

# Math Out of the Box<sup>®</sup> Correlation to




## West Virginia Content Standards and Objectives for Mathematics Grades K–5



**Math Out of the Box<sup>®</sup> Correlation to West Virginia  
Content Standards and Objectives for Mathematics  
Grades K-5**

The following pages pertain to Math Out of the Box<sup>®</sup> K-5 modules that have been aligned with the West Virginia Content Standards and Objectives for Mathematics, for Kindergarten through Fifth grades. For your reference, under each standard are the aligned strands, module titles, and lessons within that module with corresponding page numbers.

<b>Math Out of the Box<sup>®</sup> Integrated Curriculum Matrix</b>				
 <b>math</b> outofthebox	<i>Developing Algebraic Thinking</i>	<i>Developing Geometric Logic</i>	<i>Developing Measurement Benchmarks</i>	<i>Developing Number Concepts</i>
<b>K</b>	<i>Rhythm and Design</i>	<i>Towers and Trails</i>	<i>Over and Under</i>	<i>Like and Unlike</i>
<b>1</b>	<i>Together and Apart</i>	<i>Symmetry and Shapes</i>	<i>Up and Down</i>	<i>Families and Facts</i>
<b>2</b>	<i>Collecting and Sorting</i>	<i>Rows and Columns</i>	<i>Large and Small</i>	<i>More and Less</i>
<b>3</b>	<i>Plotting and Growing</i>	<i>Shapes and Paths</i>	<i>Scales and Balances</i>	<i>Ordering and Arranging</i>
<b>4</b>	<i>Signs and Symbols</i>	<i>Corners and Containers</i>	<i>Inside and Outside</i>	<i>Stories and Statements</i>
<b>5</b>	<i>Steps and Distance</i>	<i>Conjectures and Transformations</i>	<i>Tools and Time</i>	<i>Values and Variables</i>



Math Out of the Box<sup>®</sup> is a K–5, inquiry-based math curriculum developed by Clemson University's College of Engineering and Science. Based on the NCTM Principles and Standards for School Mathematics, Math Out of the Box<sup>®</sup> is filled with engaging, hands-on activities.

# Math Out of the Box® Correlation to West Virginia Content Standards and Objectives for Mathematics Grades K-5

## Kindergarten

CONTENT STANDARD / COURSE	WV.MA.S.K.1.	Number and Operations: Through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics, students will demonstrate understanding of numbers, ways of representing numbers, and relationships among numbers and number systems, demonstrate meanings of operations and how they relate to one another, and compute fluently and make reasonable estimates.
CONTENT STANDARD / OBJECTIVE	MA.O.K.1.1.	<p>Count forward to 20 and backward from 10 with and without manipulatives.</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Like and Unlike Module A</b></li> <li>• TG: L03-19 (pp 19-172)</li> <li>• TG: Post Assessment L01-09 (pp 72-76)</li> <li>• TG: Post Assessment L16-20 (pp 180-182)</li> <li>• <b>Developing Number Concepts: Like and Unlike Module B</b></li> <li>• TG: L01-07 (pp 5-56)</li> <li>• TG: L09 (pp 75-82)</li> <li>• TG: L11-12 (pp 91-108)</li> <li>• TG: Post Assessment L01-08 (pp 65-71)</li> <li>• TG: Post Assessment L09-12 (pp 109-111)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.K.1.2.	<p>Read, write, order, and compare numbers to 20 using multiple strategies (e.g. manipulatives, number line).</p> <ul style="list-style-type: none"> <li>• <b>Developing Measurement Benchmarks: Over and Under</b></li> <li>• TG: L15 (pp 103-108)</li> <li>• <b>Developing Number Concepts: Like and Unlike Module A</b></li> <li>• TG: L01-20 (pp 5-179)</li> <li>• TG: Post Assessment L01-09 (pp 72-76)</li> <li>• TG: Post Assessment L10-15 (pp 130-133)</li> <li>• TG: Post Assessment L16-20 (pp 180-182)</li> <li>• <b>Developing Number Concepts: Like and Unlike Module B</b></li> <li>• TG: L01-12 (pp 5-108)</li> <li>• TG: Post Assessment L01-08 (pp 65-71)</li> <li>• TG: Post Assessment L09-12 (pp 109-111)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.K.1.3.	<p>Group and count manipulatives by ones, fives, and tens.</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Like and Unlike Module A</b></li> <li>• TG: L01-20 (pp 5-179)</li> <li>• TG: Post Assessment L10-15 (pp 130-133)</li> <li>• <b>Developing Number Concepts: Like and Unlike Module B</b></li> <li>• TG: L01-20 (pp 5-181)</li> <li>• TG: Post Assessment L01-08 (pp 65-71)</li> <li>• TG: Post Assessment L09-12 (pp 109-111)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.K.1.4.	<p>Model and identify place value of each digit utilizing standard and expanded form through 20.</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Like and Unlike Module B</b></li> <li>• TG: L11-12 (pp 91-108)</li> <li>• TG: Post Assessment L09-12 (pp 109-111)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.K.1.5	<p>Use ordinal numbers 1st - 10th to identify position in a sequence.</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Like and Unlike Module B</b></li> <li>• TG: L04-05 (pp 27-42)</li> </ul>

