

Kindergarten Math – Standards at a Glance

By the end of Kindergarten, students should be able to:

- ✓ Add and subtract numbers up to 5
- ✓ Know number names and count to 100
- ✓ Count to tell the number of objects in a group
- ✓ Compare numbers
- ✓ Understand addition as *putting together* and *adding to*
- ✓ Understand subtraction as *taking apart* and *taking from*
- ✓ Work with numbers 11-19
- ✓ Identify and describe shapes (two-dimensional: squares, circles, triangles, rectangles, hexagons three-dimensional: cubes, cones, cylinders and spheres)
- ✓ Describe shapes and explain what shapes have in common
- ✓ Put objects in groups and count the number of objects
- ✓ Compare different shapes and make shapes

First Grade Math – Standards at a Glance

By the end of first grade, students should be able to:

- ✓ Add and subtract with numbers up to 10
- ✓ Solve problems using addition and subtraction, including word problems
- ✓ Understand the relationship between addition and subtraction ($2 + 3 = 5$ is related to $5 - 2 = 3$)
- ✓ Count to 120
- ✓ Understand place value (25 is 2 tens and 5 ones)
- ✓ Tell and write time in hours and half hours
- ✓ Measure objects; take three objects and order them by length
- ✓ Know shapes as two-dimensional (rectangles, squares, trapezoids) and three-dimensional (cubes, rectangular prisms, cones, cylinders)

Second Grade Math – Standards at a Glance

By the end of second grade, students should be able to:

- ✓ Add and subtract numbers up to 20 by memory
- ✓ Add and subtract numbers up to 100
- ✓ Know addition and subtraction single digit problems, from memory
- ✓ Solve problems using addition and subtraction, including word problems
- ✓ Understand place value (432 is 4 hundreds, 3 tens and 2 ones)
- ✓ Measure lengths in standard units (for example, inches and centimeters) and estimate lengths
- ✓ Tell and write time to the nearest 5 minutes
- ✓ Solve problems using time and money
- ✓ Recognize and compare basic shapes (triangles, quadrilaterals, pentagons, hexagons and cubes)

Third Grade Math – Standards at a Glance

By the end of third grade, students should be able to:

- ✓ Multiply and divide single-digit multiplication and division problems, from memory ($3 \times 2 = 6$, $18 \div 3 = 6$)
- ✓ Add and subtract numbers up to 1,000
- ✓ Solve problems using addition, subtraction, multiplication and division, including word problems
- ✓ Understand place value (2,364 is 2 thousands, 3 hundreds, 6 tens, 4 ones)
- ✓ Start to work with fractions as numbers
- ✓ Solve problems with area of rectangles and think about this as a multiplication and addition problem
- ✓ Solve problems with time (to the nearest minute), liquid volumes and masses (for example, kilograms and liters)
- ✓ Group shapes (rhombuses, rectangles, squares, quadrilaterals) and explain what the groups have in common. Divide shapes into fractional parts.

Fourth Grade Math – Standards at a Glance

By the end of fourth grade, students should be able to:

- ✓ Add and subtract within 1,000,000
- ✓ Use the four operations (+, -, x, ÷) to solve problems, including word problems
- ✓ Understand and use place value to solve problems (5,327.86 is 5 thousands, 3 hundreds, 2 tens, 7 ones, 8 tenths and 6 hundredths)
- ✓ Use place value to solve multi-digit problems (32×56 or $1,564 - 982$)
- ✓ Use patterns to solve problems
- ✓ Build fractions, find equivalent fractions, order fractions and compare fractions. Find common denominators for fractions.
- ✓ Understand fractions and decimals ($\frac{3}{10}$ is the same as 0.3 or 0.30, $\frac{56}{100}$ is 0.56)
- ✓ Solve problems involving measurement and conversion of measurement (4 ft. = 48 inches)
- ✓ Draw and identify lines and angles. Use a protractor to measure angles in degrees.

Fifth Grade Math – Standards at Glance

By the end of fifth grade, students should be able to:

- ✓ Solve multi-digit multiplication problems
(324×564)
- ✓ Understand and use place value (6,942.38 is 6 thousands, 9 hundreds, 4 tens, 2 ones, 3 tenths and 8 hundredths)
- ✓ Solve multi-digit problems with decimals to the hundredths
- ✓ Use patterns to solve problems
- ✓ Write expressions to solve problems
- ✓ Use equivalent fractions to add and subtract fractions; multiply and divide fractions
- ✓ Understand volume and relate it to multiplication and addition
- ✓ Convert like measurements ($5 \text{ cm} = 0.05 \text{ m}$)
- ✓ Graph points on a coordinate plane
- ✓ Group two-dimensional figures in groups based on properties (e.g. all rectangles and squares have four right angles)