b.  $10 \times 3 =$  (Answer: 30)
  - c.  $10 \times 5 =$  (Answer: 50)
  - d.  $10 \times 2 =$  (Answer: 20)
  - e.  $10 \times 8 =$  (Answer: 80)
  - f.  $10 \times 10 =$  (Answer: 100)
2. **Say:** Write the sums in your book.
3. **Say:** In pairs, use the objects you collected to solve the sums and write the answer to each sum.
4. Give pupils 11 minutes to work, then write the answers on the board.
5. **Say:** Check your partner's answers. Show me with your fingers how many they got correct.

**Closing** (1 minute)

1. **Say:** Today we practised multiplying by 10 using different objects.
2. **Say:** In the next lesson we will learn about shapes.

|  |                                 |                         |
|--|---------------------------------|-------------------------|
| <b>Lesson Title:</b> Classify 2 and 3 Dimensional Shapes | <b>Theme:</b> Geometry - Shapes |                         |
| <b>Lesson Number:</b> M-01-136                           | <b>Class/Level:</b> Class 1     | <b>Time:</b> 35 minutes |

|   |  |   |   |   |   |
|---|--|---|---|---|---|
|  | <p><b>Learning Outcomes</b><br/>By the end of the lesson, pupils will be able to classify shapes that are 2-dimensional and shapes that are 3-dimensional.</p> |  | <p><b>Teaching Aids</b><br/>1. A range of paper shapes, for example a circle a triangle.<br/>2. A range of 3-dimensional items, for example can and a ball.</p> |  | <p><b>Preparation</b><br/>1. Cut out a range of paper shapes, for example a circle a triangle.<br/>2. Gather 3-dimensional items, for example can and a ball.</p> |
|---|--|---|---|---|---|

### Opening (2 minutes)

1. **Say:** We are now going to learn about shapes.
2. **Say:** Shapes can be 2-dimensional or 3-dimensional. We will learn the difference between the two today.

### Introduction to the New Material (4 minutes)

1. Hold up the paper shapes.
2. **Say:** These shapes are 2-dimensional. They are flat. All flat shapes are 2-dimensional.
3. Write: 2-dimensional
4. Hold up a ball.
5. **Say:** This ball is 3-dimensional. It is not flat. Objects that are not flat are 3-dimensional.
6. Hold up a piece of paper.
7. **Say:** This is a piece of paper. It is 2-dimensional. It is flat.
8. Hold up a can.
9. **Say:** This can is 3-dimensional. It is not flat. Objects that are not flat are 3-dimensional.

### Guided Practice (9 minutes)

1. Hold up a paper shape.
2. **Ask:** Is this 2-dimensional or 3-dimensional? (Answer: 2-dimensional)
3. **Ask:** Why? (Answer: It is flat.)
4. Hold up a 3-dimensional item.
5. **Ask:** Is this 2-dimensional or 3-dimensional? (Answer: 3-dimensional)
6. **Ask:** Why? (Answer: It is not flat.)
7. Hold up a 3-dimensional item.
8. **Ask:** Is this 2-dimensional or 3-dimensional? (Answer: 3-dimensional)
9. **Ask:** Why? (Answer: It is not flat.)
10. Hold up a paper shape.
11. **Ask:** Is this 2-dimensional or 3-dimensional? (Answer: 2-dimensional)
12. **Ask:** What is the difference between 2-dimensional and 3-dimensional objects? (Answer: 2-dimensional objects are flat, 3-dimensional objects are not flat.)




### **Independent Practice** (15 minutes)

1. **Say:** 2-dimensional can be written as 2D.
2. Write 2D on the board.
3. **Say:** 3-dimensional can be written as 3D.
4. Write 3D on the board.
5. **Say:** On one side of your paper, write 2D like here on the board.
6. **Say:** On the other side of your paper, write 3D like here on the board.
7. **Say:** We are going to be going outside the classroom to look for 2-dimensional and 3-dimensional objects.
8. **Say:** You will now be working with a partner for this activity.
9. **Say:** Write the name or draw a picture of 2 and 3 dimensional objects. Make sure you record the object on the correct side of the paper.
10. **Say:** Please do not go in any other classrooms. Stay where I can see you.
11. **Say:** When our time is up you will hear my signal to come back to the classroom.

### **Closing** (5 minutes)

1. **Ask:** What 2-dimensional items did you find?
2. Record pupils' answers on the board.
3. **Ask:** What 3-dimensional items did you find?
4. Record pupils' answers on the board.
5. **Say:** Well done. Tomorrow we will start to learn about different 2-dimensional shapes.

|   |                                 |                         |
|---|---------------------------------|-------------------------|
| <b>Lesson Title:</b> Circles and Triangles and their Properties | <b>Theme:</b> Geometry - Shapes |                         |
| <b>Lesson Number:</b> M-01-137                                  | <b>Class/Level:</b> Class 1     | <b>Time:</b> 35 minutes |

|  |  |   |
|--|--|---|
|  <p><b>Learning Outcomes</b><br/>By the end of the lesson, pupils will be able to identify and draw a triangle and a circle by tracing around a round object.</p> |  <p><b>Teaching Aids</b><br/>1. Paper circles and triangles.<br/>2. A range of different shaped items, for example cans, cups, boxes.</p> |  <p><b>Preparation</b><br/>1. Draw a circle on the board.<br/>2. Cut out enough paper triangles of different sizes for each pupil to have 1.<br/>3. Have a circle, a can, or a cup for each pupil to trace a circle round.<br/>4. Gather a range of different shaped items.</p> |
|--|--|---|

### Opening (5 minutes)

1. Point to the circle on the board.
2. **Ask:** Do you know what this is called? (Answer: A circle)
3. **Say:** A circle is a shape. We can find circles all around us.
4. **Ask:** Can you tell me where you have seen a circle before?
5. Write the pupils' answers on the board.
6. Draw a triangle on the board.
7. **Ask:** Do you know what this is called? (Answer: A triangle)
8. **Say:** A triangle is a shape. We can find triangles all around us.
9. **Ask:** Can you tell me where you have seen a triangle before?
10. Write the pupils' answers on the board.

### Introduction to the New Material (4 minutes)

1. Hold up a paper circle.
2. **Say:** The circle is a special shape in that it is one continuous line.
3. Demonstrate the continuous line by tracing your finger around the circle.
4. **Say:** The line never ends.
5. **Say:** A circle is round.
6. **Say:** Circles come in all sizes.
7. Hold up a paper triangle.
8. **Say:** The triangle is a special shape in that it has 3 straight lines.
9. Demonstrate the 3 straight lines by tracing your finger around the triangle.
10. **Say:** Each of the 3 lines are straight.
11. **Say:** A triangle has 3 corners.
12. **Say:** Triangles come in all sizes.
13. Today you will be learning how to identify and draw circles and triangles.

