

HELPFUL LINKS ABOUT CCSS

For more information on the Common Core State Standards for mathematics, go to <http://www.corestandards.org/Math>

For more information on the standards in mathematics related to place value (Number and Operations in Base Ten) or fractions, go to <http://commoncoretools.me/category/prerequisites/>

For more information on helping your child learn mathematics (with activities from pre-school to grade five), go to <http://www2.ed.gov/parents/academic/help/math/index.html>

HELPFUL LINKS FOR STUDENTS AND PARENTS

For more information on using algorithms, dependable and understandable methods, go to https://www.everydaymathonline.com/free_resources_main.html?frnologin=1&PHPSESSID=3f5b080abde2cdba1a9f7e0c544a0c36

*Select "Algorithms in Everyday Mathematics," Select Grade 4, Select an operation, then select the algorithm

For extra math practice, go to <http://www.ixl.com/>

For help with understanding a concept, go to <http://nlvm.usu.edu/>

SC Common Core State Standards (CCSS) Implementation Timeline

2010-11	Planning, Awareness
2011-12	Transition Year
2012-13	Transition Year
2013-14	*Bridge Year (Students will be tested on what is common between current state standards and CCSS)
2014-15	Full Implementation

*CCSS will be used for instructional purposes during this school year.

Cheraw Intermediate School

"Where Dreams Are Made"

421 Chesterfield Hwy.
Cheraw, SC 29520
Ph: (843) 921-1030
Fx: (843) 921-1036



Check out our school website at: <http://schools.mychesterfieldcountyschools.com/index.aspx?NID=71>

Parent's Guide to Student Success



4th Grade Common Core State Standards

CHERAW INTERMEDIATE



THIS GUIDE INCLUDES

- 4th grade CCSS learning expectations
- Ideas for helping your child succeed in and enjoy mathematics
- Helpful links about CCSS
- Helpful links for students and parents
- SC CCSS implementation timeline

CCSS IN MATH OVERVIEW

WHAT ARE THE COMMON CORE LEARNING STANDARDS?

They are broad statements of outcomes that provide a consistent and clear understanding of what students are expected to learn so that teachers and parents can help them.

WHAT DOES THIS MEAN FOR MY CHILD?

Public school districts are changing what they teach and **HOW** they teach to align with these standards (so there is a common understanding of what students are expected to learn). Ultimately, the goal is to prepare your child to enter the college of his/her choice or to enter the workforce and be productive citizens in our democratic society.

WHERE DID THEY COME FROM?

The Common Core State Standards initiative was led by the National Governors Association for Best Practices and the Council of Chief State School Officers – this is a national body of all Commissioners of Education.

CCSS Mathematics

4th Grade

WHAT ARE THE CHANGES TO THE MATH CONTENT?

Instructional time will focus on three critical areas:

(1) developing **understanding** and **fluency** with multi-digit multiplication, and developing understanding of dividing to find quotients involving multi-digit dividends;

(2) developing an **understanding** of fraction equivalence, addition and subtraction of fractions with like denominators, and multiplication of fractions by whole numbers;

(3) **understanding** that geometric figures can be analyzed and classified based on their properties, such as having parallel sides, perpendicular sides, particular angle measures, and symmetry.

WHAT YOUR CHILD WILL LEARN IN 4TH GRADE MATHEMATICS

- Adding and subtracting whole numbers up to 1 million quickly and accurately
- Solving multi-step word problems, including problems involving measurement and converting measurements from larger to smaller units
- Multiplying and dividing multi-digit numbers
- Extending understanding of fractions by comparing the size of two fractions with different numerators (top numbers) and different denominators (bottom numbers)
- Creating equal fractions ($\frac{3}{4} = 3 \times \frac{2}{4} \times 2 = \frac{6}{8}$)
- Adding and subtracting fractions with the same denominator

- Building fractions from smaller fractions ($\frac{3}{8} = \frac{1}{8} + \frac{1}{8} + \frac{1}{8}$)
- Connecting addition and subtraction of whole numbers to multiplying fractions by whole numbers
- Connecting addition of fractions to the concept of angle measurement
- Representing and interpreting data
- Converting fractions with denominators of 10 or 100 into decimals
- Locating decimals on a number line
- Comparing decimals and fractions using the symbols $>$ (more than), $=$ (equal to), and $<$ (less than)



“Everyday people face situations that involve math!”

IDEAS TO HELP YOUR CHILD SUCCEED IN AND ENJOY MATHEMATICS

1. Set high expectations and support your child in meeting them!
2. Be Positive!
3. Link mathematics with daily life.
4. Make mathematics fun.
5. Learn about mathematics related careers.
6. Support homework, don't do it!

- Use everyday objects to allow your child to explore the concept of fractions. For example, use measuring cups so students see how many times you have to refill a $\frac{1}{4}$ cup to equal a $\frac{1}{2}$ cup or how many $\frac{1}{3}$'s are in two cups. Have students describe two fractions that are equal using a measuring cup (filling a $\frac{1}{4}$ measuring cup twice is the same as filling one $\frac{1}{2}$ measuring cup).
- Have your child write or describe fractions in different ways. For example, what are some different ways to make $\frac{3}{4}$? Answers could include $\frac{1}{4} + \frac{1}{4} + \frac{1}{4}$ or $3 \times \frac{1}{4}$
- Ask your child to create and describe equal fractions. For example, have your child take a sheet of paper, fold the paper in half, and then unfold and shade $\frac{1}{2}$. Then have students take the same sheet of paper and fold the paper in a half again. Unfold the paper and have students discuss the number of parts that are now shaded. Encourage your child to talk about ways to show that $\frac{1}{2} = \frac{2}{4}$. (Students may continue this process creating other equal fractions.)



ASK YOUR CHILD THE FOLLOWING QUESTIONS:

- Explain this math word problem.
- How did you solve it?
- Why is your answer true? **Listen carefully to the justification and ask questions. Don't simply accept an answer.**
- In this situation, would it be

helpful to use...a graph..., number line..., ruler..., diagram..., calculator..., manipulative? Why was it helpful to use...? In what situations might it be more informative or helpful to use...?”

- How did you know your solution was reasonable?
- What would be a more efficient strategy?
- How would this strategy work in other situations?

ENCOURAGE YOUR CHILD TO:

- stick with it whenever a problem seems difficult. This will help your child see that everyone can learn math.
- draw and illustrate their solution.
- give you a number model that would apply to a previously encountered real-life situation, or how they could create a diagram, graph, table...

Praise your child when he or she makes an effort and share in the excitement when he or she solves a problem or understands something for the first time.

*Students **NEED** to understand the overall concept of a problem and be able to **explain/show** how they arrived to their solution.*