**Math Out of the Box® Correlation to West Virginia  
Content Standards and Objectives for Mathematics  
Grades K-5**

		<ul style="list-style-type: none"> <li>• TG: Post Assessment L01-08 (pp 65-71)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.K.1.6.	<p>Estimate the number of objects in a group of 20 or less and count to evaluate reasonableness of estimation.</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Like and Unlike Module B</b></li> <li>• TG: L07 (pp 49-56)</li> <li>• TG: Post Assessment L01-08 (pp 65-71)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.K.1.7.	<p>Identify and name halves and wholes using concrete models.</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Like and Unlike Module A</b></li> <li>• TG: L08 (pp 59-66)</li> <li>• TG: L15 (pp 123- 129)</li> <li>• <b>Developing Number Concepts: Like and Unlike Module B</b></li> <li>• TG: L08 (pp 57-64)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.K.1.8.	<p>Use concrete objects to model addition and subtraction of whole numbers related to sums of 10 or less and write corresponding number sentence.</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Like and Unlike Module A</b></li> <li>• TG: L20 (pp 173-179)</li> <li>• <b>Developing Number Concepts: Like and Unlike Module B</b></li> <li>• TG: L13-15 (pp 119-140)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.K.1.9.	<p>Model meanings of operations and the relationship between addition and subtraction (e.g., identity element of addition, commutative property) using manipulatives.</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Like and Unlike Module A</b></li> <li>• TG: L20 (pp 173-179)</li> <li>• <b>Developing Number Concepts: Like and Unlike Module B</b></li> <li>• TG: L13 -15 (pp 119-140)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.K.1.10.	<p>Create grade-appropriate picture and story problems, solve using a variety of strategies, present solutions and justify results.</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Like and Unlike Module A</b></li> <li>• TG: L10-15 (pp 81-129)</li> </ul>
CONTENT STANDARD / COURSE	WV.MA.S.K.2.	<p>Algebra: Through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics, students will demonstrate understanding of patterns, relations and functions, represent and analyze mathematical situations and structures using algebraic symbols, use mathematical models to represent and understand quantitative relationships, and analyze change in various contexts.</p>
CONTENT STANDARD / OBJECTIVE	MA.O.K.2.1.	<p>Justify the classification of self-selected objects based on attributes.</p> <ul style="list-style-type: none"> <li>• <b>Developing Algebraic Thinking: Rhythm and Design</b></li> <li>• TG: L11-20 (pp 81-150)</li> <li>• <b>Developing Geometric Logic: Towers and Trails</b></li> <li>• TG: L02-03 (pp 13-25)</li> <li>• TG: L06-07 (pp 41-59)</li> <li>• TG: L10 (pp 77-81)</li> <li>• TG: L12-15 (pp 89-118)</li> <li>• <b>Developing Measurement Benchmarks: Over and Under</b></li> </ul>

**Math Out of the Box® Correlation to West Virginia  
Content Standards and Objectives for Mathematics  
Grades K-5**

		<ul style="list-style-type: none"> <li>• TG: L01 (pp 7-12)</li> <li>• <b>Developing Number Concepts: Like and Unlike Module A</b></li> <li>• TG: L07 (pp 51-59)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.K.2.2.	<p>Create, describe, and extend a repeating pattern using common objects, sound, and movement.</p> <ul style="list-style-type: none"> <li>• <b>Developing Algebraic Thinking: Rhythm and Design</b></li> <li>• TG: Unit Pre Assessment (pp xxii-xxiv)</li> <li>• TG: L01-10 (pp 5-76)</li> <li>• TG: Post Assessment L01-10 (p 54)</li> <li>• <b>Developing Number Concepts: Like and Unlike Module A</b></li> <li>• TG: L02 (pp 11-18)</li> <li>• TG: L16-19 (pp 139-172)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.K.2.3.	<p>Model and identify patterns of counting by 5's and 10's.</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Like and Unlike Module B</b></li> <li>• TG: L06 (pp 43-49)</li> <li>• TG: L09 (pp 75-82)</li> <li>• TG: L11 (pp 91-100)</li> <li>• TG: Post Assessment L01-08 (pp 65-71)</li> <li>• TG: Post Assessment L09-12 (pp 109-111)</li> </ul>
CONTENT STANDARD / COURSE	WV.MA.S.K.3.	<p>Geometry: Through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics, students will analyze characteristics and properties of two- and three-dimensional geometric shapes and develop mathematical arguments about geometric relationships, specify locations and describe spatial relationships using coordinate geometry and other representational systems, apply transformations and use symmetry to analyze mathematical situations, and solve problems using visualization, spatial reasoning, and geometric modeling.</p>
CONTENT STANDARD / OBJECTIVE	MA.O.K.3.1.	<p>Use physical materials to construct, identify, and classify basic geometric plane shapes: circles, ellipses (oval), rectangles including squares, triangles</p> <ul style="list-style-type: none"> <li>• <b>Developing Algebraic Thinking: Rhythm and Design</b></li> <li>• TG: L01 (pp 5-12)</li> <li>• <b>Developing Geometric Logic: Towers and Trails</b></li> <li>• TG: L07- (pp 53-93)</li> <li>• TG: L16 (pp 119-124)</li> <li>• TG: Post Assessment L07-12 (p 51)</li> <li>• TG: Post Assessment L13-16 (p 98)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.K.3.2.	<p>Recognize and describe basic geometric shapes in the environment.</p> <ul style="list-style-type: none"> <li>• <b>Developing Geometric Logic: Towers and Trails</b></li> <li>• TG: L03 (pp 19-25)</li> <li>• TG: L05 (pp 33-39)</li> <li>• TG: L17-19 (pp 129-145)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.K.3.3.	<p>Model and describe spatial relationships: inside/outside, top/bottom, before/after</p> <ul style="list-style-type: none"> <li>• <b>Developing Geometric Logic: Towers and Trails</b></li> <li>• TG: L18-20 (pp 135-151)</li> </ul>

