Lesson-7: Multiplication

12 Periods (40 minutes each)

Learn Better (Main Course Book), Stay Ahead (Workbook), Book of Holistic Teaching, CRM signs, Poster

Animated Activities, Animation, Dictionary, eBook, Explainer Video, HOTS, I Explain, Infographic, Mental Maths, Quick Maths, Quiz, Toys from Trash, Slideshow, Test Generator

Confirming better: I love to take care of plants and animals.

Curricular Goals and Objectives (NCF-FS)

To enable the students:

- to develop a conceptual understanding of multiplication through real-life connections.
- to enhance computational fluency and accuracy in multiplication.
- to apply multiplication in real-life problem-solving contexts.
- to develop logical thinking and reasoning through patterns and inquiry.
- to engage in collaborative learning and peer discussions.
- to build a positive attitude towards mathematics and healthy habits.

Methodology

Period 1

Teacher: Good morning, students. How are you today?

SHOULD DO 05 MIN.

Teacher: Before we begin, let us think about something interesting. Look around the classroom. Do you see things that are arranged in groups?

Teacher: Let me give you an example. Look at the legs of your chairs. How many legs does each chair have?

Teacher: Yes, 4 legs. Now, if we count 3 chairs together, how many legs will there be in total?

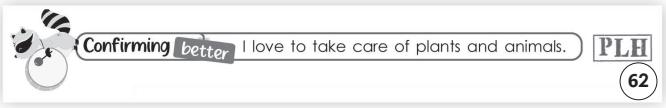
Teacher: Correct. 4 + 4 + 4 = 12. Instead of adding again and again, we can write it as 3 × 4 = 12. This is called multiplication.

Teacher: Let us try another one. Look at your hands. Each hand has 5 fingers. If we count the fingers of 2 hands, how many do we get?

Teacher: Yes, 5 + 5 = 10 or we can say 2 × 5 = 10.

Teacher: Well done, everyone. Today, we will learn more about how multiplication helps us count faster.

Confirming better



Teacher: Before we move forward, let us say a positive statement together: I love to take care of plants and animals.

MUST DO 05 MIN.

Teacher: Why do you think taking care of plants and animals is important?

Teacher: That is right. Plants provide us with oxygen and animals are our companions. Caring for them helps maintain balance in nature and makes the world a better place.

Teacher: Wonderful. Now, let us begin our chapter.

Teacher: We will begin a new chapter, Multiplication. We are going to use a KWL chart to help us organise our thoughts and learning. I have made a KWL format on the blackboard. Please take out your notebooks and draw the same format in your notebooks.

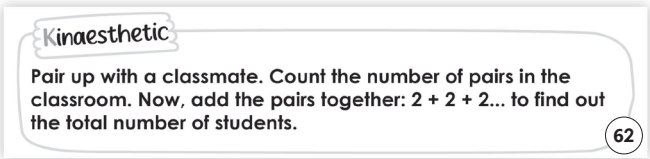
SHOULD DO 10 MIN.

K	W	L

Teacher: Take a few minutes to think and write. If you have any questions, feel free to ask.

Teacher: You all did an amazing work in this activity. Let us move to Re-KAP activities. We will use Kinaesthetic, Auditory and Pictorial activities today to make our learning exciting. Let us start with the Kinaesthetic activity.

Kinaesthetic



Teacher: Everybody please open page 62 in your Main course book Who will read and explain the activity?

MUST DO 10 MIN.

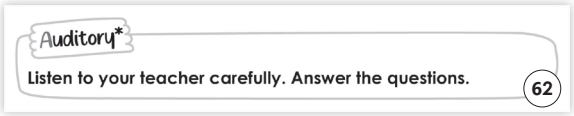
Teacher: Pair up with a classmate and count the number of pairs in the classroom.

Teacher: Now, add the pairs together. Write it down like this: 2 + 2 + 2 + 2...

Teacher: Instead of adding again and again, what can we do? Yes, we multiply.

Teacher: This shows how multiplication helps us count faster.

Auditory



Teacher: Listen carefully as I read the question aloud. Think and answer.

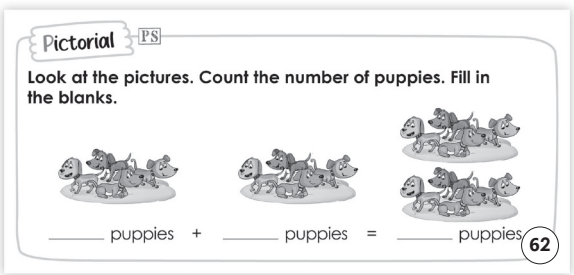
Teacher: There are 2 bunches of grapes. Each bunch has 6 grapes. How many grapes are there in all? 2. Sahil buys three packets of biscuits. Each packet has five biscuits. How many biscuits does he have in total?

MUST DO
05 MIN.

Teacher: Great effort, everyone. Now, let us explore the pictorial activity.

You may show the **eBook** given on digital platform.

Pictorial



Teacher: Now, look at the picture in your books and answer the questions.

MUST DO
05 MIN.

Teacher: Count how many puppies are in each group.

(Discuss the question with the students.)

You may show the **Dictionary** given on the digital platform.

Teacher: That was an amazing class. You all participated so well today.

Teacher: Let us all give a huge round of applause for everyone's effort. See you in the next class.

Differentiated Activities

110 km/hr

Count the total number of chairs/ desks in the classroom and write a multiplication sentence.

80 km/hr

Count the hands of students in your row and write a multiplication sentence.

40 km/hr

Count the fingers on both hands and write a multiplication sentence.

Home Task

Look around your home and find 2 objects that come in groups (e.g., pairs of shoes, eggs in a tray). Write a multiplication sentence for each.

Period 2

Teacher: Good morning, students. How are you today?

SHOULD DO
05 MIN.

Teacher: Yesterday, we learnt about multiplication and how it helps us count quickly. Let us do a quick recap.

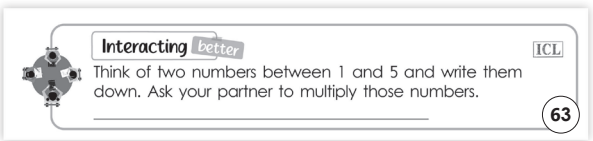
Teacher: If we have 3 rows of 5 trees, how many trees do we have in total?

Teacher: Yes, 3 × 5 = 15 trees.

Teacher: Now, if there are 4 bowls with 2 apples each, how many apples are there?

Teacher: Correct, 4 × 2 = 8 apples. Well done. Now, let us continue learning about multiplication.

Interactive better



Teacher: Open your books to page 63 and look at the activity in the 'Interacting better' section.

MUST DO
05 MIN.

Teacher: Think of two numbers between 1 and 5 and write them down.

You may show the **Animation** given on the digital platform.

Teacher: Now, ask your partner to multiply those numbers.

Teacher: Excellent. This is how multiplication helps us in daily life.

Teacher: Look at the pictures in your book. What do you see in the farm scene?

MUST DO
20 MIN.

Teacher: Yes, there are apple trees, cows and a boy talking to his father.

Teacher: The boy is counting trees in rows. Let us read the story together.

(Read the dialogue aloud while students follow along.)

Teacher: How many rows of trees are there?

Teacher: Yes, 3 rows. How many trees are in each row?

Teacher: Correct, 5 trees. So, how many trees are there in total?

Teacher: Yes, 3 × 5 = 15 trees.

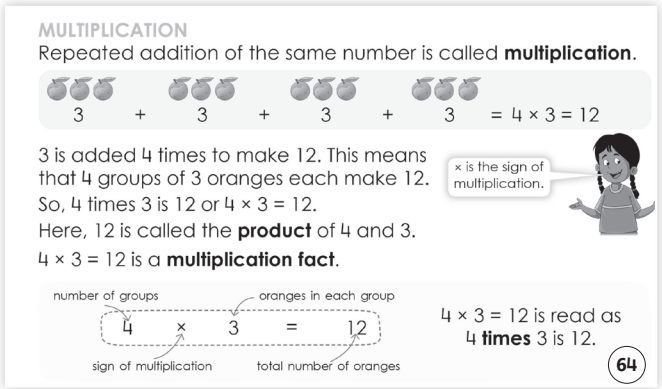
Teacher: This story connects to SDG 15: Life on Land, which teaches us to protect nature. Why is it important to plant more trees?

Teacher: Correct, trees give us fresh air, shade and food. Cutting down too many trees can harm the environment.

Teacher: What can we do to help protect nature?

Teacher: Yes, we can plant trees, take care of animals and keep our surroundings clean. Wonderful thoughts!.

Multiplication



Teacher: Multiplication is a way of adding the same number multiple times. It helps us count quickly instead of adding again and again.

