

Dinosaur Books

Derek loves to collect books about dinosaurs. Derek has seven dinosaur books. Derek wants to have ten dinosaur books. Derek says he needs to collect two more dinosaur books. Is Derek correct? Show and tell how you know.

Dinosaur Books

Common Core Task Alignments

Mathematical Practices: 1, 3, 4, 5, 6.

Grade K Content Standards:
K.OA.A.4

GO Math! Lessons: 4.3, 5.5

Task

Derek loves to collect books about dinosaurs. Derek has seven dinosaur books. Derek wants to have ten dinosaur books. Derek says he needs to collect two more dinosaur books. Is Derek correct? Show and tell how you know.

Alternative Versions of the Task

More Accessible Version:

Derek loves to collect books about dinosaurs. Derek has two dinosaur books. Derek wants to have five dinosaur books. Derek says he needs to collect two more dinosaur books. Is Derek correct? Show and tell how you know.

More Challenging Version:

Derek loves to collect books about dinosaurs. Derek has seventeen dinosaur books. Derek wants to have twenty dinosaur books. Derek says he needs to collect two more dinosaur books. Is Derek correct? Show and tell how you know.

Common Core Content Standards and Evidence

K.OA Operations and Algebraic Thinking

Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.

4. For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.

Exemplars Task-Specific Evidence

This task requires students to find the number that makes 10 when added to seven. Students also need to compare two numbers.

GO Math! Alignments

- Chapter 4, Lesson: 4.3
- Chapter 5, Lesson: 5.5

Underlying Mathematical Concepts

- Number sense to 10
- Counting on/Addition
- Counting back/Subtraction
- Comparison

Possible Problem-Solving Strategies

- Model (manipulatives)
- Diagram/Key
- Tally chart
- Number line

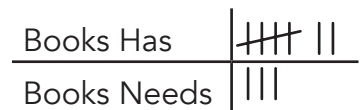
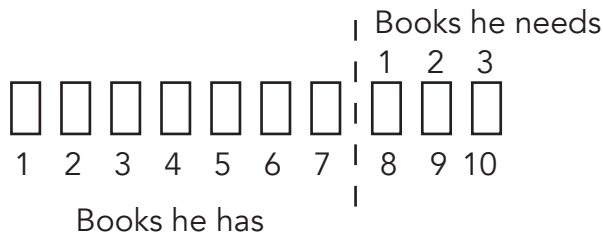
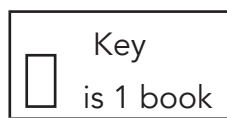
Possible Mathematical Vocabulary/Symbolic Representation

- Model
- Diagram/Key
- Tally chart
- Number line
- Total/Sum
- Odd/Even
- More than (>)/Greater than (>)/Less than (<)
- Equivalent/Equal to
- Equation

Possible Solutions

Original Version:

No, Derek is not correct.



$$7 + 2 = 9$$

More Accessible Version:

No, Derek is not correct.

More Challenging Version:

No, Derek is not correct.

Possible Connections

Below are some examples of mathematical connections. Your students may discover some that are not on this list.

- Derek needs to collect 1 more book to have 10.
- $7 + 2 = 9$, which is an odd number. 10 is an even number.
- Solve more than one way to verify the answer.
- Relate to a similar task and state a math link.
- Use subtraction to support addition.
- Derek has to collect less books than he already has.
- Equations: $10 - 7 = 3$ / $7 + ? = 10$.