### Guided Practice (14 minutes)

1. Hold up an item that is NOT a circle.
2. **Ask:** Is this a circle? (Answer: No)

3. **Ask:** Why not? (Answer: It has straight lines or it is not round.)
4. Hold up an item that is a circle.
5. **Ask:** Is this a circle? (Answer: Yes)
6. **Ask:** Why is it a circle?
7. Hold up another item that is NOT a triangle.
8. **Ask:** Is this a triangle? (Answer: No)
9. **Ask:** Why not? (Answer: It does not have 3 straight sides.)
10. **Say:** You have just learned how to identify circles and triangles.
11. **Say:** Now you will create a circle along with me.
12. Hand a paper circle or a can or a cup to each pupil.
13. **Say:** Place your item on a piece of paper.
14. **Say:** Beginning at one spot, slowly and carefully trace around the outside of the circle until you reach the place where you started.
15. **Say:** Try to do this without lifting your pencil.
16. Once the pupils have completed this, you may **say:** You have just traced a circle!
17. Hand each pupil a paper triangle.
18. **Say:** I have a large triangle that I will use to show you how to trace. You each have your own triangle to trace with as well.
19. **Say:** Choose one point to start at. Trace the edge of the paper triangle from one point to the next.
20. Demonstrate tracing a straight line from one point to the next as the pupils draw their own lines.
21. **Say:** Now we will trace the second side.
22. Demonstrate tracing a line from one point to the next, forming the second side.
23. **Say:** Every triangle has 3 sides and 3 points, so we must now connect the last 2 points to form the triangle. Trace the last side and connect the last 2 points together.
24. Demonstrate tracing a straight line between the final 2 points.
25. **Say:** You have drawn a triangle. A triangle has 3 points and 3 sides.

### **Independent Practice** (10 minutes)




1. **Say:** Now it is time to work on your own. You will trace a circle and a triangle onto your paper. Try hard to trace the circle without lifting your pencil.
2. **Say:** When you have completed your circle and triangle, trade your shapes with a partner. Trace your new shapes on your paper.
3. **Say:** Keep trading circles and triangles with classmates and tracing new shapes until I say the time is up.
4. You will need to walk around the room and support pupils who are having trouble tracing.

### **Closing** (2 minutes)

1. **Ask:** What makes a circle special? (Answer: It has one continuous curved side.)
2. **Ask:** What makes a triangle special? (Answer: It has 3 straight sides and 3 points.)



|   |                                 |                         |
|---|---------------------------------|-------------------------|
| <b>Lesson Title:</b> Squares and their Properties | <b>Theme:</b> Geometry - Shapes |                         |
| <b>Lesson Number:</b> M-01-138                    | <b>Class/Level:</b> Class 1     | <b>Time:</b> 35 minutes |

|   |   |   |   |   |   |
|---|---|---|---|---|---|
|  | <p><b>Learning Outcomes</b></p> <p>By the end of the lesson, pupils will be able to identify and draw a square by tracing around a square object.</p> |  | <p><b>Teaching Aids</b></p> <ol style="list-style-type: none"> <li>1. A large paper square.</li> <li>2. Paper squares.</li> </ol> |  | <p><b>Preparation</b></p> <ol style="list-style-type: none"> <li>1. Cut out 1 large paper square.</li> <li>2. Cut out enough paper squares of different size for each pupil to have 1.</li> </ol> |
|---|---|---|---|---|---|

### Opening (5 minutes)

1. Begin by reminding the pupils that they are learning about shapes.
2. **Ask:** What shapes have we learned about in the previous lesson? (Answer: circles and triangles)
3. Tell the pupils that today they will be learning about squares.
4. **Ask:** Does anyone know what a square is?
5. **Say:** Squares are shapes with 4 points and 4 equal sides.
6. Hold up the paper squares that you have cut out.
7. Point out the 4 points.
8. Point out the 4 equal sides.
9. **Say:** Squares can be different sizes, but they all have 4 points and 4 equal sides.

### Introduction to the New Material (6 minutes)

1. Draw 4 dots on the board in the shape of a square.
2. **Say:** Squares have 4 corners and 4 equal sides. That means that each side measures exactly the same.
3. Connect the dots to make a square.
4. Count each side as you connect one dot to the next.
5. **Say:** The lines between the dots must be straight. They cannot be curved.
6. Draw 3 points on the board.
7. Connect the 3 points together.
8. **Ask:** Is this a square? (Answer: No)
9. **Ask:** Why is this not a square? (Answer: A square has 4 corners and 4 equal sides.)

### Guided Practice (7 minutes)

1. Instruct the pupils to open their exercise books or take out a piece of paper.
2. Hand each pupil a paper square.
3. **Say:** I have a large square that I will use to show you how to trace. You each have your own square to trace with as well.
4. **Say:** Choose one corner to start at. Trace the edge of the paper corner from one corner to the next.
5. Demonstrate tracing a straight line from one corner to the next as the pupils draw their own lines.
6. **Say:** Now we will trace the second side.
7. Demonstrate tracing a line from one corner to the next, forming the second side.

8. **Say:** Now we will trace the third side.
9. Demonstrate tracing a line from one corner to the next, forming the third side.
10. **Say:** Every square has 4 sides and 4 corners, so we must now connect the last 2 corners to form the square. Trace the last side and connect the last 2 corners together.
11. Demonstrate tracing a straight line between the final 2 corners.
12. **Say:** You have drawn a square. A square has 4 corners and 4 equal sides.




**Independent Practice** (15 minutes)

1. **Say:** Now it is your turn to create squares on your own.
2. **Say:** Trace your square 4 times, then find a classmate to trade paper squares with.
3. **Say:** Trace as many squares as you can to fill the page in your exercise book or to fill your paper.
4. **Say:** Make sure to take your time and do not hurry. Be accurate in your tracing, because if the 4 sides are not straight, it is not a square.
5. Walk around the room and support pupils needing help.
6. Ask pupils to hold up their work for you to see.

**Closing** (2 minutes)

1. **Ask:** How many corners does a square have? (Answer: 4)
2. **Ask:** How many sides does a square have? (Answer: 4)
3. **Ask:** What is very special about a square? (Answer: All 4 sides are equal.)

|  |                                 |                         |
|--|---------------------------------|-------------------------|
| <b>Lesson Title:</b> Rectangles and their Properties | <b>Theme:</b> Geometry - Shapes |                         |
| <b>Lesson Number:</b> M-01-139                       | <b>Class/Level:</b> Class 1     | <b>Time:</b> 35 minutes |

|   |  |   |   |   |   |
|---|--|---|---|---|---|
|  | <p><b>Learning Outcomes</b></p> <p>By the end of the lesson, pupils will be able to identify and draw rectangles by tracing around a rectangular object.</p> |  | <p><b>Teaching Aids</b></p> <ol style="list-style-type: none"> <li>1. A large paper rectangle.</li> <li>2. Paper rectangles.</li> </ol> |  | <p><b>Preparation</b></p> <ol style="list-style-type: none"> <li>1. 1 large paper rectangle.</li> <li>2. Cut out enough paper rectangles of different size for each pupil to have 1.</li> </ol> |
|---|--|---|---|---|---|

### Opening (5 minutes)

1. Begin by reminding the pupils that they are learning about shapes.
2. **Ask:** What shapes have we learned about in the previous lesson? (Answer: circle, triangle, and square)
3. Tell the pupils that today they will be learning about rectangles.
4. **Ask:** Does anyone know what a rectangle is?
5. **Say:** Rectangles are shapes with 4 points and 4 sides. Not all the sides have to be equal like in a square. Pairs of sides are equal.
6. Hold up a paper rectangle that you have cut out.
7. Point out the 4 points.
8. Point out the 2 pairs of equal sides.
9. **Say:** These 2 sides are the same and these 2 sides are the same.
10. **Say:** Rectangles can be different sizes, but they all have 4 points and 4 sides. 2 pairs of sides that are equal, but not all 4 sides have to be equal.