MUST DO
10 MIN.

Teacher: Let us look at an example. If we have 4 groups of 3 oranges, how many oranges are there?

Teacher: Yes, 4 × 3 = 12 oranges. This means we are adding 3 four times: 3 + 3 + 3 + 3 = 12.

Teacher: Now, let us take another example. If there are 2 plates with 5 apples each, how many apples do we have?

Teacher: Yes, 2 × 5 = 10 apples.

Teacher: Look at your hands. How many fingers are there on one hand?

Teacher: Yes, 5 fingers. If we count fingers on both hands, how many do we have?

Teacher: That is correct, 2 × 5 = 10 fingers. Multiplication helps us count things in groups quickly.

Teacher: Now, let us try one last example. If a bicycle has 2 wheels, how many wheels will 3 bicycles have in total?

Teacher: Yes, 3 × 2 = 6 wheels. Excellent work, everyone.

Differentiated Activities

110 km/hr

Count the number of doors in the classroom. Each door has 2 handles. Write a multiplication sentence to find the total number of handles.

80 km/hr

Look at the number of legs on each table in the classroom. Count the number of tables and write a multiplication sentence.

40 km/hr

Count the number of legs on one chair. Now, find the total legs of 3 chairs and write a multiplication sentence.

Home Task

Look around your home and find any two objects that come in equal groups. Draw them in your notebook and write a multiplication sentence for each.

Period 3

Teacher: Good morning, students. How are you today?

SHOULD DO
05 MIN.

Teacher: Yesterday, we learnt about multiplication through repeated addition. Let us do a quick recap.

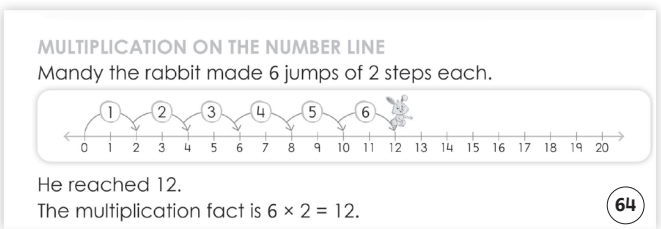
Teacher: If there are 3 baskets and each basket has 4 apples, how many apples do we have in total?

Teacher: Yes, 3 × 4 = 12 apples.

Teacher: Now, if we see 5 rows of 2 chairs each, how many chairs are there in total?

Teacher: Correct, 5 × 2 = 10 chairs. Well done. Today, we will learn how to show multiplication on a number line.

Multiplication On The Number Line

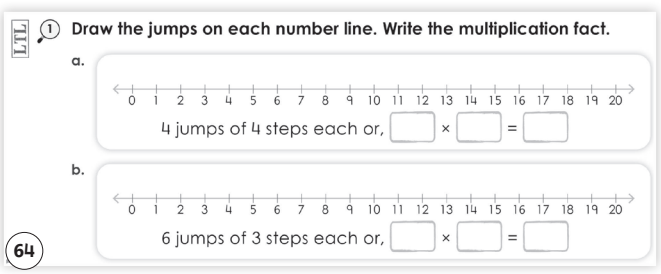


Teacher: Open your books to page 64 and look at the number line activity.

MUST DO
05 MIN.

Teacher: Mandy the rabbit made 6 jumps of 2 steps each and reached 12. This shows that multiplication is repeated addition.

(Discuss more examples with the students.)



Teacher: Let us solve Exercise 1 together. Follow the number line and fill in the missing multiplication facts.

MUST DO
05 MIN.

Teacher: What happens if we take 4 jumps of 4 steps each?

Teacher: Yes, 4 × 4 = 16.

Teacher: Make sure to count your jumps carefully and check your final position on the number line.

(Discuss the next question in a similar way.)

You may show the **Toys from Trash** given on the digital platform.

Multiplication Tables

MULTIPLICATION TABLES

② **Write multiplication tables of 2, 3, 4 and 5 in your notebook.** 65

Teacher: Now, we will revise the multiplication tables of 2, 3, 4 and 5.

MUST DO
10 MIN.

Teacher: I will say a number sentence and you will complete it.

Teacher: 3 times 2 is…?

Teacher: Yes, 6. Now, 4 times 5 is…?

Teacher: Correct, 20. Now, open Exercise 2 and complete it in your notebook.

Teacher: Well done, students. Let us have a huge round of applause.

Multiplication table of 6,7,8,9,10

Multiplication table of 6

③ **Complete the table of 6.**

1 times 6 is 6	6 × 1 = _____
2 times 6 is 12	6 × 2 = _____
3 times 6 is 18	6 × 3 = _____
4 times 6 is 24	6 × 4 = _____
5 times 6 is 30	6 × 5 = _____
6 times 6 is 36	6 × 6 = _____
7 times 6 is 42	6 × 7 = _____
8 times 6 is 48	6 × 8 = _____
9 times 6 is 54	6 × 9 = _____
10 times 6 is 60	6 × 10 = _____

Multiplication table of 7

④ **Complete the table of 7.**

1 times 7 is 7	7 × 1 = _____
2 times 7 is 14	7 × 2 = _____
3 times 7 is 21	7 × 3 = _____
4 times 7 is 28	7 × 4 = _____
5 times 7 is 35	7 × 5 = _____
6 times 7 is 42	7 × 6 = _____
7 times 7 is 49	7 × 7 = _____
8 times 7 is 56	7 × 8 = _____
9 times 7 is 63	7 × 9 = _____
10 times 7 is 70	7 × 10 = _____

Multiplication table of 8

⑤ **Complete the table of 8.**

1 times 8 is 8	8 × 1 = _____
2 times 8 is 16	8 × 2 = _____
3 times 8 is 24	8 × 3 = _____
4 times 8 is 32	8 × 4 = _____
5 times 8 is 40	8 × 5 = _____
6 times 8 is 48	8 × 6 = _____
7 times 8 is 56	8 × 7 = _____
8 times 8 is 64	8 × 8 = _____
9 times 8 is 72	8 × 9 = _____
10 times 8 is 80	8 × 10 = _____

Multiplication table of 9

⑥ **Complete the table of 9.**

1 times 9 is 9	9 × 1 = _____
2 times 9 is 18	9 × 2 = _____
3 times 9 is 27	9 × 3 = _____
4 times 9 is 36	9 × 4 = _____
5 times 9 is 45	9 × 5 = _____
6 times 9 is 54	9 × 6 = _____
7 times 9 is 63	9 × 7 = _____
8 times 9 is 72	9 × 8 = _____
9 times 9 is 81	9 × 9 = _____
10 times 9 is 90	9 × 10 = _____

65

Multiplication table of 10

LOTS

⑦ **Complete the table of 10.**

1 times 10 is 10	10 × 1 = _____
2 times 10 is 20	10 × 2 = _____
3 times 10 is 30	10 × 3 = _____
4 times 10 is 40	10 × 4 = _____
5 times 10 is 50	10 × 5 = _____
6 times 10 is 60	10 × 6 = _____
7 times 10 is 70	10 × 7 = _____
8 times 10 is 80	10 × 8 = _____
9 times 10 is 90	10 × 9 = _____
10 times 10 is 100	10 × 10 = _____

66

Teacher: Today, we will learn how to make multiplication tables of 6, 7, 8, 9 and 10 using simple activities. Let us sit in group of 6 students.

MUST DO
15 MIN.

Teacher: Take erasers and place 6 groups of 1 eraser each. How many erasers are there?

Teacher: Yes, 6. Now, make 6 groups of 2 erasers each. How many do we have?

Teacher: Correct, 12. Let us continue making the table of 6 by adding 6 erasers each time.

Teacher: Now, let us try the same method for the table of 7.

Teacher: Instead of erasers, draw 7 dots in a row. Now, draw another set of 7 dots. How many dots now?

Teacher: Yes, 14. Keep adding 7 to complete the table. Same for table of 8.

Teacher: Let us form groups and create tables for 9 and 10 using these methods.

Teacher: Write the complete tables in your books on page 65 and check your answers.

Differentiated Activities

110 km/hr

Write the tables of 6, 7, 8, 9 and 10 without looking at the book.

80 km/hr

Create groups of erasers and build the tables of 6 and 7 by adding equal groups.

40 km/hr

Draw dots in rows to complete the table of 6 and 7 with a partner.

Home Task

Complete Exercise 8 given on page 66 in the Main Course Book.

Period 4

SHOULD DO — 05 MIN.

Teacher: Good morning, students. How are you today?

Teacher: Yesterday, we learnt about multiplication tables using different methods. Let us do a quick recap.

Teacher: If we have 4 groups of 3 erasers each, how many erasers do we have in total?

Teacher: Yes, 4 × 3 = 12 erasers.

