Lesson-9: Division

Theme 6: We Explore

13 Periods (40 minutes each)

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

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

Affirming better: I love going to new places.

Curricular Goals and Objectives (NCF-FS)

To enable the students:

- to understand division as equal sharing and grouping.
- to connect division with subtraction and multiplication.
- to apply division in real-life and problem-solving situations.
- to use terms like dividend, divisor, quotient and remainder correctly.
- to explore properties and patterns in division.
- to engage in collaborative and communicative learning.
- to build confidence, curiosity and reflective thinking in mathematics.

Methodology

Period 1

SHOULD DO 5 MIN.

Teacher: Good morning students. How are you today?

Teacher: Today, we will begin a new chapter in Maths. But first, let us do a small warm-up.

Teacher: I will show you some objects and you will tell me how we can share them equally. Ready?

Teacher: If we have 6 pencils and 2 students, how can we share the pencils equally?

Teacher: Yes, each student will get 3 pencils.

Teacher: Now, if we have 10 biscuits and 5 students, how many biscuits for each?

Teacher: That is correct, each gets 2 biscuits.

Teacher: If we have 12 crayons and we make 3 equal groups, how many crayons in each group?

Teacher: Good thinking, each group has 4 crayons.

Teacher: We will learn more about the division in detail.

Affirming better

SHOULD DO 5 MIN.

Teacher: Today, our important affirmation is 'I love going to new places.'

Teacher: Can anyone share why they like visiting new places?

Teacher: That is right. New places help us learn more and see new things.

Teacher: Just like exploring new places, today we are going to explore a new topic in Maths. Let us enjoy learning something new.

Teacher: We will begin a new chapter, Division. 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

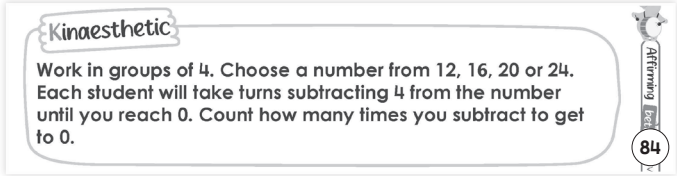
Teacher: Take a few minutes to think and write. If you have any questions, feel free to ask.

Teacher: You all did 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

MUST DO 10 MIN.

Teacher: Everybody, please open page 84 in your Main Coursebook. Who will read and explain the activity?



(Scaffold the students to complete the activity.)

Teacher: Excellent effort. What did you notice?

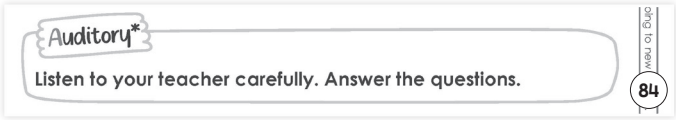
Teacher: Yes, the number of subtractions tells us how many groups of 4 are there. That is how division works.

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

Auditory

MUST DO 5 MIN.

Teacher: Now, listen carefully as I read out a set of questions.



Teacher: Naina has six candies. She gives two candies to Fiza, two candies to Rohit and two candies to Pihu.

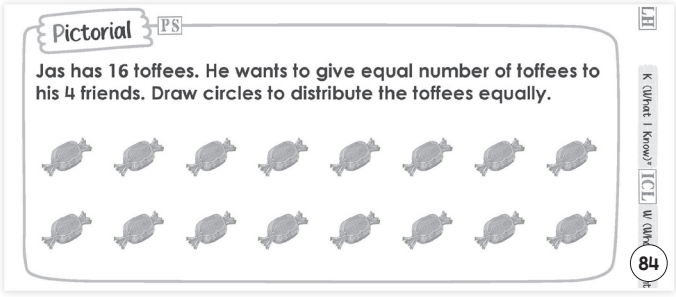
1. How many friends did Naina give candies to?
2. How many candies are left?

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

Pictorial

MUST DO 5 MIN.

Teacher: Open your books to page 84. Look at the pictures. What do we need to do here?



Teacher: Yes, we can draw circles and distribute the toffees equally.

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

Differentiated Activities

110 km/hr

Draw 12 stars in your notebook. Make 3 equal groups. How many stars are in each group?

80 km/hr

Draw 8 circles. Make 2 equal groups. How many circles are there in each group?

40 km/hr

Draw 6 smiley faces. Put 3 smileys in each group. How many groups did you make?

Home Task

Draw 10 balls in your notebook. Divide them equally into 2 groups. Count and write how many balls are in each group.

Period 2

Teacher: Good morning students. How are you today?

Teacher: Let us start with a quick warm-up. I will ask some simple questions. You will answer with a number.

SHOULD DO 5 MIN.

Teacher: If I have 4 oranges and 2 friends, can we share them equally?

Teacher: Yes, 2 oranges for each friend.

Teacher: If I have 6 crayons and 3 students, how many crayons for each?

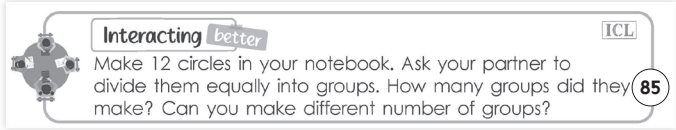
Teacher: That is right, 2 crayons each.

Teacher: Very good. This is what we call 'sharing equally' and we will learn more about it in today's class.

Interacting better

Teacher: Everyone, open page 85 in your book. Look at the 'Interacting better' section.

MUST DO 5 MIN.



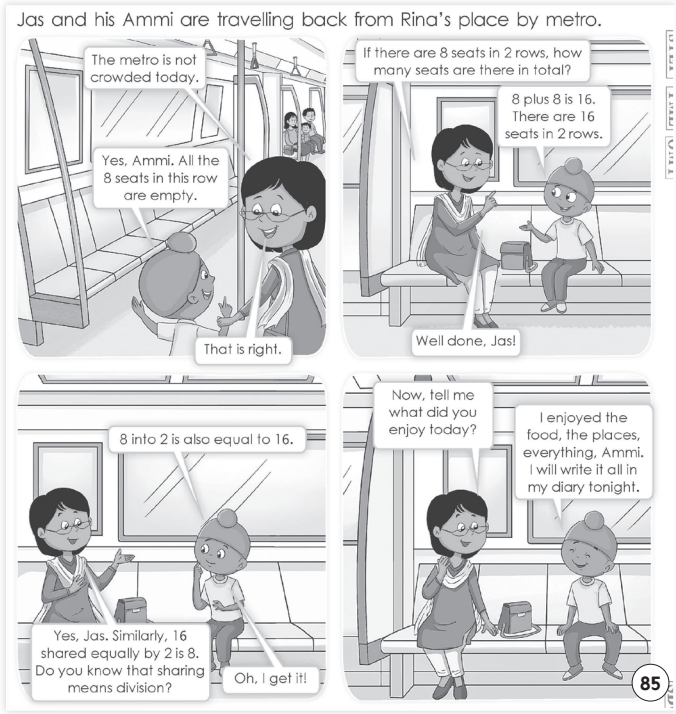
Teacher: Please make 12 circles in your notebook. Ask your partner to divide them equally into different groups.

Teacher: How many groups did you make? Could someone make 2 groups of 6?

Teacher: Did someone make 3 groups of 4? Or 4 groups of 3?

Teacher: Yes, we can divide 12 in different ways. Division helps us group things equally

MUST DO 15 MIN.



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

Teacher: Before we read the story, let me ask you a few questions.

Teacher: If you have 4 peanuts and you want to share them with one friend, how many will each of you get?

Teacher: Yes, 2 each.

Teacher: What if there are 4 peanuts and 4 friends?

Teacher: Correct, 1 for each.

Teacher: Now imagine you have 5 toys and you want to give the same number of toys to 2 people. Can you do it easily?

Teacher: Hmm, maybe not equally. That is something we will explore later in this chapter.

Teacher: Today's story is about Jas and how he learns to share. While reading, think about how Jas understands the idea of sharing equally. Are you ready?

Teacher: Who will read the first part?

(Guide them to read and explain the story.)

Teacher: So what did Jas learn from this trip in the metro?

Teacher: Yes, he learnt that 16 seats shared into 2 rows means 8 seats in each row.

Teacher: When we add, we join things together. But when we divide, we separate into equal groups.

Teacher: Can you now think of something at school that we can divide into equal parts?

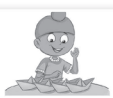
Teacher: Yes, pencils in a box, students in a line, books in a shelf.

Teacher: We will learn more about how to divide different things in different ways in the coming periods. Are you curious to find out how?

What Division Means

WHAT DIVISION MEANS

In the evening, Lina visits Jas. He has 4 paper boats. He wants to share them with Lina.



Sharing

Jas shares his paper boats with Lina.

He gives 1 paper boat to Lina. He keeps 1 for himself.

He gives 1 more paper boat to Lina. He keeps 1 more for himself.

Each of them has 2 paper boats. Now, Jas has no more paper boats left to share.

This is how Jas shares paper boats between Lina and himself.

4 paper boats	÷	2 people	=	2 paper boats for each person

4 ÷ 2 = 2 is a **division fact**. ÷ is the symbol of **division**.

We read the above as **4 divided by 2 is equal to 2** . This is a **division statement**. In equal sharing, we know the number of groups. We find out the number of objects each group gets by sharing them one by one.

86

Teacher: Now, let us move on to the topic 'What Division Means' given on page 86.

MUST DO

15 MIN.

Teacher: In the evening, Lina visits Jas. He has 4 paper boats and wants to share them.

Teacher: Look at the picture. What is Jas doing?

Teacher: Yes, he gives 1 paper boat to Lina and keeps 1 for himself. Then he does the same again.

Teacher: So, how many paper boats does each of them have now?

Teacher: Correct, 2 boats each. And how many are left?

Teacher: Yes, none. That means the boats are shared equally.

Teacher: This is called division. We write it like this: 4 ÷ 2 = 2

Teacher: 4 is the total number of paper boats. 2 is the number of people. 2 is how many each person gets.

Teacher: This is a division fact. The sign ÷ means division.

Teacher: Now read the sentence below the picture. It says: 4 divided by 2 is equal to 2. This is called a division statement.

Teacher: In equal sharing, we already know how many people there are and we find out how many objects each person gets.

Teacher: Just like Jas did. He shared by giving one by one. That is how division helps us in real life.

Teacher: Have you shared something like this with your friend or sibling?

Teacher: Great. Then you already understand what division means.

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

You have 12 pencils. Divide them equally among 3 friends. How many pencils does each friend get?

80 km/hr

You have 8 strawberries. Divide them equally between 2 friends. How many strawberries do each get?

40 km/hr

You have 6 apples and you want to put 3 apples in each basket, how many baskets do you need?

Home Task

Draw 9 flowers in your notebook. Divide them into 3 equal groups. How many flowers are in each group?

Period 3

Teacher: Good morning students. How are you today?

Teacher: Let us begin with a warm-up.

Teacher: I will say a number and you will show me that number using groups.

SHOULD DO

5 MIN.

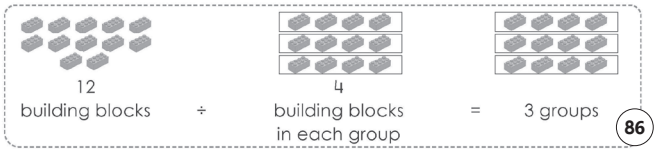
Teacher: Show me 6 fingers and divide them into 2 groups.
Teacher: How many fingers in each group?
Teacher: Yes, 3 in each.
Teacher: Let us try another. Show 12 fingers using your hands and your partner's hands. Can you make 4 equal groups?
Teacher: Yes, each group has 3 fingers. That is called grouping. We will learn about it detail.

Grouping

Teacher: Everyone, open page 86. Look at the building blocks. Jas has 12 blocks and he makes 3 equal groups.

MUST DO
10 MIN.

Grouping
There are 12 building blocks. Jas makes 3 groups with 4 building blocks in each group.



86

12 ÷ 4 = 3 is a division fact. It is read as 12 divided by 4 is equal to 3.
Division means **sharing** or **grouping**. It can be equal or unequal. Sometimes, when we divide, there is something left over. This leftover part is called the remainder.

87

Teacher: How many blocks are there in each group?
Teacher: Yes, 4.
Teacher: This is written as 12 ÷ 4 = 3. This is called a division fact.
Teacher: When we divide, we are either sharing or grouping.
Teacher: Sharing means giving one by one to each person. Grouping means putting things into equal sets.
Teacher: Sometimes, we get leftovers after dividing. That is called a remainder. We will learn about that later.

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

① **Divide the following equally. Write the division fact, as shown.** LTL SP

8 biscuits among 4 children
Raghav Nisha Sanjay Kavya
Raghav Nisha Sanjay Kavya
8 ÷ 4 = 2
There are 4 children – Raghav, Nisha, Sanjay and Kavya. They share the biscuits one by one among them. Raghav, Nisha, Sanjay and Kavya get 2 biscuits each.
Each child gets 2 biscuits.

15 capsicums in 3 plates
15 ÷ 3 = ____
Each plate has ____ capsicums.

87

Teacher: Let us solve question 1. Who will read the biscuit story aloud?

MUST DO
5 MIN.

Teacher: Well, done. Now tell me, how many biscuits are there?
Teacher: Yes, 8 biscuits and 4 children. What do we do in this exercise?
Teacher: We divide the biscuits equally. So let us write the division fact: 8 ÷ 4 = 2
Teacher: How many biscuits does each child get?
Teacher: That is right, 2 biscuits.
Teacher: Let us now solve the second part. Who will read the capsicum question?
Teacher: There are 15 capsicums and 3 plates. What do we need to find?
Teacher: How many capsicums are in each plate? Let us write: 15 ÷ 3 = 5

Remembering better

Teacher: Now look at the 'Remembering better' on page 87. Who would like to read it aloud?

MUST DO
5 MIN.

Remembering better
In distribution, the person who distributes is not included. While in sharing, the person who distributes is also included. LOTS

87

Teacher: Good. It says: In distribution, the person who gives is not included.
Teacher: But in sharing, the person giving is included. Can someone give me a real-life example of each?
Teacher: Yes, when your teacher gives you pencils but does not keep one - that is distribution.
Teacher: When you and your friend share a box of crayons and both use it - that is sharing. Well explained. Let us learn more about it in Exercise 2.

MUST DO
10 MIN.

② **Write the division statement and fact in your notebook, as shown.** ST

Ryan has made 20 sandwiches for the school picnic. He distributes them equally among 4 friends. How many sandwiches does each one get?

distributed among	shared with
Total number of sandwiches = 20	Total number of sandwiches = 20
Number of people = 4	Number of people = 5 (When we say 'shared with,' we have to include Ryan too.)
Number of sandwiches each child gets = 20 ÷ 4 = 5	Number of sandwiches each child gets = 20 ÷ 5 = 4

87

Teacher: Who will read the question about Ryan and his sandwiches?
Teacher: Excellent reading. Now look at the two boxes – one says distributed among and the other says shared with.
Teacher: In the first case, Ryan distributes 20 sandwiches to 4 friends. He is not included.
Teacher: So we write the division statement as: 20 ÷ 4 = 5
Teacher: That means each friend gets 5 sandwiches.
Teacher: Now look at the next box. This time Ryan shares with his friends – so he is included. Now how many people are there?

Teacher: Yes, 5 people. So the division fact is: 20 ÷ 5 = 4

Teacher: That means each person, including Ryan, gets 4 sandwiches.

Teacher: See how the number of people changes the answer. When you share with others, you also get a part. When you distribute, you do not.

Teacher: This is why it is important to check whether we are distributing or sharing. Let us always read the question carefully.

MUST DO
5 MIN.

Sam has 30 laddoos for the school picnic. She distributes them equally among 5 children. How many laddoos does each child get? If she shares the laddoos among 5 friends. How many laddoos will each get? 87

Teacher: Let us read the last question about Sam. Who wants to read it aloud?

Teacher: Sam has 30 *laddoos*. First, she distributes them to 5 children. So we write: 30 ÷ 5 = 6

Teacher: Then she shares the *laddoos* with her 5 friends. That includes Sam too. How many people now?

Teacher: Yes, 6. So now we write: 30 ÷ 6 = 5

Teacher: This is a clear example of how dividing changes depending on who is included.

Differentiated Activities

110 km/hr

Draw 20 sandwiches. Divide them equally among 4 friends. Now divide the same 20 sandwiches shared with 5 people. Write both division facts.

80 km/hr

Draw 30 *laddoos*. Divide them among 5 children. Then draw again and divide among 6 people (including yourself). Write the two division facts.

40 km/hr

Draw 15 capsicums. Make 3 equal groups. Circle them. Write how many are in each group.

Home Task

Draw 12 stars. First, divide them equally among 4 people. Then divide them equally among 6 people. Write how many each person gets in both cases.

Period 4

Teacher: Good morning students. How are you today?

Teacher: Today, we will start with a fun game using real objects from your bag. Take out 6 erasers or crayons or any small item you have.

SHOULD DO
5 MIN.

Teacher: Now give 2 of them to your friend.

Teacher: How many are left with you?

Teacher: Yes, 4.

Teacher: Again give 2 more. How many now?

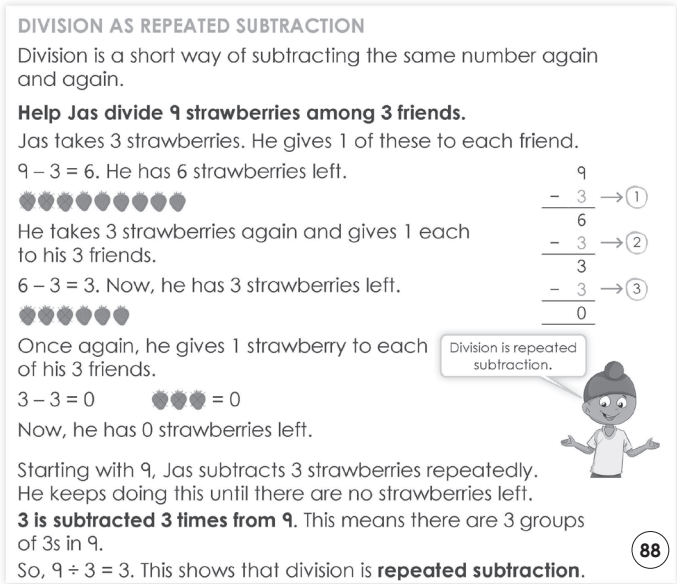
Teacher: Yes, 2.