### Introduction to the New Material (6 minutes)

1. Draw 4 dots on the board in the shape of a rectangle.
2. **Say:** Rectangles have 4 points and 4 sides.
3. Connect the dots to make a rectangle.
4. Count each side as you connect one dot to the next.
5. **Say:** The lines between the dots must be straight. They cannot be curved.
6. Label each side 1 – 4.
7. **Say:** There are 2 pairs of equal sides, but not all sides have to be equal.
8. Point to the sides that are equal and state the number of the sides. For example: Sides 1 and 3 are equal, and sides 2 and 4 are equal.
9. Draw 4 more dots on the board in the shape of a rectangle.
10. **Say:** As I said earlier, rectangles have 4 points and 4 sides.
11. Connect the dots to make a rectangle.
12. Count each side as you connect one dot to the next.
13. **Say:** The lines between the dots must be straight. They cannot be curved.
14. Label each side 1 – 4.
15. **Say:** There are 2 pairs of equal sides but not all sides are equal.
16. Point to the sides that are equal and state the number of the sides. For example: Sides 1 and 3 are equal, and sides 2 and 4 are equal.

### **Guided Practice** (7 minutes)

1. Instruct the pupils to open their exercise books or take out a piece of paper.
2. Hand each pupil a paper rectangle.
3. **Say:** I have a large rectangle that I will use to show you how to trace. You each have your own rectangle to trace with as well.
4. **Say:** Choose one corner to start at. Trace the edge of the paper corner from one corner to the next.
5. Demonstrate tracing a straight line from one corner to the next as the pupils draw their own lines.
6. **Say:** Now we will trace the second side.
7. Demonstrate tracing a line from one corner to the next, forming the second side.
8. **Say:** Now we will trace the third side.
9. Demonstrate tracing a line from one corner to the next, forming the third side.
10. **Say:** Every rectangle has 4 sides and 4 corners, so we must now connect the last 2 corners to form the rectangle. Trace the last side and connect the last 2 corners together.
11. Demonstrate tracing a straight line between the final 2 corners.
12. **Say:** You have drawn a rectangle. A rectangle has 4 corners and 2 pairs of straight equal sides.




### **Independent Practice** (15 minutes)

1. **Say:** Now it is your turn to create rectangles on your own.
2. **Say:** Trace your rectangle 4 times, then find a classmate to trade paper rectangles with.
3. **Say:** Trace as many rectangles as you can to fill the page in your notebook or to fill your paper.
4. **Say:** Make sure to take your time and do not hurry. Be accurate in your tracing.
5. Walk around the room and support pupils needing help.
6. Ask pupils to hold up their work for you to see.

### **Closing** (2 minutes)

1. **Ask:** How many corners does a rectangle have? (Answer: 4)
2. **Ask:** How many sides does a rectangle have? (Answer: 4)
3. **Ask:** How many pairs of equal sides are there? (Answer: 2)
4. **Say:** Tomorrow we will revise squares and rectangles so that we all understand them very well.

|  |                                 |                         |
|--|---------------------------------|-------------------------|
| <b>Lesson Title:</b> Rectangles and Squares and their Properties | <b>Theme:</b> Geometry - Shapes |                         |
| <b>Lesson Number:</b> M-01-140                                   | <b>Class/Level:</b> Class 1     | <b>Time:</b> 35 minutes |

|   |  |   |   |   |   |
|---|--|---|---|---|---|
|  | <p><b>Learning Outcomes</b><br/>By the end of the lesson, pupils will be able to identify and draw rectangles and squares.</p> |  | <p><b>Teaching Aids</b><br/>1. A large paper rectangle and square.<br/>2. Paper rectangles and squares.</p> |  | <p><b>Preparation</b><br/>1. Cut out a large paper rectangle and square.<br/>2. Cut out enough paper squares and rectangles of different size for each pupil to have 1 of each.</p> |
|---|--|---|---|---|---|

### Opening (1 minute)

1. Begin by reminding the pupils that they are learning about shapes.
2. **Ask:** What shapes have we learnt about in the previous lessons? (Answer: circle, triangle, square and rectangles)
3. Tell the pupils that today they will be practising drawing squares and rectangles.

### Introduction to the New Material (10 minutes)

1. **Say:** Rectangles and squares are quite similar.
2. **Ask:** What makes a square special? (Answer: A square has 4 equal sides)
3. **Say:** Squares are shapes with 4 corners and 4 equal sides.
4. Hold up a paper square that you have cut out.
5. Point out the 4 corners.
6. Point out the 4 equal sides.
7. **Say:** These 4 sides are all the same.
8. **Say:** Squares can be different sizes, but they all have 4 corners and 4 equal sides.
9. **Ask:** What makes a rectangle special? (Answer: A rectangle has 2 pairs of equal sides)
10. **Say:** Rectangles are shapes with 4 corners and 4 sides. Not all the sides have to be equal like in a square. Pairs of sides are equal.
11. Hold up a paper rectangle that you have cut out.
12. Point out the 4 corners.
13. Point out the 2 pairs of equal sides.
14. **Say:** These 2 sides are the same and these 2 sides are the same.
15. **Say:** Rectangles can be different sizes, but they all have 4 corners and 4 sides. 2 pairs of sides that are equal, but not all 4 sides have to be equal.

### Guided Practice (7 minutes)

1. Instruct the pupils to open their exercise books or take out a piece of paper.
2. Hand each pupil a paper rectangle and a paper square.
3. **Say:** Hold up your rectangle.
4. **Ask:** How many sides does it have? (Answer: 4)
5. **Say:** Hold up your square.
6. **Ask:** How many sides does it have? (Answer: 4)

7. **Say:** Check to see that the person sitting next to you is holding a square. Remember a square has 4 equal sides.
8. **Say:** Now we are going to play a game. I am going to say the name of a shape and you must quickly hold it up. I am going to be saying the names of shapes very quickly, so listen carefully!
9. Call out 'rectangle' or 'square' randomly and have pupils hold up the correct shape.




#### **Independent Practice** (15 minutes)

1. **Say:** Now it is your turn to create rectangles and squares on your own.
2. **Say:** Draw a line down the middle of your page.
3. **Say:** On one side write rectangle.
4. **Say:** On the other side write square.
5. **Say:** Use your paper shapes to trace rectangles and squares on the correct side of your page.
6. **Say:** Trace as many rectangles and squares as you can to fill the page in your notebook or to fill your paper.
7. **Say:** Make sure to take your time and do not hurry. Be accurate in your tracing and make sure you draw the shapes on the correct side of your paper.
8. Walk around the room and support pupils needing help.
9. Ask pupils to hold up their work for you to see.