Teacher: Now, if we multiply 7 by 10, what do we get?

Teacher: Correct, 70. Well done. Today, we will explore the properties of multiplication.

Properties of Multiplication

PROPERTIES OF MULTIPLICATION

Order in multiplication

3 times 6 = 3 × 6 = 18

6 times 3 = 6 × 3 = 18

So, 3 × 6 = 6 × 3

When we multiply two numbers, the product remains the same even if their order is changed.

Multiplying by 0

3 groups of 0 flowers each. 3 × 0 = 0

When we multiply any number by 0, the product is always 0.

Multiplying by 1

3 groups of 1 flower each. 3 × 1 = 3

When we multiply a number by 1, the product is always the number itself.

66

Order in multiplication

MUST DO — 15 MIN.

Teacher: Open your books to page 66. Let us begin with the order in multiplication.

Teacher: If we multiply 3 × 6 or 6 × 3, the answer remains the same. Let us try it with objects.

Teacher: Take 3 groups of 6 dots and count them. Now, take 6 groups of 3 dots and count again.

Teacher: What do you notice?

Teacher: Yes, the total is 18 in both cases. This means the order of multiplication does not change the result.

Multiplying by 0

Teacher: Now, let us see what happens when we multiply by 0.

Teacher: If there are 3 groups with 0 flowers each, how many flowers do we have?

Teacher: Correct, 0. Whenever we multiply any number by 0, the product is always 0.

Multiplying by 1

Teacher: Now, let us multiply by 1. If there are 3 groups of 1 flower each, how many flowers do we have?

Teacher: Yes, 3. When we multiply a number by 1, the product remains the same as the number.

Teacher: Now, try these properties using objects or drawings in your notebooks.

Multiplying By 10 and 100

MULTIPLYING BY 10 AND 100

To multiply a number by 10, put a zero to the right of the number.

1 × 10 = 10	3 × 10 = 30	4 × 10 = 40	5 × 10 = 50
6 × 10 = 60	8 × 10 = 80	9 × 10 = 90	10 × 10 = 100

To multiply a number by 100, put 2 zeros to the right of the number.

1 × 100 = 100	2 × 100 = 200	3 × 100 = 300
4 × 100 = 400	5 × 100 = 500	6 × 100 = 600

67

MUST DO — 10 MIN.

Teacher: Now, let us look at an easy trick for multiplying by 10 and 100.

Teacher: When we multiply a number by 10, we just add a zero to the right.

Teacher: For example, 4 × 10 = 40. Try multiplying 5 × 10.

Teacher: Yes, 50. Now, when we multiply by 100, we add two zeros.

Teacher: For example, 3 × 100 = 300. Try multiplying 6 × 100.

Teacher: Correct, 600. Write five more examples in your notebook and solve them.

Writing Multiplication Sums

WRITING MULTIPLICATION SUMS

We can write a multiplication sum in two ways – in rows (horizontally) or in columns (vertically).

	T	O
		3
×		2
		6

(T: column, O: column)

or 3 × 2 = 6 (row)

	T	O
		7
×		5
	3	5

(T: column, O: column)

or 7 × 5 = 35 (row)

67

MUST DO — 10 MIN.

Teacher: We can write multiplication sums in two ways—horizontally and vertically.

Teacher: Look at the example 3 × 2 written in two ways. The answer remains the same, but the arrangement is different.

Teacher: Let us try solving 6 × 7 and 7 × 8 using both methods.

Teacher: Now, open Exercise 9 and solve only question (a) and (b).

You may show the **Quick Maths** given on the digital platform

Teacher: Well done, everyone. Let us have a huge round of applause for our hard work today. See you in the next class!

Differentiated Activities

110 km/hr

Write five multiplication facts using numbers between 1 and 10 in both horizontal and vertical formats.

80 km/hr

Multiply 4, 6, 7, 9 and 10 by 10 and 100.

40 km/hr

Draw groups of 2, 3 and 5 dots, then write the multiplication sentence for each.

Home Task

Solve question (c) and (d) of Exercise 9 given on page 67 in the Main Course Book.

Period 5

Teacher: Good morning, students. How are you today?

SHOULD DO — 05 MIN.

Teacher: Yesterday, we learnt about multiplication properties and multiplying by 10 and 100. Let us do a quick recap.

Teacher: What happens when we multiply a number by 0?

Teacher: Yes, the product is always 0.

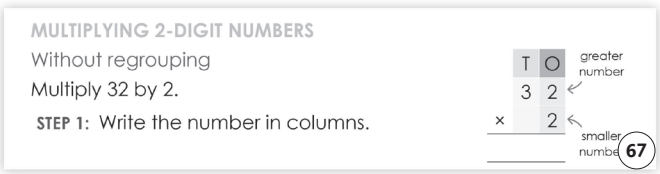
Teacher: Now, what happens when we multiply a number by 1?

Teacher: Correct, the number remains the same.

Teacher: Today, we will learn how to multiply two-digit numbers.

Multiplying 2-Digit Numbers

Without regrouping



MUST DO — 05 MIN.

Teacher: Open your books to page 67. Look at the example of 32 × 2.

Teacher: First, write the number in column form.

Teacher: Multiply the ones first: 2 × 2 = 4. Write 4 in the ones place.

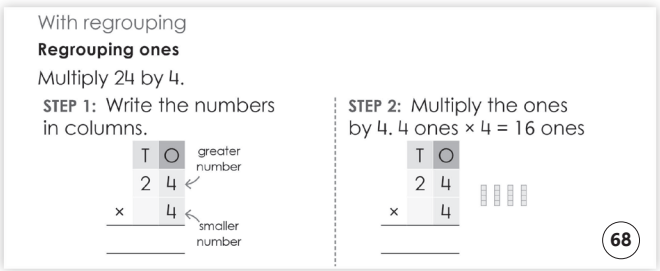
Teacher: Now, multiply the tens: 3 × 2 = 6. Write 6 in the tens place.

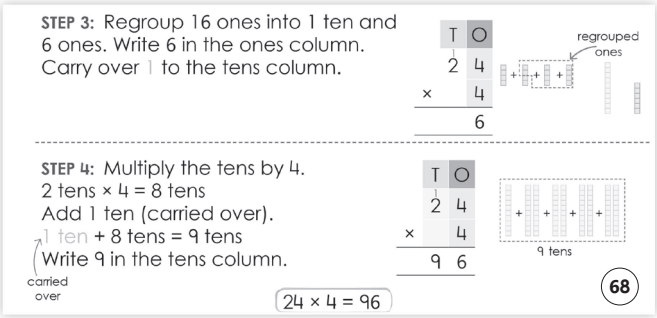
Teacher: So, 32 × 2 = 64. Let us try one more together before practicing on your own.

(Continue the discussion in a similar way.)

With regrouping

Regrouping ones





MUST DO — 10 MIN.

Teacher: Now, let us learn how to multiply when we need to regroup. Look at the example of 24 × 4 given on page 68.

Teacher: First, multiply the ones: 4 × 4 = 16. We cannot write 16 in the ones place, so we put 6 in the ones column and carry over 1 to the tens column.

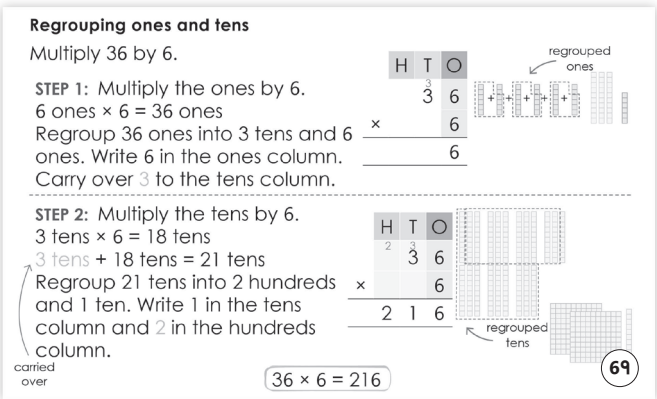
Teacher: Now, multiply the tens: 2 × 4 = 8. Add the 1 carried over: 8 + 1 = 9.

Teacher: So, 24 × 4 = 96. Let us solve another example together.

(Discuss the steps with the students.)

You may show the **Explainer Video** given on digital platform.

Regrouping ones and tens



MUST DO — 10 MIN.

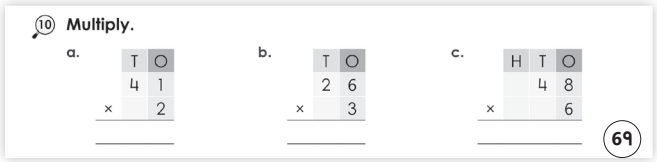
Teacher: Now, let us look at an example where we need to regroup twice. Look at 36 × 6.