Teacher: One last time, give 2 more. How many left now?

Teacher: Yes, 0. You kept subtracting 2 again and again. That is called repeated subtraction.

Teacher: Let us now understand how this connects to division.

Division As Repeated Subtraction


DIVISION AS REPEATED SUBTRACTION

Division is a short way of subtracting the same number again and again.

Help Jas divide 9 strawberries among 3 friends.

Jas takes 3 strawberries. He gives 1 of these to each friend.

9 – 3 = 6. He has 6 strawberries left.

9 − 3 → (1) = 6

He takes 3 strawberries again and gives 1 each to his 3 friends.

6 − 3 → (2) = 3

6 – 3 = 3. Now, he has 3 strawberries left.

3 − 3 → (3) = 0

Once again, he gives 1 strawberry to each of his 3 friends.

Division is repeated subtraction.

3 – 3 = 0 = 0

Now, he has 0 strawberries left.

Starting with 9, Jas subtracts 3 strawberries repeatedly. He keeps doing this until there are no strawberries left.

3 is subtracted 3 times from 9. This means there are 3 groups of 3s in 9.

So, 9 ÷ 3 = 3. This shows that division is **repeated subtraction**.

88

Teacher: Everyone, please open page 88. Who will read aloud the story about Jas and the strawberries?

MUST DO
10 MIN.

Teacher: Jas has 9 strawberries and wants to divide them among 3 friends.

Teacher: First, he gives 1 to each friend. That is 3 strawberries. How many are left?

Teacher: Yes, 6. Then he gives 3 again. Now?

Teacher: 3 are left. One last time – 3 strawberries again. Now?

Teacher: Yes, 0 left.

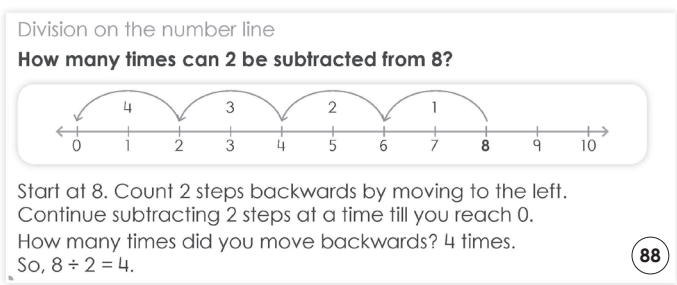
Teacher: How many times did he subtract 3?

Teacher: Correct, 3 times. So, 9 ÷ 3 = 3.

Teacher: This is called repeated subtraction. When we divide, we keep subtracting the same number again and again until we reach 0.

(Show repeated subtraction using erasers, crayons or any classroom objects. Alternatively, draw objects on the board and cross them out step by step.)

Division on the number line


Division on the number line

How many times can 2 be subtracted from 8?

Start at 8. Count 2 steps backwards by moving to the left. Continue subtracting 2 steps at a time till you reach 0.

How many times did you move backwards? 4 times.

So, 8 ÷ 2 = 4.

88

Teacher: Now let us see another way to divide using the number line.

MUST DO
10 MIN.

Teacher: Look at the number line on the same page. We start at 8 and take jumps of 2 to the left.

Teacher: How many jumps until we reach 0?

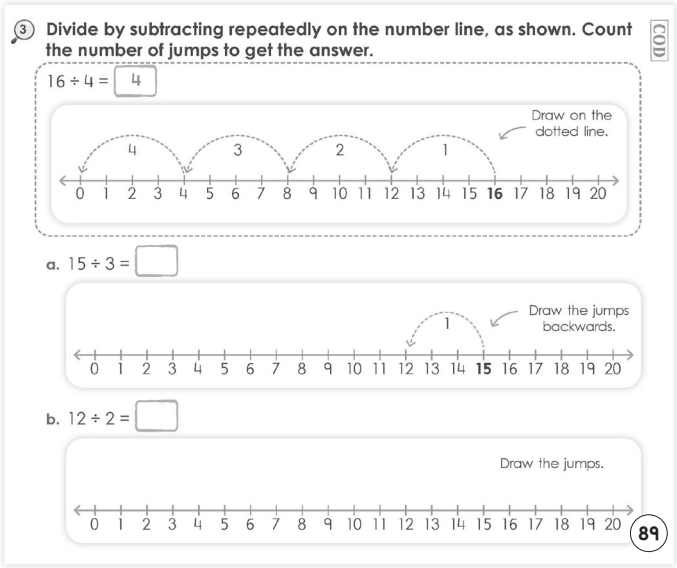
Teacher: 4 jumps. So, 8 ÷ 2 = 4.

Teacher: Division on the number line means going backwards in equal jumps. Let us try it ourselves now.

(Draw the number line on the board. Use a token or marker to show the jumps clearly.)

MUST DO

5 MIN.



Teacher: Turn to Exercise 3 on page 89.

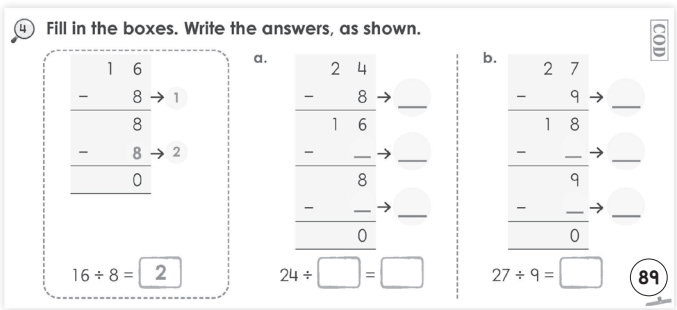
Teacher: Who will read the question (a) aloud for us?

Teacher: Let us solve the question (a) together: 15 ÷ 3.

Teacher: Start from 15 and subtract 3 again and again. How many times?

Teacher: Yes, 5 times. Now solve questions (b): 12 ÷ 2 independently in your notebook.

(Walk around to support students as needed.)



Teacher: Let us now do Exercise 4. Who will read the instructions aloud?

MUST DO

5 MIN.

Teacher: We will solve the first example together: 16 ÷ 8.

Teacher: We subtract 8 twice to reach 0. So, 16 ÷ 8 = 2.

Teacher: Now solve questions (a) and (b) in pairs. Take turns in subtracting and writing down the steps.

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

COULD DO

5 MIN.

Teacher: Let us all play a subtraction jump game together.

Teacher: I will give you a number to start with and the jump size. You will take steps backward as we subtract again and again.

Teacher: We will start from 20 and take jumps of 4. How many jumps will it take to reach 0? Let us find out by jumping together.

(Draw a number line on the floor using chalk or tape. Mark the numbers from 0 to 20. Ask one student to start from 20 and physically jump backwards in steps 4. Let others count aloud as they jump. Repeat with different numbers and jump sizes like 15 with jumps of 3 or 18 with jumps of 6.)

Teacher: Now let us try with 15 and jump size 3. Who wants to try next?

(If there is not enough space in the classroom, take the class outside or to the corridor or ground. Students can walk or jump and use body movement to show repeated subtraction.)

Differentiated Activities

110 km/hr

Draw a number line. Subtract 2 repeatedly from 10. How many jumps did you make?

80 km/hr

Start from 24. Subtract 6 repeatedly. Show jumps on a number line. How many jumps?

40 km/hr

Draw a number line starting from 6. Take backward jumps of 2. Stop when you reach 0. How many jumps did you take?

Home Task

Draw a number line from 0 to 16. Start from 16 and take backward jumps of 4. Show the jumps and write how many times you subtracted 4 to reach 0.

Period 5

Teacher: Good morning students. How are you today?

Teacher: Yesterday, we learnt that division can be shown through repeated subtraction. Let us revise that quickly with a fun challenge.

SHOULD DO

5 MIN.

Teacher: I will give you a number and a subtraction number. You will tell me how many times we can subtract it until we reach zero.

Teacher: Ready? Let us start with 12. If I keep subtracting 3 again and again, how many times will I subtract before I get zero?

Teacher: Yes, 4 times. That means 12 ÷ 3 = 4

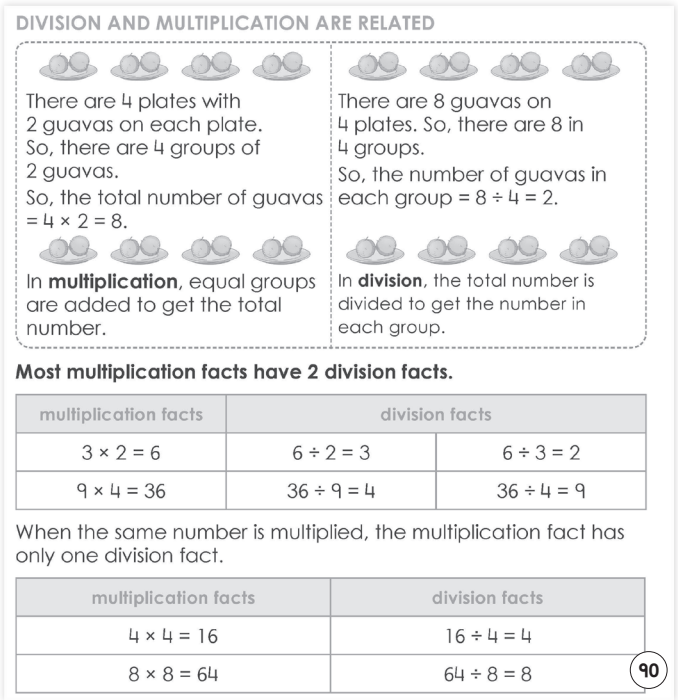
Teacher: Now try 16. If we subtract 4 again and again, how many times?

Teacher: Yes, 4 times. So, 16 ÷ 4 = 4

Teacher: Wonderful. So when we subtract the same number repeatedly, we are finding out how many groups we can make.

Teacher: Today, we will learn how this idea connects with multiplication. Let us begin.

Division And Multiplication Are Related



DIVISION AND MULTIPLICATION ARE RELATED

There are 4 plates with 2 guavas on each plate. So, there are 4 groups of 2 guavas. So, the total number of guavas = 4 × 2 = 8.

There are 8 guavas on 4 plates. So, there are 8 in 4 groups. So, the number of guavas in each group = 8 ÷ 4 = 2.

In **multiplication**, equal groups are added to get the total number.

In **division**, the total number is divided to get the number in each group.

Most multiplication facts have 2 division facts.

multiplication facts	division facts	
3 × 2 = 6	6 ÷ 2 = 3	6 ÷ 3 = 2
9 × 4 = 36	36 ÷ 9 = 4	36 ÷ 4 = 9

When the same number is multiplied, the multiplication fact has only one division fact.

multiplication facts	division facts
4 × 4 = 16	16 ÷ 4 = 4
8 × 8 = 64	64 ÷ 8 = 8

90

Teacher: Everyone, please open your books to page 90.

Teacher: Today we will learn how multiplication and division are connected. Look at the pictures of guavas on your page.

MUST DO
10 MIN.

Teacher: Who will read the left side, the part about multiplication?

Teacher: Yes, well read. So, we have 4 plates with 2 guavas each. That means there are 4 groups of 2.

Teacher: How do we find the total number of guavas?

Teacher: Yes, by multiplying. 4 × 2 = 8. That is multiplication.

Teacher: Now, look at the right side. Who will read the part about division?

Teacher: Very good. So, there are 8 guavas in total and we divide them into 4 groups.

Teacher: What does each group get?

Teacher: Yes, 2 guavas. That is 8 ÷ 4 = 2. That is division.

Teacher: So when we multiply, we are making equal groups to find the total.

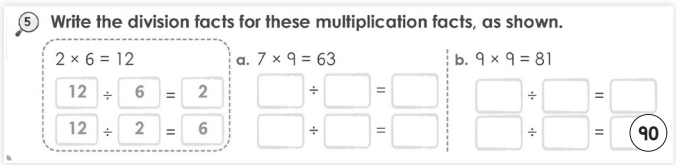
Teacher: And when we divide, we are taking the total and breaking it into equal groups.

Teacher: That is how multiplication and division are related. One helps us understand the other.

Teacher: Now work with your partner. I will say a multiplication sentence and both of you will write its two division facts.

Teacher: Let us begin with 6 × 3 = 18. What are the two division facts?

Teacher: Yes, 18 ÷ 3 = 6 and 18 ÷ 6 = 3. Well done.



5 Write the division facts for these multiplication facts, as shown.

2 × 6 = 12

12 ÷ 6 = 2

12 ÷ 2 = 6

a. 7 × 9 = 63

b. 9 × 9 = 81

90

Teacher: Let us solve Exercise 5 together. Who will read the first question aloud?

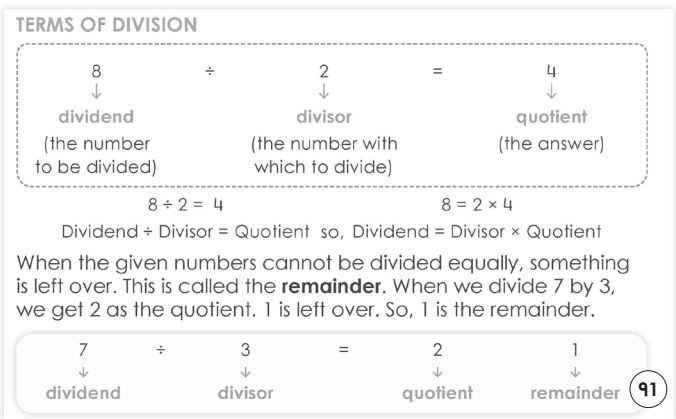
MUST DO
5 MIN.

Teacher: The first multiplication sentence is 2 × 6 = 12. We are asked to write two related division facts.

Teacher: Let us solve this one together. 12 ÷ 6 = 2 and 12 ÷ 2 = 6.

Teacher: Now solve questions (a) and (b) independently. Write both division facts for each multiplication sentence.

Terms Of Division



TERMS OF DIVISION

8 ÷ 2 = 4

8 dividend (the number to be divided)

2 divisor (the number with which to divide)

4 quotient (the answer)

8 ÷ 2 = 4 8 = 2 × 4

Dividend ÷ Divisor = Quotient so, Dividend = Divisor × Quotient

When the given numbers cannot be divided equally, something is left over. This is called the **remainder**. When we divide 7 by 3, we get 2 as the quotient. 1 is left over. So, 1 is the remainder.

7 ÷ 3 = 2 1

7 dividend 3 divisor 2 quotient 1 remainder

91

Teacher: Now let us look at the important terms in division.

Teacher: Everyone open the page 90, where the chart showing dividend, divisor and quotient.

MUST DO
5 MIN.

Teacher: In 8 ÷ 2 = 4

- 8 is called the dividend – it is the number to be divided.
- 2 is the divisor – the number we divide by.
- 4 is the quotient – the answer we get.

Teacher: Any body knows, what is Reminder?

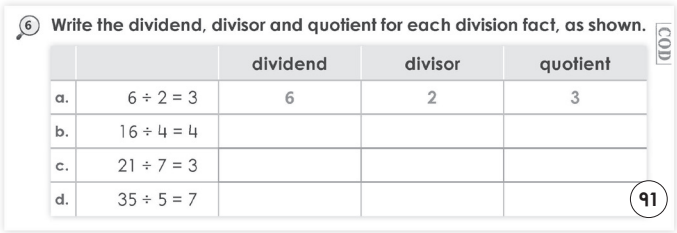
Teacher: When the given numbers cannot be divided equally, something is left over. This is called the remainder

Teacher: Look at 7 ÷ 3. 3 goes into 7 two times and 1 is left. That 1 is the remainder.

Teacher: Let us solve one more together: 10 ÷ 4

Teacher: 4 goes into 10 two times. What is left?

Teacher: Yes, 2. So quotient is 2 and remainder is 2.



6 Write the dividend, divisor and quotient for each division fact, as shown.

		dividend	divisor	quotient
a.	6 ÷ 2 = 3	6	2	3
b.	16 ÷ 4 = 4			
c.	21 ÷ 7 = 3			
d.	35 ÷ 5 = 7			

91

Teacher: Let us move on to Exercise 6. Who will read the question instructions for us?

MUST DO 10 MIN.

Teacher: We have to find the dividend, divisor and quotient from each division fact.

Teacher: Let us solve the first one together: 6 ÷ 2 = 3

- Dividend is 6
- Divisor is 2
- Quotient is 3

Teacher: Now solve questions (b), (c) and (d) independently. If needed, you may work with a partner for discussion.

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

Doubt session

COULD DO 5 MIN.

Teacher: Now, let us take some time to clear any doubts you may have.

Teacher: You can ask questions about anything we learnt – multiplication facts, division facts, dividend, divisor, quotient or remainder.

Teacher: If you are confused or unsure, raise your hand.

Teacher: Let us take one example on the board and solve it together.

(Discuss any doubts raised by students. Use simple examples like 12 ÷ 4 or 7 ÷ 3 to revise key terms such as dividend, divisor, quotient and remainder. Involve students while solving each step.)

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

Draw a triangle and label each corner as Dividend, Divisor and Quotient. Now write 56 ÷ 7 = 8 and place the numbers at the correct corners. Then create two division facts and explain to your partner how the three parts are connected.

80 km/hr

Write the multiplication sentence: 4 × 5 = 20

Now, using the same numbers, write the two related division facts. Do the same for: 3 × 6 = 18

Draw arrows to show how multiplication and division are connected.

40 km/hr

Circle the dividend, underline the divisor and box the quotient in this sentence:

Home Task

Write two division facts for 56 ÷ 7 = 8 and identify the dividend, divisor and quotient.

Period 6

Teacher: Good morning students. How are you today?

