Readiness | Engagement | Mastery

Lesson 1

Chapter Opener (page 45)

20 minutes

The picture provides a familiar context for students to review addition within 10 and an opportunity to discuss how math is a part of everyday school experiences.

- You may use the Interactive Class Presentation to facilitate discussions and promote interactions.
- Display the picture. Invite students to share what they see. children, hexagonal table, teacher, paper, paint, tables, chairs, stools, art classroom with students and a teacher
- Group students in pairs or small groups.
- Have students think about how they can find the total number of students, without counting all the students one by one in the picture.
- You may facilitate discussions with these questions. Observe student discussions and pay attention to the language they use.

How many children can sit at the table? 6 **How did you find the answer?** The table has 6 sides.

- Discuss with students the following strategies:
  Counting all 6 (6 children in all);
  Counting on 2 more from 4 (4 seated and 2 standing);
  Counting on 4 more from 2 (2 standing and 4 seated);
  Finding 1 more than 4, then 1 more than 5;
  Conceptual subitizing: seeing a group of 4 and a group of 2, then recalling that 4 and 2 make 6 using number bonds.

How many children are there in all? 6 **Let's look at the bulletin boards. How many butterflies do you see?** 2 **How do you know?** 1 and 1 make 2.

Promoting Growth

Encourage students to represent the number of children using connecting cubes.

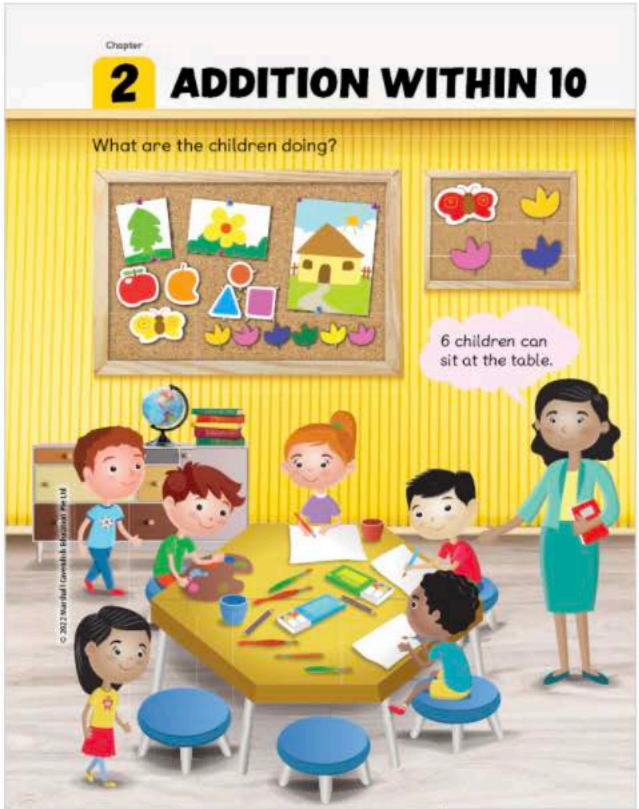
How many connecting cubes would you use to show the number of students at the table? 4 **How many connecting cubes would you use to show the number of students who are standing?** 2

Encourage students to join their 4-cube train and 2-cube train together.

What does it look like to put the cubes together? How many cubes do you have in all? 6

Best Practice

Encouraging any level of response from students in the discussions in early chapters will foster a willingness to take risks and to participate at a deeper level.



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English Language Support

Provide students with a number/word chart for numbers 1 to 10.

1	One	□
2	Two	□□
3	Three	□□□
4	Four	□□□□

Use the following sentence frames to facilitate discussions. Use pictures to help students recall the vocabulary words in the sentence frames.

I see _____ stools.

I see _____ table.

I see _____ teacher.

I see _____ children seated.

I see _____ children standing.

I see _____ children in all.

Recall (page 46)

30 minutes

Have students complete the **Recall** questions to check their readiness for the chapter. After students have answered all the questions, go through each of them by facilitating the following class activities and/or discussions. You may refer to the **Transition Guide** for additional resources. As an option, you may refer students to the online **Recall** questions. These online questions will be auto-graded. For questions that require students to show their work, have them do so in the Student Book.

Material(s)

- 5 green and 5 yellow connecting cubes per student (optional)
- I set of Number Cards (TR01) per student (optional)
- I copy of Number Bonds (TR04) per student (optional)
- I copy of Five Frame I (TR05) per student (optional)

QUESTION I assesses students' ability to count on and write numbers to 10 in order.

- Provide students with a set of Number Cards (TR01) to create the number patterns and find the missing numbers.

How can you use the number cards to figure out what numbers come next? I put them in order from I to 10.