Teacher: First, multiply the ones: 6 × 6 = 36. Write 6 in the ones column and carry over 3 to the tens column.

Teacher: Now, multiply the tens: 3 × 6 = 18. Add the 3 carried over: 18 + 3 = 21.

Teacher: Write 1 in the tens column and carry over 2 to the hundreds column.

Teacher: So, 36 × 6 = 216. Now, solve one more question in pairs.



MUST DO — 10 MIN.

Teacher: Open your books to Exercise 10. Solve the multiplication problems

given carefully, following the steps we discussed.

Teacher: Check your answers and make sure to place the numbers correctly in the columns.

Teacher: Well done, everyone. Let us have a huge round of applause for our hard work today. See you in the next class!

Differentiated Activities

110 km/hr

Solve 45 × 3, 26 × 4 and 37 × 5 using column multiplication with regrouping.

80 km/hr

Solve 32 × 2 and 41 × 3 without regrouping.

40 km/hr

Solve 21 × 2 and write the answer.

Home Task

Solve 28 × 3 and 36 × 4 in your notebook.

Period 6

SHOULD DO 05 MIN.

Teacher: Good morning, students. How are you today?

Teacher: Yesterday, we learnt how to multiply two-digit numbers with and without regrouping. Let us do a quick recap.

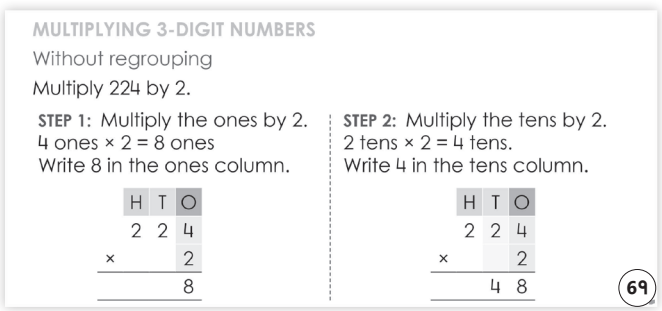
Teacher: If we multiply 24 × 4, what is the first step?

Teacher: Yes, multiply the ones. What do we do if the product is more than 9?

Teacher: Correct, we carry over the extra value. Today, we will learn how to multiply three-digit numbers.

Multiplying 3-Digit Numbers

Without regrouping



MUST DO 10 MIN.

Teacher: Open your books to page 69 and look at the example of 224 × 2.

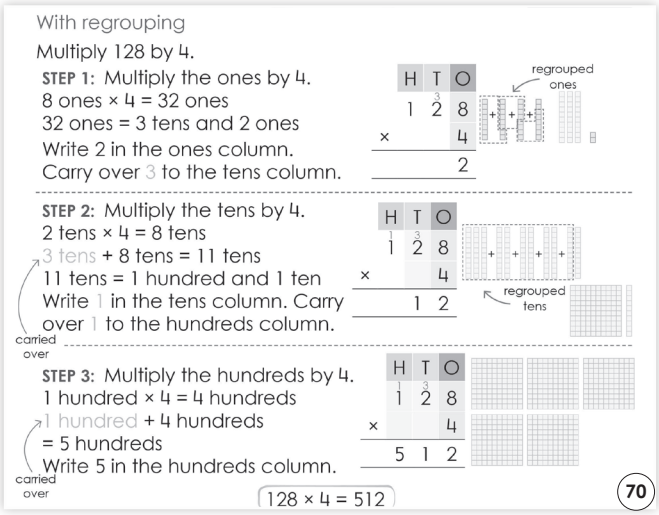
Teacher: First, multiply the ones: 4 × 2 = 8. Write 8 in the ones place.

Teacher: Now, multiply the tens: 2 × 2 = 4. Write 4 in the tens place.

Teacher: Lastly, multiply the hundreds: 2 × 2 = 4. Write 4 in the hundreds place.

Teacher: So, 224 × 2 = 448. Let us try another example together.

With regrouping



MUST DO 10 MIN.

Teacher: Now, let us try a problem where we need to regroup. Look at the example of 128 × 4.

Teacher: First, multiply the ones: 8 × 4 = 32. Write 2 in the ones column and carry over 3 to the tens column.

Teacher: Next, multiply the tens: 2 × 4 = 8. Add the 3 carried over: 8 + 3 = 11. Write 1 in the tens column and carry over 1 to the hundreds column.

Teacher: Finally, multiply the hundreds: 1 × 4 = 4. Add the 1 carried over: 4 + 1 = 5.

SHOULD DO 05 MIN.

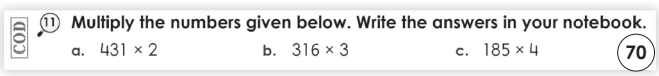
Teacher: So, 128 × 4 = 512. Let us solve one more question together.

Teacher: Let us practise multiplication using a fun activity.

Teacher: Each group will get a three-digit number and a one-digit number to multiply.

Teacher: Work together to multiply step by step and write your answers on the board.

Teacher: The group with the fastest correct answer will explain their steps to the class.



MUST DO 10 MIN.

Teacher: Open your books to Exercise 11. Solve question (a) and (b).

Teacher: Remember to align numbers in columns carefully and carry over if needed.

Teacher: Well, done, everyone. Let us have a huge round of applause for our hard work today. See you in the next class!

Differentiated Activities

110 km/hr:

Solve 452 × 3 and 316 × 4 using column multiplication with regrouping.

80 km/hr:

Solve 213 × 2 and 341 × 3 without regrouping.

40 km/hr:

Solve 127 × 2 with the classmate's help and write the answer.

Home Task

Solve question (c) of Exercise 11 given on page 69 in the Main Course Book.

Period 7

SHOULD DO
05 MIN.

Teacher: Good morning, students. How are you today?

Teacher: Today, we will play a quick game called Guess the Operation. I will read a short situation and you have to tell me if we should use multiplication. If yes, you also have to tell me the multiplication sentence.

Teacher: Here is the first one. A farmer has 5 baskets. Each basket has 6 apples. How many apples are there in total?

Teacher: Should we use multiplication?

Teacher: Yes. What is the multiplication sentence?

Teacher: Correct. 5 × 6 = 30 apples. Now, here is another one. Sarah has 4 bottles. She gives away 2. How many bottles are remaining with Sarah?

Teacher: Do we use multiplication here?

Teacher: No, that is subtraction.

Teacher: Let us try one more. The school has 7 classrooms. Each classroom has 9 desks. How many desks are there in total?

Teacher: Yes, we use multiplication. What is the multiplication sentence?

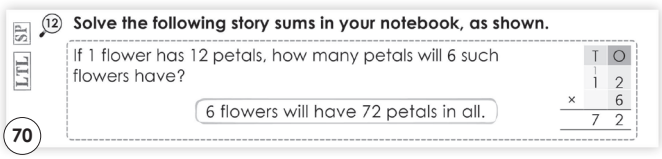
Teacher: Correct. 7 × 9 = 63. Well done, everyone. Now, let us learn more about multiplication word problems.

MUST DO
05 MIN.

Teacher: When we solve word problems, we look for clues in the question to know which operation to use.

Teacher: If the problem talks about groups of, each or times, what operation do we use

Teacher: Yes, multiplication. Let us look at an example.


SP LTL 12 Solve the following story sums in your notebook, as shown.

If 1 flower has 12 petals, how many petals will 6 such flowers have?

6 flowers will have 72 petals in all.

	T	O
	1	2
×		6
	7	2

70

MUST DO
10 MIN.

Teacher: Open your books to page 70. Read the first question.

Teacher: There are 24 horses in a stable. How many horses will there be in 8 such stables.

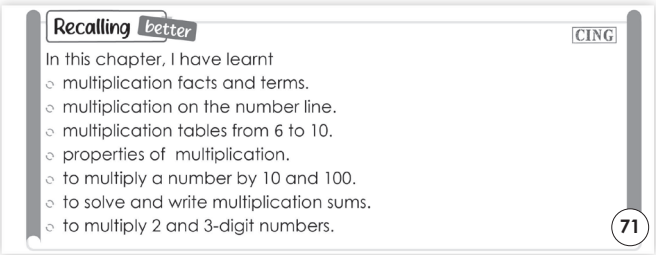
Teacher: What multiplication sentence will we write.

Teacher: Yes, 24 × 8. Solve this in your notebooks.

Teacher: Now, solve the second problem about Maria's stickers in pairs.

You may show the **I Explain** given on the digital platform.

Recalling better


Recalling better

In this chapter, I have learnt

- multiplication facts and terms.
- multiplication on the number line.
- multiplication tables from 6 to 10.
- properties of multiplication.
- to multiply a number by 10 and 100.
- to solve and write multiplication sums.
- to multiply 2 and 3-digit numbers.