Teacher: In the previous period, we learnt how division is related to multiplication. Let us revise with a fun quick game.

SHOULD DO 5 MIN.

Teacher: I will give you a multiplication fact. You have to tell me the division sentence using the same numbers.

Teacher: Let us begin.

Teacher: 4 × 7 = 28. Who can give me the two-division facts?

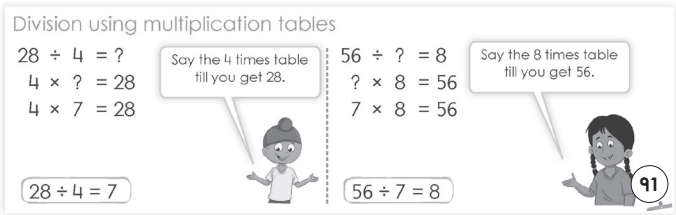
Teacher: Yes, 28 ÷ 4 = 7 and 28 ÷ 7 = 4.

Teacher: Now try this one: 8 × 7 = 56.

Teacher: Yes, 56 ÷ 8 = 7 and 56 ÷ 7 = 8.

Teacher: Excellent. Today we will learn how we can use multiplication tables to help us solve division problems easily.

Division using multiplication tables



Teacher: Everyone, please open your books to page 91.

Teacher: What are our friends Jas and Maria saying?

MUST DO 5 MIN.

Teacher: Jas says, 'Say the 4 times table till you get 28.'

Teacher: Maria says, 'Say the 8 times table till you get 56.'

Teacher: Jas is solving 28 ÷ 4. He says 4 × 7 = 28, so 28 ÷ 4 = 7

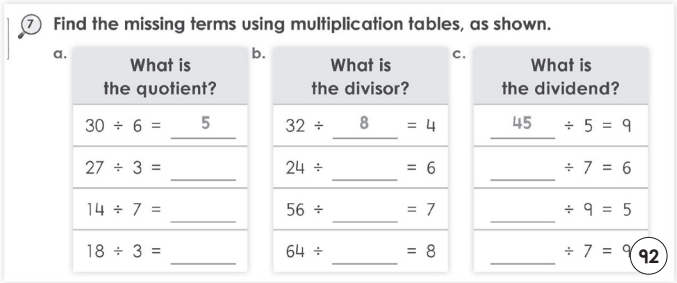
Teacher: Maria is solving 56 ÷ 7. She says 7 × 8 = 56, so 56 ÷ 7 = 8

Teacher: So what are they doing to solve the division problems?

Teacher: Yes, they are using multiplication tables to help them divide.

Teacher: When we know the multiplication table, we can easily find the missing number in a division sentence.

Teacher: Now we will use this method to solve the next exercise.



7 Find the missing terms using multiplication tables, as shown.

a.

What is the quotient?
30 ÷ 6 = 5
27 ÷ 3 = ____
14 ÷ 7 = ____
18 ÷ 3 = ____

b.

What is the divisor?
32 ÷ 8 = 4
24 ÷ ____ = 6
56 ÷ ____ = 7
64 ÷ ____ = 8

c.

What is the dividend?
45 ÷ 5 = 9
____ ÷ 7 = 6
____ ÷ 9 = 5
____ ÷ 7 = 9

92

Teacher: Please look at Exercise 7. There are three boxes: What is the quotient, What is the divisor and What is the dividend.

MUST DO

10 MIN.

Teacher: Let us solve the first question in each box together.

Teacher: In 'What is the quotient', we see 30 ÷ 6 = ?

Teacher: Yes, the answer is 5.

Teacher: In 'What is the divisor', 32 ÷ ? = 4. What number gives 4 when 32 is divided?

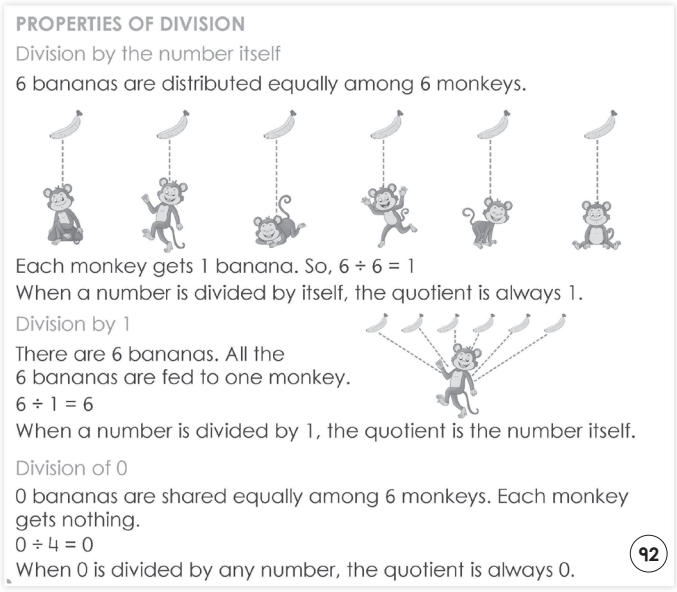
Teacher: Yes, 8

Teacher: In 'What is the dividend', ? ÷ 5 = 9. What is the total number?

Teacher: 45 ÷ 5 = 9, so the dividend is 45.

Teacher: Now complete the rest of the questions independently. Use multiplication tables to help you.

Properties of Division



PROPERTIES OF DIVISION

Division by the number itself

6 bananas are distributed equally among 6 monkeys.

Each monkey gets 1 banana. So, 6 ÷ 6 = 1

When a number is divided by itself, the quotient is always 1.

Division by 1

There are 6 bananas. All the 6 bananas are fed to one monkey.

6 ÷ 1 = 6

When a number is divided by 1, the quotient is the number itself.

Division of 0

0 bananas are shared equally among 6 monkeys. Each monkey gets nothing.

0 ÷ 4 = 0

When 0 is divided by any number, the quotient is always 0.

92

Division by 0

3 ÷ 0 is not possible. We should not divide a number by zero.

93

Teacher: Everyone, open page 92. Today, we will learn four important properties of division. These will help you understand how division works in different situations. Let us look at each one together.

MUST DO

15 MIN.

Division by the number itself

Teacher: Look at the first picture. There are 6 bananas and 6 monkeys. Each monkey gets 1 banana. So, 6 ÷ 6 = 1

Teacher: When any number is divided by itself, the answer is always 1.

Teacher: Now think of this situation, you have 5 pencils and you want to divide them equally among 5 friends. Each friend gets 1 pencil. So 5 ÷ 5 = 1

Division by 1

Teacher: Look at the first picture. There are 6 bananas and 6 monkeys. Each monkey gets 1 banana. So, 6 ÷ 6 = 1

Teacher: When any number is divided by itself, the answer is always 1.

Teacher: Now think of this situation, you have 5 pencils and you want to divide them equally among 5 friends. Each friend gets 1 pencil. So 5 ÷ 5 = 1

Division of 0

Teacher: Look at the next picture. There are 0 bananas and 6 monkeys are waiting. How many bananas will each get? None. 0 ÷ 6 = 0

Teacher: When 0 is divided by any number, the answer is always 0.

Teacher: Suppose you have 0 books and 3 children are waiting. Will they get anything? No. 0 ÷ 3 = 0

Division by 0

Teacher: Now read the pink line at the top. 3 ÷ 0 is not possible.

Teacher: We cannot divide anything by 0. It is not correct as per Maths.

Teacher: For example, if I say I will share 3 pencils with 0 people, that does not make sense. We cannot divide something among zero people.

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

Teacher: We will play a clapping game to revise the four properties of division.

COULD DO

5 MIN.

Teacher: I will say a division sentence. If the answer is:

- Division by itself – clap once
- Division by 1 – clap twice
- Division of 0 – tap your desk
- Division by 0 – fold your arms

Teacher: Let us practise once. Ready?

Teacher: 7 ÷ 1 → Yes, clap twice.

Teacher: 9 ÷ 9 → Clap once.

Teacher: 0 ÷ 6 → Tap your desk.

Teacher: 8 ÷ 0 → Fold your arms.

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

Draw 4 small scenes to explain each property of division using real-life objects like bananas, pencils or balls. Write the division sentence below each drawing.

80 km/hr

Create your own division puzzle. Write 5 division facts and leave one number missing in each (dividend, divisor or quotient). Swap puzzles with a partner and solve each other's puzzles.

40 km/hr

Draw 4 things (like chapatis, fruits etc.) and show equal sharing using division. Write the division sentence below each picture.

Home Task

Draw three division situations using pictures. For each, write multiplication sentences that helps solve the division.

Period 7

Teacher: Good morning students. How are you today?

Teacher: Let us begin with a quick warm-up. I will give you some division sentences and you will tell me the quotient and remainder.

SHOULD DO
5 MIN.

Teacher: If I divide 8 by 2, what do I get?

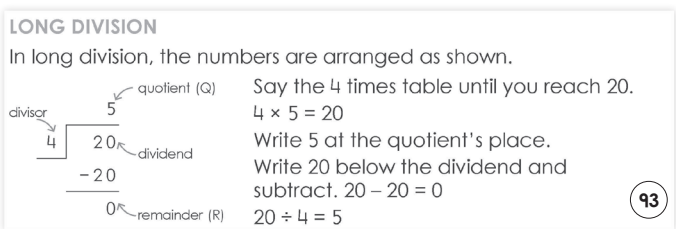
Teacher: Yes, quotient is 4, remainder is 0.

Teacher: What about 7 ÷ 2?

Teacher: Good. Quotient is 3 and remainder is 1.

Teacher: Today we will learn how to write this properly using long division.

Long Division



Teacher: Everyone, open page 93. Let us look at the long division format.

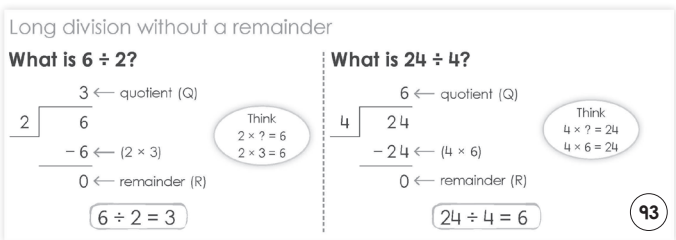
MUST DO
5 MIN.

Teacher: This is how we write division when we want to show our steps clearly.

Teacher: See this example – 20 ÷ 4. We say the 4 times table until we reach 20. 4 × 5 = 20, so we write 5 at the top. Subtract 20 from 20 and we get 0. So, quotient is 5 and remainder is 0.

(Discuss the concept in detail on board.)

Long division without a remainder

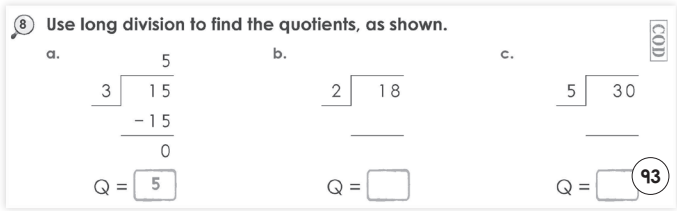


Teacher: Look at the examples at the bottom of the page. These are long division problems that divide perfectly.

MUST DO
5 MIN.

Teacher: Let us try 6 ÷ 2. 2 goes into 6 three times. Subtract and you get 0.

Teacher: These are called 'without remainder' because nothing is left.



Teacher: Let us solve Exercise 8 question (a) together. Who will try it?

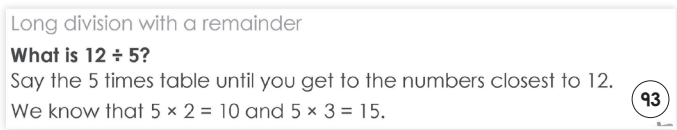
MUST DO
10 MIN.

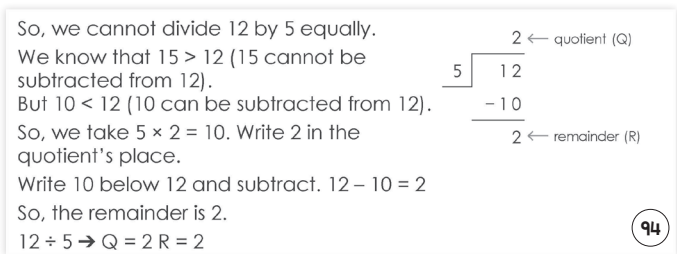
Teacher: 15 ÷ 3 = ? Draw the long division symbol. Think of the 3 times table.

Teacher: Yes, 3 × 5 = 15. Write 5 as the quotient and 0 as the remainder.

Teacher: Now try question (b) on your own. Use your notebook. Discuss with your partner if needed.

Long division with a remainder



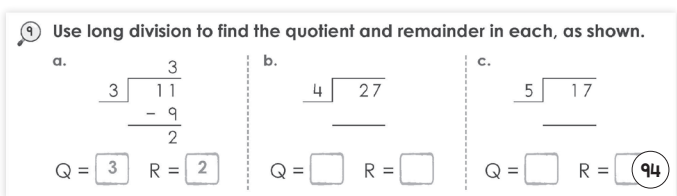


Teacher: Sometimes the number does not divide equally.

Teacher: Look at the example 12 ÷ 5. 5 × 3 = 15, which is too big. But 5 × 2 = 10 is okay. Subtract 10 from 12, we get 2 left. This 2 is the remainder.

MUST DO
5 MIN.

Teacher: So, quotient is 2 and remainder is 2.



Teacher: Let us solve question (a) together. 11 ÷ 3.

Teacher: 3 × 3 = 9. Write 3 as quotient. 11 – 9 = 2. Remainder is 2.

MUST DO
10 MIN.

Teacher: Now do question (b) on your own. Use the long division steps in your notebook. Pair up if you need help.

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

Divide 22 apples into boxes of 4 and 37 apples into boxes of 6.

Write the quotient and remainder. Draw boxes and leftover apples

80 km/hr

Divide 18 *samosas* in 3 trays and 25 *laddoos* in 4 trays.

Use long division and draw trays with snacks. Show quotient and remainder.

40 km/hr

Divide 10 carrots equally among 2 friends. What is the quotient?

Home Task

Complete question (c) of Exercises 8 and 9 given on pages 93 and 94 respectively, in the Main Coursebook.

Period 8

Teacher: Good morning students. How are you?

Teacher: Let us play a quick grouping game using food items.

SHOULD DO — 5 MIN.

Teacher: Imagine you have 36 mangoes. You want to divide them among 2 baskets.

Teacher: How many mangoes will each basket get?

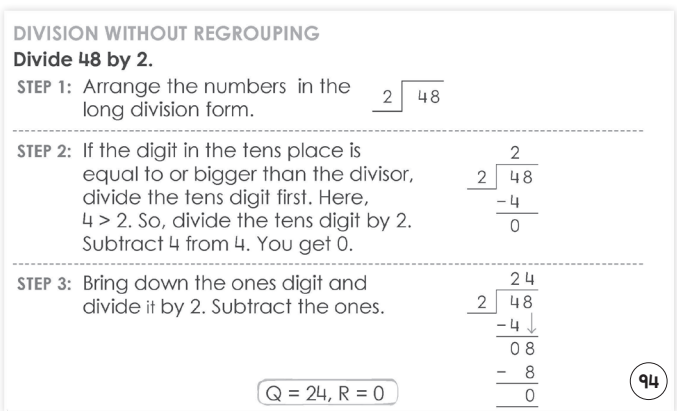
Teacher: Yes, 18 mangoes.

Teacher: Now imagine you have 51 peanuts and want to put them into 4 bowls. Will all bowls get the same number?

Teacher: Some peanuts may remain. Today, we will learn how to solve this using long division. Sometimes we divide directly, sometimes we regroup.

Division Without Regrouping

Divide 48 by 2



Teacher: Everyone, open your books to page 94 and look at the example: Divide 48 by 2.

MUST DO — 15 MIN.

Teacher: Imagine 48 stickers that need to be packed into 2 packets. How can we use long division to find out how many go in each?

Teacher: First, we divide 4 tens by 2. We get 2 tens. Then we bring down 8 ones and divide by 2 again. We get 4.

Teacher: So, each packet will have 24 stickers.

Teacher: Now look at the second example: 64 divided by 3. Think of 64 marbles and 3 jars.

Teacher: Let us try solving this in pairs. One of you writes the long division steps and the other explains each step aloud.

(Discuss the steps in detail with the students.)

Remembering better

Teacher: Now let us look at the 'Remembering better' section.

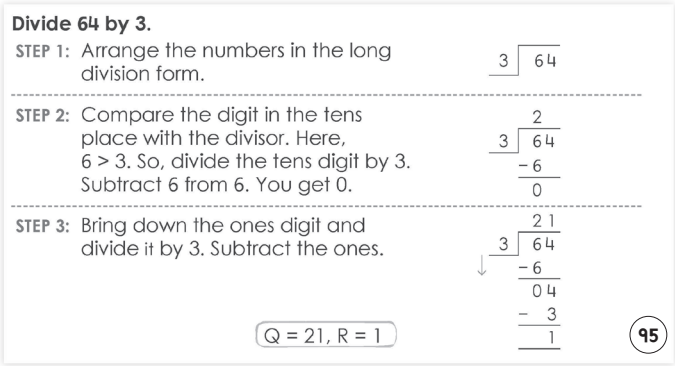
Teacher: Who will read and explain it?

Teacher: Why do you think we divide from the left side?

Teacher: Yes, because we start dividing from the biggest place value, like tens.

Teacher: This helps us understand how to bring down and divide step by step in long division.

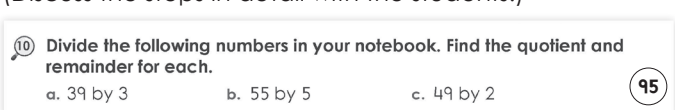
Divide 64 by 3



Teacher: Now look at the second example: 64 divided by 3. Think of 64 marbles and 3 jars.

Teacher: Let us try solving this in pairs. One of you writes the long division steps and the other explains each step aloud.

(Discuss the steps in detail with the students.)



Teacher: Let us now solve Exercise 10 given on page 95.