**Math Out of the Box® Correlation to West Virginia  
Content Standards and Objectives for Mathematics  
Grades K-5**

		<ul style="list-style-type: none"> <li>• TG: Post Assessment L17-20 (p 128)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.K.3.4.	<p>Identify the separate parts used to make a whole object.</p> <ul style="list-style-type: none"> <li>• <b>Developing Algebraic Thinking: Rhythm and Design</b></li> <li>• TG: L01 (pp 5-12)</li> <li>• <b>Developing Geometric Logic: Towers and Trails</b></li> <li>• TG: Unit Pre Assessment (pp xxiii-xxvi)</li> <li>• TG: L01-02 (pp 7-17)</li> <li>• TG: L06 (pp 41-46)</li> <li>• TG: Post Assessment L01-06 (p 5)</li> </ul>
CONTENT STANDARD / COURSE	WV.MA.S.K.4.	<p>Measurement: Through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics, students will demonstrate understanding of measurable attributes of objects and the units, systems, and processes of measurement, and apply appropriate techniques, tools and formulas to determine measurements.</p>
CONTENT STANDARD / OBJECTIVE	MA.O.K.4.1.	<p>Estimate the size of an object and compare and order objects with respect to a given attribute.</p> <ul style="list-style-type: none"> <li>• <b>Developing Geometric Logic: Towers and Trails</b></li> <li>• TG: L04 (pp 27-32)</li> <li>• TG: L08 (pp 61-67)</li> <li>• TG: Post Assessment L07-12 (p 51)</li> <li>• <b>Developing Measurement Benchmarks: Over and Under</b></li> <li>• TG: Unit Pre Assessment (pp xxii-xxv)</li> <li>• TG: L01-05 (pp 7-36)</li> <li>• TG: L07 (pp 43-48)</li> <li>• TG: L17 (pp 119-126)</li> <li>• TG: Post Assessment L01-09 (p 5)</li> <li>• TG: Post Assessment L17-20 (p 118)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.K.4.2.	<p>Use standard and nonstandard units of measure to find the length of an object.</p> <ul style="list-style-type: none"> <li>• <b>Developing Measurement Benchmarks: Over and Under</b></li> <li>• TG: Unit Pre Assessment (pp xxii-xxv)</li> <li>• TG: L04-08 (pp 25-52)</li> <li>• TG: Post Assessment L01-09 (p 5)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.K.4.3.	<p>Compare two objects in nonstandard units of measure, according to one or more of the following attributes: length, height, weight</p> <ul style="list-style-type: none"> <li>• <b>Developing Measurement Benchmarks: Over and Under</b></li> <li>• TG: Unit Pre Assessment (pp xxii-xxv)</li> <li>• TG: L01-03 (pp 7-24)</li> <li>• TG: L17 (pp 119-126)</li> <li>• TG: Post Assessment L01-09 (p 5)</li> <li>• TG: Post Assessment L17-20 (p 118)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.K.4.4.	<p>Use calendar to identify date and the sequence of days of the week.</p> <ul style="list-style-type: none"> <li>• <b>Developing Measurement Benchmarks: Over and Under</b></li> <li>• TG: L14-15 (pp 97-108)</li> </ul>

**Math Out of the Box® Correlation to West Virginia  
Content Standards and Objectives for Mathematics  
Grades K-5**

CONTENT STANDARD / OBJECTIVE	MA.O.K.4.5.	<p>Read time to the hour using analog and digital clocks.</p> <ul style="list-style-type: none"> <li>• <b>Developing Measurement Benchmarks: Over and Under</b></li> <li>• TG: L12-13 (pp 81-96)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.K.4.6.	<p>Identify the name and value of coins and explain the relationships between: penny, nickel, dime.</p> <ul style="list-style-type: none"> <li>• <b>Developing Measurement Benchmarks: Over and Under</b></li> <li>• TG: L10-11 (pp 65-80)</li> </ul>
CONTENT STANDARD / COURSE	WV.MA.S.K.5.	<p>Data Analysis and Probability: Through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics, students will formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them, select and use appropriate statistical methods to analyze data, develop and evaluate inferences and predictions that are based on models, and apply and demonstrate an understanding of basic concepts of probability.</p>
CONTENT STANDARD / OBJECTIVE	MA.O.K.5.1.	<p>Collect, organize, display, and interpret data using a pictograph and bar graph (with and without technology).</p> <ul style="list-style-type: none"> <li>• <b>Developing Algebraic Thinking: Rhythm and Design</b></li> <li>• TG: L14-20 (pp 103-150)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.K.5.2.	<p>Conduct a simple probability experiment and use tallies to record results in a table, make predictions based on results.</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Like and Unlike Module B</b></li> <li>• TG: L16-20 (pp 149-181)</li> </ul>

# Math Out of the Box® Correlation to West Virginia Content Standards and Objectives for Mathematics Grades K-5

## Grade 1

CONTENT STANDARD / COURSE	WV.MA.S.1.1.	Number and Operations: Through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics, students will demonstrate understanding of numbers, ways of representing numbers, and relationships among numbers and number systems, demonstrate meanings of operations and how they relate to one another, and compute fluently and make reasonable estimates.
CONTENT STANDARD / OBJECTIVE	MA.O.1.1.1.	<p>Count forward to 100 and backward from 20 with and without manipulatives.</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Families and Facts Module A</b></li> <li>• TG: L04 (pp 33-40)</li> <li>• TG: L11-12 (pp 105-118)</li> <li>• TG: L18-21 (pp 173-208)</li> <li>• TG: Post Assessment L01-04 (pp 41-43)</li> <li>• TG: Post Assessment L18-22 (pp 218-221)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.1.1.2.	<p>Read, write, order, and compare numbers to 100 using multiple strategies (e.g. manipulatives, number line, symbols).</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Families and Facts Module A</b></li> <li>• TG: L01-22 (pp 5-217)</li> <li>• TG: Post Assessment L01-04 (pp 41-43)</li> <li>• TG: Post Assessment L18-22 (pp 218-221)</li> <li>• <b>Developing Number Concepts: Families and Facts Module B</b></li> <li>• TG: L01-07 (pp 5-81)</li> <li>• TG: Post Assessment L04-07 (pp 82-83)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.1.1.3.	<p>Identify odd and even numbers to 20 and determine if a set of objects has an odd or even number of elements.</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Families and Facts Module A</b></li> <li>• TG: L18 (pp 173-182)</li> <li>• TG: L20 (pp 191-200)</li> <li>• TG: Post Assessment L18-22 (pp 218-221)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.1.1.4.	<p>Group and count manipulatives by ones, fives, and tens to 100.</p> <ul style="list-style-type: none"> <li>• <b>Developing Measurement Benchmarks: Up and Down</b></li> <li>• TG: L02 (pp 15-20)</li> <li>• TG: L06 (pp 37-42)</li> <li>• TG: L12 (pp 89-94)</li> <li>• <b>Developing Number Concepts: Families and Facts Module A</b></li> <li>• TG: L01-22 (pp 5-217)</li> <li>• TG: Post Assessment L01-04 (pp 41-43)</li> <li>• TG: Post Assessment L18-22 (pp 218-221)</li> <li>• <b>Developing Number Concepts: Families and Facts Module B</b></li> <li>• TG: L01-07 (pp 5-81)</li> <li>• TG: L09 (pp 97-106)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.1.1.5.	<p>Model and identify place value of each digit utilizing standard and expanded form to 100.</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Families and Facts Module B</b></li> <li>• TG: L04-07 (pp 41-81)</li> <li>• TG: Post Assessment L04-07 (pp 82-83)</li> </ul>