71

MUST DO
10 MIN.

Teacher: Let us recall what we have learnt in this chapter in the 'Recalling better' section.

Teacher: What is multiplication?

Teacher: How do we multiply using a number line

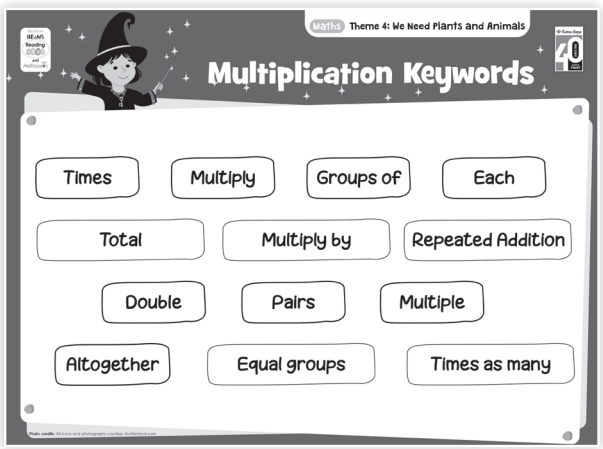
Teacher: What happens when we multiply a number by 0

Teacher: What trick do we use to multiply by 10 and 100

Teacher: What is the first step when multiplying a two-digit number with regrouping

Teacher: Think about your answers, then discuss with your partner before sharing with the class.

Poster


Maths Theme 4: We Need Plants and Animals

Multiplication Keywords

Times | Multiply | Groups of | Each

Total | Multiply by | Repeated Addition

Double | Pairs | Multiple

Altogether | Equal groups | Times as many

MUST DO
10 MIN.

Teacher: Look at the poster on the board. These are words that help us identify multiplication in word problems.

Teacher: Can you find the words we used in today's word problems

Teacher: Yes, each, times and groups of.

Teacher: Now, write down three multiplication keywords and use them to make your own word problem.

Teacher: Well done, everyone. Let us have a huge round of applause for our hard work today. See you in the next class!

Differentiated Activities

110 km/hr

Create your own multiplication word problem using poster and solve it.

80 km/hr

There are 9 boxes. Each box has 7 apples. How many apples are there in total.

40 km/hr

There are 3 baskets. Each basket has 4 oranges. How many oranges are there in total.

Home Task

A farmer has 8 fields. Each field has 120 mango trees. How many mango trees are there in total? Write the multiplication sentence and solve it in your notebook.

Period 8

SHOULD DO 05 MIN.

Teacher: Good morning, students. How are you today.

Teacher: Yesterday, we solved multiplication word problems and learnt about multiplication keywords. Let us do a quick recap.

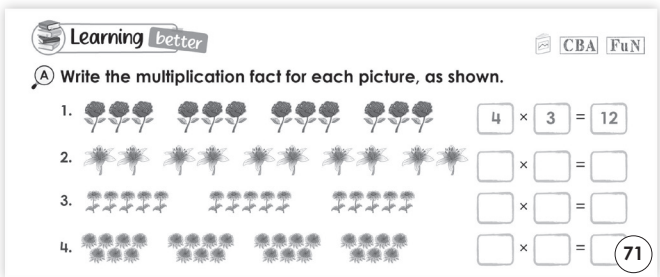
Teacher: If one basket has 5 apples, how many apples will there be in 4 baskets.

Teacher: Yes, 5 × 4 = 20 apples. Now, if each shelf has 6 books and there are 3 shelves, how many books are there in total.

Teacher: Correct. 6 × 3 = 18 books. Today, we will practise multiplication using different exercises.

MUST DO 10 MIN.

Learning better


Learning better

CBA FuN

Ⓐ Write the multiplication fact for each picture, as shown.

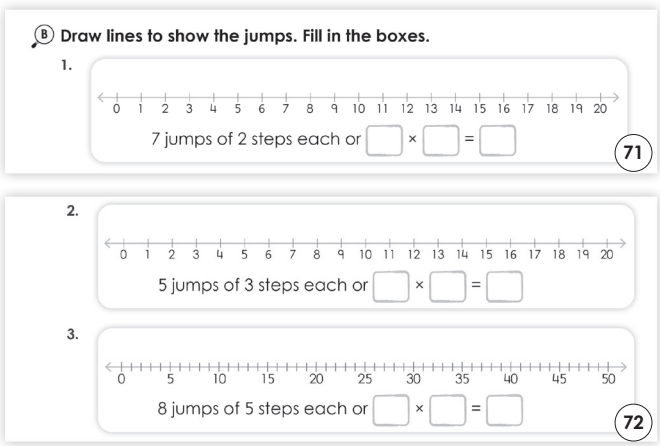
1. 4 × 3 = 12
2. ☐ × ☐ = ☐
3. ☐ × ☐ = ☐
4. ☐ × ☐ = ☐

71

Teacher: Open your books to page 71. Look at the first exercise, where we write multiplication facts from pictures.

Teacher: Count the groups and the objects in each group, then write the multiplication sentence.

Teacher: Let us do the first one together. Now, complete the rest on your own.


Ⓑ Draw lines to show the jumps. Fill in the boxes.

1. 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

7 jumps of 2 steps each or ☐ × ☐ = ☐

71

2. 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

5 jumps of 3 steps each or ☐ × ☐ = ☐

3. 0 5 10 15 20 25 30 35 40 45 50

8 jumps of 5 steps each or ☐ × ☐ = ☐

72

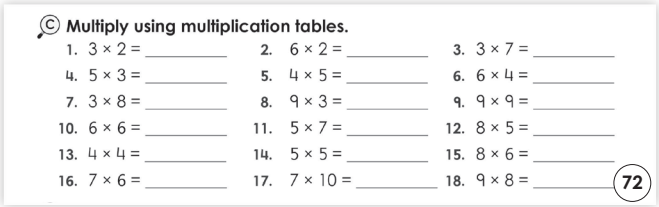
Teacher: Look at the number lines in Exercise B. These show how multiplication works through jumps.

MUST DO 10 MIN.

Teacher: Draw the jumps for each problem and fill in the missing multiplication facts.

Teacher: Let us solve the first one together, then complete the remaining in your notebooks.

You may show the **HOTS** given on the digital platform.


Ⓒ Multiply using multiplication tables.

1. 3 × 2 = _____
2. 6 × 2 = _____
3. 3 × 7 = _____
4. 5 × 3 = _____
5. 4 × 5 = _____
6. 6 × 4 = _____
7. 3 × 8 = _____
8. 9 × 3 = _____
9. 9 × 9 = _____
10. 6 × 6 = _____
11. 5 × 7 = _____
12. 8 × 5 = _____
13. 4 × 4 = _____
14. 5 × 5 = _____
15. 8 × 6 = _____
16. 7 × 6 = _____
17. 7 × 10 = _____
18. 9 × 8 = _____

72

Teacher: Now, let us practise multiplication tables. Solve only questions 1 to 9.

MUST DO 10 MIN.

Teacher: Read each question carefully and write the correct product.

Teacher: Check your answers with a partner once you are done.

Teacher: Let us take a short meditation break to relax our minds.

COULD DO 05 MIN.

Teacher: Close your eyes, take deep breaths and focus on your breathing.

Teacher: Think about one thing you learnt today and how it helps you in daily life.

Teacher: Well done, everyone. Let us have a huge round of applause for our hard work today. See you in the next class!

Differentiated Activities

110 km/hr

Solve 17 × 8, 16 × 9 and 19 × 5 and write the answers.

80 km/hr

Draw a number line and show 4 jumps of 3. Write the multiplication sentence.

40 km/hr

Look at 5 groups of 2 stars. Write the multiplication sentence and find the total number of stars.

Home Task

Solve questions 10 to 18 of Exercise C given on page 72 in the Main Course Book.

Period 9

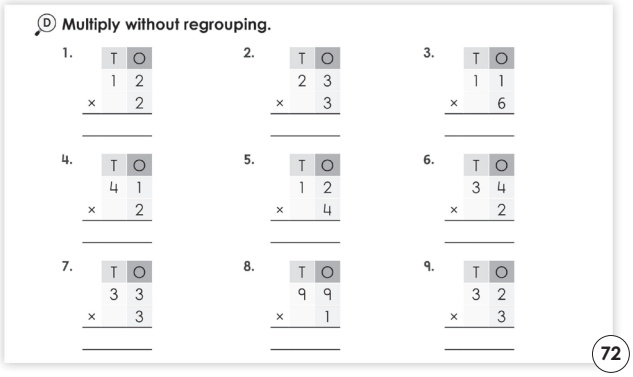
SHOULD DO 05 MIN.