MUST DO — 5 MIN.

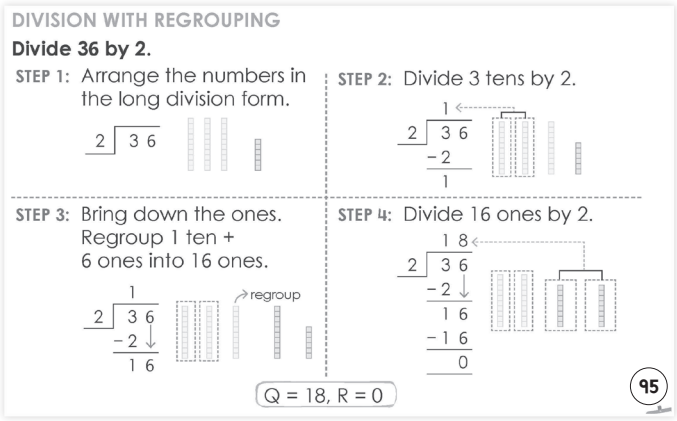
Teacher: Solve question (a):39 divided by 3. Think of 39 pencils shared among 3 pencil boxes. (Solve the question on board.)

Teacher: We get 13 in each box. So, quotient is 13 and remainder is 0.

Teacher: Now solve questions (b) and (c) independently in your notebook using long division. I will come around to help.

Division with Regrouping

Divide 36 by 2



Teacher: Now let us see how regrouping helps in division. Look at the example: Divide 36 by 2.

MUST DO
10 MIN.

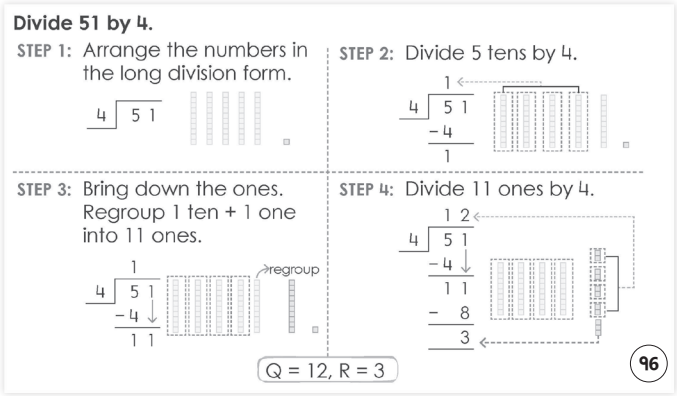
Teacher: Think of 36 *laddoos*. You want to pack them into 2 trays.

Teacher: First we divide 3 tens. That gives 1 and 1 ten is left.

Teacher: We regroup that 1 ten with 6 ones to make 16. Divide 16 by 2 and we get 8.

Teacher: So, 36 ÷ 2 = 18 *laddoos* per tray.

Divide 51 by 4

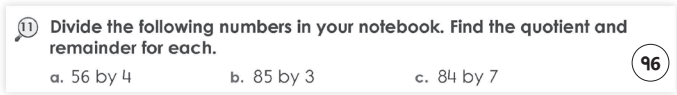


Teacher: Let us now look at Divide 51 by 4. Imagine 51 marbles and 4 packets.

Teacher: 4 goes into 5 once. 1 is left. Regroup it with the 1 to get 11. Divide 11 by 4.

Teacher: We get 2 and 3 marbles left over. The quotient is 12, remainder is 3.

Teacher: Now turn to your partner and retell this example using your things: sweets or beads. Share how you divide and regroup.



Teacher: Open to Exercise 11. We will do questions (a) and (b).

MUST DO
5 MIN.

Teacher: Use long division for both. One of you writes the steps and your partner checks and explains the process.

Teacher: Switch roles after one question. If you need help, raise your hand.

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

Draw your division puzzle. Make a 2-digit number and choose a 1-digit number to divide it. Write the division in a long division format and leave blanks for quotient and remainder. Swap with a partner and solve each other's puzzles.

80 km/hr

Draw 3 long division houses in your notebook. In each house, write a division question (like 36 ÷ 4) on the door and show the steps of division inside each room (tens and ones rooms). Label quotient and remainder clearly.

40 km/hr

Draw 10 stars in your notebook. Then draw 2 boxes below. Divide the stars equally into the 2 boxes by placing them one by one. After that, solve the same using long division and write the quotient and remainder below your drawing.

Home Task

Solve question (c) of Exercises 10 and 11 given on pages 95 and 96, respectively in the Main Coursebook.

Period 9

Teacher: Good morning students. How are you today?

Teacher: Let us begin with a quick challenge using real-life examples.

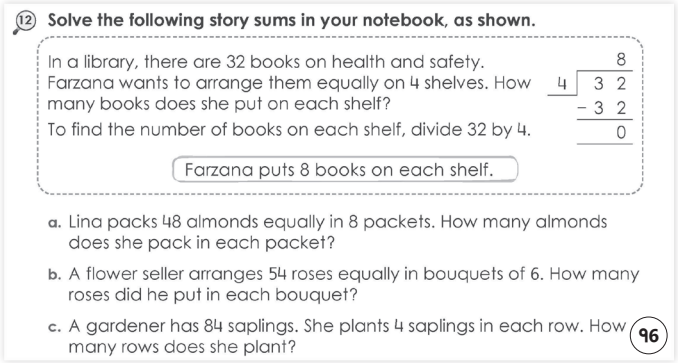
SHOULD DO
5 MIN.

Teacher: Imagine you have 18 colour pencils and want to share them equally among 6 friends. How many pencils does each get?

Teacher: Yes, 3 each.

Teacher: Now you have 24 flowers to divide among 6 vases. How many go in each vase?

Teacher: Well, done. You are thinking like smart dividers. Let us now practise more story sums using long division.



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

In a library, there are 32 books on health and safety. Farzana wants to arrange them equally on 4 shelves. How many books does she put on each shelf?

To find the number of books on each shelf, divide 32 by 4.

$$\begin{array}{r|l} & 8 \\ \hline 4 & 32 \\ & -32 \\ \hline & 0 \end{array}$$

Farzana puts 8 books on each shelf.

a. Lina packs 48 almonds equally in 8 packets. How many almonds does she pack in each packet?

b. A flower seller arranges 54 roses equally in bouquets of 6. How many roses did he put in each bouquet?

c. A gardener has 84 saplings. She plants 4 saplings in each row. How many rows does she plant?

96

Teacher: Everyone, open to Exercise 12 given on page 96.

Teacher: Who will read the example aloud about the 32 books in the library?

MUST DO

15 MIN.

Teacher: Now tell me, what are the important words that tell us this is a division question?

Teacher: Yes, 'equally', 'on 4 shelves', 'each shelf'. These are division keywords.

Teacher: Now, let us solve the question (a) together.

Teacher: Who would like to read question (a)?

Teacher: Read it slowly and clearly.

Teacher: Great. The question says: Lina packs 48 almonds equally in 8 packets. How many almonds does she pack in each packet?

Teacher: What is the total number of almonds?

Teacher: Yes, 48. What is the number of groups or packets?

Teacher: Yes, 8 packets. So, we are dividing 48 almonds into 8 equal packets. This is a sharing problem.

Teacher: Let us solve using long division on the board.

Teacher: First write 48 inside the division bracket and 8 outside.

Teacher: 8 goes into 48 how many times? Let us try the 8 tables.

Teacher: Yes, 8 times 6 is 48. So the quotient is 6 and the remainder is 0.

Teacher: That means there are 6 almonds in each packet.

Teacher: Excellent. Now solve questions (b) and (c) in pairs. Take turns reading and solving.

Teacher: If you need help or have any doubts, raise your hand. I will support you.

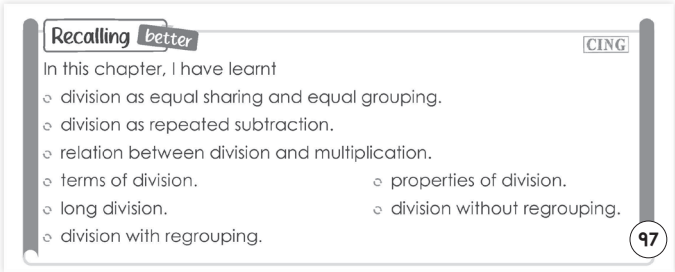
You may show the **Infographic** given on the digital platform.

Recalling better

Teacher: Now let us look at the 'Recalling better' section at the end of the chapter.

MUST DO

15 MIN.



Recalling better

CING

In this chapter, I have learnt

- division as equal sharing and equal grouping.
- division as repeated subtraction.
- relation between division and multiplication.
- terms of division.
- long division.
- division with regrouping.
- properties of division.
- division without regrouping.

97

Teacher: Who will read the first point?

Teacher: Yes, division as equal sharing and grouping. Can you give a real example of grouping?

Teacher: Great. What about repeated subtraction?

Teacher: Right, we subtract the same number again and again until we reach 0.

Teacher: What about the connection between multiplication and division?

Teacher: Good. We can use multiplication tables to help divide.

Teacher: Who remembers what dividend, divisor and quotient mean?

Teacher: Excellent. We also learnt long division with and without regrouping.

Teacher: Let us give ourselves a big round of applause for remembering all this.

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

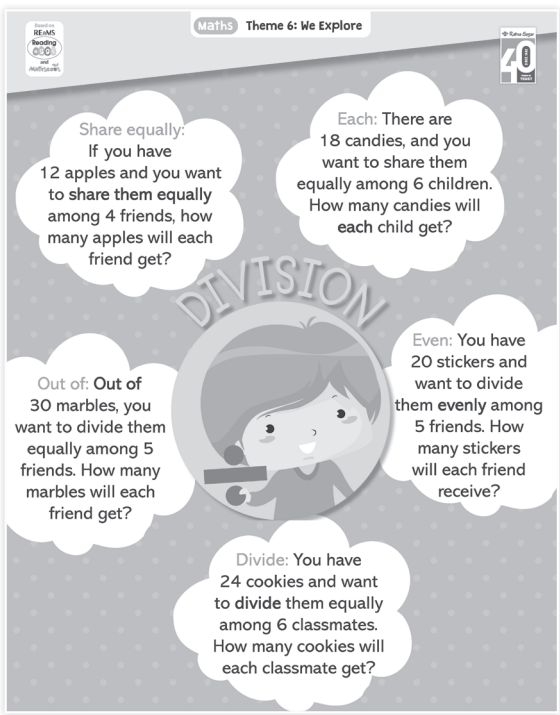
Poster

Teacher: Now, everyone please look at the division poster.

Teacher: It shows different words that help us know when a question is about division – like share equally, each, divide, even and out of.

MUST DO

5 MIN.



Teacher: Pick any one question from the poster. Read it aloud with your partner and solve it using long division in your notebook.

Teacher: After solving, choose any one of the poster words and make your own sentence using it.

Teacher: For example, using 'out of' – Out of 16 beads, I give 4 to each friend.

Teacher: Write your new sentence in your notebook. If you finish early, draw a small picture to go with it.

Teacher: Well done students. Let us have a huge round of applause. See you in the next class.

Differentiated Activities

110 km/hr

Write your own division story using any two words from the poster. Solve it using long division. Underline the quotient and explain it in a sentence.

80 km/hr

Choose any 2 words from the poster. Write one-word problem for each and solve using long division. Underline the quotient.

40 km/hr

Pick one word from the poster like share equally, each, divide, evenly or out of.

Explain its meaning to your partner with an example. Then draw 15 pens and 3 children. Show equal sharing and solve it using long division. Write the quotient.

Home Task

Write two division story sums using words we learnt like share, divide, evenly, out of or each. Solve both using long division.

Period 10

Teacher: Good morning students. How are you today?

Teacher: Let us warm up by solving a few quick division riddles.

SHOULD DO
5 MIN.

Teacher: If there are 20 pencils and 5 boxes, how many in each box?

Teacher: Yes, 4.

Teacher: If there are 16 notebooks and we give 4 to each student, how many students are there?

Teacher: Good. Today we will revise our division skills using different methods like division facts, statements, number lines and repeated subtraction.

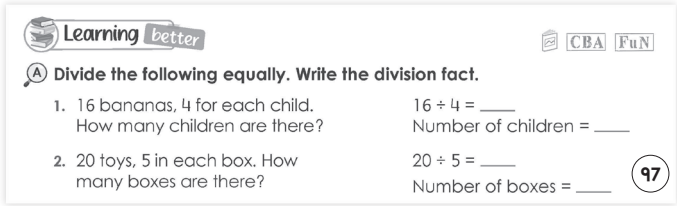
Learning better

Teacher: Everyone, open to the 'Learning better' section, given on page 97. Let us read question 1 of Exercise A together.

MUST DO
5 MIN.

Teacher: Who would like to read it aloud?

Teacher: The question says: 16 bananas, 4 for each child. How many children?



Learning better

CBA FuN

A **Divide the following equally. Write the division fact.**

1. 16 bananas, 4 for each child. How many children are there?
   16 ÷ 4 = ____
   Number of children = ____
2. 20 toys, 5 in each box. How many boxes are there?
   20 ÷ 5 = ____
   Number of boxes = ____

97

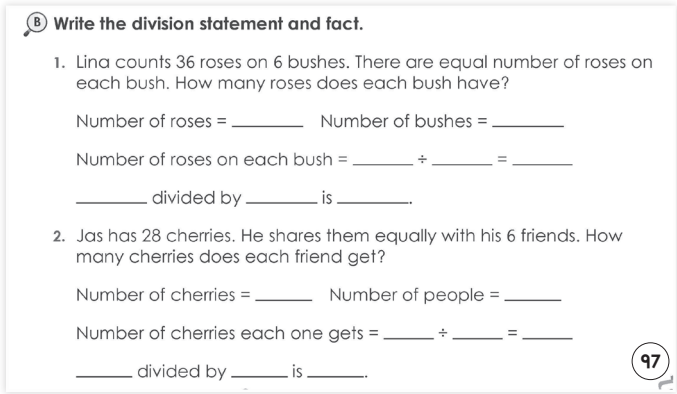
Teacher: What are the key division words here?

Teacher: Yes, 'each', 'for' and 'how many'.

Teacher: Solve using: 16 ÷ 4 = 4. So, 4 children.

Teacher: Now solve question 2 with your partner. Read and solve together. Raise your hand if you have any doubt.

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



B **Write the division statement and fact.**

1. Lina counts 36 roses on 6 bushes. There are equal number of roses on each bush. How many roses does each bush have?

   Number of roses = _____ Number of bushes = _____

   Number of roses on each bush = _____ ÷ _____ = _____

   _____ divided by _____ is _____.

2. Jas has 28 cherries. He shares them equally with his 6 friends. How many cherries does each friend get?

   Number of cherries = _____ Number of people = _____

   Number of cherries each one gets = _____ ÷ _____ = _____

   _____ divided by _____ is _____.

97

Teacher: Let us move to Exercise B. We will solve question 1 together.

MUST DO
10 MIN.

Teacher: Lina has 36 roses on 6 bushes.

Teacher: What is the total?

Teacher: Yes, 36 roses.

Teacher: How many bushes?

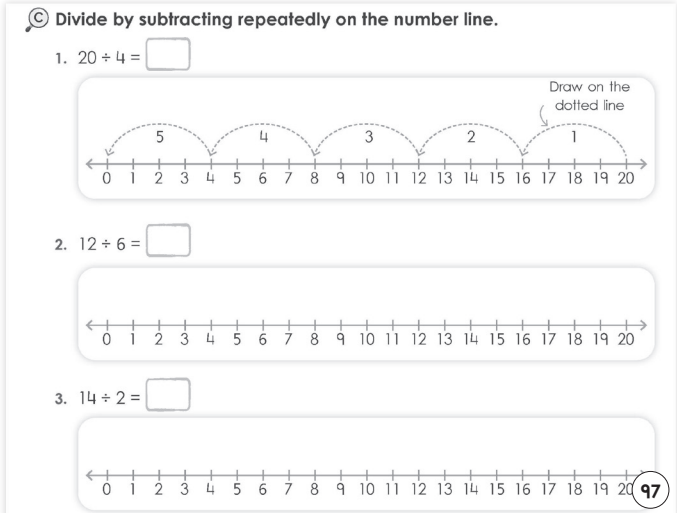
Teacher: Yes, 6.

Teacher: Let us write the division sentence: 36 ÷ 6 = 6.

Teacher: That means each bush has 6 roses.

Teacher: Fill in the blanks and read the division fact aloud.

Teacher: Now solve question 2 in pairs. One partner reads, the other writes. Switch roles for checking.



Teacher: Now, let us solve Exercise C using number lines.
Teacher: Look at the first question: 20 ÷ 4.
Teacher: Draw backward jumps of 4 on the number line until you reach 0. Count how many jumps.

MUST DO
10 MIN.

Teacher: Yes, 5 jumps, so the answer is 5.
Teacher: Now complete questions 2 and 3 independently. If you need help, raise your hand.
Teacher: Remember, each jump represents one group being taken away.
You may show the **HOTS** given on the digital platform.

D Divide by using repeated subtraction. Write the answers in your notebook.

1. 6 ÷ 3
2. 12 ÷ 6
3. 8 ÷ 4
4. 20 ÷ 5
5. 12 ÷ 4
6. 18 ÷ 9
7. 27 ÷ 9
8. 21 ÷ 7

98

Teacher: In this section, we use repeated subtraction to divide.

MUST DO
10 MIN.

Teacher: Let me show the first one on the board: 6 ÷ 3
Teacher: Start with 6. Subtract 3: 6 − 3 = 3
Teacher: Now subtract 3 again: 3 − 3 = 0
Teacher: How many times did we subtract 3?
Teacher: Yes, 2 times. So, 6 ÷ 3 = 2
Teacher: Now you will solve questions 2, 3, 4 and 5 using the same method.
Teacher: Show each subtraction step like we just did.
Teacher: Work independently. If you are stuck, raise your hand and I will come help you.
Teacher: Remember to subtract until you reach 0 and count how many times you subtract. That gives your answer.