**Math Out of the Box® Correlation to West Virginia  
Content Standards and Objectives for Mathematics  
Grades K-5**

CONTENT STANDARD / OBJECTIVE	MA.O.1.1.7.	Use ordinal numbers 1st - 20th to identify position in a sequence. <ul style="list-style-type: none"> <li>Developing Number Concepts: Families and Facts Module A</li> <li>TG: L21 (pp 201-208)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.1.1.8.	Estimate the number of objects in a group of 100 or less and count to evaluate reasonableness of estimate. <ul style="list-style-type: none"> <li>Developing Number Concepts: Families and Facts Module B</li> <li>TG: L01-03 (pp 5-33)</li> <li>TG: Post Assessment L01-03 (pp 34-35)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.1.1.9.	Identify, name, and explain why a given part is a half, third or fourth of a whole or part of a group, using concrete models. <ul style="list-style-type: none"> <li>Developing Number Concepts: Families and Facts Module B</li> <li>TG: L15 (pp 151-158)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.1.1.10.	Use concrete objects to model the addition of two or three addends and subtraction of whole numbers related to sums less than 18 and write the corresponding number sentence. <ul style="list-style-type: none"> <li>Developing Number Concepts: Families and Facts Module A</li> <li>TG: L01-03 (pp 5-32)</li> <li>TG: L06-13 (pp 59-134)</li> <li>TG: L16-22 (pp 153-217)</li> <li>Developing Number Concepts: Families and Facts Module B</li> <li>TG: L09 (pp 97-106)</li> <li>TG: L12-14 (pp 123-144)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.1.1.11.	Model operations, addition and subtraction, and the relationship between addition and subtraction (e.g., identity element of addition, commutative property, fact families, inverse operations) using concrete objects. <ul style="list-style-type: none"> <li>Developing Number Concepts: Families and Facts Module A</li> <li>TG: L01-03 (pp 5-32)</li> <li>TG: L05-22 (pp 49-217)</li> <li>Developing Number Concepts: Families and Facts Module B</li> <li>TG: L05-06 (pp 51-74)</li> <li>TG: L08-14 (pp 89-144)</li> <li>TG: Post Assessment L08-14 (pp 145-146)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.1.1.12.	Quick recall of basic addition facts with sums to 10 and corresponding subtraction facts. <ul style="list-style-type: none"> <li>Developing Number Concepts: Families and Facts Module A</li> <li>TG: L03-17 (pp 25-166)</li> <li>TG: Post Assessment L05-12 (pp 119-122)</li> <li>TG: Post Assessment L13-17 (pp 167-168)</li> <li>Developing Number Concepts: Families and Facts Module B</li> <li>TG: L08-14 (pp 89-144)</li> <li>TG: Post Assessment L08-14 (pp 145-146)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.1.1.13.	Model and solve 2-digit addition and subtraction without regrouping. <ul style="list-style-type: none"> <li>Developing Number Concepts: Families and Facts Module B</li> <li>TG: L07-12 (pp 75-130)</li> </ul>

**Math Out of the Box® Correlation to West Virginia  
Content Standards and Objectives for Mathematics  
Grades K-5**

CONTENT STANDARD / OBJECTIVE	MA.O.1.1.14.	<p>Create grade-appropriate picture and story problems using a variety of strategies (with and without technology), present solutions and justify results.</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Families and Facts Module A</b></li> <li>• TG: L09 (pp 87-96)</li> </ul>
CONTENT STANDARD / COURSE	WV.MA.S.1.2.	<p>Algebra: Through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics, students will demonstrate understanding of patterns, relations and functions, represent and analyze mathematical situations and structures using algebraic symbols, use mathematical models to represent and understand quantitative relationships, and analyze change in various contexts.</p>
CONTENT STANDARD / OBJECTIVE	MA.O.1.2.1.	<p>Sort and classify objects by more than one attribute, using various strategies, including Venn Diagrams.</p> <ul style="list-style-type: none"> <li>• <b>Developing Algebraic Thinking: Together and Apart</b></li> <li>• TG: Unit Pre Assessment (pp xxiv-xxx)</li> <li>• TG: L11-20 (pp 99-176)</li> <li>• TG: Post Assessment L11-13 (p 98)</li> <li>• <b>Developing Geometric Logic: Symmetry and Shapes</b></li> <li>• TG: L02 (pp 17-22)</li> <li>• TG: L04-05 (pp 29-40)</li> <li>• TG: L09-10 (pp 65-76)</li> <li>• TG: L12 (pp 83-87)</li> <li>• <b>Developing Number Concepts: Families and Facts Module B</b></li> <li>• TG: L09 (pp 97-106)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.1.2.2.	<p>Determine the rule or give the output given an input/output model using addition or subtraction.</p> <ul style="list-style-type: none"> <li>• <b>Developing Algebraic Thinking: Together and Apart</b></li> <li>• TG: Unit Pre Assessment (pp xxiv-xxx)</li> <li>• TG: L08 (pp 71-78)</li> <li>• TG: Post Assessment L07-10 (p 60)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.1.2.3.	<p>Identify and write number patterns by 2's, 5's, and 10's.</p> <ul style="list-style-type: none"> <li>• <b>Developing Algebraic Thinking: Together and Apart</b></li> <li>• TG: Unit Pre Assessment (pp xxiv-xxx)</li> <li>• TG: L07-09 (pp 61-88)</li> <li>• TG: Post Assessment L07-10 (p 60)</li> <li>• <b>Developing Measurement Benchmarks: Up and Down</b></li> <li>• TG: L02 (pp 15-20)</li> <li>• TG: L06 (pp 37-42)</li> <li>• TG: L12 (pp 89-94)</li> <li>• <b>Developing Number Concepts: Families and Facts Module A</b></li> <li>• TG: L08-09 (pp 77-96)</li> <li>• TG: L11-12 (pp 105-118)</li> <li>• TG: L19 (pp 183-190)</li> <li>• TG: Post Assessment L18-22 (pp 218-221)</li> <li>• <b>Developing Number Concepts: Families and Facts Module B</b></li> <li>• TG: L02-03 (pp 15-33)</li> <li>• TG: L09 (pp 97-106)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.1.2.4.	<p>Create and analyze number patterns based on real-life situations using words, AB form, and T-charts and present results.</p> <ul style="list-style-type: none"> <li>• <b>Developing Algebraic Thinking: Together and Apart</b></li> </ul>

