

# Unit 6 - Chapter 6: Fraction Equivalence and Comparison

Content Area: **Mathematics**  
Course(s): **Math 4**  
Time Period: **December**  
Length: **3 weeks**  
Status: **Published**

## Unit Summary

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In this unit, students will develop an understanding of fraction equivalence. Students will explain why fractions are equivalent as well as recognize and generate equivalent fractions. Students will also compare and order fractions with different numerators and different denominators.

## Standards

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MA.4.NF.A.1	Explain why a fraction $a/b$ is equivalent to a fraction $(n \times a)/(n \times b)$ by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.
MA.4.NF.A.2	Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as $1/2$ . Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols $>$ , $=$ , or $<$ , and justify the conclusions, e.g., by using a visual fraction model.
TECH.8.1.5	Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.
TECH.8.1.5.A.CS2	Select and use applications effectively and productively.

## Student Learning Objectives

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Students will learn to:

- use models to show equivalent fractions.
- use multiplication to generate equivalent fractions.
- write and identify equivalent fractions in simplest form.
- use equivalent fractions to represent a pair of fractions as fractions with a common denominator.
- use the strategy make a table to solve problems using equivalent fractions.
- compare fractions using benchmarks.
- compare fractions by first writing them as fractions with a common numerator or a common denominator.
- compare and order fractions.

## Essential Questions

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- How can you use models to show equivalent fractions?
- How can you use multiplication to find equivalent fractions?
- How can you write a fraction as an equivalent fraction in simplest form?
- How can you write a pair of fractions as fractions with a common denominator?
- How can you use the strategy make a table to solve problems using equivalent fractions?
- How can you use benchmarks to compare fractions?
- How can you compare fractions?
- How can you order fractions?

## Enduring Understandings

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Students will understand that:

- models and multiplication can be used to show equivalent fractions.
- a fractions simplest form is found by dividing by it's greatest common factor.
- common multiples are needed in order to find and make fractions with a common denominator.
- fractions can be compared and ordered using benchmarks, common numerators and comoon denominators.

## Application

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Students will be able to independently use their learning to:

- Use models and/or multiplication to generate equivalent fractions.
- Write and identify equivalent fractions in simplest form.
- Write fractions as a pair of fractions with a common denominator.
- Compare and order fractions.

## Skills

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Students will be skilled at:

- using models and/or multiplication to generate equivalent fractions.
- writing and identifying equivalent fractions in simplest form.
- writing fractions as a pair of fractions with a common denominator.
- comparing and ordering fractions.