Differentiated Activities

110 km/hr
Create your own division sentence using repeated subtraction and number line. Solve both methods and compare the answers.

80 km/hr
Write a fun riddle that uses division. For example, 'I had 36 buttons and 6 boxes. I put the same number in each box. How many buttons per box?' Solve your riddle using long division and challenge a partner to solve it.

40 km/hr
Draw a staircase with 4 steps. On each step, write one subtraction from the division 12 ÷ 3 (like 12 − 3 = 9, 9 − 3 = 6, etc.). At the bottom step, write the quotient. Do the same for 16 ÷ 4.

Home Task

Solve questions 6,7 and 8 of Exercise D given on page 98 in the Main Coursebook.

Period 11

Teacher: Good morning students. How are you today?
Teacher: Let us warm up with some quick questions.

SHOULD DO
5 MIN.

Teacher: If I divide 9 by 3, what is the quotient?
Teacher: Yes, 3.
Teacher: Now, if I divide 14 by 5, what do I get?
Teacher: Yes, the quotient is 2, the remainder is 4.
Teacher: Well done. Today, we will work on identifying parts of a division sentence and solve problems using long division.

E Write the dividend, divisor, quotient and remainder for each division fact.

	dividend	divisor	quotient	remainder
1. 8 ÷ 2 = 4				
2. 18 ÷ 3 = 6				
3. 35 ÷ 6 = 4				

98

Teacher: Please open to Exercise E. Look at the first division fact: 8 ÷ 2 = 4

MUST DO
10 MIN.

Teacher: Who can tell me which number is the dividend?
Teacher: Yes, 8 is the number to be divided – the dividend.
Teacher: What is the divisor?
Teacher: Correct, 2 is the divisor – the number we divide by.
Teacher: And the answer we get is the quotient – which is 4.
Teacher: Now check if there is any number left?
Teacher: No, so remainder is 0.
Teacher: Complete the table for all three rows. You can work with your partner. If you need help, raise your hand

F Find the missing terms using multiplication tables.

What is the quotient?	What is the divisor?	What is the dividend?
1. 32 ÷ 8 = ___	1. 35 ÷ ___ = 5	1. ___ ÷ 6 = 5
2. 28 ÷ 7 = ___	2. 9 ÷ ___ = 3	2. ___ ÷ 2 = 3
3. 16 ÷ 4 = ___	3. 42 ÷ ___ = 6	3. ___ ÷ 3 = 4
4. 72 ÷ 8 = ___	4. 36 ÷ ___ = 4	4. ___ ÷ 5 = 8

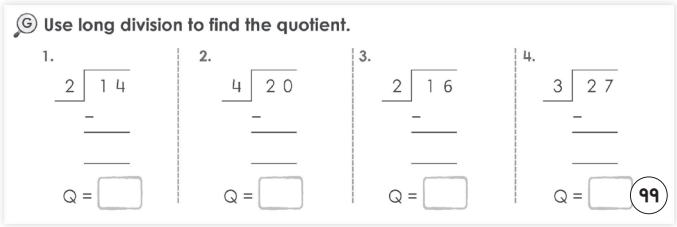
99

Teacher: Now let us move to Exercise F. Look at the first column – we have to find the quotient.

MUST DO
10 MIN.

Teacher: Let us solve the first one together: 32 ÷ 8 = ?
Teacher: Use the 8 times table.
Teacher: 8 × 4 = 32, so the quotient is 4.
Teacher: Now move to the second part – finding the missing divisor. Who can solve the first one: 35 ÷ ___ = 5
Teacher: Yes, 7.

Teacher: Now do the rest of the section with your partner. Take turns solving and checking each other's answers.



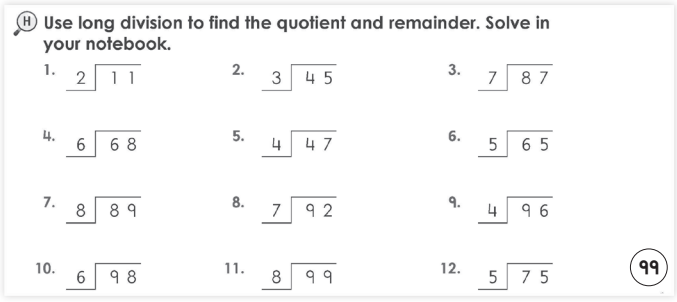
Teacher: Look at Exercise G. Here we will use long division to find only the quotient.

MUST DO
5 MIN.

Teacher: Start with question 1: 14 ÷ 2. Think of how many times 2 goes into 14.

Teacher: Yes, 7 times.

Teacher: Solve the rest of the questions 2, 3 and 4 on your own. Use the long division steps we learnt before. I will walk around and help if needed.



Teacher: Let us now solve long division problems with a remainder. Open to Exercise H.

MUST DO
10 MIN.

Teacher: Look at question 1: 11 ÷ 2

Teacher: Let us do it together. 2 goes into 11 how many times?

Teacher: Yes, 5 times. What is 5 × 2?

Teacher: 10. Subtract 10 from 11, we get 1.

Teacher: So, quotient is 5 and remainder is 1.

Teacher: Now solve questions 2 to 6 independently. If you need help, ask your partner or raise your hand.

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

Think of a real-life division situation. Write a word problem that includes a dividend, divisor, quotient and remainder. Solve using long division. Label all parts clearly and draw a related diagram.

80 km/hr

Write 3 division facts where the remainder is not zero. For each, draw a picture showing the remainder and explain it to your partner.

40 km/hr

Draw 12 objects (e.g., leaves). Divide them into 5 boxes one by one. Show leftover objects. Write the division sentence and explain to your partner what the remainder means.

Home Task

Solve questions 7 to 12 from Exercise H, given on page 99 in the Coursebook. Label the dividend, divisor, quotient and remainder in each.

Bring a coloured sheet of paper, a straw or flag stick, a drawing pin and glue for the 'Creating better' paper windmill activity. Bring your 'Little book' for the 'Revising better ' activity.

Period 12

Teacher: Good morning students. How are you today?

Teacher: Today, we will play a quick 'Division Challenge' game to get our brains warmed up.

SHOULD DO
5 MIN.

Teacher: I will show you some division scenarios and you will tell me the answers. Ready?

Teacher: If you have 30 apples and you want to give them equally to 5 friends, how many apples does each friend get?

Teacher: Correct, 6 apples.

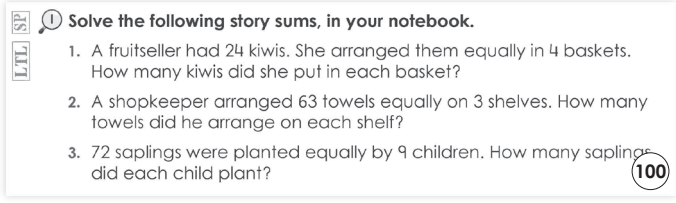
Teacher: Now, imagine you have 16 stickers and you want to share them equally between 4 students. How many stickers will each student get?

Teacher: Right, 4 stickers.

Teacher: Last one. You have 24 marbles and you want to divide them into 3 equal groups. How many marbles will each group get?

Teacher: Well done, each group will get 8 marbles.

Teacher: Great work, everyone. This game helps us practise division, which we are going to focus on today.



Teacher: Let us move to Exercise I, given on page 100. We will solve the first-division word problem together.

MUST DO
10 MIN.

(Ask students to read and explain the question.)

Teacher: What do we need to do here?

Teacher: Yes, divide 24 by 4.

Teacher: 24 ÷ 4 = 6, so 6 kiwis in each basket.

(Discuss the question in detail.)

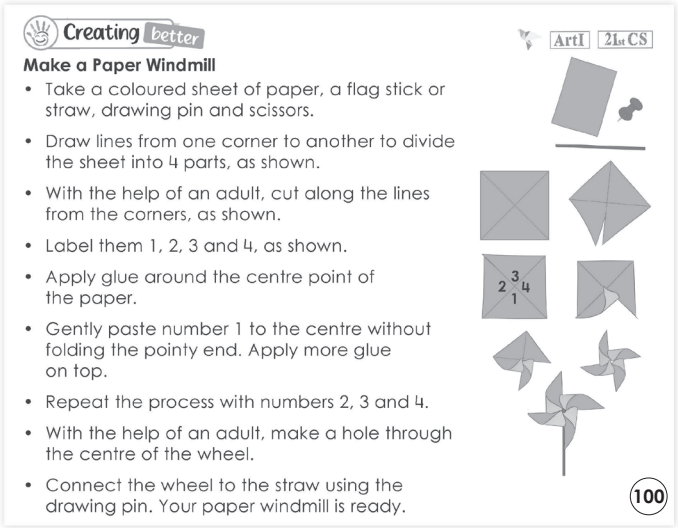
Teacher: Now, for the next two questions, work with your partner. Read the problem, divide and write the division fact in your notebook.

Teacher: Check each other's work and solve the problems together.

Creating better

Teacher: Now, let us move on to the 'Creating better' section, given on the same page. Today, we will make a paper windmill.

MUST DO
15 MIN.


Creating better
ArtI 2LaCS
Make a Paper Windmill
- Take a coloured sheet of paper, a flag stick or straw, drawing pin and scissors.
- Draw lines from one corner to another to divide the sheet into 4 parts, as shown.
- With the help of an adult, cut along the lines from the corners, as shown.
- Label them 1, 2, 3 and 4, as shown.
- Apply glue around the centre point of the paper.
- Gently paste number 1 to the centre without folding the pointy end. Apply more glue on top.
- Repeat the process with numbers 2, 3 and 4.
- With the help of an adult, make a hole through the centre of the wheel.
- Connect the wheel to the straw using the drawing pin. Your paper windmill is ready.

100

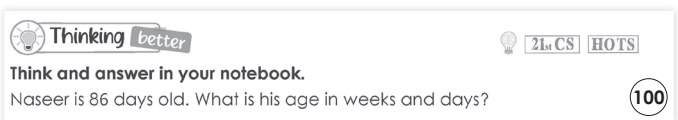
(Guide the students to complete the activity.)

Thinking better

Teacher: Now, look at the 'Thinking better' section.

MUST DO
5 MIN.

Teacher: Naseer is 86 days old. What is his age in weeks and days?


Thinking better
2LaCS HOTS
Think and answer in your notebook.
Naseer is 86 days old. What is his age in weeks and days?
100

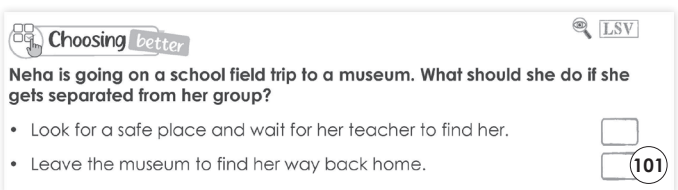
Teacher: Who can solve this problem for us?

Teacher: Yes, 86 ÷ 7 = 12 weeks and 2 days.

Teacher: Great work. Now, try solving this in your notebook and check with your partner.

Choosing better

Teacher: Let us move to the 'Choosing better' section given on the next page 101.


Choosing better
LSV
Neha is going on a school field trip to a museum. What should she do if she gets separated from her group?
- Look for a safe place and wait for her teacher to find her.
- Leave the museum to find her way back home.

101

Teacher: Neha is going on a school field trip to a museum. What should she do if she gets separated from her group?

Teacher: What do you think is the better choice?

Teacher: Now, discuss with your partner and decide which option Neha should choose.

Teacher: After your discussion, mark the correct answer in your notebook.

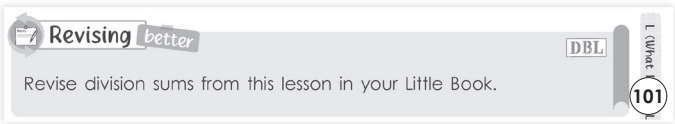
Teacher: Yes, Option 1 is the best choice because it keeps Neha safe while waiting for her teacher.

Teacher: Well done. You have all made great decisions.

Revising better

Teacher: Let us move to the 'Revising better' section.

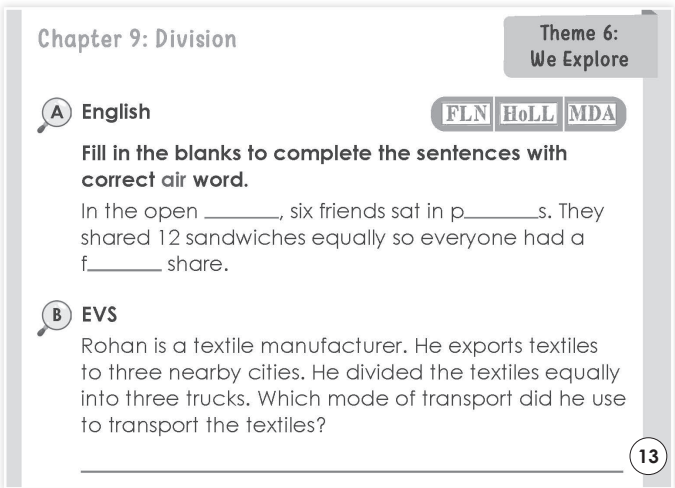
Teacher: Now, take a few minutes to revise the division sums you have learnt in your Little Book.


Revising better
DBL
Revise division sums from this lesson in your Little Book.
101

(Guide the students to complete the activity.)

Teacher: Take your time to solve them and feel free to ask me if you need any help.

Book of Holistic Teaching


Chapter 9: Division
Theme 6: We Explore

A **English**
FLN HoLL MDA

Fill in the blanks to complete the sentences with correct air word.

In the open _____, six friends sat in p_____s. They shared 12 sandwiches equally so everyone had a f_____ share.

B **EVS**

Rohan is a textile manufacturer. He exports textiles to three nearby cities. He divided the textiles equally into three trucks. Which mode of transport did he use to transport the textiles?

_____

13

(Refer to the Book of Holistic Teaching, page 13 under the title 'Division' 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.)

MUST DO
5 MIN.

Differentiated Activities

110 km/hr

Create a real-life division word problem involving sharing or grouping things. Solve the problem using long division and explain the steps to your partner.

80 km/hr

A farmer has 96 apples. He wants to pack them equally into 8 baskets. How many apples will be in each basket?

40 km/hr

A teacher has 30 markers. She wants to divide them equally among 5 students. How many markers will each student receive?

Home Task

Think of a real-life situation where something needs to be divided equally. Write your own division word problem and solve it. Be sure to include the dividend, divisor and quotient in your problem.

Period 13

Teacher: Good morning students. How are you today?

Teacher: Let us begin with an interesting 'Division Scenario'. We are going to think about how we divide things in our daily lives.

SHOULD DO

5 MIN.

Teacher: Imagine you are at a park with 16 tennis balls. You and your 3 friends want to play a game and you decide to divide the balls equally between all of you. How many balls does each person get?

Teacher: Correct, each person gets 4 balls.

Teacher: Now, let us say you have 24 books that need to be arranged equally on 6 shelves. How many books will you place on each shelf?

Teacher: Yes, each shelf will have 4 books.

Teacher: One more. You are organising a party and you have 36 cups. If you want to divide them equally between 9 tables, how many cups will go on each table?

Teacher: Yes, each table will have 4 cups.

Teacher: Excellent work.

Worksheet 1

Theme 6: We Explore

9. Division

Worksheet 1

A. Fill in the blanks.

1. We can get _____ division facts from a multiplication fact.
2. The answer in division is called the _____.
3. Division is repeated _____.
4. Division means _____ sharing or grouping.
5. The sign of division is _____.

34

B. Use multiplication tables to fill in the blanks.

1. 12 ÷ 2 = _____
2. 16 ÷ 4 = _____
3. 21 ÷ 3 = _____
4. 30 ÷ 5 = _____
5. 42 ÷ 7 = _____
5. 56 ÷ 8 = _____

C. Find the dividend using multiplication tables.

1. _____ ÷ 5 = 3
2. _____ ÷ 6 = 7
3. _____ ÷ 4 = 9
4. _____ ÷ 8 = 9
5. _____ ÷ 6 = 6
6. _____ ÷ 9 = 6

34

Teacher: Please open your workbooks to page 34. We will solve Worksheet 1 together.

MUST DO

15 MIN.

Teacher: Start with Exercise A. Fill in the blanks using what you have learnt.

Teacher: Now, move to Exercise B. Use your multiplication tables to help you fill in the blanks.

Teacher: In Exercise C, you will find the dividend using multiplication tables. Think carefully before writing the answer.

Teacher: Work independently, but if you need help, raise your hand.

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

Worksheet 2

Worksheet 2

A. Match the columns.

1. 40 ÷ 5	●	●	a. 9
2. 18 ÷ 2	●	●	b. 5
3. 50 ÷ 10	●	●	c. 7
4. 24 ÷ 6	●	●	d. 8
5. 49 ÷ 7	●	●	e. 4

B. Use the number line to divide the following numbers. Fill in the blanks.

1. 8 ÷ 2 = _____ 

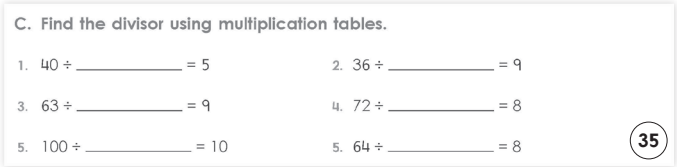
2. 15 ÷ 3 = _____ 

3. 20 ÷ 4 = _____ 

4. 21 ÷ 3 = _____ 

5. 30 ÷ 5 = _____

35



C. Find the divisor using multiplication tables.

1. 40 ÷ _____ = 5
2. 36 ÷ _____ = 9
3. 63 ÷ _____ = 9
4. 72 ÷ _____ = 8
5. 100 ÷ _____ = 10
5. 64 ÷ _____ = 8

35

Teacher: Now turn to page 35. Let us begin Worksheet 2.

Teacher: In Exercise A, match the correct answers.

MUST DO

15 MIN.

Teacher: For Exercise B, use the number lines to solve the division problems. Draw jumps as needed.

Teacher: In Exercise C, find the divisor. Use your multiplication tables.

