

## 2017 K-2 Mathematics Standards Major Revisions At-A-Glance

### General changes:

- Many of the standards with multiple parts were rewritten using bullets to make the expectations clear and concise.
- Language was incorporated into standards to add clarity of expectations.
- Examples were removed from the standards and placed in the instructional support documents.
- Footnotes were removed and placed in the standards or instructional support documents.
- Some standards were combined to make the expectation more concise while other standards were separated for clarity.
- Cluster headings are an organizational tool. They are no longer necessary for interpretation of the standard.

### Considerations:

- Expectations expressed in a grade level are not repeated in higher grade levels but should be maintained and built upon.
- Further explanation and expectation of standards (what student should know and do) will be found in the instructional support documents.

Major Revisions		
Kindergarten	1 <sup>st</sup> Grade	2 <sup>nd</sup> Grade
<ul style="list-style-type: none"> <li>• <b>NC.K.CC.4</b> Perceptual subitizing is more clearly defined.</li> <li>• <b>NC.K.OA.6</b> Conceptual subitizing has been made more explicit.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>NC.1.OA.1</b> The comparison problem type limited to Difference Unknown.</li> <li>• <b>NC.1.NBT.1</b> Revised to count to 150 instead of 120 to allow for more pattern exploration within the counting sequence.</li> <li>• <b>NC.1.NBT.7</b> Reading and writing numbers changed to 100 to correspond with the place value instruction for first grade.</li> <li>• <b>NC.1.MD.5</b> Coin identification has been added.</li> </ul> <p><b>Removed Standard</b></p> <ul style="list-style-type: none"> <li>• <b>1.OA.5</b> Relating counting to addition and subtraction was removed.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>NC.2.OA.1</b> Comparison problem types, Compare-Bigger Unknown and Compare-Smaller Unknown, were moved from first grade.</li> <li>• <b>NC.2.OA.4</b> Using rectangular arrays.</li> </ul> <p><b>Removed Standard</b></p> <ul style="list-style-type: none"> <li>• <b>2.MD.9</b> Generating and displaying data on line plots was removed.</li> <li>• <b>2.G.2</b> Partitioning rectangles into rows and columns was removed</li> </ul>

## 2017 3-5 Mathematics Standards Major Revisions At-A-Glance

### General changes:

- Many of the standards with multiple parts were rewritten using bullets to make the expectations clear and concise.
- Language was incorporated into standards to add clarity of expectations.
- Examples were removed from the standards and placed in the instructional support documents.
- Footnotes were removed and placed in the standards or instructional support documents.
- Some standards were combined to make the expectation more concise while other standards were separated for clarity.
- Cluster headings are an organizational tool. They are no longer necessary for interpretation of the standard.

### Considerations:

- Expectations expressed in a grade level are not repeated in higher grade levels but should be maintained and built upon.
- Further explanation and expectation of standards (what student should know and do) will be found in the instructional support documents.