Teacher: Good morning, students. How are you today

Teacher: Let us begin with a fun multiplication game. I will say a number and you will multiply it by 2 as fast as you can. First number is 4.

Teacher: Yes, 4 × 2 = 8. Now, try this one. 7.

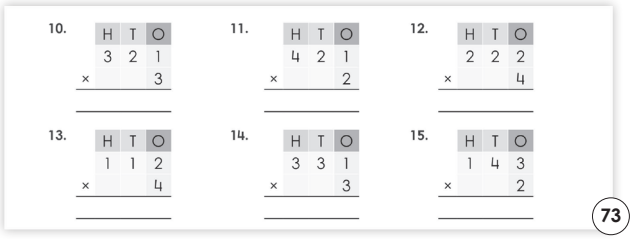
Teacher: Correct, 7 × 2 = 14. Now, let us move to our exercises for today.



Ⓓ Multiply without regrouping.

1. T O: 1 2 × 2
2. T O: 2 3 × 3
3. T O: 1 1 × 6
4. T O: 4 1 × 2
5. T O: 1 2 × 4
6. T O: 3 4 × 2
7. T O: 3 3 × 3
8. T O: 9 9 × 1
9. T O: 3 2 × 3

72



10. H T O: 3 2 1 × 3
11. H T O: 4 2 1 × 2
12. H T O: 2 2 2 × 4
13. H T O: 1 1 2 × 4
14. H T O: 3 3 1 × 3
15. H T O: 1 4 3 × 2

73

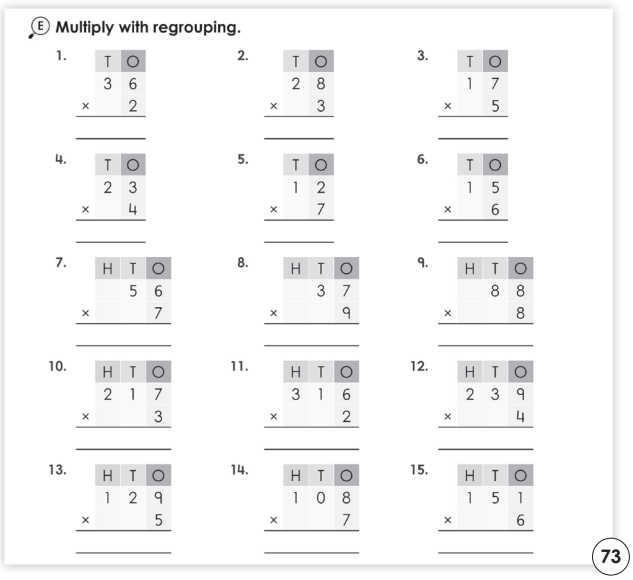
Teacher: Open your books to page 72. Look at Exercise D. We will solve questions 1 to 10 together.

MUST DO 15 MIN.

Teacher: Carefully multiply each number in column form. Remember to start with the ones place.

Teacher: Let us solve the first question together, then continue solving the rest on your own.

Teacher: Check your answers once you are done.



Ⓔ Multiply with regrouping.

1. T O: 3 6 × 2
2. T O: 2 8 × 3
3. T O: 1 7 × 5
4. T O: 2 3 × 4
5. T O: 1 2 × 7
6. T O: 1 5 × 6
7. H T O: 5 6 × 7
8. H T O: 3 7 × 9
9. H T O: 8 8 × 8
10. H T O: 2 1 7 × 3
11. H T O: 3 1 6 × 2
12. H T O: 2 3 9 × 4
13. H T O: 1 2 9 × 5
14. H T O: 1 0 8 × 7
15. H T O: 1 5 1 × 6

73

Teacher: Now, let us move to multiplication with regrouping. Open your book to page 73.

MUST DO 15 MIN.

Teacher: Look at the first question of Exercise E. Multiply the ones first. If the product is greater than 9, carry over to the next place value.

Teacher: Let us solve the first one together. What is 36 × 2?

Teacher: Yes, 72. Now, complete questions 1 to 10 in your books.

Teacher: Check your work and ensure your carrying is correct.

Teacher: Form groups of four. Each group will create a multiplication riddle for another group to solve.

SHOULD DO 05 MIN.

Teacher: Think of a multiplication problem with two-digit numbers and write it down, but do not reveal the numbers. Instead, give hints.

Teacher: For example, if your multiplication problem is 12 × 4, you can say, we multiplied a number by 4 and got 48. Guess the missing number.

Teacher: Once your group has created the riddle, swap it with another group and solve their problem.

Teacher: Discuss your answers and explain how you found them. Let us begin.

Teacher: For the next class, bring an ice-cream stick, a small piece of cardboard, a cutout of a rectangle, a marker and glue to make plant markers for the school garden.

You may show the **Infographics** given on the digital platform.

Teacher: Well done, everyone. Let us have a huge round of applause for our hard work today. See you in the next class.

Differentiated Activities

110 km/hr

Solve 42 × 3, 56 × 4 and 31 × 7 using column multiplication with regrouping. Show your carrying process.

80 km/hr

Solve 21 × 2 and 34 × 3 using column multiplication with regrouping. Write the answers clearly.

40 km/hr

Multiply 18 × 2 in pairs. Write the answer and check your calculation.

Home Task

Solve questions 11 to 15 of Exercise D given on page 73 in the Main Course Book.

Bring an ice-cream stick, a small piece of cardboard, a cutout of a rectangle, a marker and glue to make plant markers.

Period 10

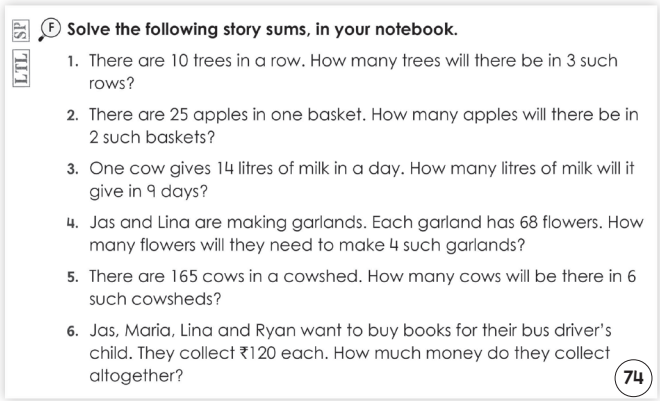
Teacher: Good morning, students. Let us start with a fun game to revise the multiplication table of 5.

SHOULD DO 05 MIN.

Teacher: We will count from 1 to 50, but whenever we reach a number which comes in table of 5, you will say buzz instead of the number.

Teacher: Let us begin. I will start and the next student continues. 1, 2, 3, 4...

Teacher: Great work. Now, let us move on to our exercises for today.


SP LTL F **Solve the following story sums, in your notebook.**

1. There are 10 trees in a row. How many trees will there be in 3 such rows?
2. There are 25 apples in one basket. How many apples will there be in 2 such baskets?
3. One cow gives 14 litres of milk in a day. How many litres of milk will it give in 9 days?
4. Jas and Lina are making garlands. Each garland has 68 flowers. How many flowers will they need to make 4 such garlands?
5. There are 165 cows in a cowshed. How many cows will be there in 6 such cowsheds?
6. Jas, Maria, Lina and Ryan want to buy books for their bus driver's child. They collect ₹120 each. How much money do they collect altogether?

74

Teacher: Open your books to page 74. Read the word problems carefully and find the numbers involved in multiplication.

MUST DO
15 MIN.

Teacher: Identify the multiplication keywords in the question, then write the multiplication sentence and solve.

Teacher: Let us do the first one together. There are 10 trees in a row. How many trees will there be in 3 such rows.

Teacher: Yes, 10 × 3 = 30 trees. Now, complete the remaining questions on your own.

MUST DO
10 MIN.

Creating better


Creating better

ArtI 2.1.CS

Plant Marker Craft

- Take an ice-cream stick, cardboard, and a marker.
- Draw a rectangle on the cardboard.
- Write a thank you note for the plants on the rectangle (for example, 'Thank you for keeping us healthy').
- With the help of an adult, cut the rectangle.
- Paste the rectangle on an ice-cream stick.
- Your plant marker is ready! Place it in a pot.

74

Teacher: Today, we will create plant markers and place them in the school garden. Follow these steps carefully.

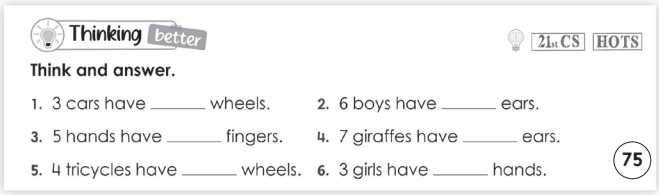
(Guide the students in creating the Plant Marker Craft with the reference of the steps given on page 74 in 'Creating better' section.)