**Math Out of the Box® Correlation to West Virginia  
Content Standards and Objectives for Mathematics  
Grades K-5**

		<ul style="list-style-type: none"> <li>• TG: L07-10 (pp 61-94)</li> <li>• TG: Post Assessment L07-10 (p 60)</li> <li>• <b>Developing Measurement Benchmarks: Up and Down</b></li> <li>• TG: Unit Pre Assessment (pp xxii-xxix)</li> <li>• TG: Post Assessment L13-17 (pp 99-101)</li> <li>• <b>Developing Number Concepts: Families and Facts Module A</b></li> <li>• TG: L01-04 (pp 5-40)</li> <li>• TG: L08-09 (pp 77-96)</li> <li>• TG: L11 (pp 105-110)</li> <li>• TG: L12 (pp 111-118)</li> <li>• TG: L18-19 (pp 173-190)</li> <li>• <b>Developing Number Concepts: Families and Facts Module B</b></li> <li>• TG: L04-05 (pp 41-62)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.1.2.5.	<p>Use concrete materials to demonstrate that the quantities on both sides of a grade-appropriate number sentence are equivalent.</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Families and Facts Module A</b></li> <li>• TG: L01-03 (pp 5-32)</li> <li>• TG: L06-13 (pp 59-134)</li> <li>• TG: L16-22 (pp 153-217)</li> <li>• <b>Developing Number Concepts: Families and Facts Module B</b></li> <li>• TG: L09 (pp 97-106)</li> <li>• TG: L12-14 (pp 123-144)</li> </ul>
CONTENT STANDARD / COURSE	WV.MA.S.1.3.	<p>Geometry: Through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics, students will analyze characteristics and properties of two- and three-dimensional geometric shapes and develop mathematical arguments about geometric relationships, specify locations and describe spatial relationships using coordinate geometry and other representational systems, apply transformations and use symmetry to analyze mathematical situations, and solve problems using visualization, spatial reasoning, and geometric modeling.</p>
CONTENT STANDARD / OBJECTIVE	MA.O.1.3.1.	<p>Draw, label, and sort circle, rectangles including squares, triangles, and according to sides and vertices</p> <ul style="list-style-type: none"> <li>• <b>Developing Geometric Logic: Symmetry and Shapes</b></li> <li>• TG: L07-12 (pp 53-87)</li> <li>• TG: L16 (pp 111-116)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.1.3.2.	<p>Use physical materials to construct, identify, and classify three-dimensional figures: cube, cone, sphere, rectangular solid, pyramid, cylinder</p> <ul style="list-style-type: none"> <li>• <b>Developing Geometric Logic: Symmetry and Shapes</b></li> <li>• TG: Post Assessment L01-06 (p 5)</li> <li>• TG: Unit Pre Assessment (pp xxiii-xxvii)</li> <li>• TG: L01-06 (pp 7-45)</li> <li>• TG: L13 (pp 93-97)</li> <li>• TG: L18 (pp 129-134)</li> <li>• TG: L20 (pp 141-144)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.1.3.3.	<p>Recognize three-dimensional shapes in the environment.</p> <ul style="list-style-type: none"> <li>• <b>Developing Geometric Logic: Symmetry and Shapes</b></li> <li>• TG: L01-06 (pp 7-45)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.1.3.4.	<p>Draw and identify: open and closed figures, congruent plane shapes</p>

