

# PREPARATION FOR DIVISION

The theme of this mathematics unit is *Plants*.

Learning Outcomes
<ul style="list-style-type: none"> <li>● Make equal groups</li> <li>● Count the equal groups</li> <li>● Group the same number of things in different ways</li> <li>● Share things equally to make groups of a given number</li> </ul>

Integration	
Art	Activity 1
Environmental Studies, General Awareness, Language	Warm-up, Find Out, Text
Wellness	Activity 1, Find Out
Life Skills and Values	Exercise
Multiple Intelligences	Maths Lab Activity 1, Maths Lab Activity 2
Digital	Presentations

## Suggested Number of Sessions: 10

**Session 1:** Recall, Warm-up, Grouping things

**Session 2:** Exercise question 1, Grouping things (continued): *Counting the groups*, Exercise question 2

**Session 3:** Exercise question 3, Activity 1, Grouping things (continued): *Grouping in different ways*

**Session 4:** Exercise questions 4 and 5

**Session 5:** Sharing, Exercise question 6

**Session 6:** Maths Lab Activity 1, Maths Lab Activity 2, Digital asset: Presentation (*making equal groups and making groups of a given number*)

**Session 7:** Find Out, Instructions for part of the Find Out task, which is to be given as home assignment, Digital asset: Presentation (*recipe for mint juice*), solving the story sum given in Find Out

**Session 8:** Exercise questions 7 to 9, Digital asset: Presentation (*same number of things shared in different ways*)

**Session 9:** Exercise question 10, Story about sharing work to make it easier, Activity 2

**Session 10:** Worksheets, other pending work

## Teaching Guidelines

### Recall

- Instruct students to complete the Recall exercises.

**S** Ask students to complete the **Warm-up** exercises. Question 2 is a story sum based on a visit to a plant nursery. The accompanying image shows a variety of plants. The answer to the question at the end of the section brings out their preferences regarding house plants. There is integration with Environmental Studies as students learn what a nursery is and talk about what plants they would like to have in their home to make it look beautiful.

### Grouping things

- Help students recall why we group things.
- Ask students to observe how the leaves have been put into equal groups. (Equal groups means groups with the same number of things.)
- Instruct students to complete question 1 of the Exercise.

### Counting the groups

- Ask students to count the number of equal groups and write the answer in the blank given.
- Instruct students to complete questions 2 and 3 of the Exercise.

**S** Instruct students to attempt **Activity 1**. It integrates Art. Students draw baskets, one for each day of the week. They then draw two bananas in each basket and colour them. They answer the questions that follow based on their drawings. They speak about the benefits of eating bananas every day. Thus, the Activity also integrates Wellness.

### Grouping in different ways

- Explain / Help students recall (from what they have learnt in the lesson Preparation for Multiplication) that the same number of things can be grouped in two different ways.
- Use the example given in the coursebook to reinforce this concept.
- Instruct students to attempt questions 4 and 5 of the Exercise.

### Sharing

- With the help of the step-wise method given in the coursebook, explain how we can share things equally by making equal groups.
- Instruct students to follow the steps for sharing or dividing things into equal groups and complete question 6 of the Exercise.

**S** Conduct **Maths Lab Activity 1** in the class. It involves Multiple Intelligences (Bodily-Kinesthetic, interpersonal intelligences). Physical movement is involved and students get a hands-on experience of forming equal groups and of saying how many in each group. They communicate effectively with each other to complete the task correctly.

**S** Conduct **Maths Lab Activity 2** in the class. It involves Multiple Intelligences (Bodily-Kinesthetic and interpersonal intelligences). Physical movement is involved and students get a hands-on experience of making groups of a given number and counting the number of groups. They communicate effectively with each other for completing the task correctly.

Encourage students to watch the Presentation on making equal groups and making groups of a given number. This is digital integration as learning is reinforced through a digital presentation.

**S** Explain what mint is and what it is used for. Students find out the uses / health benefits of mint and share the details with the class. Thus, the **Find Out** task integrates Environmental Studies and Wellness.

**S** Encourage students to watch the Presentation on how to make mint juice, which is a refreshing health drink. This is Digital integration as learning happens through a digital presentation. There is further integration with Environmental Studies as students learn what seeds are. They also learn that mint plants grow from seeds.

- Instruct students to complete the rest of the activity which involves drawing the remaining rows of mint seeds and answering the questions based on the drawing.
- Explain question 7 of the Exercise. Read out and explain the solved question 7a and the hint to give students an idea of how to work out the answers for the remaining questions (b, c, d and e).

Run the Presentation to show one more example of how the same number of things can be shared in different ways. This is Digital integration. The concept that the same number of things can be shared or divided equally in different ways is reinforced through a digital presentation.

- Instruct students to attempt question 8 and 9 of the Exercise. Both these questions involve critical thinking.