#### **Closing** (2 minutes)

1. **Ask:** How many corners does a rectangle have? (Answer: 4)
2. **Ask:** How many sides does a rectangle have? (Answer: 4)
3. **Ask:** How many pairs of equal sides does a rectangle have? (Answer: 2)
4. **Ask:** How many corners does a square have? (Answer: 4)
5. **Ask:** How many sides does a square have? (Answer: 4)
6. **Ask:** How many equal sides does a square have? (Answer: 4)

|  |                                 |                         |
|--|---------------------------------|-------------------------|
| <b>Lesson Title:</b> Classify 2 Dimensional Shapes Outside the Classroom | <b>Theme:</b> Geometry - Shapes |                         |
| <b>Lesson Number:</b> M-01-141   | <b>Class/Level:</b> Class 1     | <b>Time:</b> 35 minutes |

|  |  |  |
|--|--|--|
|  <b>Learning Outcomes</b><br>By the end of the lesson, pupils will be able to find and classify 2-dimensional shapes outside the classroom. |  <b>Teaching Aids</b><br>None |  <b>Preparation</b><br>None |
|--|--|--|

### Opening (2 minutes)

1. **Say:** In the last few lessons we have learnt about 2 dimensional shapes and their properties.
2. **Say:** Today we are going to search for and classify shapes outside the classroom.

### Introduction to the New Material (4 minutes)

1. **Ask:** What are the shapes we have learned about in the last few lessons? (Answer: circle, triangle, square, rectangle)
2. **Ask:** What are the characteristics of a circle? (Answer: A circle is round. It is made by one continuous line.)
3. **Ask:** What are the characteristics of a triangle? (Answer: A triangle has 3 points and 3 sides.)
4. **Ask:** What are the characteristics of a square? (Answer: A square has 4 corners and 4 equal sides.)
5. **Ask:** What are the characteristics of a rectangle? (Answer: A rectangle has 4 corners and 4 sides. 2 pairs of sides are equal, but not all 4 sides have to be equal.)
6. **Say:** Now that we have reviewed the characteristics of our shapes, we can go outside and look for shapes.

### Guided Practice (5 minutes)

1. Take the pupils outside the classroom to a central location. Make sure they bring a pencil and paper.
2. Find an object that has a familiar shape.
3. **Say:** \_\_\_\_\_ is in the shape of a \_\_\_\_\_. It has \_\_\_\_\_ (describe characteristics).
4. Find another object that has a familiar shape.
5. **Say:** \_\_\_\_\_ is in the shape of a \_\_\_\_\_. It has \_\_\_\_\_ (describe characteristics).

### Independent Practice (22 minutes)

1. **Say:** You will now work with a partner to find items in familiar 2-dimensional shapes. You must stay where I can see you.
2. **Say:** When you find an item in a familiar 2-dimensional shape, draw the item and write the name of the shape and the name of the item if you know it.
3. **Say:** Keep searching for shapes until I give you the signal it is time to go back to the classroom.
4. Walk around and support pupils when needed by pointing out objects in familiar shapes.




5. Give pupils 20 minutes to look for shapes, then ask them to return to the classroom.
6. Ask 4 volunteers to share some of the shapes they found and describe the characteristics of the shape.

**Closing** (*2 minutes*)

1. **Say:** Today we went on a hunt for shapes in our environment.
2. **Say:** In our next lesson we will use our creativity to add shapes into art.



|   |                                 |                         |
|---|---------------------------------|-------------------------|
| <b>Lesson Title:</b> Making Drawings Using Triangles, Squares, Rectangles and Circles | <b>Theme:</b> Geometry - Shapes |                         |
| <b>Lesson Number:</b> M-01-142  | <b>Class/Level:</b> Class 1     | <b>Time:</b> 35 minutes |

|   |   |   |   |   |   |
|---|---|---|---|---|---|
|  | <p><b>Learning Outcomes</b><br/>By the end of the lesson, pupils will make drawings using triangles, squares, rectangles and circles.</p> |  | <p><b>Teaching Aids</b><br/>Sticks for each pupil</p> |  | <p><b>Preparation</b><br/>Gather enough sticks for each pupils to have 1.</p> |
|---|---|---|---|---|---|

### Opening (2 minutes)

1. **Say:** In the last few lessons we have learnt about 2-dimensional shapes.
2. **Say:** Today we are going to get creative and make drawings using our shapes.

### Introduction to the New Material (4 minutes)

1. **Ask:** What are the shapes we have learned about in the last few lessons? (Answers: square, triangles, rectangles, circles)
2. Write pupil answers on the board then draw each shape.
3. **Say:** We are going to use these shapes to create pictures.

### Guided Practice (12 minutes)

1. **Say:** Using the shapes we have learnt about, create a picture of whatever you would like on your paper or in your book.
2. **Say:** Maybe you will want to draw a picture of your family made out of different shapes. You could use circles for their heads, squares and triangles for their bodies and rectangles for their arms and legs.
3. **Say:** Maybe you will want to draw a picture of a tree made out of different shapes. You could use a rectangle for the trunk, circles for the leaves and triangles for the fruit hanging in the tree.
4. **Say:** It is up to you what you draw, but you must use the shapes we have been learning about.
5. Give pupils 10 minutes to draw.
6. Ask pupils to hold up their work for you to see.
7. **Say:** Point to a circle you used in your picture.
8. **Say:** Point to a square you used in your picture.
9. **Say:** Point to a triangle you used in your picture.
10. **Say:** Point to a rectangle you used in your picture.

### Independent Practice (15 minutes)




1. **Say:** Now we're going to go outside and create more shape art.
2. **Say:** You may use whatever you find to create shapes and art that contains shapes.
3. **Say:** Maybe you'll want to use a stick to draw shapes in the dirt.
4. **Say:** Maybe you will want to create shapes with rocks or sticks or leaves.
5. **Say:** Just remember to stay where I can see you and do not touch anyone else's work unless they say it is okay.

6. **Say:** When it is time to go in I will give you the signal.

**Closing** (2 minutes)

1. **Say:** Today we used creativity using shapes to make art.
2. **Say:** In our next lesson, we will begin learning more about 3-dimensional shapes.

|   |                                    |                         |
|---|------------------------------------|-------------------------|
| <b>Lesson Title:</b> Cylinders, Spheres, and Their Properties | <b>Theme:</b> Geometry – 3D Shapes |                         |
| <b>Lesson Number:</b> M-01-143                                | <b>Class/Level:</b> Class 1        | <b>Time:</b> 35 minutes |

|   |   |   |  |  |   |
|---|---|---|--|--|---|
|  | <p><b>Learning Outcomes</b><br/>By the end of the lesson, pupils will be able to identify cylinders, spheres and their simple properties.</p> |  | <p><b>Teaching Aids</b><br/>1. A cylinder and a sphere.<br/>2. Shapes that are not cylinders or spheres.</p> |  | <p><b>Preparation</b><br/>1. Gather items that are cylinders and spheres.<br/>2. Gather items that are not in the shape of cylinders and spheres.</p> |
|---|---|---|--|--|---|

### Opening (2 minutes)

1. **Say:** In our previous lesson we created art, using circles, triangles, squares and rectangles.
2. **Say:** Today we are going to learn about cylinders and spheres. They are 3-dimensional objects.
3. **Say:** 3-dimensional objects are objects that are not flat.

