

Lesson 13: Use Bar Graphs to Compare

Standards Alignments

Addressing 2.MD.D.10, 2.OA.B.2

Teacher-facing Learning Goals

- Solve Compare problems with an unknown difference within 20.
- Write equations to represent Compare problems.

Student-facing Learning Goals

- Let's use bar graphs to solve Compare problems.

Lesson Purpose

The purpose of this lesson is for students to make sense of and solve Compare problems using the structure of a bar graph and equations.

In grade 1, students use the relationship between addition and subtraction to solve and represent Compare problems. They create diagrams and write equations to represent how they think about the quantities within the Compare problems. In this lesson, students interpret bar graphs and use their visual structure to compare quantities. They write equations to represent comparisons and connect these equations to the structure of the bar graph (MP2). In upcoming lessons, students will use bar graphs to make sense of tape diagrams that represent Compare problems.

Access for:

Students with Disabilities

- Representation (Activity 2)

English Learners

- MLR8 (Activity 1)

Instructional Routines

True or False (Warm-up)

Lesson Timeline

Warm-up	10 min
Activity 1	15 min
Activity 2	20 min

Teacher Reflection Question

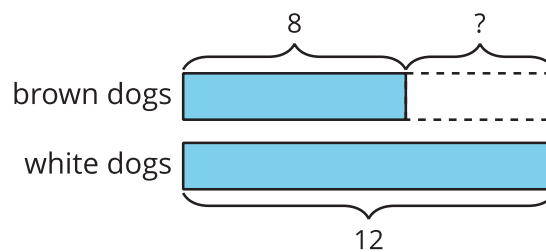
In future lessons, students will make sense of tape diagrams to represent Compare problems.

Lesson Synthesis

10 min

Cool-down

5 min



How does the work with the bar graphs today help build students' understanding of this more abstract diagram?

Cool-down (to be completed at the end of the lesson)

🕒 5 min

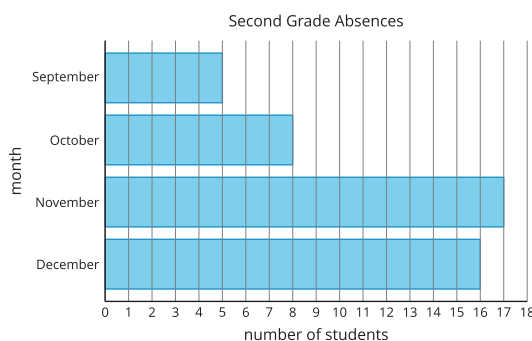
Second Grade Absences

Standards Alignments

Addressing 2.MD.D.10

Student-facing Task Statement

The school collected attendance data to see how many second graders were absent each month from September to December. The data is shown in this bar graph.



1. How many fewer students were absent in October than in November? Show your thinking using drawings, numbers, or words.
2. Write an equation to show how you found the difference. Can you write another equation that shows how to find the difference?

Student Responses

1. 9 fewer students were absent in October than November. Sample responses:
 - First break apart 8 into 7 and 1. Then subtract $17 - 7 = 10$ and $10 - 1 = 9$.
 - Student shows counting on from 8 to 17 and labeling 9 fewer students.
2. Sample responses:
 - $17 - 8 = 9$
 - $8 + 9 = 17$
 - $8 + ? = 17$