Teacher: Complete it in pairs and discuss your answers before writing.

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

SHOULD DO

5 MIN.

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

Teacher: Think about the topics, have we learnt 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

Draw a grocery cart with 85 apples. Divide them equally among 3 baskets using long division. Write the quotient and remainder. Label each basket and leftover clearly.

80 km/hr

Complete the sentence using your own numbers:
'I had ___ crayons. I divided them equally among ___ friends. Each friend got ___ crayons.'
Draw the crayons and groups to show your division.

40 km/hr

60 mangoes are divided equally into 3 baskets. How many in each basket? Draw the mangoes and explain your answer to your partner.

Home Task

Solve Worksheet 3 given on page 36 in the Workbook.

Learning Outcomes

The students will:

Domain	Learning Outcome
Physical Development	• demonstrate division using body movements or objects to form equal groups.
Socio-Emotional and Ethical Development	• cooperate with peers during group tasks and take responsibility for fair sharing activities.
Cognitive Development	• solve division problems accurately using strategies like equal grouping, repeated subtraction and number lines.
Language and Literacy Development	• correctly use the terms such as dividend, divisor, quotient and remainder in oral and written communication.
Aesthetic and Cultural Development	• create and interpret visual representations of division using familiar and easily available materials.
Positive Learning Habits	• express confidence while attempting division problems and complete reflection tasks like KWL charts independently.

Starry Knights

As a teacher, where do you see yourself five years from now? Write your plans here.

Award yourself a STAR, for being a dynamic teacher.

Answers

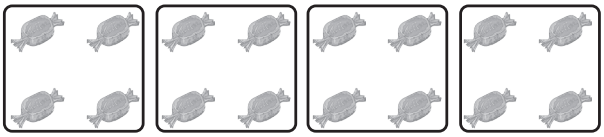
Theme 6: We Explore
Chapter-9: Division

Main Coursebook

Auditory

1. 3 2. 0

Pictorial



1. 5; 5

2.

distributed among	shared with
Total number of laddoos = 30	**Total** number of laddoos = 30
Number of children = 5	**Number** of children = 6
Number of laddoos each child gets = 30 ÷ 5 = 6	**Number** of laddoos each child gets = 30 ÷ 6 = 5

3. a. 5 b. 6

4. a. 1; 8; 2; 8; 3; 24 ÷ 8 = 3
   b. 1; 9; 2; 9; 3; 27 ÷ 9 = 3

Lesson-10: Fractions

Theme 6: We Explore

10 Periods (40 minutes each)

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

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

Affirming better: I have to discover new things.

Curricular Goals and Objectives (NCF-FS)

To enable the students:

- to understand and represent fractions using shapes and collections.
- to apply the concept of fractions in real-life situations.
- to develop mathematical vocabulary related to fractions.
- to engage in hands-on and visual learning experiences.
- to participate in collaborative and peer learning.
- to connect fractions with cultural and everyday contexts.

Methodology

Period 1

Teacher: Good morning, students. How are you?

SHOULD DO 5 MIN.

Teacher: Today, we will begin our new chapter, 'Fractions'.

Teacher: Let us start with a quick energiser. I will say a number and you will clap that many times. Ready?

Teacher: 5, yes clap 5 times.

Teacher: 7, yes clap 7 times.

Teacher: Great. Now you are all awake and ready to begin.

Affirming better

Teacher: We are beginning a new chapter today. Let us begin with the 'Affirming better' section.

SHOULD DO 5 MIN.

Teacher: Who will read and explain it to the class?

Teacher: Yes, it says 'I love to discover new things'.

Teacher: Why do you think it is important to discover new things?

Teacher: Absolutely right. Discovering new things helps us learn more and stay curious.

Teacher: Let us keep this thought in mind as we explore fractions together.

Teacher: We will begin a new chapter, Fraction. 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.

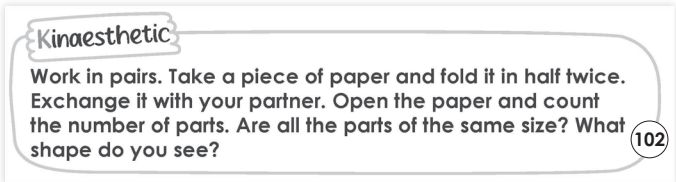
Teacher: You all did an amazing work in this activity. Let us move to Re-KAP activities. We will use Kinaesthetic, Auditory and Pictorial activities today to make our learning exciting. Let us start with the Kinaesthetic activity.

Kinaesthetic

Teacher: Everybody, please open page 102 in your Main Coursebook.

MUST DO 10 MIN.

Teacher: Who would like to read and explain the Kinaesthetic activity?



Teacher: Yes, we are folding a paper in half twice and exchanging it with our partner. Count the number of parts and observe their size.

Teacher: What shape do you see after folding and opening the paper?

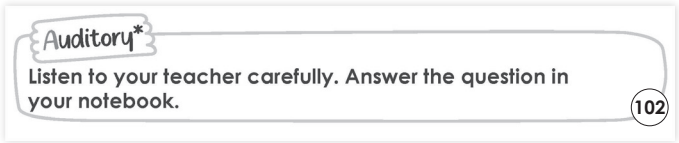
Teacher: Excellent teamwork. This activity helped us understand fractions through movement.

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

Auditory

MUST DO
5 MIN.

Teacher: Now, listen carefully as I read out a set of questions.



Teacher: Half a *chapati*, Half a glass of chai, halfway to the market, Under the blue sky. Write the fraction mentioned in the poem?

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

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

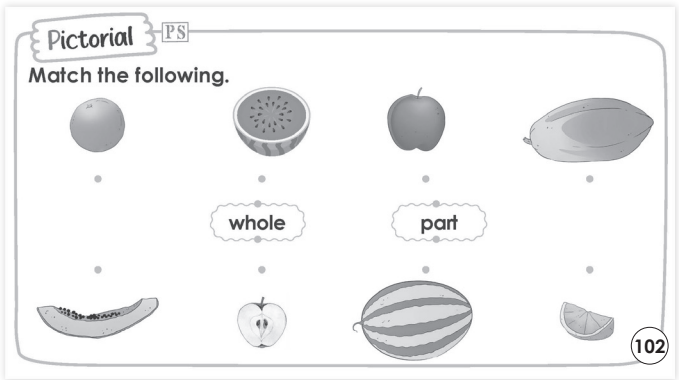
Pictorial

Teacher: Look at the pictures in your book on page 102.

MUST DO
5 MIN.

Teacher: Who will read and explain the task shown here?

Teacher: Yes, we have to match the pictures with 'whole' or 'part'.



Teacher: Observe carefully which fruits are shown completely and which are shown in pieces.

Teacher: Excellent. This activity helps us understand the concept of whole and part visually.

Teacher: Well done, everyone. You all worked hard today. Let us end the session with a big round of applause for your efforts. See you in the next period. Keep practicing.

Differentiated Activities

110 km/hr

If a rectangle is divided into 4 equal parts and 2 parts are coloured, what fraction is coloured? What do you call the coloured part – whole or part?

80 km/hr

If a square is divided into 2 equal parts and 1 part is coloured, what part of the square is coloured?

40 km/hr

Colour one part of a circle. Is it the whole or a part?

Home Task

Look around your house and find one object that can be divided into equal parts, like a *chapati*, a chocolate bar or a fruit. Draw it in your notebook and colour one part.

Period 2

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

Teacher: Let us begin with a fun thinking activity. I will name an item and you will tell me whether we can divide it into two equal parts. Ready?

SHOULD DO
5 MIN.

Teacher: Can we divide a '*chapati*' into two equal parts?

Teacher: Yes, we can. Both parts will look the same.

Teacher: What about a pencil? Can we divide it into two equal parts?

Teacher: No, if we break it, the parts will not be equal.

Teacher: Let us try another one. Can we divide a chocolate bar into two equal parts?

Teacher: Yes, if we break it carefully along the lines.

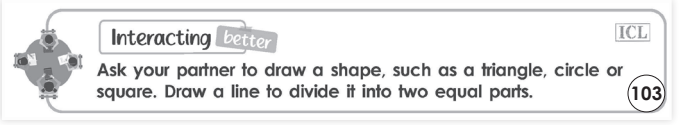
Teacher: So, what are we doing here? We are thinking about how things can be divided into equal parts.

Teacher: When we divide something into equal parts, each part is called a fraction. Today, we will learn more about that through a story.

Interacting better

Teacher: Everyone please look at the 'Interacting better' section on page 103.

MUST DO
5 MIN.

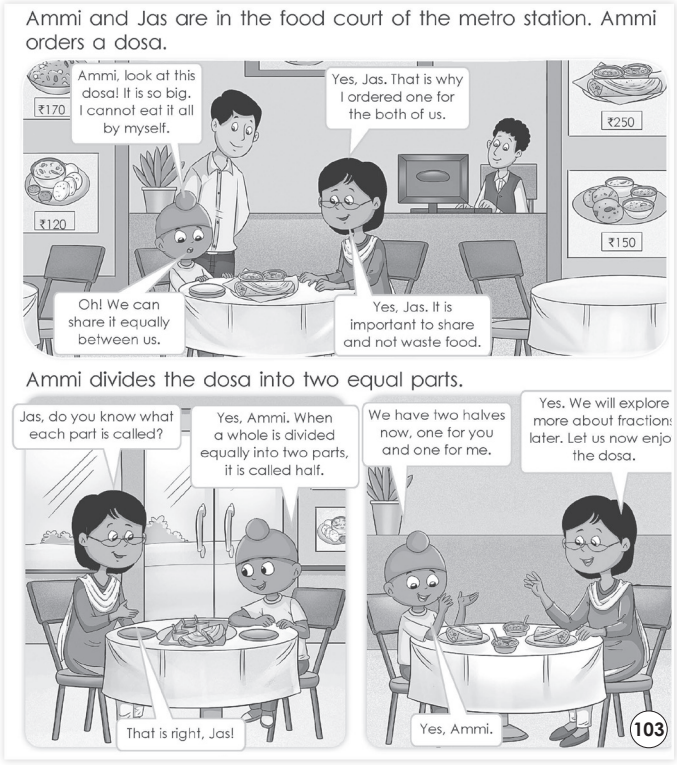


Teacher: Ask your partner to draw a shape like a triangle, circle or square.

Teacher: Now draw a line to divide it into two equal parts.

Teacher: What did you notice after dividing? Was it easy to make equal parts?

Teacher: Let us read a short read.



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

MUST DO 20 MIN.

Teacher: Before we read, let me ask you a few questions.

Teacher: Have you ever gone out to eat with your family or friends?

Teacher: What do you do when there is one big dish and two people want to eat it?

Teacher: Yes, you share it. And how do you share it fairly?

Teacher: Correct, by dividing it into equal parts.

Teacher: Open your books to page 103. Look at the story.

Teacher: Who would like to read the first part of the story aloud for the class?

(Students take turns reading each speech bubble aloud.)

Teacher: Very good reading. Now, let us discuss what happened in the story.

Teacher: Why did Ammi and Jas decide to share one *dosa*?

Teacher: Yes, because it was big and they did not want to waste food.

Teacher: What did Ammi do to the *dosa*?

Teacher: She divided it into two equal parts. That means each part is called a half.

Teacher: Did both Ammi and Jas get equal amounts?

Teacher: Yes, they did. This shows us how fractions are used in daily life to share things fairly.

Teacher: What did we learn from this story?

Teacher: That dividing into equal parts helps us share and be fair.

Teacher: Well done. Let us now do a small activity to understand this even better.

Teacher: Take one round paper. This is your *dosa*.

Teacher: Now, fold your paper *dosa* into two equal parts.

COULD DO 10 MIN.

Teacher: Open it and look at the fold line. Can you see the two parts?

Teacher: Colour one part. This shows one-half of the *dosa*.

Teacher: Write the word 'half' on the coloured side.

Teacher: If you had to share this *dosa* with a friend, would both of you get equal amounts?

Teacher: Yes, because you have divided it into two equal parts.

Teacher: This activity helps us understand how we use fractions.

Teacher: Well done, everyone. You all participated with great interest today. Let us have a huge round of applause for our teamwork and learning. See you in the next class.

Differentiated Activities

110 km/hr

If you cut a sandwich into 2 equal parts and eat 1 part, what part is left?

80 km/hr

You have a *chapati*. If you divide it into 2 equal parts, what is each part called?

40 km/hr

Colour one part of a circle. Say if it is a whole or a part.

Home Task

Draw a shape in your notebook. Divide it into two equal parts and colour one part. Write what the coloured part is called.

Period 3

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

Teacher: Let us warm up our minds. I will show you pictures and you will tell me whether the shape shows a whole or a part.

SHOULD DO 5 MIN.

Teacher: (Show a complete circle) Is this a whole or a part?

Teacher: Yes, this is a whole.

Teacher: (Show a circle cut into two parts with one part shaded) Is this a whole or a part?

Teacher: Correct, it is a part.

Teacher: Great. Today, we are going to understand what a whole is and how it can be divided into parts called fractions. Open your books to page 104.

Whole and Fractions

MUST DO 5 MIN.

Teacher: Who will read the paragraph under 'Whole and Fractions'?

WHOLE AND FRACTIONS

When an object is divided into parts, each part is called a **fraction**. A complete or a full object is a **whole**. Fractions are **parts of a whole**.

104

Teacher: Yes, when an object is divided into parts, each part is called a fraction.

Teacher: A complete object is called a whole.

Teacher: So, what are fractions?

Teacher: Yes, they are parts of a whole. Let us now explore some common fractions.

Fractions of a Whole

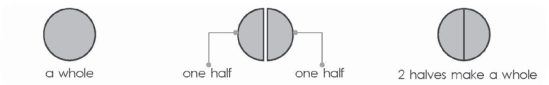
MUST DO 10 MIN.

Half

Fractions of a whole

Half

When an object is divided into 2 equal parts, each part is called a **half**.



One half is written as $\frac{1}{2}$ → number of equal parts taken / → total number of equal parts

104

Teacher: Look at the section called 'Half'.

Teacher: Who can read this part aloud?

Teacher: Yes, when an object is divided into 2 equal parts, each part is called a half.

Teacher: Half is written as 1 by 2.

Teacher: What does the number 1 show?

Teacher: It shows how many parts we are taking.

Teacher: What does the number 2 show?

Teacher: It shows how many equal parts the whole is divided into.

Teacher: Take your maths notebook. Draw a big circle.

Teacher: Now fold the page gently so the circle folds into two equal parts.

Teacher: Open the page and colour one half of the circle. Write $\frac{1}{2}$ on the shaded part.

Teacher: This shows one half.

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

One third

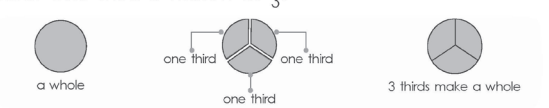
MUST DO 10 MIN.

Teacher: Now, let us look at the next part – 'One third'.

Teacher: Who can read this for us?

One third

When an object is divided into 3 equal parts, each part is called **one third**. One third is written as $\frac{1}{3}$.



104

Teacher: Yes, when an object is divided into 3 equal parts, each part is one third.

Teacher: One third is written as 1 by 3.

Teacher: How many one-thirds make a whole?

Teacher: Yes, three.

Teacher: In your notebook, draw a big circle.

Teacher: Divide it into 3 equal parts using lines.

Teacher: Colour one part and write $\frac{1}{3}$.

One fourth

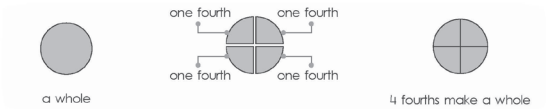
Teacher: Who will read this for the class?

MUST DO 10 MIN.

Teacher: Yes, when something is divided into 4 equal parts, each part is one fourth.

One fourth

When an object is divided into 4 equal parts, each part is called **one fourth**. It is also called a **quarter**. One fourth is written as $\frac{1}{4}$.



104

Teacher: It is also called a quarter.

Teacher: How many fourths make a whole?

Teacher: Yes, four fourths.

Teacher: Draw a large circle in your notebook.

Teacher: Divide it into 4 equal parts.

Teacher: Colour one part and write $\frac{1}{4}$ on it.

Teacher: This shows what one fourth or one quarter looks like.

Teacher: Well done, everyone. You learned about halves, thirds and fourths today. Let us have a huge round of applause for our efforts. See you in the next class.

Differentiated Activities

110 km/hr

Take a rectangle and divide it into 6 equal parts. Shade 4 parts. Write the fraction and describe what you see in one line.

80 km/hr

Draw a square. Divide it into 2 equal parts. Shade 1 part. Write the fraction and say it aloud as 'one-half.'

40 km/hr

Colour half of a circle and write the fraction for the shaded part.

Home Task

Draw three circles in your notebook. Divide the first into 2 parts and shade one part.

Divide the second into 3 parts and shade one part. Divide the third into 4 parts and shade one part. Label each as half, one-third and one-fourth.

Period 4

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

Teacher: Let us begin with a quick notebook activity to revise what we have learned.

SHOULD DO — 5 MIN.

Teacher: Open your notebooks.

Teacher: Draw a circle and divide it into 2 equal parts. Colour 1 part. Write the fraction for the shaded part.

Teacher: Now draw another circle and divide it into 3 equal parts. Colour 1 part. Write the fraction for the shaded part.

Teacher: Lastly, draw one more circle and divide it into 4 equal parts. Colour 3 parts. Write the fraction for the shaded part.

Teacher: Well done. You all remembered halves, thirds and fourths.

Teacher: We will now practise fractions using different shapes and colours. Let us get started.

Three fourth

Teacher: Let us begin with 'three fourths'.

MUST DO — 10 MIN.

Teacher: Who can tell me what 'one fourth' means?

Three fourths

When an object is divided into 4 equal parts, 3 out of the 4 equal parts are called **three fourths** or **3 quarters**. Three fourth is written as $\frac{3}{4}$.

104

Teacher: Yes, it means 1 out of 4 equal parts.

Teacher: If we take 3 out of 4 parts, what do we call it?