**Math Out of the Box® Correlation to West Virginia  
Content Standards and Objectives for Mathematics  
Grades K-5**

		<ul style="list-style-type: none"> <li>• <b>Developing Geometric Logic: Symmetry and Shapes</b></li> <li>• TG: L07-08 (pp 53-64)</li> <li>• TG: L13-14 (pp 93-103)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.1.3.5.	<p>Create and describe simple symmetrical designs.</p> <ul style="list-style-type: none"> <li>• <b>Developing Geometric Logic: Symmetry and Shapes</b></li> <li>• TG: Unit Pre Assessment (pp xxiii-xxvii)</li> <li>• TG: L16 (pp 111-116)</li> <li>• TG: Post Assessment L13-16 (p 92)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.1.3.6.	<p>Describe spatial relationships: over/under, left/right.</p> <ul style="list-style-type: none"> <li>• <b>Developing Geometric Logic: Symmetry and Shapes</b></li> <li>• TG: Unit Pre Assessment (pp xxiii-xxvii)</li> <li>• TG: L17-19 (pp 121-139)</li> <li>• TG: Post Assessment L17-20 (p 120)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.1.3.8.	<p>Predict the result of combining or decomposing two or more two-dimensional/three-dimensional shapes.</p> <ul style="list-style-type: none"> <li>• <b>Developing Geometric Logic: Symmetry and Shapes</b></li> <li>• TG: L01-02 (pp 7-22)</li> <li>• TG: L06-07 (pp 41-60)</li> </ul>
CONTENT STANDARD / COURSE	WV.MA.S.1.4.	<p>Measurement: Through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics, students will demonstrate understanding of measurable attributes of objects and the units, systems, and processes of measurement, and apply appropriate techniques, tools and formulas to determine measurements.</p>
CONTENT STANDARD / OBJECTIVE	MA.O.1.4.1.	<p>Estimate, measure, compare and order using customary, metric, and nonstandard units to determine length to nearer whole unit.</p> <ul style="list-style-type: none"> <li>• <b>Developing Measurement Benchmarks: Up and Down</b></li> <li>• TG: Unit Pre Assessment (pp xxii-xxix)</li> <li>• TG: L01-06 (pp 7-42)</li> <li>• TG: Post Assessment L01-08 (pp 4-5)</li> <li>• <b>Developing Number Concepts: Families and Facts Module B</b></li> <li>• TG: L03 (pp 25-33)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.1.4.2.	<p>Select appropriate units and tools to measure and compare two objects or events according to one or more of the following attributes: length, height, weight, temperature, volume justify selection of units and tools used to measure the attributes and present results.</p> <ul style="list-style-type: none"> <li>• <b>Developing Measurement Benchmarks: Up and Down</b></li> <li>• TG: Unit Pre Assessment (pp xxii-xxix)</li> <li>• TG: L02 (pp 15-20)</li> <li>• TG: L05 (pp 31-36)</li> <li>• TG: L17-18 (pp 133-150)</li> <li>• TG: Post Assessment L18-20 (p 144)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.1.4.3.	<p>Use calendar to identify date, sequence of days of the week, and months of the year.</p> <ul style="list-style-type: none"> <li>• <b>Developing Measurement Benchmarks: Up and Down</b></li> <li>• TG: Unit Pre Assessment (pp xxii-xxix)</li> </ul>

**Math Out of the Box® Correlation to West Virginia  
Content Standards and Objectives for Mathematics  
Grades K-5**

		<ul style="list-style-type: none"> <li>• TG: L13-14 (pp 103-120)</li> <li>• TG: Post Assessment L13-17 (pp 99-101)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.1.4.4.	<p>Explain time concept in context of personal experience.</p> <ul style="list-style-type: none"> <li>• <b>Developing Measurement Benchmarks: Up and Down</b></li> <li>• TG: L13-16 (pp 103-132)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.1.4.5.	<p>Read time to the half hour using an analog and digital clock.</p> <ul style="list-style-type: none"> <li>• <b>Developing Measurement Benchmarks: Up and Down</b></li> <li>• TG: L15-16 (pp 121-132)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.1.4.6.	<p>Identify, count, trade and organize the following coins and bill to display a variety of price values from real-life examples with a total value of 100 cents or less: penny, nickel, dime, quarter, dollar bill.</p> <ul style="list-style-type: none"> <li>• <b>Developing Measurement Benchmarks: Up and Down</b></li> <li>• TG: L09-12 (pp 65-94)</li> <li>• TG: Post Assessment L09-12 (pp 62-63)</li> </ul>
CONTENT STANDARD / COURSE	WV.MA.S.1.5.	<p>Data Analysis and Probability: Through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics, students will formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them, select and use appropriate statistical methods to analyze data, develop and evaluate inferences and predictions that are based on models, and apply and demonstrate an understanding of basic concepts of probability.</p>
CONTENT STANDARD / OBJECTIVE	MA.O.1.5.1.	<p>Identify a real life situation to gather data over time; make a hypothesis as to the outcome; design and implement a method to collect, organize, and analyze the results to make a conclusion; evaluate the validity of the hypothesis based upon collected data; design a mode of presentation using a pictograph and a bar graph (with and without technology).</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Families and Facts Module B</b></li> <li>• TG: L20 (pp 187-191)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.1.5.2.	<p>Conduct simple experiments, record data on a tally chart or table and use the data to predict which of the events is more likely or less likely to occur if the experiment is repeated.</p> <ul style="list-style-type: none"> <li>• <b>Developing Measurement Benchmarks: Up and Down</b></li> <li>• TG: L16 (pp 127-132)</li> <li>• <b>Developing Number Concepts: Families and Facts Module B</b></li> <li>• TG: L18 (pp 175-180)</li> </ul>