### Introduction to the New Material (6 minutes)

1. Draw a rectangle on the board.
2. **Ask:** Do you know what this is called? (Answer: rectangle)
3. Draw a circle on the board.
4. **Ask:** Do you know what this is called? (Answer: circle)
5. **Say:** Rectangles and circles together make a new shape.
6. Hold up a cylinder.
7. **Say:** This is a cylinder. It is a 3-dimensional object.
8. **Say:** A cylinder has 3 sides or faces. One circle on the top and one on the bottom. Then a rectangle is wrapped around and connected end to end.
9. Draw a circle on the board.
10. **Ask:** What is this called? (Answer: A circle)
11. Hold up a sphere.
12. **Say:** This is a sphere. It is a 3-dimensional object.

### Guided Practice (8 minutes)

1. Hold up an item that is not a cylinder.
2. **Ask:** Is this a cylinder? (Answer: No)
3. **Ask:** Why not? (Answer: A cylinder is made up of a rectangle and 2 circles.)
4. Hold up an item that is a cylinder.
5. **Ask:** Is this a cylinder? (Answer: Yes)
6. **Ask:** Why is it a cylinder? (Answer: A cylinder is made up of a rectangle and 2 circles.)
7. Hold up various objects and ask students to identify if they are or are not cylinders.
8. **Say:** Cylinders are made up of a rectangle and 2 circles.
9. Hold up an item that is not a sphere.
10. **Ask:** Is this a sphere? (Answer: No)
11. **Ask:** Why not? (Answer: A sphere is perfectly round. It has no edges or points.)
12. Hold up an item that is a sphere.
13. **Ask:** Is this a sphere? (Answer: Yes)
14. **Ask:** Why is it a sphere? (Answer: It is perfectly round. It has no edges or points.)
15. Hold up various objects and ask students to identify if they are or are not spheres.




**Independent Practice** (13 minutes)

1. **Say:** Find a partner and sit together somewhere in the room.
2. **Say:** Talk about the characteristics of cylinders and spheres.
3. **Say:** Think of all the cylinders and spheres you have seen. Draw all the cylinders and spheres you can think of on your piece of paper.

**Closing** (6 minutes)

1. **Ask:** Can you name the cylinders and spheres you and your partner came up with?
2. Write the answers on the board.
3. **Say:** Today we learnt about cylinders and spheres and how to identify them.
4. **Say:** In the next lesson, we will learn about cubes and cuboids and how to identify them.

|   |                                 |                         |
|---|---------------------------------|-------------------------|
| <b>Lesson Title:</b> Cubes, Cuboids, and their Properties | <b>Theme:</b> Geometry – Shapes |                         |
| <b>Lesson Number:</b> M-01-144                            | <b>Class/Level:</b> Class 1     | <b>Time:</b> 35 minutes |

|   |   |   |  |   |   |
|---|---|---|--|---|---|
|  | <p><b>Learning Outcomes</b><br/>By the end of the lesson, pupils will be able to identify cubes, cuboids and their simple properties.</p> |  | <p><b>Teaching Aids</b><br/>1. A cube and a cuboid.<br/>2. Shapes that are not cubes or cuboids.</p> |  | <p><b>Preparation</b><br/>1. Gather items that cubes and cuboids.<br/>2. Gather items that are not in the cubes or cuboids.</p> |
|---|---|---|--|---|---|

### Opening (2 minutes)

- Say:** In a previous lesson we learnt about cylinders and spheres and their properties.
- Say:** Today we are going to learn about cubes and cuboids. They are both 3-dimensional objects. When cubes are flat, they are squares. When cuboids are flat they are rectangles.

### Introduction to the New Material (8 minutes)

- Draw a square on the board.
- Ask:** Do you know what this is called? (Answer: square)
- Say:** A square is a 2-dimensional shape. We can find squares all around us.
- Ask:** Can you tell me where you have seen a square before?
- Write the pupils' answers on the board.
- Hold up a cube.
- Say:** This is a cube. It is a 3-dimensional object.
- Say:** A cube has 6 sides or faces. Each side has a square on it. A cube also has 8 corners.
- Draw a rectangle on the board.
- Ask:** Do you know what this is called? (Answer: rectangle)
- Say:** A rectangle is a 2-dimensional shape. We can find rectangles all around us.
- Ask:** Can you tell me where you have seen a rectangle before?
- Write the pupils' answers on the board.
- Hold up a cuboid.
- Say:** This is a cuboid. It is a 3-dimensional object.
- Say:** A cuboid has 6 sides or faces. 6 sides are rectangles. A cuboid also has 8 corners.

### Guided Practice (8 minutes)

- Say:** Let's learn more about cubes.
- Hold up an item that is not a cube.
- Ask:** Is this a cube? (Answer: No)
- Ask:** Why not? (Answer: A cube has 6 sides. Each side has a square on it. A cube also has 8 corners.)
- Hold up an item that is a cube.
- Ask:** Is this a cube? (Answer: Yes)
- Ask:** Why is it a cube? (Answer: A cube has 6 sides. Each side has a square on it. A cube also has 8 corners.)

8. Hold up various objects and ask pupils to identify if they are or are not cubes.
9. Remind students that cubes have 6 sides. Each side has a square on it. A cube also has 8 corners.
10. **Say:** Let's learn more about cuboids.
11. Hold up an item that is not a cuboid.
12. **Ask:** Is this a cuboid? (Answer: No)
13. **Ask:** Why not? (Answer: A cuboid has 6 sides. Each side has a rectangle on it. A cuboid also has 8 corners.)
14. Hold up an item that is a cuboid.
15. **Ask:** Is this a cuboid? (Answer: Yes)
16. **Ask:** Why is it a cuboid? (Answer: A cuboid has 6 sides. Each side has a rectangle on it. A cuboid also has 8 corners.)
17. Hold up various objects and ask students to identify if they are or are not cuboids.
18. **Say:** Cuboids have 6 sides. Each side has a rectangle on it. A cuboid also has 8 corners.




### **Independent Practice** (11 minutes)

1. **Say:** Find a partner and sit together somewhere in the room.
2. **Say:** Think about the characteristics of a cube (A cube has 6 sides. Each side has a square on it. A cube also has 8 corners.)
3. **Say:** Write all the cubes you can think of on your piece of paper.
4. **Say:** Once you have finished writing all the cubes you can think of you may move on to cuboids.
5. **Say:** Think about the characteristics of a cuboid (A cuboid has 6 sides. Each side has a rectangle on it. A cuboid also has 8 corners.)
6. **Say:** Write all the cuboids you can think of on your piece of paper.

### **Closing** (6 minutes)

1. **Ask:** Can you name the cubes you and your partner came up with?
2. Write the answers on the board.
3. **Ask:** Can you name the cuboids you and your partner came up with?
4. Write the answers on the board.
5. **Say:** Today we learnt about cubes and cuboids and how to identify them.

|   |                                 |                         |
|---|---------------------------------|-------------------------|
| <b>Lesson Title:</b> Making up Stories Involving 2 and 3 Dimensional Shapes | <b>Theme:</b> Geometry - Shapes |                         |
| <b>Lesson Number:</b> M-01-145  | <b>Class/Level:</b> Class 1     | <b>Time:</b> 35 minutes |

|  |   |   |
|--|---|---|
|  <b>Learning Outcomes</b><br>By the end of the lesson, pupils will be able to make up stories involving 2 and 3 dimensional shapes. |  <b>Teaching Aids</b><br>The 'Shape Story' at the end of the plan. |  <b>Preparation</b><br>Write the 'Shape Story' at the end of the plan, on the board. |
|--|---|---|

### Opening (1 minute)

1. **Say:** We have been learning all about 2 dimensional and 3 dimensional shapes.
2. **Say:** Today we are going to make up stories about shapes.

