

Dear Parents,

We will begin our next unit of study in math soon. The information below will serve as an overview of the unit as you work to support your child at home. If you have any questions, please feel free to contact me. I appreciate your on-going support.

Sincerely,

Your Child's Teacher

Unit Name: Equivalent Fractions

Common Core State Standards:

4.NF.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 numbers 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.

4.NF.3 Understand a fraction a/b with $a > 1$ as a sum of fractions $1/b$.

a. Understand addition and subtraction of fractions joining and separating parts referring to the same whole.

b. Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g. by using a visual fraction model.

c. Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and relationship between addition and subtraction.

Essential Vocabulary:

- | | |
|--------------------------|---------------------|
| • Operations | • Reason |
| • Addition/joining | • Denominator |
| • Subtraction/separating | • Numerator |
| • Fraction | • Decomposing |
| • Unit fraction | • Mixed number |
| • Equivalent | • Multiple/multiply |
| • Partition | |

Unit Overview:

In this unit, students will develop understanding of fraction equivalence and operations with fractions. Students will recognize that two different fractions can be equal (e.g. $15/9 = 5/3$), and they will need to develop methods for generating and recognizing equivalent fractions. Students will apply their knowledge of fractions by joining unit fractions (e.g. $1/3, 1/2, 1/4$) and separating larger fraction back into unit fractions. Mixed numbers will be introduced for the first time in 4th grade. Students will learn how to turn mixed numbers into improper fractions using fraction models/drawings. ***There is NO mathematical reason why fractions must be written in simplified form, although it may be convenient to do so in some cases.**

Strategies/Skills:

Students will build on their understanding of fractions from 3rd grade to make sense of larger fractions when adding, subtracting and equivalence. They are expected to use a variety of models to support their reasoning about numbers.

- Fraction bars
- Number Line

Wake County Public Schools, Unit Overview for Parents

This document should not replace on-going communication between teachers & parents.

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Video Support:

Video support can be found on The WCPSS Academics YouTube Channel.

- <http://tinyurl.com/WCPSSAcademicsYouTube>
 - [Finding Equivalent Fractions](#)

Video support can be found on LearnZillion.

- <http://learnzillion.com>
 - Recognize equivalent fractions using number lines
<https://learnzillion.com/student/lessons/617>
 - Generate equivalent fractions using number lines
<https://learnzillion.com/student/lessons/619-generate-equivalent-fractions-using-number-lines>
 - Create equivalent fractions using a number line
<https://learnzillion.com/student/lessons/1245>

Additional Resources:

If you have limited/no internet access, please contact your child's teacher for hard copies of the resources listed in this document.

- [NCDPI Additional Resources](#)

Questions to Ask When Helping Your Child with Math Homework

Keep in mind that homework in elementary schools is designed as practice. If your child is having problems, please let the classroom teacher know. When helping your child with his/her math homework, you don't have to know all the answers! Instead, we encourage you to ask probing questions so your child can work through the challenges independently.

- What is the problem you're working on?
- What do the directions say?
- What do you already know that can help you solve the problem?
- What have you done so far and where are you stuck?
- Where can we find help in your notes?
- Are there manipulatives, pictures, or models that would help?
- Can you explain what you did in class today?
- Did your teacher work examples that you could use?
- Can you go onto another problem & come back to this one later?
- Can you mark this problem so you can ask the teacher for an explanation tomorrow?