## Math Out of the Box® Correlation to West Virginia Content Standards and Objectives for Mathematics Grades K-5

### Grade 2

CONTENT STANDARD / COURSE	WV.MA.S.2.1.	Number and Operations: Through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics, students will demonstrate understanding of numbers, ways of representing numbers, and relationships among numbers and number systems, demonstrate meanings of operations and how they relate to one another, and compute fluently and make reasonable estimates.
CONTENT STANDARD / OBJECTIVE	MA.O.2.1.1.	<p>Read, write, order, and compare numbers to 1,000 using multiple strategies (e.g. symbols, manipulatives, number line).</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: More and Less Module A</b></li> <li>• TG: L13-16 (pp 135-173)</li> <li>• TG: Post Assessment L11-16 (pp 174-177)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.2.1.2.	<p>Justify any number as odd or even and determine if a set has an odd or even number of elements.</p> <ul style="list-style-type: none"> <li>• <b>Developing Algebraic Thinking: Collecting and Sorting</b></li> <li>• TG: L05 (pp 37-44)</li> <li>• <b>Developing Number Concepts: More and Less Module A</b></li> <li>• TG: L02-03 (pp 13-30)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.2.1.3.	<p>Count and group concrete manipulatives by ones, tens, and hundreds to 1,000.</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: More and Less Module A</b></li> <li>• TG: L11-16 (pp 115-173)</li> <li>• TG: L18-22 (pp 193-236)</li> <li>• TG: Post Assessment L11-16 (pp 174-177)</li> <li>• <b>Developing Number Concepts: More and Less Module B</b></li> <li>• TG: L05 (pp 45-50)</li> <li>• TG: L07 (pp 61-67)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.2.1.4.	<p>Model and identify place value of each digit utilizing standard and expanded form through 1000.</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: More and Less Module A</b></li> <li>• TG: L11-12 (pp 115-133)</li> <li>• TG: L14 (pp 145-156)</li> <li>• TG: L16 (pp 167-173)</li> <li>• TG: Post Assessment L11-16 (pp 174-177)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.2.1.5.	<p>Identify and read any ordinal number to identify position in a sequence.</p> <ul style="list-style-type: none"> <li>• <b>Developing Measurement Benchmarks: Large and Small</b></li> <li>• TG: L13 (pp 109-116)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.2.1.6.	<p>Round any 3-digit number to both the nearer 10 and 100.</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: More and Less Module A</b></li> <li>• TG: L13 (pp 135-144)</li> <li>• TG: L15 (pp 157-165)</li> <li>• <b>Developing Number Concepts: More and Less Module B</b></li> <li>• TG: L01-03 (pp 5-31)</li> <li>• TG: Post Assessment L01-03 (p 32)</li> </ul>

**Math Out of the Box® Correlation to West Virginia  
Content Standards and Objectives for Mathematics  
Grades K-5**

CONTENT STANDARD / OBJECTIVE	MA.O.2.1.7.	Identify and explain fractions as part of a whole and as part of a set/group using models. <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: More and Less Module B</b></li> <li>• TG: Post Assessment L11-17 (p 150)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.2.1.8.	Model and justify the relationship between addition and subtraction (e.g., identity element of addition, associative property, commutative property, inverse operations, fact families). <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: More and Less Module A</b></li> <li>• TG: L06-10 (pp 59-105)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.2.1.9.	Demonstrate quick recall of basic addition facts with sums to 18 and corresponding subtraction facts. <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: More and Less Module A</b></li> <li>• TG: L01-10 (pp 5-105)</li> <li>• TG: L13 (pp 135-144)</li> <li>• TG: L15 (pp 157-165) TG: L17 (pp 183-191)</li> <li>• TG: L20-22 (pp 213-236)</li> <li>• TG: Post Assessment L01-05 (pp 52-54)</li> <li>• TG: Post Assessment L06-10 (pp 106-109)</li> <li>• TG: Post Assessment L17-22 (pp 237-241)</li> <li>• <b>Developing Number Concepts: More and Less Module B</b></li> <li>• TG: L04-06 (pp 37-59)</li> <li>• TG: L11-12 (pp 101-114)</li> <li>• TG: L15 (pp 129-135)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.2.1.10.	Model 2- and 3-digit addition and subtraction with regrouping using multiple strategies. <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: More and Less Module B</b></li> <li>• TG: L05-10 (pp 45-93)</li> <li>• TG: Post Assessment L04-10 (pp 94-96)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.2.1.11.	Add and subtract 2- and 3-digit numbers without regrouping. <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: More and Less Module A</b></li> <li>• TG: L18-19 (pp 193-211)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.2.1.12.	Use rounding to analyze the reasonableness of a sum or a difference. <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: More and Less Module A</b></li> <li>• TG: L13 (pp 135-144)</li> <li>• <b>Developing Number Concepts: More and Less Module B</b></li> <li>• TG: L11 (pp 101-107)</li> <li>• TG: L14 (pp 121-128)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.2.1.13.	Create story problems that require one or two-step procedures, using a variety of strategies explain the reasoning used, justify the procedures selected and present the results. <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: More and Less Module B</b></li> <li>• TG: L13 (pp 115-120)</li> </ul>

**Math Out of the Box® Correlation to West Virginia  
Content Standards and Objectives for Mathematics  
Grades K-5**

CONTENT STANDARD / COURSE	WV.MA.S.2.2.	Algebra: Through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics, students will demonstrate understanding of patterns, relations and functions, represent and analyze mathematical situations and structures using algebraic symbols, use mathematical models to represent and understand quantitative relationships, and analyze change in various contexts.
CONTENT STANDARD / OBJECTIVE	MA.O.2.2.1.	<p>Analyze, describe, extend and create a growing pattern using objects or numbers.</p> <ul style="list-style-type: none"> <li>• <b>Developing Algebraic Thinking: Collecting and Sorting</b></li> <li>• TG: Unit Pre Assessment (pp xxiv-xxxiii)</li> <li>• TG: L03 (pp 17-24)</li> <li>• TG: L06-10 (pp 45-92)</li> <li>• TG: Post Assessment L08-10 (pp 60-62)</li> <li>• <b>Developing Number Concepts: More and Less Module A</b></li> <li>• TG: L04-05 (pp 31-51)</li> <li>• TG: L11-12 (pp 115-133)</li> <li>• TG: L17 (pp 183-191)</li> <li>• TG: L20-22 (pp 213-236)</li> <li>• <b>Developing Number Concepts: More and Less Module B</b></li> <li>• TG: L13-15 (pp 115-135)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.2.2.3.	<p>Describe, complete and extend a variety of counting patterns, according to a given rule.</p> <ul style="list-style-type: none"> <li>• <b>Developing Algebraic Thinking: Collecting and Sorting</b></li> <li>• TG: Unit Pre Assessment (pp xxiv-xxxiii)</li> <li>• TG: L03 (pp 17-24)</li> <li>• TG: L06-10 (pp 45-92)</li> <li>• TG: Post Assessment L08-10 (pp 60-62)</li> <li>• <b>Developing Number Concepts: More and Less Module A</b></li> <li>• TG: L04-05 (pp 31-51)</li> <li>• TG: L11-12 (pp 115-133)</li> <li>• TG: L17 (pp 183-191)</li> <li>• TG: L20-22 (pp 213-236)</li> <li>• <b>Developing Number Concepts: More and Less Module B</b></li> <li>• TG: L13-15 (pp 115-135)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.2.2.4.	<p>Create physical models to demonstrate equivalency of two numerical expressions written as a grade-appropriate number sentence.</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: More and Less Module A</b></li> <li>• TG: L14 (pp 145-156)</li> <li>• TG: L16 (pp 167-173)</li> </ul>
CONTENT STANDARD / COURSE	WV.MA.S.2.3.	Geometry: Through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics, students will analyze characteristics and properties of two- and three-dimensional geometric shapes and develop mathematical arguments about geometric relationships, specify locations and describe spatial relationships using coordinate geometry and other representational systems, apply transformations and use symmetry to analyze mathematical situations, and solve problems using visualization, spatial reasoning, and geometric modeling.
CONTENT STANDARD / OBJECTIVE	MA.O.2.3.1.	<p>Identify and describe the following geometric solids according to the number of faces and edges: rectangular solid, cube, cylinder, cone, pyramid</p> <ul style="list-style-type: none"> <li>• <b>Developing Geometric Logic: Rows and Columns</b></li> </ul>