### Introduction to the New Material (5 minutes)

1. **Say:** I am going to share a shape story with you.
2. Read 'Shapes'.

### Guided Practice (5 minutes)

1. **Ask:** What are some of the 2-dimensional shapes we know? (Answer: circles, triangles, rectangles, squares)
2. Write pupil responses on the board.
3. **Ask:** What are some of the 3-dimensional shapes we know? (Answer: spheres, cylinders, cubes, cuboids)
4. Write pupil responses on the board.

### Independent Practice (14 minutes)

1. **Say:** You are now going to work with a partner to make up a story involving 2 and 3 dimensional shapes.
2. **Say:** Take turns adding to the story.

### Closing (10 minutes)

1. **Ask:** Who would like to share their shape stories with the class?
2. Call on pairs of pupils to tell their stories to the class.




[STORY SHAPE]

By: *Shel Silverstein*

A square was sitting quietly  
Outside his rectangular shack  
When a triangle came down- *kerplunk!*-  
And struck him in the back.  
'I MUST GO TO THE HOSPITAL,'  
Cried the wounded square,  
So a passing rolling circle  
Picked him up and took him there.



|  |   |                         |
|--|---|-------------------------|
| <b>Lesson Title:</b> Buying and Selling Using Counters | <b>Theme:</b> Everyday Arithmetic - Money |                         |
| <b>Lesson Number:</b> M-01-146                         | <b>Class/Level:</b> Class 1               | <b>Time:</b> 35 minutes |

|  |  |  |
|--|--|--|
|  <p><b>Learning Outcomes</b><br/>By the end of the lesson, pupils will be able to buy and sell using counters as currency using numbers 1 – 10.</p> |  <p><b>Teaching Aids</b><br/>1. Counters (stones, bead)<br/>2. Paper money (in denominations of 5 and 10)<br/>3. Items that can be bought at the market or in a shop.</p> |  <p><b>Preparation</b><br/>1. Gather enough single counters for each pupil to have 10.<br/>2. Make paper money in denominations of 5 and 10, enough for each pair to have 2 5s and 2 10s.<br/>3. Gather items that can be used when buying and selling.</p> |
|--|--|--|

### Opening (5 minute)

1. **Ask:** How many of you go to the market or the shop to purchase items by yourself or with an adult?
2. **Ask:** What do you buy at the market or shop?
3. **Say:** Today we will be practising buying and selling.
4. **Say:** In Sierra Leone, our money uses very big numbers. Today we will practise using small numbers to get used to buying and selling.

### Introduction to the New Material (5 minutes)

1. **Say:** I am going to demonstrate how to buy an item using exact change.
2. **Say:** I have play money in coins and paper bills in denominations of 5 and 10.
3. **Say:** I would like to buy a lime.
4. **Say:** The cost is 3.
5. **Say:** I am going to pay with three single counters.
6. **Say:** 1, 2, 3.
7. **Say:** I will give the shopkeeper 3 single counters.
8. **Say:** I would now like to buy bananas.
9. **Say:** The cost is 8 for a bunch of bananas.
10. **Say:** I am going to pay with a paper 5 bill and three single counters.
11. **Say:** 1, 2, 3, 4, 5 for the paper 5 and 1, 2, 3 single counters. That makes 8.
12. **Say:** I will give the shopkeeper 8.

### Guided Practice (10 minutes)

1. **Ask:** Who would like to help me with the next problem?
2. Choose a pupil with hand raised to come to the front to help you demonstrate.
3. **Say:** \_\_\_\_\_ (pupil's name) is going to be the shopkeeper.
4. **Say:** I am going to buy 3 cucumbers. 3 cucumbers cost 6 total.
5. Write: 3 cucumbers = 6

6. **Say:** I am going to give \_\_\_\_\_ (pupil's name) a paper bill that says 5 and 1 single counter.
7. **Say:** \_\_\_\_\_ (pupil's name) can you count how much I have given you?
8. The pupil should count 1, 2, 3, 4, 5, 6.
9. **Ask:** Is 6 correct? (Answer: Yes)
10. **Say:** The cucumbers cost 6 and I gave \_\_\_\_\_ (pupil's name) 6.
11. **Say:** We will demonstrate another problem.
12. **Say:** I am going to buy 4 sweet potatoes. Each sweet potato costs 2.  $4 \text{ times } 2 = 8$
13. Write:  $4 \text{ sweet potatoes} = 8$
14. **Say:** I am going to give \_\_\_\_\_ (pupil's name) a paper bill that says 5 and 3 singles.
15. **Say:** \_\_\_\_\_ (pupil's name) please count out loud how much I have given you.
16. The pupil should count 1, 2, 3, 4, 5, 6, 7, 8.
17. **Ask:** Is 8 correct? (Answer: Yes)
18. **Say:** The sweet potatoes cost 8 and I gave \_\_\_\_\_ (pupil's name) 6.




### **Independent Practice** (14 minutes)

1. Hand each pair at least 20 single counters, 2 paper 5s and 2 paper 10s.
2. **Say:** You are now going to work with a partner. You are going to take turns playing the role of buyer and shopkeeper.
3. **Say:** The buyer will tell the shopkeeper what they want to buy.
4. **Say:** The shopkeeper will tell the buyer the price – which must be less than 10.
5. **Say:** The buyer will pay the shopkeeper the exact amount.
6. **Say:** The shopkeeper will count to make sure the amount is correct.
7. **Say:** Take turns as buyer and shopkeeper.

### **Closing** (1 minute)

1. **Say:** Today we learnt how to buy and sell using single and paper counters up to 10.
2. **Say:** In the next lesson we will practise buying and selling using counters up to 20.

|  |   |                         |
|--|---|-------------------------|
| <b>Lesson Title:</b> Buying and Selling Using Counters | <b>Theme:</b> Everyday Arithmetic - Money |                         |
| <b>Lesson Number:</b> M-01-147                         | <b>Class/Level:</b> Class 1               | <b>Time:</b> 35 minutes |

|  |  |   |
|--|--|---|
|  <p><b>Learning Outcomes</b><br/>By the end of the lesson, pupils will be able to buy and sell using counters as currency using numbers 1 – 20.</p> |  <p><b>Teaching Aids</b><br/>1. Counters (stones, beads)<br/>2. Paper money in denominations of 5, 10 and 20.<br/>3. Items that can be bought at the market or in a shop.</p> |  <p><b>Preparation</b><br/>1. Gather enough single counters for each pupil to have 10.<br/>2. Paper money in denominations of 5, 10 and 20, enough for each pair to have 2 5s, 2 10s, and 2 20s.<br/>3. Gather items that can be used when buying and selling.</p> |
|--|--|---|

### Opening (5 minute)

1. **Say:** In the previous lesson we learnt how to buy and sell using numbers up to 10.
2. **Say:** Today we are going to buy and sell using numbers up to 20.

