

Parents' Guide to Student Success in *Mathematics*

Fifth Grade

Why Are Academic Standards Important?

Academic standards are important because they help ensure that all students, no matter where they live, are prepared for success in college and the workforce. Standards provide an important first step — a clear roadmap for learning for teachers, parents, and students. Having clearly defined goals helps families and teachers work together to ensure that students succeed. They also will help your child develop critical thinking skills that will prepare him or her for college and career.

A Sample of What Your Child Will Be Working on in 5th Grade

- Adding and subtracting fractions with unlike denominators (e.g., $2\frac{1}{4} - 1\frac{1}{3}$), and solving word problems of this kind
- Multiplying fractions; dividing fractions in simple cases; and solving related word problems (e.g., finding the area of a rectangle with fractional side lengths; determining how many $\frac{1}{3}$ -cup servings are in 2 cups of raisins; determining the size of a share if 9 people share a 50-pound sack of rice equally or if 3 people share $\frac{1}{2}$ pound of chocolate equally)
- Generalizing the place-value system to include decimals, and calculating with decimals to the hundredths place (two places after the decimal)
- Multiplying whole numbers quickly and accurately, for example $1,638 \times 753$, and dividing whole numbers in simple cases, such as dividing 6,971 by 63
- Understanding the concept of volume, and solving word problems that involve volume
- Graphing points in the coordinate plane (two dimensions) to solve problems
- Analyzing mathematical patterns and relationships

A white speech bubble with a teal outline and tail, containing the text "TALKING TO YOUR CHILD'S TEACHER".

TALKING TO YOUR CHILD'S TEACHER

When you talk to the teacher, do not worry about covering everything. Instead, keep the conversation focused on the most important topics. In 5th grade, these include:

- Multiplying and dividing fractions, and solving related word problems
- Decimals (concepts and arithmetic)
- Volume (concepts and problem-solving)

Help Your Child Learn at Home

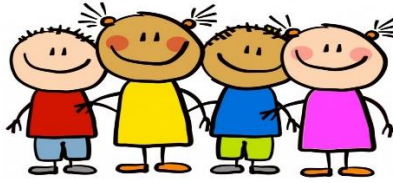
Try to create a quiet place for your child to study, and carve out time every day when your child can concentrate. You should also try to sit down with your child at least once a week for 15 to 30 minutes while he or she works on homework. This will keep you informed about what your child is working on, and it will help you be the first to know if your child needs help with specific topics. Additionally, here are some activities you can do with your child to support learning at home:

Look for "word problems" in real life. Some 5th grade examples might include:

- Doing arithmetic with decimals, for example when balancing a checkbook.
- Multiplying with fractions — for example, if you used about $\frac{2}{3}$ of a $\frac{3}{4}$ -cup measure of vegetable stock, then how much stock did you use? About how much is left?
- Using the length, width, and depth of a garden plot to determine how many bags of garden soil to buy.

Fifth Grade

Nine Week Checkpoints for Parents and Students



First Nine Weeks	Second Nine Weeks
<p><i>Helpful websites to help students master the first and second nine week concepts:</i> https://www.khanacademy.org/commoncore/grade-5-OA https://www.khanacademy.org/commoncore/grade-5-NBT https://www.khanacademy.org/commoncore/grade-5-NF</p>	
<p><i>Students should know and be able to:</i></p> <ul style="list-style-type: none"> • Order of operations • Explain the relationship between digits in different decimal places • Use exponents to show powers of 10 • Fluently multiply 3-digit by 2-digit whole numbers using the standard algorithm¹ • Fluently divide 4-digit numbers by 2-digit numbers • Read write and compare decimals to the thousandths place • Round decimals to a given place • Add and subtract decimals 	<p><i>Students should know and be able to:</i></p> <ul style="list-style-type: none"> • Multiply and divide decimals • Explain the connection between the decimal point and multiplying/dividing by 10 • Solve word problems involving addition and subtraction of fractions with unlike denominators • Solve word problems involving division and express my answers in fraction form • Multiply a whole number or fraction by a fraction • Solve word problems involving multiplication by fractions
Third Nine Weeks	Fourth Nine Weeks
<p><i>Helpful websites to help students master the third and fourth nine week concepts:</i> https://www.khanacademy.org/commoncore/grade-5-G https://www.khanacademy.org/commoncore/grade-5-MD</p>	
<p><i>Students should know and be able to:</i></p> <ul style="list-style-type: none"> • Classify shapes based on properties • Convert units within one measurement system • Solve measurement word problems involving conversions • Measure volume of objects • Solve real word problems involving volume 	<p><i>Students should know and be able to:</i></p> <ul style="list-style-type: none"> • Describe the coordinate system using correct vocabulary (axes, origin, points, plane, coordinates, quadrants) • Graph points on a coordinate plane • Represent the context of a problem using a coordinate plane • Explain the meaning of the graph within the context of real-world problems

¹ After students have a conceptual understanding of multiplying multi-digit numbers.