Chapter 7: Compare Numbers

Content Area: **Mathematics**
Course(s): **Math 1**
Time Period: **February**
Length: **8 Days**
Status: **Published**

Unit Summary

In unit 7, children begin to understand place value. Children learn to compare numbers to find which one is greater using place value and the > symbol. When the tens digit is the same, then the ones place in each number is compared. They learn the meaning of less than with the symbol < and compare the digits in each place value in the same way. Children begin to understand that either symbol can be used to express the same inequality depending on which number is first. The equal symbol = is then used to express that two numbers are equal. Their knowledge of place value is expanded to mentally find 10 more or 10 less than a number, without having to count (1.NBT.C.5). Children observe that only the tens place changes when they find 10 more or 10 less. Throughout this unit, students will become familiar with and master the following academic terms: two-digit numbers, compare, greater than, less than, equal to, fewer, more, same.

Standards

MA.1.NBT.B.3	Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <.
MA.1.NBT.C.5	Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.
MA.K-12.6	Attend to precision.
MA.K-12.8	Look for and express regularity in repeated reasoning.
CRP.K-12.CRP2	Apply appropriate academic and technical skills.
CRP.K-12.CRP2.1	Career-ready individuals readily access and use the knowledge and skills acquired through experience and education to be more productive. They make connections between abstract concepts with real-world applications, and they make correct insights about when it is appropriate to apply the use of an academic skill in a workplace situation.
TECH.8.1.2.A.CS1	Understand and use technology systems.
TECH.8.1.2.A.CS2	Select and use applications effectively and productively.
	Mathematically proficient students notice if calculations are repeated, and look both for general methods and for shortcuts. Upper elementary students might notice when dividing 25 by 11 that they are repeating the same calculations over and over again, and conclude they have a repeating decimal. By paying attention to the calculation of slope as they repeatedly check whether points are on the line through (1, 2) with slope 3, middle school students might abstract the equation $(y - 2)/(x - 1) = 3$. Noticing the regularity in the way terms cancel when expanding $(x - 1)(x + 1)$, $(x - 1)(x^2 + x + 1)$, and $(x - 1)(x^3 + x^2 + x + 1)$ might lead them to the general formula for the sum of a geometric series. As they work to solve a problem, mathematically proficient students maintain oversight of the process, while attending to the details. They continually evaluate the reasonableness of their intermediate results.
	Mathematically proficient students try to communicate precisely to others. They try to use clear definitions in discussion with others and in their own reasoning. They state the meaning of the symbols they choose, including using the equal sign consistently and appropriately. They are careful about specifying units of measure, and labeling axes to clarify the correspondence with quantities in a problem. They calculate accurately and efficiently, express numerical answers with a degree of precision appropriate for the problem context. In the elementary grades, students give carefully formulated explanations to each other. By the time they reach high school they have learned to

examine claims and make explicit use of definitions.

Student Learning Objectives

Students will learn to...

- Model and compare two digit numbers using symbols
- Solve problems using the strategy make a model
- Identify numbers that are 10 less or 10 more than a given number

Essential Questions

- How are two numbers related to one another and how can we represent this relationship?

Enduring Understandings

Students will understand that...

- place value can help us compose numbers and compare them.

Application

Students will be able to independently use their learning to...

- understand place value by composing and comparing numbers.

Skills

Students will be skilled at...

- Modeling and comparing two-digit numbers to determine which is greater
- Modeling and comparing two-digit numbers to determine which is less
- Using symbols for is less than "<", is greater than ">" and is equal to "=" to compare numbers
- Solving problems using the strategy "make a model"
- Identifying numbers that are 10 less or 10 more than a given number