Parent Guide to Student Success

4th Grade TAG Math Skills

This document provides information about what your child will learn during their time in fourth grade TAG math. This guide is based on the most recent Texas Essential Knowledge and Skills (TEKS) for math, which have been adopted by the Texas State Board of Education. If your child is meeting the expectations outlined in these standards, he or she will have a strong foundation leading into fourth grade.

Texas Essential Knowledge and Skills are important because they help ensure that all students, no matter where they live in the state, 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.

TAG Math is an accelerated program, meaning that students will work through more than one grade level of math each year. For 4^{th} grade, this means that students will work through the 4^{th} grade skills not covered in 3^{rd} grade math first, then move through most of 5^{th} grade math.

4th Grade Skills and Understandings:

- Use whole-number arithmetic to solve story problems, including problems with remainders and problems with measurements
- Represent story problems using diagrams and equations with a letter standing for the unknown quantity
- Add and subtract whole numbers quickly and accurately (numbers up to 1 billion)
- Multiply and divide multi-digit whole numbers in simple cases (for example, multiplying 1,638×7 or 24×17, and dividing 6,766÷6)
- Measure angles and find unknown angles in a diagram
- Analyze shapes using knowledge of types of angles and parallel and perpendicular lines
- Use a variety of strategies to compare fractions with different numerators and different denominators (for example, knowing that 5/12 is less than 7/8 because 5/12 is less than one-half and 7/8 is greater than one-half)
- Solve story problems involving addition and subtraction of fractions with like denominators
- Extend understanding of place value to read, write, and compare decimal numbers to the hundredths place
- Add and subtract decimal numbers quickly and accurately (numbers to the hundredths place)
- Use data to create frequency tables, dot plots, and stem- and leaf plots marked with whole numbers and/or fractions

4th Grade Key Questions for Parents:

- How is my child extending their understanding of place value to read, write, and compare numbers up to 100,000?
- Are they solving story problems using addition, subtraction, multiplication, and division and representing them with drawings and/or equations?
- Are they comparing fractions that either have the same numerator or the same denominator?
- How can I help them to analyze shapes using knowledge of types of angles and parallel and perpendicular lines?

5th Grade Skills and Understandings:

- Solve story problems involving addition and subtraction of fractions with unlike denominators (for example, 21/4 11/3)
- Solve story problems involving multiplication and division of fractions in specific cases (multiplying a whole number by a fraction or mixed number; dividing a whole number by a unit fraction; dividing a unit fraction by a whole number)
- Solve story problems involving addition, subtraction, multiplication, and division with decimal numbers
- Multiply and divide multi-digit whole numbers (for example, multiplying 638×75 and dividing 6,971÷63)
- Understand the concept of volume, and solve story problems that involve volume of rectangular prisms
- Represent and solve story problems involving all four operations with whole numbers using diagrams and equations with a letter standing for the unknown quantity
- Use the order of operations to simplify numerical expressions
- Graph points in the coordinate plane to solve problems and analyze patterns
- Generalize their understanding of 2-D shapes to create hierarchies representing relationships between types of shapes
- Convert measurements within the same measurement system (for example, convert 18 inches to 112 feet)
- Solve one- and two-step problems using data from a frequency table, dot plot, bar graph, stem-and-leaf plot, or scatterplot

5th Grade Key Questions for Parents:

- How is my child adding, subtracting, multiplying, and dividing with fractions and decimals (and solving related story problems)?
- Are they able to represent problems with equations and a letter standing for the unknown quantity?
- How can I help them work on solving measurement problems involving perimeter, area, and volume?