QUESTION 2 assesses students' ability to complete a number bond.

- Provide laminated copies of Number Bonds (TR04) to allow students to practice using number bonds.

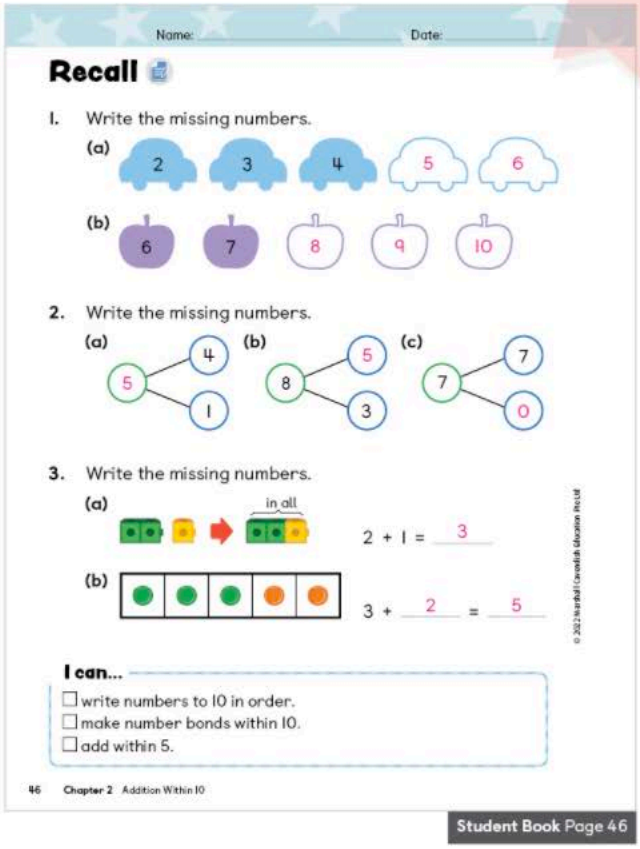
How is 2(a) different from (b) and (c)? I need to find the whole in (a) and the missing parts in (b) and (c). **How do you find the whole?** put the parts together **How do you find a missing part?** take away the other part from the whole

QUESTION 3 assesses students' ability to add within 5.

- Provide students with Five Frame I (TR05) to practice adding within 5.

In (a), how do the connecting cubes show us addition? We are putting the cubes together. We are finding the number of cubes in all.

In (b), how does the five frame show us addition? There are 3 green and 2 orange counters. There are 5 counters in all. The five frame shows 3 and 2 together.



Name: _____ Date: _____

Recall

1. Write the missing numbers.

(a) 2, 3, 4, 5, 6

(b) 6, 7, 8, 9, 10

2. Write the missing numbers.

(a) 5 | 4, 1

(b) 8 | 5, 3

(c) 7 | 7, 0

3. Write the missing numbers.

(a) in all

2 + 1 = 3

(b) 3 + 2 = 5

I can...

- ☐ write numbers to 10 in order.
- ☐ make number bonds within 10.
- ☐ add within 5.

46 Chapter 2 Addition Within 10

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Additional Support

During center time or small group intervention, provide materials for learners who are at the concrete level. For **Question 2(a)**, provide students with a large number bond and have students place 4 green connecting cubes in one "part" of the number bond and I yellow connecting cube in the other "part." Prompt them to find the "whole" using the cubes. This practice will support foundational understanding of numbers within 10.

Extension

Challenge students to tell number stories for the pictures in **Question 3**.

Lesson 2

2A Make Addition Stories (1)

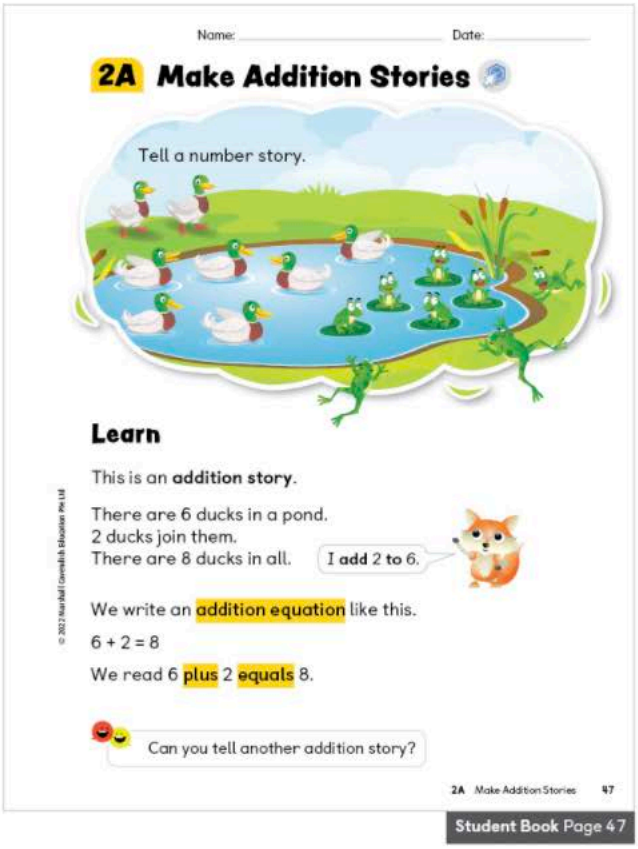
Focus Question
What is an addition equation?

