# Lesson 2: Represent Data and Solve Problems

### Standards Alignments

|  |  |
| --- | --- |
| Building On | 2.MD.D.10, 2.OA.C.3 |
| Addressing | 3.MD.B, 3.MD.B.3 |
| Building Towards | 3.MD.B.3 |

### Teacher-facing Learning Goals

* Represent data using bar graphs and picture graphs.
* Solve one- and two-step problems using addition and subtraction within 20.

### Student-facing Learning Goals

* Let’s create graphs and answer questions.

### Lesson Purpose

The purpose of this lesson is for students to solve one- and two-step problems about data represented in bar graphs.

Students solved one-step problems about data in grade 2. In this lesson, students first create a picture graph and bar graph that represent how they get home from school. Then, they solve one- and two- step “how many more” and “how many fewer” problems using data presented in a bar graph. Consider launching the lesson with a read-a-loud of *Last Stop on Market Street* by Matt de la Peña and Christian Robinson.

**Math Community**

Tell students they will have a chance to revise their math community ideas at the end of this lesson. As they work today they should think about actions that may be missing from the current list.

### Access for:

###  Students with Disabilities

* Representation (Activity 2)

###  English Learners

* MLR8 (Activity 1)

### Instructional Routines

How Many Do You See? (Warm-up)

### Materials to Gather

* Sticky notes: Activity 1

### Lesson Timeline

|  |  |
| --- | --- |
| Warm-up | 10 min |
| Activity 1 | 15 min |
| Activity 2 | 20 min |
| Lesson Synthesis | 10 min |
| Cool-down | 5 min |

### Teacher Reflection Question

Think about who participated in math class today. What assumptions are you making about those who did not participate? How can you leverage each of your students’ ideas to support them in being seen and heard in tomorrow’s math class?

## Cool-down

(to be completed at the end of the lesson) 5min

Questions About a Bar Graph

### Standards Alignments

|  |  |
| --- | --- |
| Addressing | 3.MD.B.3 |
| Building Towards | 3.MD.B.3 |

### Student-facing Task Statement

A group of students were asked, “Where is your favorite place to read?”

Their responses are shown in this bar graph:



1. How many more students chose the park than home as their favorite place to read?
2. True or false: More students like to read at the school or library than the park. Explain or show your reasoning.

### Student Responses

1. 3 more students
2. False. Sample response: Six students $\left(4+2\right)$ like to read at the school or library, and 8 students like to read at the park.