**S** Read out question 10 of the Exercise. Explain how by sharing work, Roshan's family members are able to spend more time with each other. This is integration with Values. Students learn that family members help each other by sharing the work.

- Instruct students to fill in the blanks to answer the question. This brings out their understanding of how work gets reduced when divided among many people and how less work for each member results in more time spent with the family.

**S** Read out / Instruct students to read the picture story about sharing work. This is Language integration. The idiom 'Many hands make light work,' which means 'A heavy task becomes lighter when divided among many', is reinforced through an interesting story.

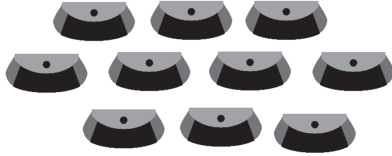
- Instruct students to complete **Activity 2**. It reinforces making of equal groups in an interesting way.

## QUESTION BANK WITH ANSWERS

### PREPARATION FOR DIVISION

A. Put into equal groups by drawing circles. Then, write the number of groups in the box.

1. Groups of 5 each



Ans: 2 groups

2. Groups of 3 each



Ans: 3 groups

B. Put these into groups in different ways. Write the addition sum below each group.

Groups of 4 each



1. \_\_\_\_\_ = \_\_\_\_\_

Ans: 1.  $4 + 4 + 4 + 4 = 16$

Groups of 8 each



2. \_\_\_\_\_ = \_\_\_\_\_

2.  $8 + 8 = 16$

C. Roshan feeds street dogs. He gives 5 biscuits to the black dog, 4 biscuits to the white dog and 3 biscuits to the brown dog. *(Critical thinking)*

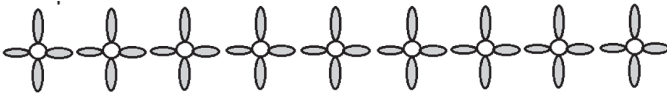
1. If he wants to give equal number of biscuits to the three dogs, how many biscuits will each dog get?

2. If he wants to give 16 biscuits to 8 dogs, how many biscuits will each dog get?

Ans: 1. 4 biscuits      2. 2 biscuits

A. Put into equal drops by drawing circles.

1. Groups of 3 each



2. Groups of 2 each



B. Make equal groups in two ways. Write the addition sum below each group.

1. Groups of 4 each



\_\_\_\_\_ = \_\_\_\_\_

Groups of 2 each



\_\_\_\_\_ = \_\_\_\_\_

2. Groups of 6 each



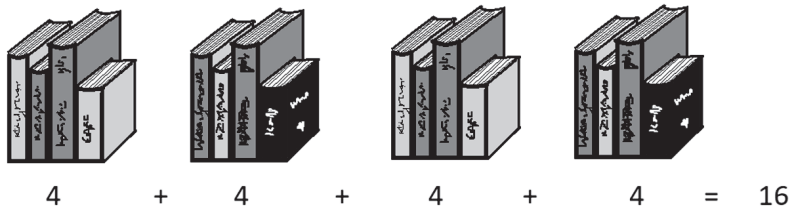
\_\_\_\_\_ = \_\_\_\_\_

Groups of 3 each



\_\_\_\_\_ = \_\_\_\_\_

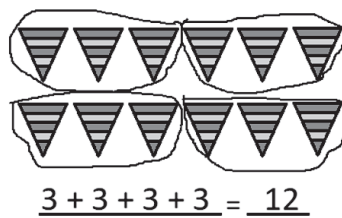
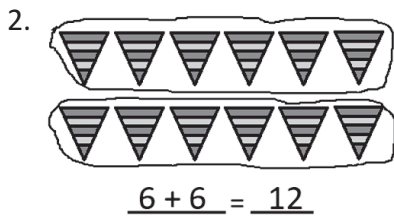
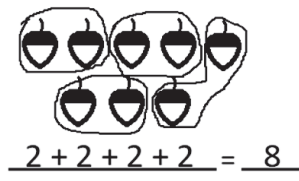
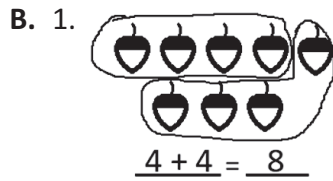
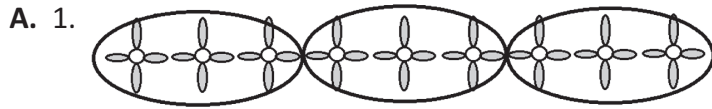
C. Mina has 16 books. She wants to give her books to 4 of her friends. She has grouped them like this.



Two of her friends do not want the books. Can you help Mina give the same number of books to the two friends who want the books?

# ANSWER KEY TO THE WORKSHEET

## PREPARATION FOR DIVISION



(**Note:** Students can draw 8 rectangles or squares in each box to show the books. They need not draw the books given in the question.)