I CAN
- I can tell and solve addition stories where I have to add more objects to a group.
- I can write addition equations using + and =.

Mathematical Practice(s)
- 4 Model
- 5 Use Tools
- 6 Use Math Language

Vocabulary
- addition equation
- plus
- equals

Material(s)
- 10 crayons per pair or small group
- 1 cup per pair or small group
- 1 paper plate per pair or small group
- 1 set of connecting cubes per pair or small group


Name: _____ Date: _____

2A Make Addition Stories

Tell a number story.

Learn

This is an **addition story**.

There are 6 ducks in a pond.
2 ducks join them.
There are 8 ducks in all.

I add 2 to 6.

We write an addition equation like this.

6 + 2 = 8

We read 6 plus 2 equals 8.

Can you tell another addition story?

2A Make Addition Stories 47

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ADD TO (pages 47 to 50)

Lesson Opener

Task (page 47) — 10 minutes

- You may use the appropriate digital manipulatives to support teaching and learning throughout the lesson(s) in Section 2A.
- Group students in pairs or small groups. Provide them with a set of connecting cubes.
- Have students work on the task. Observe student discussions.
- After students have attempted the task, use the following prompts to facilitate a class discussion. Pay attention to the language students use.

What do you see in the picture? There are 2 ducks outside the pond and 6 ducks in the pond. There are 8 ducks in all. There are 5 frogs in the pond. 3 frogs are jumping into the pond. There are 8 frogs in all.
How do you know? I counted.

- Encourage students to talk about the real-world applications of addition equations.

When do you use "equal" outside of math class? What do we mean when we use the word "equals"? Shannon and Carla have an equal number of cookies. I use "equals" when one group has the same number of objects as another group.

- Extend the discussion using the following questions.

What are some things that are the same about our number stories for the ducks and for the frogs? Both number stories add up to 8. There are 8 ducks and 8 frogs.

Best Practice

Do not focus on the commutative property of addition at this juncture. It will be covered in the lesson on number bonds.

Lesson Development

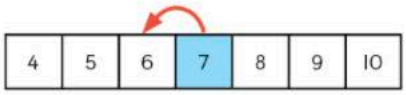
Learn (page 47) — 10 minutes

- Display the picture of the pond on page 47.
- Group students in pairs or small groups.
- Provide each pair or group with connecting cubes and a paper plate.

There are 6 ducks in a pond. 2 ducks join them. Make a number train for this part of the addition story with your classmate. What do you notice about this number story? It is the same as the picture. **Can you tell us about your number train?** We made an 8-cube train for the ducks. 6 ducks and 2 ducks make 8 ducks.

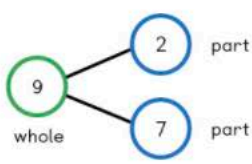
In **Section 3B**, students explore different strategies to subtract within 10, including counting back, using number bonds to represent subtraction scenarios in two different ways, and using their knowledge of addition to subtract. Students use number tapes, number bonds, and fact families to represent number stories.

Subtract 1 from 7.



