



Teaching with Math and Me!

Math at School

Connection to Standards

Students will understand various meanings of addition and subtraction of whole numbers and the relationship between the two operations. (NCTM)

Differentiation for ESL

- Review these additional vocabulary words in context: *during*, *parent*, *absent*, *divides*, *measuring*
- Allow students to complete word maps for any term for which they have limited understanding. Have students say or write the definition in their own words and think of words related to the term.
- Have students sit with a partner while reading. After each page, have students discuss words and ideas they found confusing. They can refer to their word maps to try to clarify meanings. Allow partners to raise their hands for assistance.



Lexile: 390
Words: 403

PreK-2

Before Reading

Building Background Knowledge:

- If this is students' first time reading this series, explain to them that in each book they'll be reading about different ways they can use math in their everyday lives. Tell them that in this book, they'll be learning about using math at school—and not only during math class!

Preview:

- Show the cover of the book. Explore the cover photo. Ask students to guess who the people are and what they are doing.
- Lead students on a brief picture walk of the book, exploring the photos on each page. Have students identify one or two details in each photo.

Predict: Ask students to predict some of the specific examples of using math at school they'll be reading about in the book. Have students support their predictions with evidence they discovered while previewing the book.

Vocabulary: Turn to page 23 (“Words to Know”). Review each vocabulary word and the provided definition. For each word, have students:

- give a thumbs-up if they know the word well.
- give a thumbs-sideways if they don’t know the word well.
- give a thumbs-down if they don’t know the word at all.

Strengthen understanding of words students do not know well by modeling how to use the word in a sentence. Create sentences with rich context clues, then review how the context clues help students understand the meaning. Have students come up with their own sentences for each word.

Skill Introduction: Write the words “plus” and “minus” on the board. Under each word, write the symbol that represents it (+, –). Discuss the differences between addition and subtraction and the situations in which we’d use each of them.

During Reading

Look for Key Details: Remind students that the main idea of the book is to describe some of the ways we use math at school. As you read each chapter, invite volunteers to share how that chapter supports the main idea. In what ways does the chapter show math being used at school?

Practice the Concepts: Ask students the following questions as they read.

- **pp. 8–9:** *If the four students who ride their bikes to school switch to riding the bus, how many total students in the class will ride the bus? Write the number sentence to show how to get the answer. ($5 + 4 = 9$)*
- **pp. 10–11:** *The students’ first class ends at 9:00. How many minutes long is the class? (30)*
- **pp. 12–13:** *Two of the students who were sick return to class the next day. How many students are in class the next day? Write the number sentence to show how to get the answer. ($12 + 2 = 14$)*
- **pp. 14–15:** *Suppose the teacher wants to divide the class into four equal groups instead of two. How many students will be in each group? (3)*
- **pp. 16–17:** *A second pair of students pours water into measuring cups. One cup holds 7 ounces. The other cup holds 11 ounces. Which cup holds more? (the 11-ounce cup) How can you show that using numbers and symbols? ($11 > 7$)*
- **pp. 18–19:** *Suppose 5 students from the class buy lunch instead of 8. How many students bring their lunch from home? Write the number sentence to show how to get the answer. ($12 - 5 = 7$)*

After Reading

Reflection: Ask students to think of and share other ways they use math at school. Which math skills do they use in each of those instances (e.g. addition, subtraction, telling time, measuring, etc.)?

Skill: Have students complete the word problems on the following Worksheet.



Math at School Answer Key

1. On Monday, Lily borrows 5 books from the school library. On Friday, she returns 3 of those books. How many library books does she have left? 2 $5 - 3 = 2$
2. 8 students sign up for chess club. The following week, 4 more students join the club. How many total students are in the chess club? 12 $8 + 4 = 12$
3. Mr. Lee's class has 15 students. Ms. Green's class has 18 students. Whose class has more students? Ms. Green's class $18 > 15$
4. There are 16 students in Mrs. Sharp's class. At recess, 7 of the students play on the playground, 3 play with jump ropes, and the rest play basketball. How many students play basketball? 6 $16 - 7 = 9$ and $9 - 3 = 6$
5. Mr. Sanchez's red reading group needs to earn 20 gold stars to earn extra recess. The table below shows the number of gold stars each of the group's students have earned. Did they earn enough to get extra recess?: yes $9 + 7 = 16$ and $16 + 5 = 21$

Student	Number of gold stars
Matt	4
Ella	5
Nate	4
Liam	3
Charlotte	5

Name _____

Addition and Subtraction Problems

Ask students to think of and share other ways they use math at school. Which math skills do they use in each of those instances (e.g. addition, subtraction, telling time, measuring, etc.)?

1. On Monday, Lily borrows 5 books from the school library. On Friday, she returns 3 of those books. How many library books does she have left? _____
2. 8 students sign up for chess club. The following week, 4 more students join the club. How many total students are in the chess club? _____
3. Mr. Lee's class has 15 students. Ms. Green's class has 18 students. Whose class has more students? _____
4. There are 16 students in Mrs. Sharp's class. At recess, 7 of the students play on the playground, 3 play with jump ropes, and the rest play basketball. How many students play basketball?

5. Mr. Sanchez's red reading group needs to earn 20 gold stars to earn extra recess. The table below shows the number of gold stars each of the group's students have earned. Did they earn enough to get extra recess?: _____

Student	Number of gold stars
Matt	4
Ella	5
Nate	4
Liam	3
Charlotte	5