Major Revisions		
3 <sup>rd</sup> Grade	4 <sup>th</sup> Grade	5 <sup>th</sup> Grade
<ul style="list-style-type: none"> <li>• <b>NC.3.OA.8</b> Two-step word problems are limited to addition, subtraction, and multiplication.</li> <li>• <b>NC.3.MD.2</b> Metric Measurement was removed. Students will solve problems involving the customary measurement system.</li> <li>• <b>NC.3.MD.3</b> Data involving fractional values on a line plot has been removed and the focus is on collecting and representing categorical data in scaled picture and bar graphs.</li> </ul> <p><b>Removed Standard</b></p> <ul style="list-style-type: none"> <li>• <b>3.MD.7d</b> The concept of finding the area of rectilinear figures has been moved to 4th grade.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>NC.4.OA.4</b> Finding factors of a number is now limited to 50 instead of 100.</li> <li>• <b>NC.4.NBT.4</b> and <b>NC.4.NBT.7</b> the range of numbers for place value and the operations of addition and subtraction are limited to 100,000.</li> <li>• <b>NC.4.MD.1</b> Customary measurement was removed from 4<sup>th</sup> grade. Metric measurement is now the focus in 4<sup>th</sup> grade to align and support place value understanding with decimals.</li> <li>• <b>NC.4.MD.3</b> Finding areas of rectilinear figures with known side lengths, was moved from 3<sup>rd</sup> grade to 4<sup>th</sup> grade.</li> <li>• <b>NC.4.MD.4</b> Fractional values on a line plot has been removed from this standard, and the focus is working with categorical and numerical data</li> </ul>	<ul style="list-style-type: none"> <li>• <b>NC.5.OA.2</b> The use of brackets and braces to evaluate numerical expressions was removed.</li> <li>• <b>NC.5.NBT.6</b> This standard now includes models to make a connection to and develop the algorithm for division of whole numbers.</li> <li>• <b>NC.5.NF.1</b> The expectation is to use related fractions: halves, fourths and eighths; thirds, sixths, and twelfths; fifths, tenths, and hundredths to add and subtract fraction with unlike denominators.</li> <li>• <b>NC.5.NF.3</b> Specifies the denominators to use when modeling division of fractions to solve.</li> <li>• <b>NC.5.NF.4</b> Limited to solving one-step word problems involving multiplication of fractions using models to develop the algorithm.</li> <li>• <b>NC.5.MD.2</b> Focus on data that changes over time, making and interpreting line graphs.</li> <li>• <b>NC.5.MD.1</b> Stipulates that a conversion chart will be given to solve one-step conversion problems within a given measurement system.</li> <li>• <b>NC.5.MD.2</b> Line plots were removed.</li> <li>• <b>NC.5.MD.5</b> Finding the volume of combined rectangular prisms, is limited to prisms with sides of one-digit measurement.</li> </ul> <p><b>Removed Standard</b></p> <ul style="list-style-type: none"> <li>• <b>5.NBT.2</b> The concept of exponents to denote powers of 10 was moved to 6<sup>th</sup> grade</li> </ul>

## 2017 6-8 Mathematics Standards Major Revisions At-A-Glance

### General changes:

- Many of the standards with multiple parts were rewritten using bullets to make the expectations clear and concise.
- Language was incorporated into standards to add clarity of expectations.
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- Footnotes were removed and placed in the standards or instructional support documents.
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### Considerations:

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- Further explanation and expectation of standards (what student should know and do) will be found in the instructional support documents.

Major Revisions		
6 <sup>th</sup> Grade	7 <sup>th</sup> Grade	8 <sup>th</sup> Grade
<ul style="list-style-type: none"> <li>• <b>NC.6.RP.2</b> Work with equivalent unit ratios are emphasized.</li> <li>• <b>NC.6.NS.1</b> Develop using common denominators to divide fractions.</li> <li>• <b>NC.6.NS.4</b> Determining GCF/LCM using prime factorization; using LCM to add and subtract fractions with uncommon denominators.</li> <li>• <b>NC.6.NS.9</b> Using models build conceptual understanding when adding and subtracting integers</li> <li>• <b>NC.6.SP.3</b> Developing understanding of mean and median; MAD removed – understanding variability through graphical means ONLY.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>NC.7.RP.2a</b> Comparing proportional relationships using tables, graphs, equations and verbal descriptions was moved from 8<sup>th</sup> grade.</li> <li>• <b>NC.7.RP.3</b> Using scale factors and unit rates to solve proportion problems</li> <li>• <b>NC.7.SP.3a</b> Developing understanding for calculating MAD and IQR were added.</li> </ul> <p><b>Removed Standards:</b></p> <ul style="list-style-type: none"> <li>• <b>7.G.3</b> Cross sections were removed</li> <li>• <b>7.SP.3</b> Quantifying the difference of measures of center of two data sets as a multiple of a measure of variability was removed.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>NC.8.NS.2</b> Limits irrational numbers to square roots, cube root and pi.</li> <li>• <b>NC.8.EE.2</b> Limits perfect square and perfect cube numbers to positive numbers less than or equal to 400.</li> <li>• <b>NC.8.EE.4</b> Limits operations of numbers in scientific notation to multiplication and division.</li> <li>• <b>NC.8.EE.8</b> Limits linear equations in systems of equations to slope-intercept form; limits solving systems of equations to using graphs.</li> <li>• <b>NC.8.G.9</b> Understand how the formulas for volume are related and use to solve problems.</li> </ul> <p><b>Removed Standard:</b></p> <ul style="list-style-type: none"> <li>• <b>8.EE.5</b> Comparing proportional relationships was moved to 7<sup>th</sup> grade (NC.7.RP.2a).</li> </ul>