### Introduction to the New Material (5 minutes)

1. **Say:** I am going to demonstrate how to buy an item using exact change up to 20.
2. **Say:** I have play money in coins and paper bills in denominations of 5, 10, and 20.
3. **Say:** I would like to buy 6 limes.
4. **Say:** The cost is 3 for each. 3 times 6 equals 18.
5. Write:  $3 \times 6 = 18$
6. **Say:** I am going to pay with bills and singles. I am going to pay with a 10, a 5, and 3 singles.
7. **Say:** Now I am going to count to make sure I am paying the correct amount.
8. **Say:** 10 plus 5 equals 15. 15 plus 3 equals 18.
9. **Say:** I am paying the correct amount.
10. **Say:** I would now like to buy pineapples.
11. **Say:** Pineapples are 4 each. I want to buy 3. 3 times 4 equals 12.
12. Write:  $3 \times 4 = 12$
13. **Say:** I am going to pay with a 10 and 2 singles.
14. **Say:** 10 plus 2 equals 12.
15. **Say:** I will give the shopkeeper 12.

### Guided Practice (10 minutes)

1. **Ask:** Who would like to help me with the next problem?
2. Choose a pupil with hand raised to come to the front to help you demonstrate.
3. **Say:** \_\_\_\_\_ (pupil's name) is going to be the shopkeeper.
4. **Say:** I am going to buy 4 watermelons. 4 watermelons cost 16 total.
5. Write:  $4 \text{ watermelons} = 16$ .

6. **Say:** I am going to give \_\_\_\_\_ (pupil's name) a 10, a 5 and 1 single counter.
7. **Say:** \_\_\_\_\_ (pupil's name) can you count how much I have given you?
8. The pupil should count 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16
9. **Ask:** Is 16 correct? (Answer: Yes)
10. **Say:** We will demonstrate another problem.
11. **Say:** I am going to buy 5 coconuts. Each coconut costs 3.  $5 \text{ times } 3 = 15$ .
12. Write:  $5 \text{ coconut} = 15$
13. **Say:** I am going to give \_\_\_\_\_ (pupil's name) a 10 and a 5.
14. **Say:** \_\_\_\_\_ (pupil's name) please count out loud how much I have given you.
15. The pupil should count 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15
16. **Ask:** Is 15 correct? (Answer: Yes)




### **Independent Practice** (14 minutes)

1. Hand each pair at least 20 single counters, 2 paper 5s, 2 paper 10s, and 2 paper 20s.
2. **Say:** You are now going to work with a partner. You are going to take turns playing the role of buyer and shopkeeper.
3. **Say:** The buyer will tell the shopkeeper what they want to buy.
4. **Say:** The shopkeeper will tell the buyer the price – which must be less than 20.
5. **Say:** The buyer will pay the shopkeeper the exact amount.
6. **Say:** The shopkeeper will count to make sure the amount is correct.
7. **Say:** Take turns as buyer and shopkeeper.

### **Closing** (1 minute)

1. **Say:** Today we learnt how to buy and sell using single and paper counters up to 20.
2. **Say:** In the next lesson we will practise buying and selling and giving change.

|   |   |                         |
|---|---|-------------------------|
| <b>Lesson Title:</b> Giving Change Using Counters | <b>Theme:</b> Everyday Arithmetic - Money |                         |
| <b>Lesson Number:</b> M-01-148                    | <b>Class/Level:</b> Class 1               | <b>Time:</b> 35 minutes |

|   |  |  |
|---|--|--|
|  <p><b>Learning Outcomes</b><br/>By the end of the lesson, pupils will be able to give change using counters as currency using numbers 1 – 10.</p> |  <p><b>Teaching Aids</b><br/>1. Counters (stones, beads)<br/>2. Paper money in denominations of 5 and 10.<br/>3. Items that can be bought at the market or in a shop.</p> |  <p><b>Preparation</b><br/>1. Gather enough single counters for each pupil to have 10.<br/>2. Paper money in denominations of 5 and 10, enough for every pair to have 2 5s and 2 10s.<br/>3. Gather items that can be used when buying and selling.</p> |
|---|--|--|

### Opening (2 minutes)

1. **Say:** In our previous lessons we have focussed on buying and selling using exact amounts.
2. **Ask:** What happens if you don't have the exact amount? (Answer: You need to get change.)
3. **Say:** Today we will be learning how to give change.

### Introduction to the New Material (5 minutes)

1. **Say:** I am going to demonstrate how to make and give change up to 10.
2. **Say:** I have play money in counters and paper bills in denominations of 5 and 10.
3. **Say:** I would like to buy a mango.
4. **Say:** The cost is 3.
5. **Say:** I am going to pay with a paper bill that says 5 because I do not have exactly 3.
6. Write:  $5 - 3 =$
7. **Say:** If the cost is 3 and I pay with 5, the difference is 2.
8. **Say:**  $5 - 3 = 2$
9. **Say:** My change will be 2.

### Guided Practice (10 minutes)

1. **Ask:** Who would like to help me demonstrate the next problem?
2. Choose a pupil with hand raised to come to the front to help you demonstrate.
3. **Say:** \_\_\_\_\_ (pupil's name) is going to be the shopkeeper.
4. **Say:** I am going to buy 3 oranges. 3 oranges cost 6.
5. Write: 3 oranges = 6
6. **Say:** I am going to give \_\_\_\_\_ (pupil's name) a paper bill that says 10.
7. Write:  $10 - 6 =$
8. **Ask:** How much should \_\_\_\_\_ (pupil's name) give me back? (Answer: 4)
9. **Say:** \_\_\_\_\_ (pupil's name) please count out loud my change.
10. The pupil should count 1, 2, 3, 4.
11. **Say:** The oranges cost 6 and I gave \_\_\_\_\_ (pupil's name) a paper bill that said 10.
12. Write:  $10 - 6 = 4$

13. **Say:**  $10 - 6 = 4$
14. **Say:** I will demonstrate one more time.
15. **Say:** I am going to buy 4 apples. Each apple costs 2.  $4 \text{ times } 2 = 8$
16. Write:  $4 \text{ apples} = 8$
17. **Say:** I am going to give \_\_\_\_\_ (pupil's name) a paper bill that says 10.
18. Write:  $10 - 8 =$
19. **Ask:** How much should \_\_\_\_\_ (pupil's name) give me back? (Answer: 2)
20. **Say:** \_\_\_\_\_ (pupil's name) please count out loud my change.
21. The pupil should count 1, 2
22. **Say:** The apples cost 8 and I gave \_\_\_\_\_ (pupil's name) a paper bill that said 10.
23. Write:  $10 - 8 = 2$
24. **Say:**  $10 - 8 = 2$




### **Independent Practice** (17 minutes)

1. Hand each pair of students at least 20 single counters, 2 paper 5s and 2 paper 10s.
2. **Say:** You are now going to work with a partner. You are going to take turns playing the role of buyer and shopkeeper.
3. **Say:** The buyer will tell the shopkeeper what they want to buy.
4. **Say:** The shopkeeper will tell the buyer the price – which must be less than 10.
5. **Say:** The buyer will pay and the shopkeeper will give change.
6. **Say:** Take turns as buyer and shopkeeper.

