

# 1st Grade Math At-A-Glance

## Common Core State Standards



Critical Areas	What's New?	What's Different?	What's Fluent?
<ul style="list-style-type: none"> <li>1 Developing an understanding of addition, subtraction, and strategies for addition and subtraction within 20</li> <li>2 Developing an understanding of whole number relationships and place value, including grouping in tens and ones</li> <li>3 Developing an understanding of linear measurement and measuring lengths as iterating length units</li> <li>4 Reasoning about attributes of, and composing and decomposing geometric shapes</li> </ul>	<ul style="list-style-type: none"> <li>1 Measure length by iterating units</li> <li>2 Understand commutative and associative properties</li> <li>3 Find ten more or ten less and explain</li> <li>4 Understand the meaning of "=" to determine true or false</li> <li>5 Count to 120 starting at any number &amp; represent a number of objects with a written numeral</li> <li>6 Use &lt; or &gt; symbols</li> <li>7 Organize, represent, and interpret data with up to 3 categories</li> </ul>	<ul style="list-style-type: none"> <li>1 Recognize identity properties</li> <li>2 Skip counting</li> <li>3 Write addition and subtraction number sentences</li> <li>4 Develop the concept of days, weeks, and months using a calendar</li> <li>5 Identify the names of coins</li> <li>6 Sort and identify congruent shapes</li> <li>7 Describe, extend, and create, patterns with objects and numbers</li> <li>8 Use language to describe objects in space (above, behind etc.)</li> </ul>	<ul style="list-style-type: none"> <li>1 Add/subtract within 10</li> </ul>

**Note:** Topics may appear to be similar between PASS and CCSS; however, CCSS may be presented at a higher cognitive demand.

## Required Fluencies

Grade	Required Fluency
Kindergarten	Add/subtract within 5
1st	Add/subtract within 10
2nd	Add/subtract within 20 (memorized facts) Add/subtract within 100
3rd	Multiply/divide within 100 (memorized facts) Add/subtract within 1000
4th	Add/subtract within 1,000,000
5th	Multi-digit multiplication
6th	Multi-digit division Multi-digit decimal operations
7th	Solve $px + q = r$ , $p(x + q) = r$

# 2nd Grade Math At-A-Glance

## Common Core State Standards



Critical Areas	What's New?	What's Different?	What's Fluent?
<ul style="list-style-type: none"> <li>① Extending understanding of base-ten notation</li> <li>② Building fluency with addition and subtraction</li> <li>③ Using standard units of measure</li> <li>④ Describing and analyzing shapes</li> </ul>	<ul style="list-style-type: none"> <li>① Addition with rectangular array</li> <li>② Count within 1,000 by 5s, 10s, 100s</li> <li>③ Mentally add and subtract by 10 &amp; 100</li> <li>④ Measurement concepts</li> <li>⑤ Money</li> <li>⑥ Line Plots, Picture graphs, bar graphs</li> </ul>	<ul style="list-style-type: none"> <li>① Estimation while computing</li> <li>② Temperature</li> <li>③ Cut and rearrange 2-D and 3-D figures</li> <li>④ Symmetric and congruent figures</li> <li>⑤ Venn diagrams and pictographs</li> <li>⑥ Probability</li> <li>⑦ Repeating and growing patterns</li> </ul>	<ul style="list-style-type: none"> <li>① Add/subtract within 20 (memorized facts)</li> <li>② Add/subtract within 100</li> </ul>

Note: Topics may appear to be similar between PASS and CCSS; however, CCSS may be presented at a higher cognitive demand.

## Required Fluencies

Grade	Required Fluency
Kindergarten	Add/subtract within 5
1st	Add/subtract within 10
2nd	Add/subtract within 20 (memorized facts) Add/subtract within 100
3rd	Multiply/divide within 100 (memorized facts) Add/subtract within 1000
4th	Add/subtract within 1,000,000
5th	Multi-digit multiplication
6th	Multi-digit division Multi-digit decimal operations
7th	Solve $px + q = r$ , $p(x + q) = r$

# 3rd Grade Math At-A-Glance

## Common Core State Standards



Critical Areas	What's New?	What's Different?	What's Fluent?
<ul style="list-style-type: none"> <li>① Developing understanding of multiplication and division and strategies for multiplication and division within 100</li> <li>② Developing understanding of fractions, especially unit fractions (fractions with numerator 1)</li> <li>③ Developing understanding of the structure of rectangular arrays and of area</li> <li>④ Describing and analyzing two-dimensional shapes</li> </ul>	<ul style="list-style-type: none"> <li>① Area</li> <li>② Division</li> <li>③ Liquid Volume</li> <li>④ Order of Operations when there are no parentheses</li> </ul>	<ul style="list-style-type: none"> <li>① Probability</li> <li>② Read, write, and order whole numbers</li> <li>③ Linear Measurement</li> </ul>	<ul style="list-style-type: none"> <li>① Multiplication and division within 100. Know from memory all products of two 1-digit numbers. (Must start at beginning of year.)</li> <li>② Fluently add and subtract within 1000</li> </ul>

**Note:** Topics may appear to be similar between PASS and CCSS; however, CCSS may be presented at a higher cognitive demand.