Teacher: Think about how plants help us and choose your message wisely. Once everyone is ready, let us go and put them in the school garden.

You may show the **Mental Maths** given on the digital platform.

MUST DO
05 MIN.

Thinking better


Thinking better

2.1.CS HOTS

Think and answer.

1. 3 cars have _____ wheels.
2. 6 boys have _____ ears.
3. 5 hands have _____ fingers.
4. 7 giraffes have _____ ears.
5. 4 tricycles have _____ wheels.
6. 3 girls have _____ hands.

75

Teacher: Open your books to the 'Thinking better' section. Let us solve these questions together.

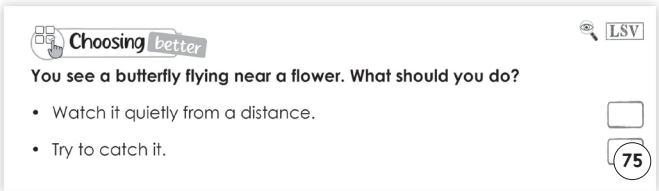
Teacher: If 3 cars have how many wheels, how can we find the answer?

Teacher: Yes, by multiplying 3 × 4 = 12. Now, let us complete the remaining questions in pairs.

You may show the **Quiz** given on the digital platform.

MUST DO
05 MIN.

Choosing better


Choosing better

LSV

You see a butterfly flying near a flower. What should you do?

- Watch it quietly from a distance.
- Try to catch it.

75

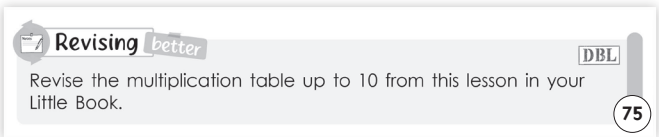
Teacher: Everybody please open 'Choosing better' section given on page 75.

Teacher: Look at the question in your book. You see a butterfly flying near a flower. What should you do

Teacher: Discuss with your partner and choose the correct option.

Teacher: Now, share your answers with the class.

Revising better


Revising better

DBL

Revise the multiplication table up to 10 from this lesson in your Little Book.

75

Teacher: For your home task, you will revise the multiplication tables up to 10 from this lesson in your Little Book.

Teacher: You can do this in different ways. You may write the tables neatly in your notebook, say them aloud while pointing at the numbers or even ask a family member to quiz you.

Teacher: Try making a fun multiplication table chart or flashcards to help you remember better.

Teacher: Be creative while revising and let us discuss how you did it in the next class.

Teacher: Well done, everyone. Let us have a huge round of applause for our hard work today. See you in the next class.

Differentiated Activities

110 km/hr

Create a short multiplication story where a character uses multiplication to solve a real-world problem. Write it in three to four sentences and share with the class

80 km/hr

Draw a multiplication flower. Write a number in the center and draw petals around it with multiplication facts related to that number.

40 km/hr

Hold up fingers on both hands to show two numbers. Your partner will multiply them and say the multiplication sentence. For example, if you show 3 fingers on one hand and 2 on the other, your partner will say 3 × 2 = 6.

Home Task

Complete the Revising better task by practicing multiplication tables up to 10 in your Little Book. Use any creative method to help you remember them.

Period 11

SHOULD DO 05 MIN.

Teacher: Good morning, students. How are you?

Teacher: Let us start by discussing the home task. How did you revise the multiplication tables at home

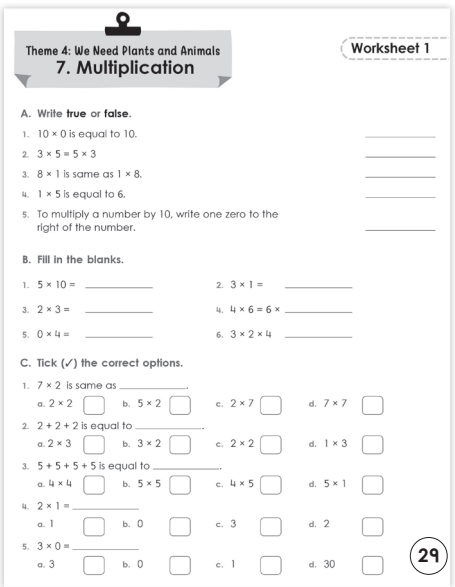
Teacher: That is a great method. Who recited the tables with a family member

Teacher: Well done, practicing with someone helps in quick recall. Who wrote the tables in their notebooks.

MUST DO 15 MIN.

Teacher: That is a great way to remember. Now, let us begin with today's worksheet.

Worksheet 1



Theme 4: We Need Plants and Animals
7. Multiplication

Worksheet 1

A. Write **true** or **false**.

1. 10 × 0 is equal to 10. _____
2. 3 × 5 = 5 × 3 _____
3. 8 × 1 is same as 1 × 8. _____
4. 1 × 5 is equal to 6. _____
5. To multiply a number by 10, write one zero to the right of the number. _____

B. Fill in the blanks.

1. 5 × 10 = _____
2. 3 × 1 = _____
3. 2 × 3 = _____
4. 4 × 6 = 6 × _____
5. 0 × 4 = _____
6. 3 × 2 × 4 _____

C. Tick (✓) the correct options.

1. 7 × 2 is same as _____.
   a. 2 × 2 ☐ b. 5 × 2 ☐ c. 2 × 7 ☐ d. 7 × 7 ☐
2. 2 + 2 + 2 is equal to _____.
   a. 2 × 3 ☐ b. 3 × 2 ☐ c. 2 × 2 ☐ d. 1 × 3 ☐
3. 5 + 5 + 5 + 5 is equal to _____.
   a. 4 × 4 ☐ b. 5 × 5 ☐ c. 4 × 5 ☐ d. 5 × 1 ☐
4. 2 × 1 = _____
   a. 1 ☐ b. 0 ☐ c. 3 ☐ d. 2 ☐
5. 3 × 0 = _____
   a. 3 ☐ b. 0 ☐ c. 1 ☐ d. 30 ☐

29

Teacher: Open your workbooks to page 29. We will solve worksheet 1. Let us go through each exercise step by step.

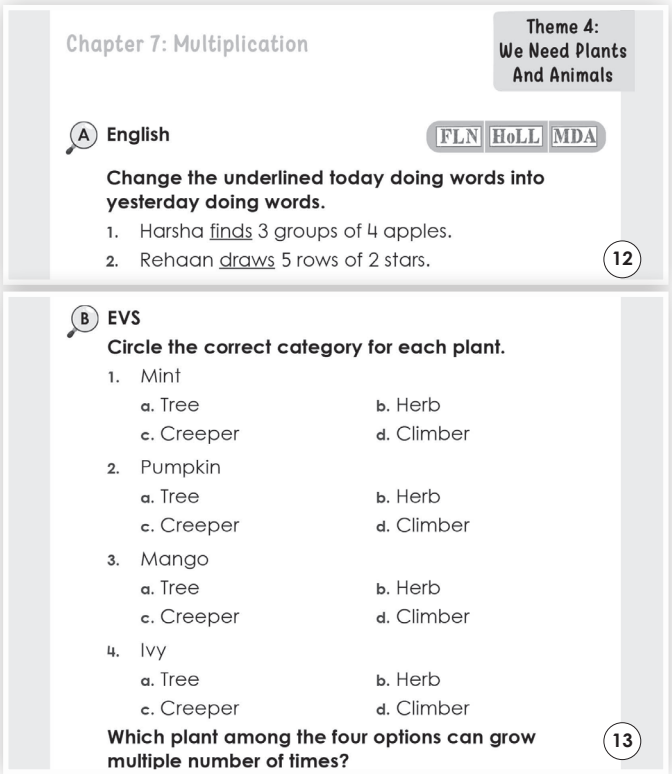
Teacher: In Exercise A, decide whether the given statements are true or false. Think carefully before answering.

Teacher: In Exercise B, fill in the missing numbers in the multiplication sentences. Use your knowledge of tables to help you.

Teacher: In Exercise C, tick the correct multiplication option. Look at all choices carefully before selecting.

Teacher: Solve each exercise one by one. Raise your hand if you have any doubts.

Book of Holistic Teaching



Chapter 7: Multiplication

Theme 4: We Need Plants And Animals

A English — FLN HoLL MDA

Change the underlined today doing words into yesterday doing words.

1. Harsha finds 3 groups of 4 apples.
2. Rehaan draws 5 rows of 2 stars.

12

B EVS

Circle the correct category for each plant.