### **Closing** (1 minute)

1. **Say:** Today we learnt how to make and give change up to 10.
2. **Say:** In the next lesson we will make and give change up to 20.

|   |   |                         |
|---|---|-------------------------|
| <b>Lesson Title:</b> Giving Change Using Counters | <b>Theme:</b> Everyday Arithmetic - Money |                         |
| <b>Lesson Number:</b> M-01-149                    | <b>Class/Level:</b> Class 1               | <b>Time:</b> 35 minutes |

|   |  |   |
|---|--|---|
|  <p><b>Learning Outcomes</b><br/>By the end of the lesson, pupils will be able to give change using counters as currency using numbers 1-20.</p> |  <p><b>Teaching Aids</b><br/>1. Counters (stones, beads)<br/>2. Paper money in denominations of 5, 10 and 20.<br/>3. Items that can be bought at the market or in a shop.</p> |  <p><b>Preparation</b><br/>1. Gather enough single counters for each pupil to have 10.<br/>2. Paper money in denominations of 5, 10 and 20, enough for every pair to have 2 5s and 2 10s, and 2 20s.<br/>3. Gather items that can be used when buying and selling.</p> |
|---|--|---|

### Opening (2 minutes)

1. **Say:** In our previous lesson we learnt how to make and give change up to 10.
2. **Say:** Today we will learn how to make and give change up to 20.

### Introduction to the New Material (5 minutes)

1. **Say:** Things that are more expensive will require the buyer to pay more.
2. **Ask:** What are some things you think would cost more than a banana?
3. Write pupil answers on the board.
4. **Say:** Today I am going to purchase items that cost more than the items purchased during the previous lesson.
5. **Say:** I would like to purchase a bag of rice.
6. **Say:** The cost of the bag of rice is 17.
7. **Say:** I am going to pay with a paper bill that says 20 since I do not have 17 singles.
8. Write:  $20 - 17 =$
9. **Say:** If the cost is 17 and I pay with 20, the difference is 3.
10. **Say:**  $20 - 17 = 3$
11. **Say:** My change will be 3.

### Guided Practice (10 minutes)

1. **Ask:** Who would like to help me with the next problem?
2. Choose a pupil with hand raised to come to the front to help you demonstrate.
3. **Say:** \_\_\_\_\_ (pupil's name) is going to be the shopkeeper.
4. **Say:** I am going to buy palm oil. Palm oil costs 14.
5. Write: palm oil = 14
6. **Say:** I am going to give \_\_\_\_\_ (pupil's name) a paper bill that says 20.
7. Write:  $20 - 14 =$
8. **Ask:** How much should \_\_\_\_\_ (pupil's name) give me back? (Answer: 6)
9. **Say:** \_\_\_\_\_ (pupil's name) please count out loud my change.

10. The pupil should count 1, 2, 3, 4, 5, 6
11. **Say:** The palm oil cost 14 and I gave \_\_\_\_\_ (pupil's name) a paper bill that said 20.
12. Write:  $20 - 14 = 6$
13. **Say:**  $20 - 14 = 6$
14. **Say:** I will demonstrate one more time.
15. **Say:** I am going to buy 2 notebooks. Each notebook costs 6. 2 times 6 = 12
16. Write: 2 notebooks = 12
17. **Say:** I am going to give \_\_\_\_\_ (pupil's name) a paper bill that says 20.
18. Write:  $20 - 12 =$
19. **Ask:** How much should \_\_\_\_\_ (pupil's name) give me back? (Answer: 8)
20. **Say:** \_\_\_\_\_ (pupil's name) please count out loud my change.
21. The pupil should count 1, 2, 3, 4, 5, 6, 7, 8
22. **Say:** The notebooks cost 12 and I gave \_\_\_\_\_ (pupil's name) a paper bill that said 20.
23. Write:  $20 - 12 = 8$
24. **Say:**  $20 - 12 = 8$
25. **Say:** \_\_\_\_\_ (pupil's name) could have given me change in 2 different ways.
26. **Say:** The first way is 8 single counters.
27. Write: Eight 1s
28. **Say:** The other way is a paper 5 bill and 3 single counters.
29. Write:  $5 + 3 = 8$

### **Independent Practice** (17 minutes)




1. Hand each pair at least 20 single counters, 2 paper 5s and 2 paper 10s, and 2 20s.
2. **Say:** You are now going to work with a partner. You are going to take turns playing the role of buyer and shopkeeper.
3. **Say:** The buyer will tell the shopkeeper what they want to buy.
4. **Say:** The shopkeeper will tell the buyer the price – which must be less than 20.
5. **Say:** The buyer will pay and the shopkeeper will give change.
6. **Say:** Take turns as buyer and shopkeeper.

### **Closing** (1 minute)

1. **Say:** Today we learnt how to make and give change up to 20.
2. **Say:** In the next lesson we will learn about real currency.



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| <b>Lesson Title:</b> National Currency | <b>Theme:</b> Everyday Arithmetic - Money |                         |
| <b>Lesson Number:</b> M-01-150         | <b>Class/Level:</b> Class 1               | <b>Time:</b> 35 minutes |

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|  <p><b>Learning Outcomes</b><br/>By the end of the lesson, pupils will be able to recognise and identify denomination of national currency in everyday use.</p> |  <p><b>Teaching Aids</b><br/>Currency in all denominations</p> |  <p><b>Preparation</b><br/>Gather currency in 10, 50, 100, 500, 1,000, 2,000, 5,000, 10,000 Leones.</p> |
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### Opening (2 minutes)

1. **Say:** In our previous lessons we learnt how to buy and sell and make change using simple, small numbers that we are familiar with.
2. **Say:** In today's lesson we will learn about the money we use in everyday life.

### Introduction to the New Material (8 minutes)

1. **Say:** Our unit of currency is called the Leone.
2. **Say:** As you remember in our previous lessons, we have coins and paper bills that are used as currency.
3. **Say:** The coins come in denominations of 10, 50, 100 and 500.
4. Hold up the different coins and describe the colour, size and shape of each coin.
5. **Say:** The bills come in denominations of 1,000, 2,000, 5,000, and 10,000.
6. Hold up the different bills and describe the colour and the print on each bill.
7. You can walk around the classroom and show the bills to the pupils.

### Guided Practice (10 minutes)

1. During this part of the lesson, share with the pupils the costs of different items at the market.
2. **Ask:** What items do you buy at the market and how much do they cost?
3. Record pupil answers on the board.

### Independent Practice (10 minutes)

1. **Say:** You are going to work on your own to draw pictures of the currency used in Sierra Leone.
2. Give pupils 10 minutes to draw the coins and notes. Draw examples on the board to guide them.
3. **Say:** Hold your drawing up for me to see.

### Closing (5 minutes)

1. **Say:** Today we learnt about our currency and the different denominations.
2. **Ask:** What would you buy with 10,000 Leone?
3. Call on pupils with hands raised to share their answers aloud.





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Document information:

Leh Wi Learn (2016). "*Maths, Class 01, Term 03, lesson plan.*" A resource produced by the Sierra Leone Secondary Education Improvement Programme (SSEIP). DOI: 10.5281/zenodo.3745092.

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Archived on Zenodo: April 2020.

DOI: 10.5281/zenodo.3745092

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