Teacher: Correct, that is 'three fourths'. It is written as 3 by 4.

Teacher: Look at the circle on page 104. How many parts are there?

Teacher: Four equal parts.

Teacher: How many are shaded?

Teacher: Three. So, we say the shaded portion is three fourths of the circle.

Teacher: What part is not coloured?

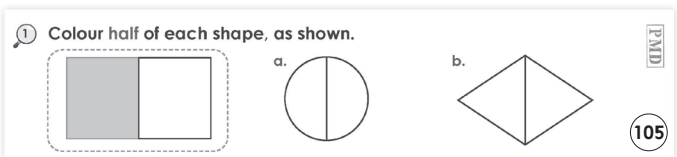
Teacher: One fourth. Very good.

Teacher: Now let us try some exercises to practise this.

Teacher: Let us begin with Exercise 1 on page 105.

MUST DO — 5 MIN.

Teacher: Look at the first shape. It is already coloured.



Teacher: Now look at the other shapes questions (a) and (b).

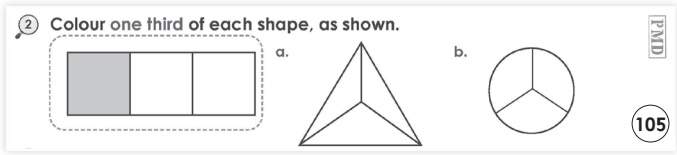
Teacher: Your task is to colour half of each shape, just like the example.

Teacher: Take your time and do it neatly.

Teacher: Now look at Exercise 2.

MUST DO — 5 MIN.

Teacher: What is the fraction shown in the example?

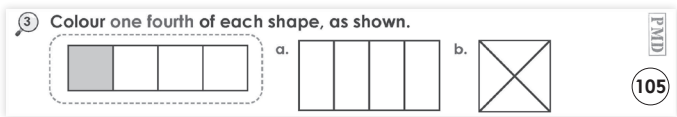


Teacher: Yes, one third.

Teacher: Now colour one third of each shape in questions (a) and (b).

MUST DO — 5 MIN.

Teacher: Remember, one third means one out of three equal parts.



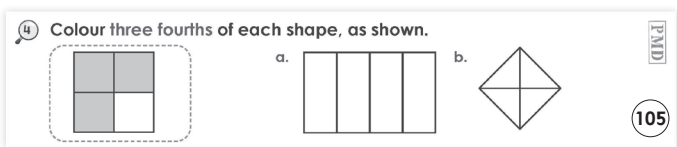
Teacher: Time to do Exercise 3 now.

Teacher: What are we asked to colour in this exercise?

Teacher: One fourth.

Teacher: So, count the total number of parts and colour only one. That will be one fourth.

MUST DO — 5 MIN.



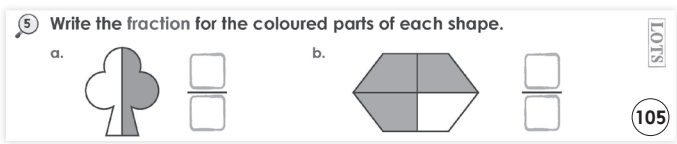
Teacher: Look at Exercise 4 now.

Teacher: The example shows three parts coloured out of four.

Teacher: This is called three fourths.

Teacher: Now do the same for questions (a) and (b). Colour three out of four parts.

MUST DO — 5 MIN.



Teacher: Let us now do Exercise 5.

Teacher: Look at the shapes in questions (a) and (b).

Teacher: Count how many parts are coloured and how many total parts are there.

Teacher: Then write the fraction that shows the coloured part.

Teacher: For example, if 2 out of 3 parts are coloured, we write the fraction as 2 by 3.

Teacher: Well done, everyone. Let us end with a huge round of applause for our effort. See you next time.

Differentiated Activities

110 km/hr

Look at a square divided into 4 equal parts. If 3 parts are shaded, what fraction is shaded? What part is left?

80 km/hr

Draw a circle. Divide it into 4 parts. Shade 3 parts. What fraction is this?

40 km/hr

Draw a rectangle and colour 1 out of 4 parts. Say the fraction aloud.

Home Task

Draw a triangle, circle and rectangle in your notebook. Divide each into 4 equal parts.

Colour three parts in each and write the fraction $\frac{3}{4}$ under them.

Period 5

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

Teacher: Let us begin with a fun activity to energise ourselves.

SHOULD DO — 5 MIN.

Teacher: I will say a number and you will clap that many times. Ready?

Teacher: Clap 2 times.

Teacher: Clap 4 times.

Teacher: Clap 3 times.

Teacher: Now, jump 2 times.

Teacher: Turn around once.

Teacher: Great. You are now awake and alert.

Teacher: We are ready to explore something new today. Open your books to page 105.

Fractions of a collection

MUST DO — 15 MIN.

Teacher: Today we are learning about 'Fractions of a Collection'.

Teacher: When we divide a shape into parts, we get fractions. But what happens when we divide a group of things?

Teacher: Look at the bottom of page 105. What do you see?

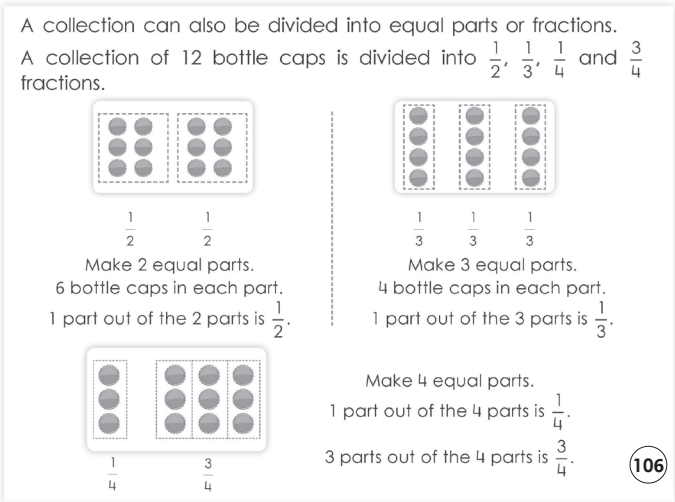
Teacher: Yes, stamps, coins and storybooks. These are collections.

Teacher: A collection is a group of similar things. The whole group is called a whole.

Teacher: Now, look at the bottle caps. How many caps are there?

Teacher: Yes, 12. Let us learn how to divide this collection.

Teacher: If we divide them into 2 equal parts, how many in each?



Teacher: Six. So, $\frac{1}{2}$ of 12 is 6.

Teacher: If we divide into 3 parts?

Teacher: Four in each. So, $\frac{1}{3}$ of 12 is 4.

Teacher: If we divide into 4 equal groups?

Teacher: Three in each. So, $\frac{1}{4}$ of 12 is 3.

Teacher: And $\frac{3}{4}$ of 12?

Teacher: Yes, 9. Very good.

Teacher: Now, let us try an activity using our own collections.

(Discuss the concept in detail.)

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

Teacher: In your notebooks, draw 12 small smiley faces.

Teacher: Now divide them into 2 equal groups.

Teacher: How many in each? Write the number and the fraction.

SHOULD DO — 20 MIN.

Teacher: Now draw 12 stars. Divide into 3 groups.

Teacher: How many in each? What is $\frac{1}{3}$ of 12?

Teacher: Next, draw 12 circles. Divide into 4 equal groups.

Teacher: How many in each? Colour 3 groups and write the fraction for $\frac{3}{4}$.

Teacher: You may ask your partner if you are unsure.

Teacher: Let us see how many different collections we can make and divide.

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

Teacher: Let us end the class with a huge round of applause for your hard work. See you in the next class.

Differentiated Activities

110 km/hr

A collection has 20 stickers. What is $\frac{1}{2}$, $\frac{1}{4}$ and $\frac{3}{4}$ of the collection?

80 km/hr

A collection has 12 balls. Divide them into 3 equal parts. How many in each part?

40 km/hr

Draw 8 stars. Colour $\frac{1}{2}$ of them.

Home Task

Draw a collection of 16 circles. Divide them into 4 equal parts. Colour $\frac{1}{4}$ of the collection and write the fraction.

Period 6

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

Teacher: Let us begin with a fun game called 'Touch and Count'.

SHOULD DO — 5 MIN.

Teacher: When I say a number, touch that many things near you – like your pencil, bag, table or book. Ready?

Teacher: Touch 1 thing.

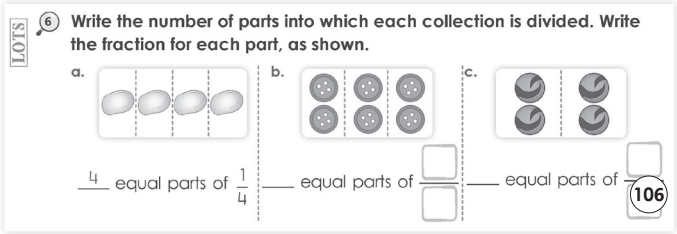
Teacher: Touch 3 things.

Teacher: Touch 2 things.

Teacher: Great work. Now sit back and take a deep breath.

Teacher: That was fun. Now we will practise some more about fractions. Open page 106 in your books.

MUST DO — 10 MIN.



Teacher: Look at Exercise 6. Let us read the instructions together.

Teacher: We have to count how many parts the group is divided into and then write the fraction for one part.

Teacher: Let us do part (a) together.

Teacher: How many groups are there? Yes, 4 equal groups.

Teacher: So, each is 1 out of 4, that is $\frac{1}{4}$.

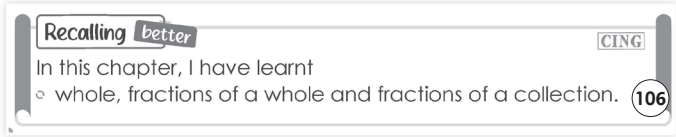
Teacher: Now try questions (b) and (c) with your partner.

Teacher: Remember: count the groups and write 1 over the number of groups.

Recalling better

Teacher: Let us remember what we have learnt so far. I will ask you some questions.

MUST DO — 15 MIN.



Teacher: What is a whole?

Teacher: Yes, one complete thing.

Teacher: What is a fraction?

Teacher: A small part of a whole.

Teacher: What do we call one part out of two?

Teacher: One-half.

Teacher: What do we call one part out of four?

Teacher: One-fourth or a quarter.

Teacher: What is a collection in maths?

Teacher: A group of same things like pencils, balls or books.

Teacher: Very nice answers. Now let us do some colouring.

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

Learning better

Teacher: Look at Exercise A, questions 1 and 2.

Teacher: You need to colour half of each shape.

MUST DO — 5 MIN.

Teacher: Use crayons or colour pencils and fill in one of the two equal parts.

Teacher: Now, read questions 1 and 2 of Exercise B .

MUST DO — 5 MIN.

Teacher: You need to colour one-third of each shape.

Teacher: Count the total parts in the shape. Colour only one part.

You may show the **eBook** given on the digital platform to discuss the answers.

Teacher: You all did so well today. Give yourselves a big round of applause. See you in the next class.

Differentiated Activities

110 km/hr

Draw 9 circles. Divide them into 3 equal groups. Colour 2 groups. What fraction is coloured?

80 km/hr

Draw 6 stars. Divide into 2 equal parts. Colour 1 part. What is the fraction?

40 km/hr

Draw 4 shapes. Colour only 1. Is this a whole or a part?

Home Task

Complete question 3 of Exercise A and question 3 of Exercise B on page 107 in the book.

Period 7

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

Teacher: Let us begin with a fun activity called 'Fraction in My World'. SHOULD DO 5 MIN.

Teacher: I will ask a few questions and you will answer by raising your hand or sharing with your partner.

Teacher: Have you ever shared a chocolate bar with a friend?

Teacher: Yes? How many parts did you break it into?

Teacher: At home, when you cut a *chapati* or sandwich into 2 pieces, how many parts do you get?

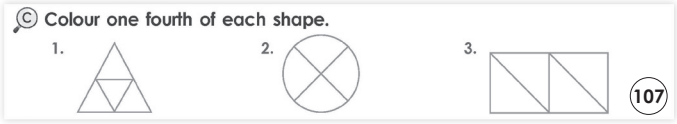
Teacher: Is that called half?

Teacher: If you eat one part and your brother eats one part, what part is yours?

Teacher: Yes, one half.

Teacher: Let us now use these ideas to colour and write fractions in shapes and collections.

Teacher: Please open your books to page 107. MUST DO 5 MIN.



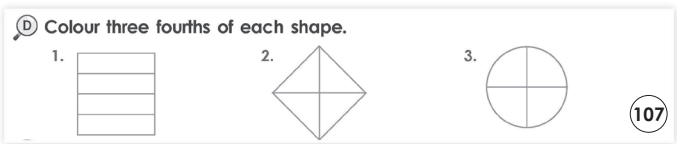
Teacher: Look at Exercise C.

Teacher: What do we have to do here?

Teacher: Yes, colour one fourth of each shape.

Teacher: How many parts in each shape? Four.

Teacher: Colour only one part. That is one fourth. MUST DO 10 MIN.



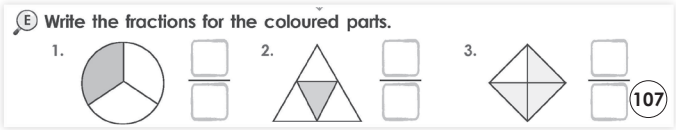
Teacher: Now let us do Exercise D.

Teacher: What fraction are we colouring now?

Teacher: Three fourths. That means three out of four equal parts.

Teacher: Count carefully and colour only three parts in each shape. MUST DO 5 MIN.

Teacher: If needed, ask your partner for help.



Teacher: Time for Exercise E.

Teacher: In each shape, some parts are already coloured.

Teacher: Count the coloured parts and total parts.

Teacher: Then write the fraction for the coloured part.

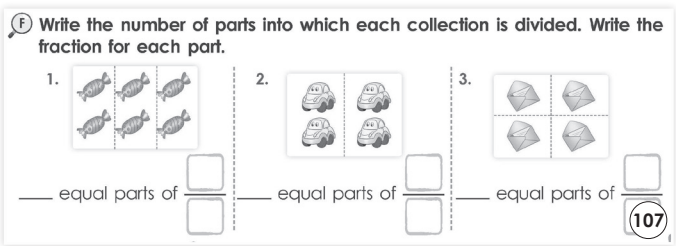
Teacher: For example, if 2 parts are coloured out of 3, we write $\frac{2}{3}$.

Exercise F

Teacher: Look at Exercise F.

Teacher: These are collections: candies, cars, envelopes

Teacher: You need to write how many equal groups are there and the fraction for one group. MUST DO 10 MIN.



Teacher: Let us do question 1 together.

Teacher: There are 3 equal parts. So, the fraction is $\frac{1}{3}$.

Teacher: Now try question 2 and 3 on your own. You may work with a partner.

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

Doubt Session

Teacher: Now raise your hand if you found any question confusing. SHOULD DO 5 MIN.

Teacher: Let us go over it again together.

Teacher: Ask your friend if you are unsure. Remember, we learn better when we help each other.

Teacher: That was a wonderful word. Give yourselves a big round of applause. See you in the next class.

Differentiated Activities

110 km/hr

Draw 16 balloons in your notebook. Divide them into 4 equal groups. Colour 3 groups. What is the fraction? Write and explain in one sentence.

80 km/hr

Draw 12 flowers. Divide them into 3 equal groups. Colour 1 group. What is the fraction for the coloured flowers?

40 km/hr

Draw 6 circles. Colour 3 circles. What part is coloured? Show it using numbers and say it aloud.

Home Task

Find any group of 8 or 12 things at home like spoons, pencils or buttons. Divide them into equal parts and draw them in your notebook. Write the fraction for one part.

For the 'Creating better' activity in the next class, please bring 1 sliced tomato, 1 sliced cucumber and 1 sliced onion. The slicing should be done by an adult at home. Pack the items neatly in a clean container. Bring your 'Little book' for .Revising better. activity.

Period 8

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

Teacher: Let us play a fun game called 'Guess the Fraction'.

SHOULD DO — 5 MIN.

Teacher: I will say something and you tell me if it is half, one-third or one-fourth.

Teacher: You ate one piece out of two from a *chapati*. What is it?

Teacher: Half.

Teacher: You shared a chocolate bar with 2 friends and each took one piece. What part did you get?

Teacher: One-third.

Teacher: You cut a sandwich into 4 parts and ate one. What is that called?

Teacher: One-fourth.

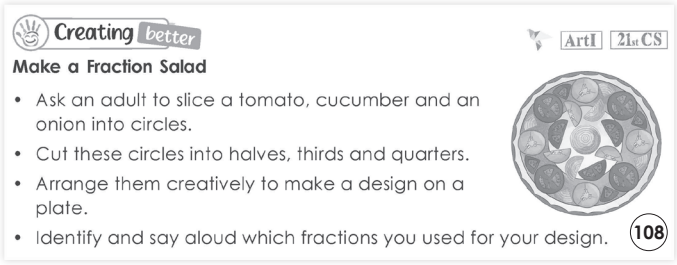
Teacher: Great work. Now let us do a creative activity. Everyone please open page 108 in your book.

Creating better

Teacher: Let us do the 'Fraction Salad' activity.

MUST DO — 20 MIN.

(Guide the students to complete the activity.)



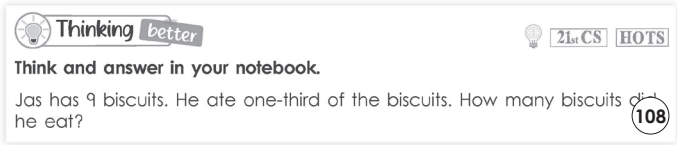
You may show the **Mental Maths** given on the digital platform.

Thinking better

Teacher: Jas has 9 biscuits. He ate one-third of them.

MUST DO — 5 MIN.

Teacher: What is one-third of 9?