1. Mint
   a. Tree b. Herb c. Creeper d. Climber
2. Pumpkin
   a. Tree b. Herb c. Creeper d. Climber
3. Mango
   a. Tree b. Herb c. Creeper d. Climber
4. Ivy
   a. Tree b. Herb c. Creeper d. Climber

Which plant among the four options can grow multiple number of times?

13

COULD DO 10 MIN.

(Refer to the Book of Holistic Teaching, page 12,13 under the title 'Multiplication.' Complete the activities mentioned in this section and ensure that the students complete them. These activities are designed to enhance their holistic understanding and engagement with the topic. Provide any necessary support and materials to help the students successfully finish the activities.)

You may show **Animated Activities** given on digital platform.

Doubt Session

SHOULD DO 10 MIN.

Teacher: Now, let us discuss any doubts you had while solving the worksheet.

Teacher: Which question did you find tricky

Teacher: Let us solve it together. What should be the first step

Teacher: Good thinking. Remember, multiplication is just repeated addition. Let us try another one.

Differentiated Activities

110 km/hr

Create a multiplication riddle. For example, I have 5 baskets and each has 7 oranges. How many oranges do I have in total Solve your riddle and share it with a friend.

80 km/hr

Roll two dice and multiply the numbers you get. Repeat this five times and write the answers in your notebook.

40 km/hr

Use stickers or small drawings to show a multiplication fact. For example, draw 3 rows of 2 stars each and write the multiplication sentence.

Home Task

Observe your day and think about where you use multiplication in real life. Write one word problem based on your experience. For example, I ate 3 bowls of salad and each bowl had 5 pieces of cucumber. How many pieces of cucumber did I eat in total?

Period 12

Teacher: Good morning, students. Let us begin with a quick warm-up activity. I will call out a number and you will multiply it by 3 as fast as you can.

SHOULD DO
05 MIN.

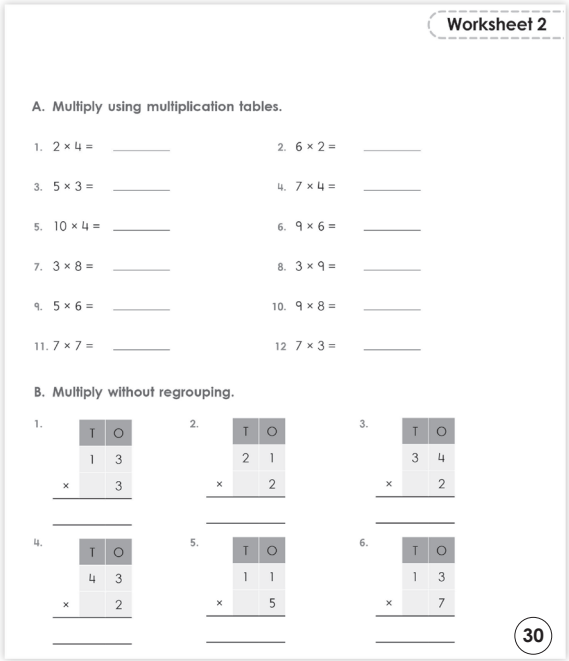
Teacher: What is 4 × 3

Teacher: Yes, it is 12. Now, let us try another one. What is 7 × 3

Teacher: Great work. Now, let us move to our worksheets.

MUST DO
15 MIN.

Worksheet 2



Worksheet 2

A. Multiply using multiplication tables.

1. 2 × 4 = _____ 2. 6 × 2 = _____
3. 5 × 3 = _____ 4. 7 × 4 = _____
5. 10 × 4 = _____ 6. 9 × 6 = _____
7. 3 × 8 = _____ 8. 3 × 9 = _____
9. 5 × 6 = _____ 10. 9 × 8 = _____
11. 7 × 7 = _____ 12 7 × 3 = _____

B. Multiply without regrouping.

1. T O: 1 3 × 3
2. T O: 2 1 × 2
3. T O: 3 4 × 2
4. T O: 4 3 × 2
5. T O: 1 1 × 5
6. T O: 1 3 × 7

30

Teacher: Open your workbooks to page 30. We will complete **Worksheet 2**.

Teacher: In Exercise A, solve the multiplication table problems. Remember to use the tables we have practised.

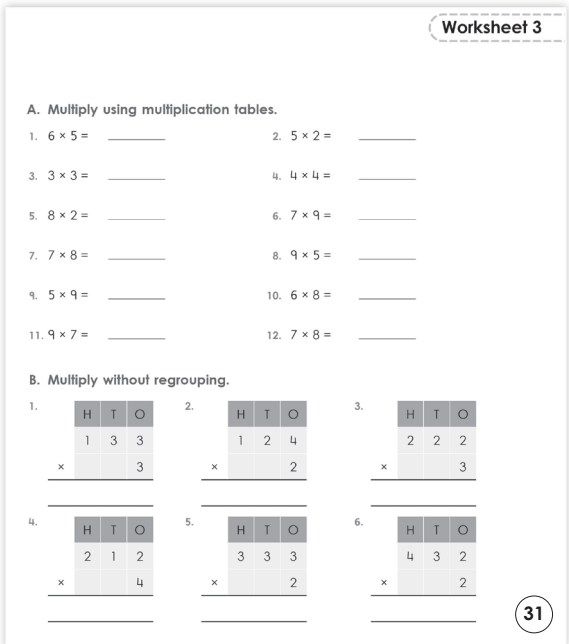
Teacher: In Exercise B, multiply the numbers using column multiplication without regrouping. Solve each problem carefully.

Teacher: Work independently, and I will check your answers once you are done.

You may generate additional practice worksheets using the **Test Generator** given on digital platform.

MUST DO
15 MIN.

Worksheet 3



Worksheet 3

A. Multiply using multiplication tables.

1. 6 × 5 = _____ 2. 5 × 2 = _____
3. 3 × 3 = _____ 4. 4 × 4 = _____
5. 8 × 2 = _____ 6. 7 × 9 = _____
7. 7 × 8 = _____ 8. 9 × 5 = _____
9. 5 × 9 = _____ 10. 6 × 8 = _____
11. 9 × 7 = _____ 12. 7 × 8 = _____

B. Multiply without regrouping.

1. H T O: 1 3 3 × 3
2. H T O: 1 2 4 × 2
3. H T O: 2 2 2 × 3
4. H T O: 2 1 2 × 4
5. H T O: 3 3 3 × 2
6. H T O: 4 3 2 × 2

31

Teacher: Now, let us move to Worksheet 3 on page 31.

Teacher: In section A, solve multiplication problems using your tables.

Teacher: In section C, multiply without regrouping. Follow the steps we learnt in previous lessons.

SHOULD DO
05 MIN.

Teacher: Check your work after completing each question.

Teacher: Now, let us fill in the last column of the KWL chart.

Teacher: In this column we will write what we have learnt in this chapter.

Teacher: Think about the topics, have we **l**earnt and write them in the 'L' column of the chart.

(Wait for students to fill in the chart.)

Teacher: Let us all give a huge round of applause to everyone for their hard work and creativity. Great work, everyone. See you in the next class. Have a wonderful day ahead.

Differentiated Activities

110 km/hr

A shopkeeper arranges 24 apples in baskets, placing 6 apples in each basket. How many baskets does he use

80 km/hr

Find the missing number: 7 × __ = 35 and __ × 4 = 28.

40 km/hr

There are 3 plates and each plate has 2 sandwiches. How many sandwiches are there in total Write the multiplication sentence.

Home Task

Practise the concepts discussed in this chapter.

Learning Outcomes

The students will:

Physical Development	• engage in hands-on activities like making plant markers, using dice for multiplication practise and drawing multiplication arrays to strengthen fine motor skills.
Socio-Emotional and Ethical Development	• collaborate with peers in group activities such as creating multiplication riddles, solving puzzles together and placing plant markers in the school garden, fostering teamwork and shared responsibility.
Cognitive Development	• apply multiplication concepts in real-life contexts like arranging objects in groups, solving word problems related to healthy food habits and using logical reasoning to find missing numbers in equations.
Language and Literacy Development	• read and interpret multiplication-based word problems, discuss problem-solving strategies with classmates and explain mathematical reasoning through structured activities like the KWL chart.
Aesthetic and Cultural Development	• appreciate mathematical patterns in everyday life through activities like designing multiplication flowers, using rangoli-style groupings and learning through poster on multiplication keywords.
Positive Learning Habits	• develop perseverance in problem-solving by practicing multiplication tables in creative ways, engaging in peer discussions and reflecting on learning through structured exercises like Revising better.

Starry Knights

Could you make this unit an enjoyable learning experience for your learners? Mention any one incident that makes you feel contented about introducing multiplication to the young learners.

Kudos to you!! Give yourself a STAR.