# Lesson 4: Compare Numbers on a Number Line

### Standards Alignments

|  |  |
| --- | --- |
| Addressing | 2.MD.B.6, 2.NBT.B.5 |

### Teacher-facing Learning Goals

* Recognize that on a number line, the numbers increase to the right and decrease to the left.

### Student-facing Learning Goals

* Let’s use the number line to compare numbers.

### Lesson Purpose

The purpose of this lesson is for students to recognize that on a number line the numbers increase to the right and decrease to the left.

In previous lessons, students learned how to locate a number on the number line and represent numbers with labeled tick marks and points. They used multiples of 5 and 10 to help them locate numbers up to 100 on a number line.

In this lesson, students recognize that as you move to the right on the number line, numbers increase in value because they are a greater distance from 0. Students also use the relative position of numbers and generalize that a number that is greater than a given number if it is farther to the right on the number line. To demonstrate this understanding, students compare numbers within 100 (a skill from grade 1) and use the number line to explain their comparison (MP7).

In a later lesson, students connect this understanding to movement on the number line, as they learn to represent addition as moving to the right and subtraction as moving to the left.

### Access for:

###  Students with Disabilities

* Engagement (Activity 1)

### Instructional Routines

MLR8 Discussion Supports (Activity 1), Number Talk (Warm-up)

### Materials to Gather

* Counters: Activity 1
* Dry erase markers: Activity 2
* Materials from a previous lesson: Activity 1, Activity 2
* Number cubes: Activity 1, Activity 2
* Sheet protectors: Activity 2

### Materials to Copy

* Number Line to 100 (groups of 1): Activity 2

### Lesson Timeline

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

### Teacher Reflection Question

How did students explain why a number was greater than or less than another number? What can you do to support students who are not yet articulating their reasoning in terms of a number's location on the number line?

## Cool-down

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

Compare on the Number Line

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|  |  |
| --- | --- |
| Addressing | 2.MD.B.6 |

### Student-facing Task Statement

1.
* 
	1. Locate and label 31 on the number line.
	2. Locate and label a number that is less than 31 on the number line.
	3. Use < and > to compare the 2 numbers represented on your number line.
	4. Explain how you know your comparison is true.

### Student Responses

* 1. Students locate and label 31.
	2. Answers vary. Sample response:
	+ 
	1. Sample response: $26<31$
	2. Sample response: My point is on 26. I know it is less than 31 because it is farther to the left.