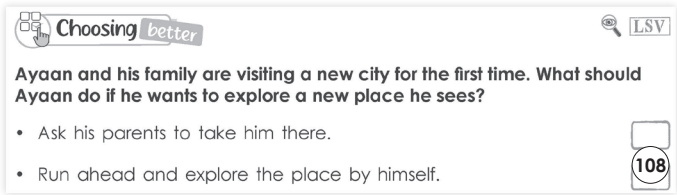
Teacher: Yes, 3. So he ate 3 biscuits.

Teacher: Write the question and answer in your notebook.

Choosing better

Teacher: Ayaan and his family are visiting a new city for the first time. He sees a place he wants to explore.

MUST DO — 5 MIN.



Teacher: What do you think Ayaan should do?

- Run ahead and go alone?
- Or ask his parents to take him there?

Teacher: Raise your hand if you think he should run there alone.

Teacher: Hmm… What could happen if Ayaan runs alone in a new city?

Teacher: Yes, he might get lost or scared. Is that safe?

Teacher: Now raise your hand if you think he should ask his parents to go with him.

Teacher: Yes, that is the right choice. Always stay with an adult in a new place.

Teacher: So, we should always ask before going somewhere new. That keeps us safe and happy.

Teacher: Now tick the correct answer in your book.

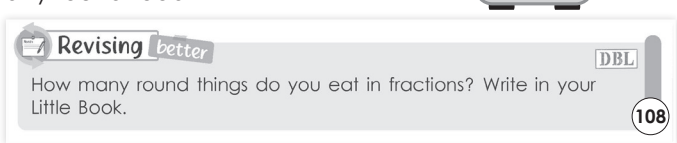
You may show the **Animated Activities** given on the digital platform.

Revising better

Teacher: Everyone, please open your 'Little Book.

Teacher: Now think about the food you eat at home. Can you think of any round food?

MUST DO — 5 MIN.



Teacher: Yes, things like *chapati*, pie, *idli*, pizza.

Teacher: Do you always eat the full thing or sometimes only a part?

Teacher: I want you to write the names of 2 or 3 round things you eat in your Little Book.

Teacher: Also write whether you eat them whole, half, one-third or one-fourth.

Teacher: Take a minute to write quietly. I will ask some of you to share.

Teacher: Who would like to share one example from their list?

Teacher: Very good.

Teacher: These everyday things help us understand fractions better.

Teacher: Well done, everyone. Let us give ourselves a big round of applause for our hard work. See you in the next period.

Differentiated Activities

110 km/hr

Draw 12 slices of cucumber. Divide them into 3 equal groups. Colour 2 groups and write the fraction for the coloured part.

80 km/hr

Draw 8 pieces of carrot sticks. Colour 4 of them. Write the fraction that shows the part you coloured.

40 km/hr

Draw a *chapati*. Divide it into 2 parts. Colour part 1 and write the fraction below it.

Home Task

Look at your dinner plate today. Pick any round item you eat (like '*chapati*' or '*idli*').

Write how many pieces it was divided into and how many you ate. Draw and write the correct fraction in your notebook.

Period 9

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

Teacher: Let us begin with a warm-up related to fractions. I will describe some situations and you tell me the fraction.

SHOULD DO — 5 MIN.

Teacher: If I divide an apple into 4 equal pieces and I eat 1 piece, what fraction of the apple did I eat?

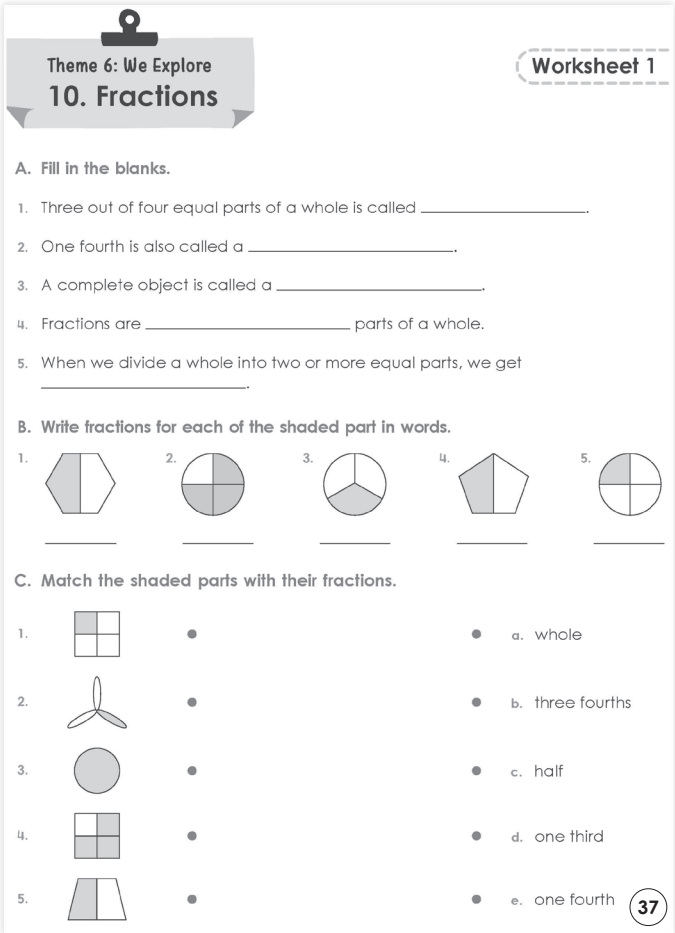
Teacher: Yes, $\frac{1}{4}$.

Teacher: If I divide a sandwich into 2 equal parts and eat 1 part, what fraction did I eat?

Teacher: Yes, $\frac{1}{2}$.

Teacher: Great. Now let us move on to Worksheet 1 to practise more fractions.

Worksheet 1



Theme 6: We Explore
10. Fractions

Worksheet 1

A. Fill in the blanks.

1. Three out of four equal parts of a whole is called _____.
2. One fourth is also called a _____.
3. A complete object is called a _____.
4. Fractions are _____ parts of a whole.
5. When we divide a whole into two or more equal parts, we get _____.

B. Write fractions for each of the shaded part in words.

1. _____ 2. _____ 3. _____ 4. _____ 5. _____

C. Match the shaded parts with their fractions.

1.	a. whole
2.	b. three fourths
3.	c. half
4.	d. one third
5.	e. one fourth

37

MUST DO — 20 MIN.

Teacher: Open Worksheet 1 on page 37 and look at Exercise A.

Teacher: For question 1, 'Three out of four equal parts of a whole is called ____.'

Teacher: What should we write here?

Teacher: Yes, three fourths. Write that in your notebook.

Teacher: Let us move on to Exercise B. In question 1, we have a shape. Write the fraction for the shaded part.

Teacher: Look at the first shape. What fraction do we see?

Teacher: Yes, it is one half. Write it down.

Teacher: Now, look at Exercise C. In question 1, match the shaded part with its fraction.

Teacher: What fraction does the first shape represent?

Teacher: Yes, it is one fourth. Write the correct match.

Teacher: Continue working on the rest of the questions in the exercises. If you need help, raise your hand and I will come over.

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

Book of Holistic Teaching

Chapter 10: Fractions

A English FLN HoLL MDA

Fill in the blanks with the correct er word.

1. Manav is half of Kavisha's age. Kavisha is _____ than her brother. (older/younger)
2. Jay has 12 marbles. He gives half of a marble to Amit and one fourth to Simran. The number of marbles Simran has is _____ than Amit. (greater/smaller)

14

B EVS

Rohan is traveling from Assam to a village in Tamil Nadu. He traveled one third by train, one third by aeroplane and one third by boat.

Which modes of travel did he use? Match correctly.

1. land transport	a. aeroplane
2. water transport	b. train
3. air transport	c. boat

15

(Refer to the Book of Holistic Teaching, page 13,14 under the title 'Fractions.' 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.)

COULD DO — 15 MIN.

Differentiated Activities

110 km/hr

Create a simple story involving fractions. For example, you have 12 flowers and you give 4 flowers to a friend. Divide the flowers into groups and ask your partner to write the fraction for the flowers you gave away and the ones you kept. Draw the groups to help illustrate your story.

80 km/hr

Draw 4 simple shapes, divide them into equal parts, colour one part and write the fraction for the coloured part.

40 km/hr

Draw a picture of a watermelon divided into 4 slices. Colour one slice and write '$\frac{1}{4}$' for the coloured part.

Share and discuss your drawing with a partner.

Home Task

Look around your home and find objects that can be divided into equal parts, such as a window, pizza or flowers. Draw 3 objects you find that can be divided into halves or quarters. Write the fraction for each of the divided parts (e.g., $\frac{1}{2}$, $\frac{1}{4}$).

Period 10

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

Teacher: To get started, let us do a quick interactive exercise related to fractions.

SHOULD DO — 5 MIN.

Teacher: Look around the classroom and find 5 objects that you think could be divided into equal parts, such as a window, a piece of paper or a flower.

Teacher: Write down the name of the object and the fraction you would use to divide it (for example, a window divided into 2 equal parts is $\frac{1}{2}$).

Teacher: Once you have finished, I will ask some of you to share your examples. Let us see how many objects you can find.

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

Worksheet 2

Worksheet 2

A. Tick (✓) the correct option.

1. A quarter is the same as _____.
   a. whole ☐ b. one fourth ☐
   c. half ☐ d. one third ☐
2. One part out of 3 equal parts means _____.
   a. three fourth ☐ b. quarter ☐
   c. one third ☐ d. whole ☐
3. Half means _____ part out of two equal parts.
   a. 1 ☐ b. 2 ☐ c. 3 ☐ d. 4 ☐
4. If there are 3 mangoes, then one mango is _____ of the whole collection.
   a. three fourth ☐ b. quarter ☐
   c. one third ☐ d. whole ☐
5. Fractions are _____ parts of a whole.
   a. bigger ☐ b. equal ☐ c. unequal ☐ d. small ☐

B. Write the following in fractions.

1. whole _____ 2. three fourths _____
3. half _____ 4. one third _____
5. one fourth _____

C. Circle the correct fraction for the shaded part(s) in each of the following.

1. $\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{4}$
2. $\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{4}$
3. $\frac{1}{2}$ $\frac{1}{3}$
4. $\frac{3}{4}$ $\frac{1}{3}$ $\frac{1}{4}$
5. $\frac{3}{4}$ $\frac{1}{3}$
6. $\frac{1}{4}$ $\frac{2}{4}$ $\frac{3}{4}$

38

Teacher: Open Worksheet 2 on page 38. Let us work through Exercise A together.

MUST DO — 15 MIN.

Teacher: Question 1: A quarter is the same as ____.

Teacher: What do you think?

Teacher: Yes, it is one fourth. Write that in your book.

Teacher: Now, let us move on to Exercise B.

Teacher: Question 1: Write the following in fractions.

Teacher: Now, continue with Exercise C.

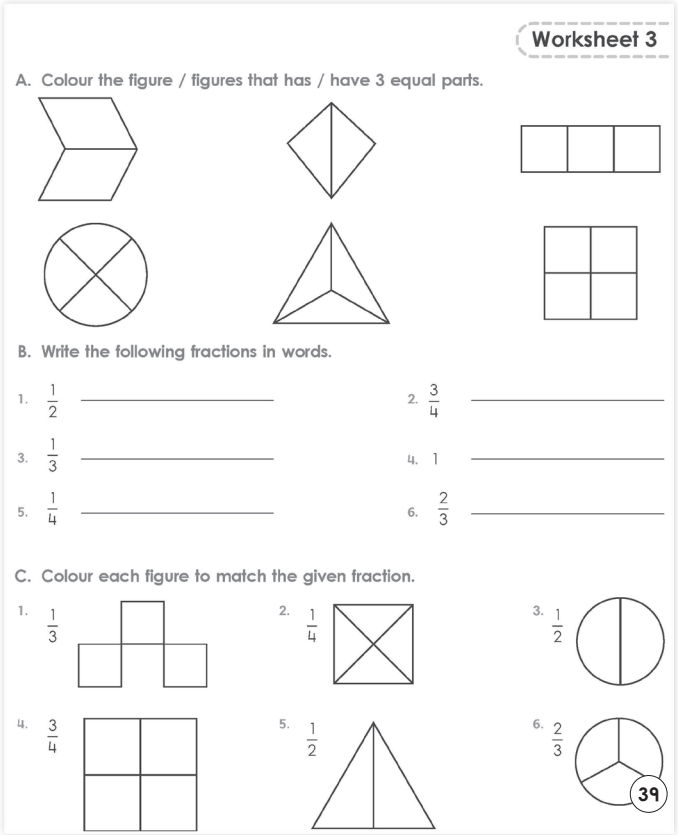
Teacher: Question 1: Circle the correct fraction for the shaded part(s) in each of the following.

Teacher: Look carefully at the shapes and circle the correct fraction for each shaded part.

(Guide the students to complete the questions.)

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

Worksheet 3



Teacher: Now let us move to Worksheet 3 on page 39.

Teacher: In Exercise A, we will colour the figures that have 3 equal parts.

MUST DO
15 MIN.

Teacher: Question 1: Look at the first shape. Does it have 3 equal parts?

Teacher: Let us continue with Exercise B.

Teacher: Question 1: Write the following fractions in words.

Teacher: How do you write fraction in words?

Teacher: Yes, half. Write that down.

Teacher: Now, let us do Exercise C.

Teacher: Question 1: Colour each figure to match the given fraction.

Teacher: Look at the fraction and colour the appropriate parts of each figure.

(Guide the students to complete the questions.)

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

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

SHOULD DO
5 MIN.

Teacher: Think about the topics, have we learnt 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

Draw a garden with 12 flowers. Divide each flower into equal parts (e.g., 2, 3 or 4 parts). Colour some parts and write the fraction for each coloured part. Then, swap your drawing with a partner and ask them to solve the fractions you used in your garden.

80 km/hr

Draw a simple board game path with 10 steps. In each step, draw an object (like a watermelon, pie or *chapati*) divided into different fractions. For example, step 1 could have a pie divided into 2 parts ($\frac{1}{2}$), step 2 could have a watermelon divided into 4 parts ($\frac{1}{4}$). After drawing, swap with a partner and ask them to identify and solve the fractions for each step they land on.

40 km/hr

Go outside or look around your classroom for objects that can be divided into fractions. For example, a leaf divided into 2 equal parts ($\frac{1}{2}$) or a flower divided into 4 equal parts ($\frac{1}{4}$). Draw these objects in your notebook and write the fraction for each. Share your findings with a partner and ask them to identify the fractions too.

Home Task

Practise the questions done in this chapter.

Learning Outcomes

The students will:

Domain	Learning Outcome
Physical Development	• accurately fold paper and colour parts of shapes to show $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$ and $\frac{3}{4}$
Socio-Emotional and Ethical Development	• complete tasks involving sharing and dividing objects fairly using fractions.
Cognitive Development	• solve fraction-based exercises involving shapes and collections with accuracy.
Language and Literacy Development	• correctly use terms like 'half', 'one-third' and 'quarter' in written and oral responses.
Aesthetic and Cultural Development	• draw and label real-life objects divided into equal parts with correct fractions
Positive Learning Habits	• express key ideas they have learnt about fractions during class discussions.

Starry Knights

Are you contented after teaching this unit? Were you able to help the learners understand fractions? What fraction of your class, you think, can score the most on this topic?

Give yourself a STAR.

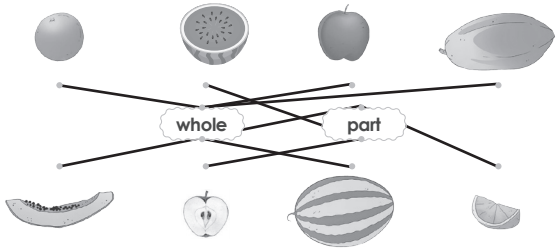
Answers

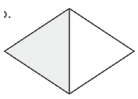
Theme 6: We Explore
Chapter-10: Fractions

Main Coursebook

Auditory: $\frac{1}{2}$

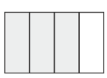
Pictorial



1. a.  b. 

2. a.  b. 

3. a.  b. 

4. a.  b. 

5. a. $\frac{\mathbf{1}}{\mathbf{2}}$ b. $\frac{\mathbf{3}}{\mathbf{4}}$

6. b. 3; $\frac{\mathbf{1}}{\mathbf{3}}$ c. 2; $\frac{\mathbf{1}}{\mathbf{2}}$

A. 1.  2.  3. 

B. 1.  2.  3. 

C. 1.  2.  3. 

D. 1.  2.  3. 

E. 1. $\frac{\mathbf{1}}{\mathbf{3}}$ 2. $\frac{\mathbf{1}}{\mathbf{4}}$ 3. $\frac{\mathbf{3}}{\mathbf{4}}$

F. 1. 3; $\frac{1}{3}$ 2. 2; $\frac{1}{2}$ 3. 4; $\frac{1}{4}$

Think and answer: 3

Choosing better:

- Ask his parents to take him there. ☑

Worksheets

Worksheet 1

A. 1. three fourths 2. quarter
3. whole 4. equal
5. fractions

B. 1. $\frac{1}{2}$ 2. $\frac{3}{4}$ 3. $\frac{1}{3}$
4. $\frac{1}{2}$ 5. $\frac{1}{4}$

C. 1. e 2. d 3. a 4. b 5. c

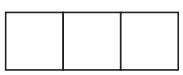
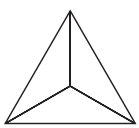
Worksheet 2

A. 1. b 2. c 3. a 4. c 5. b

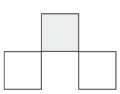
B. 1. 1 2. $\frac{3}{4}$ 3. $\frac{1}{2}$ 4. $\frac{1}{3}$ 5. $\frac{1}{4}$

C. 1. $\frac{1}{3}$ 2. $\frac{1}{2}$ 3. $\frac{1}{2}$ 4. $\frac{1}{4}$ 5. $\frac{3}{4}$
6. $\frac{2}{4}$

Worksheet 3

A.  

B. 1. half 2. three fourths
3. one third 4. whole
5. one fourth 6. two third

C. 1.  2.  3. 
4.  5.  6. 

Book of Holistic Teaching

A. 1. older 2. smaller

B. 1. b. 2. c. 3. a.