## Required Fluencies

Grade	Required Fluency
Kindergarten	Add/subtract within 5
1st	Add/subtract within 10
2nd	Add/subtract within 20 (memorized facts) Add/subtract within 100
3rd	Multiply/divide within 100 (memorized facts) Add/subtract within 1000
4th	Add/subtract within 1,000,000
5th	Multi-digit multiplication
6th	Multi-digit division Multi-digit decimal operations
7th	Solve $px + q = r$ , $p(x + q) = r$

# 4th Grade Math At-A-Glance

## Common Core State Standards



Critical Areas	What's New?	What's Different?	What's Fluent?
<ol style="list-style-type: none"> <li>Developing an understanding of multiplication and division with multi-digit numbers</li> <li>Developing an understanding of equivalent fractions; addition/subtraction of fractions; multiplication of fractions by a whole number</li> <li>Developing an understanding that geometric figures can be analyzed and classified based on their properties, such as having parallel sides, perpendicular sides</li> </ol>	<ol style="list-style-type: none"> <li>Factors</li> <li>Prime numbers</li> <li>Composite numbers</li> <li>Multiplication/division with multi-digit numbers</li> <li>Addition/Subtraction of fractions</li> <li>Addition/Subtraction of mixed numbers</li> <li>Multiplication of fractions by a whole number</li> <li>Angle measurement</li> <li>Decomposing angles</li> <li>Circular measurement</li> <li>Line of symmetry</li> <li>Use of line plots to solve problems addition and subtraction of fractions</li> <li>Use of numbered pairs to illustrate measurement concepts</li> </ol>	<ol style="list-style-type: none"> <li>Probability</li> <li>Geometric transformations</li> <li>Temperature</li> <li>Bar graphs, pictographs</li> <li>Central tendency</li> </ol>	<ol style="list-style-type: none"> <li>Add/subtract within 1,000,000</li> </ol>

**Note:** Topics may appear to be similar between PASS and CCSS; however, CCSS may be presented at a higher cognitive demand.

## Required Fluencies

Grade	Required Fluency
Kindergarten	Add/subtract within 5
1st	Add/subtract within 10
2nd	Add/subtract within 20 (memorized facts) Add/subtract within 100
3rd	Multiply/divide within 100 (memorized facts) Add/subtract within 1000
4th	Add/subtract within 1,000,000
5th	Multi-digit multiplication
6th	Multi-digit division Multi-digit decimal operations
7th	Solve $px + q = r$ , $p(x + q) = r$

# 5th Grade Math At-A-Glance

## Common Core State Standards



Critical Areas	What's New?	What's Different?	What's Fluent?
<ol style="list-style-type: none"> <li>Addition and subtraction of fractions and developing understanding of the multiplication of fractions and of division of fractions in limited cases (unit fractions divided by whole numbers and whole numbers divided by unit fractions)</li> <li>Extending division to 2-digit divisors, integrating decimal fractions into the place value system and developing understanding of operations with decimals to hundredths</li> <li>Understand concepts of volume and relate volume to multiplication and to addition based on their properties, such as having parallel sides, perpendicular sides</li> </ol>	<ol style="list-style-type: none"> <li>Write and evaluate numeric expressions with parentheses</li> <li>Multiply a fraction or whole number by a fraction</li> <li>Solve real world word problems involving multiplication of fractions and mixed numbers</li> <li>Fluently multiply and divide multi-digit whole numbers and decimals</li> <li>Extend understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions</li> <li>Round decimals using place value</li> <li>Volume</li> <li>Coordinate System</li> <li>Interpret and explain multiplication and division outcomes in relation to whole numbers and fractions</li> <li>Line plot to display measurements with fractions</li> </ol>	<ol style="list-style-type: none"> <li>Primes, factors, composites</li> <li>Compare and translate data displays</li> <li>Angles</li> <li>Comparing fractions and decimals</li> <li>Design data using investigations</li> <li>Money</li> </ol>	<ol style="list-style-type: none"> <li>Multi-digit multiplication using standard algorithm</li> </ol>

**Note: Topics may appear to be similar between PASS and CCSS; however, CCSS may be presented at a higher cognitive demand.**

## Required Fluencies

Grade	Required Fluency
Kindergarten	Add/subtract within 5
1st	Add/subtract within 10
2nd	Add/subtract within 20 (memorized facts) Add/subtract within 100
3rd	Multiply/divide within 100 (memorized facts) Add/subtract within 1000
4th	Add/subtract within 1,000,000
5th	Multi-digit multiplication
6th	Multi-digit division Multi-digit decimal operations
7th	Solve $px + q = r$ , $p(x + q) = r$