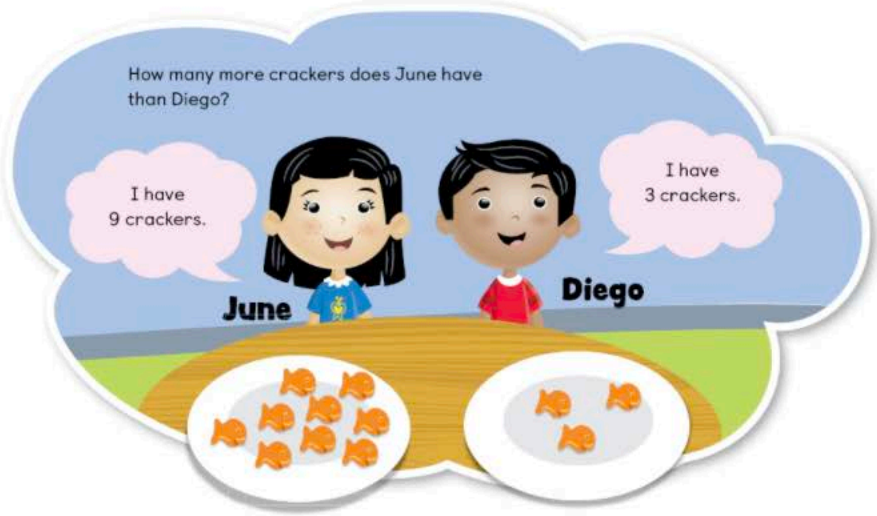
7 − 1 = 6

There are 9 dragonflies.
2 dragonflies fly away.
9 − 2 = 7
There are 7 dragonflies on the leaf.



There are 9 dragonflies.
7 dragonflies land on the leaf.
9 − 7 = 2
2 dragonflies fly away.

In **Section 3C**, students learn to compare two numbers by subtraction to find the difference.



$9 - 3 = 6$

June has 6 more crackers than Diego.

continued

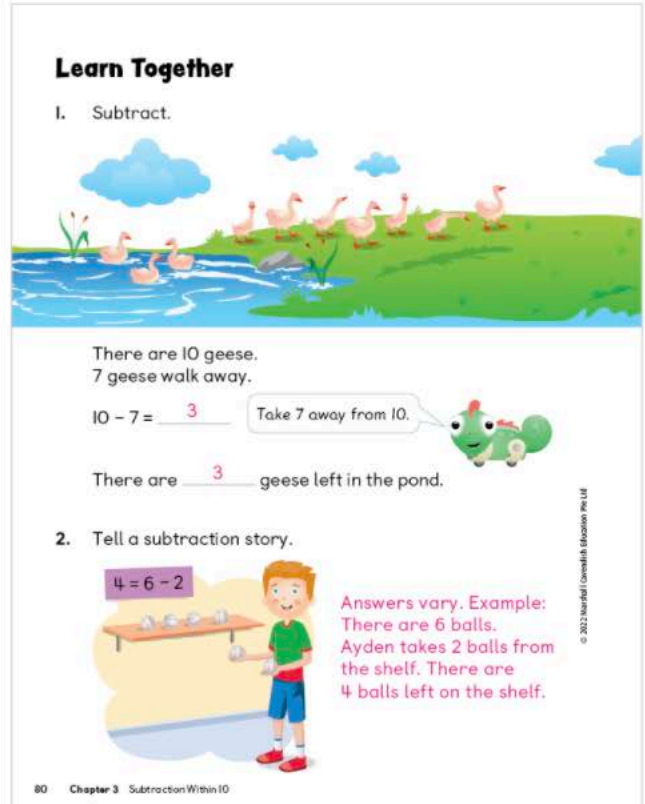
English Language Support

Point out to students that when they take 3 away from 8, there are 5 left. In this case, "left" is not referring to the direction but to the number that is left over.

- Invite students to discuss the picture with their classmate and tell another subtraction story. Have them read their story, model it using connecting cubes, and write a subtraction equation for it.
- You may want to walk around to observe and facilitate student discussions.
- Invite students to share their stories with the class.

Best Practice

Remind students that the equal symbol means "is the same as," and not simply "the answer." This will help students understand and make connections when the answer blank in a subtraction equation is on the left of the equal symbol, for example, 5 = 8 − 3.



Learn Together

1. Subtract.

There are 10 geese.
7 geese walk away.

10 − 7 = 3 Take 7 away from 10.

There are 3 geese left in the pond.

2. Tell a subtraction story.

4 = 6 − 2

Answers vary. Example: There are 6 balls. Ayden takes 2 balls from the shelf. There are 4 balls left on the shelf.

80 Chapter 3 Subtraction Within 10

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Learn Together (page 80) 10 minutes

- Group students in pairs or small groups to answer Questions 1 and 2. Provide each pair or group with a set of connecting cubes to model the subtraction stories.
- **QUESTION 1** requires students to complete a subtraction equation for a given subtraction story.

What do you see in the picture? What can you say about the geese in the picture? There are 10 geese in all. 7 geese are walking away from the pond. **How many geese are left in the pond?** 3 **How do you know to use subtraction?** The geese are walking away.

- **QUESTION 2** requires students to tell a subtraction story for a "take from" situation.

Tell a subtraction story. Use these words to help you: balls, shelf, take, from, left

- Invite students to share their subtraction stories.

Additional Support

Encourage students to use concrete materials to physically "take from" to understand the action of subtraction. Invite students to verbalize the steps they take when understanding and solving a problem.