## Math Out of the Box® Correlation to West Virginia Content Standards and Objectives for Mathematics Grades K-5

		<ul style="list-style-type: none"> <li>• TG: Unit Pre Assessment (pp xxiii-xxix)</li> <li>• TG: L01-05 (pp 7-46)</li> <li>• TG: Post Assessment L01-06 (p 5)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.2.3.2.	<p>Compare and contrast plane and solid geometric shapes.</p> <ul style="list-style-type: none"> <li>• <b>Developing Geometric Logic: Rows and Columns</b></li> <li>• TG: Unit Pre Assessment (pp xxiii-xxix)</li> <li>• TG: L01-05 (pp 7-46)</li> <li>• TG: L07-08 (pp 61-76)</li> <li>• TG: Post Assessment L01-06 (p 5)</li> <li>• TG: Post Assessment L07-12 (pp 59-64)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.2.3.3.	<p>Identify and draw congruent shapes that have been rotated or reflected.</p> <ul style="list-style-type: none"> <li>• <b>Developing Geometric Logic: Rows and Columns</b></li> <li>• TG: L12 (pp 95-100)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.2.3.4.	<p>Model and draw line segments and angles.</p> <ul style="list-style-type: none"> <li>• <b>Developing Geometric Logic: Rows and Columns</b></li> <li>• TG: L09 (pp 77-82)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.2.3.5.	<p>Plot and describe the path between locations on a grid.</p> <ul style="list-style-type: none"> <li>• <b>Developing Geometric Logic: Rows and Columns</b></li> <li>• TG: L17-18 (pp 141-156)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.2.3.6.	<p>Identify similar shapes.</p> <ul style="list-style-type: none"> <li>• <b>Developing Geometric Logic: Rows and Columns</b></li> <li>• TG: L11-12 (pp 89-100)</li> </ul>
CONTENT STANDARD / COURSE	WV.MA.S.2.4.	<p>Measurement: Through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics, students will demonstrate understanding of measurable attributes of objects and the units, systems, and processes of measurement, and apply appropriate techniques, tools and formulas to determine measurements.</p>
CONTENT STANDARD / OBJECTIVE	MA.O.2.4.1.	<p>Identify a real life situation to use appropriate measurement tools; over time make a hypothesis as to the change overtime using whole units: length in centimeters and inches, temperature in Celsius and Fahrenheit, weight/mass in pounds and kilograms, and design and implement a method to collect, organize, and analyze data; analyze the results to make a conclusion evaluate the validity of the hypothesis based upon collected data; design a mode of presentation (with and without technology).</p> <ul style="list-style-type: none"> <li>• <b>Developing Algebraic Thinking: Collecting and Sorting</b></li> <li>• TG: L16-20 (pp 1241-188)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.2.4.2.	<p>Estimate and determine the perimeter of squares, rectangles and triangles.</p> <ul style="list-style-type: none"> <li>• <b>Developing Measurement Benchmarks: Large and Small</b></li> <li>• TG: L06 (pp 43-48)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.2.4.3.	<p>Estimate and count the number of square units needed to cover a given area</p>

**Math Out of the Box® Correlation to West Virginia  
Content Standards and Objectives for Mathematics  
Grades K-5**

		<p>using manipulatives.</p> <ul style="list-style-type: none"> <li>• <b>Developing Geometric Logic: Rows and Columns</b></li> <li>• TG: Unit Pre Assessment (pp xxiii-xxix)</li> <li>• TG: L15-16 (pp 123-134)</li> <li>• TG: Post Assessment L13-16 (pp 104-105)</li> <li>• <b>Developing Measurement Benchmarks: Large and Small</b></li> <li>• TG: L07 (pp 49-56)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.2.4.4.	<p>Order events in relation to time.</p> <ul style="list-style-type: none"> <li>• <b>Developing Measurement Benchmarks: Large and Small</b></li> <li>• TG: L14 (pp 117-124)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.2.4.5.	<p>Determine past and future days of the week and identify specific dates, given a calendar.</p> <ul style="list-style-type: none"> <li>• <b>Developing Measurement Benchmarks: Large and Small</b></li> <li>• TG: Unit Pre Assessment (pp xxiii-xxviii)</li> <li>• TG: L13 (pp 109-116)</li> <li>• TG: Post Assessment L12-15 (pp 98-99)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.2.4.6.	<p>Read time to the quarter hour using an analog and digital clock.</p> <ul style="list-style-type: none"> <li>• <b>Developing Measurement Benchmarks: Large and Small</b></li> <li>• TG: L15 (pp 125-134)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.2.4.7.	<p>Identify, count and organize coins and bills to display a variety of price values from real-life examples with a total value of one dollar or less and model making change using manipulatives.</p> <ul style="list-style-type: none"> <li>• <b>Developing Measurement Benchmarks: Large and Small</b></li> <li>• TG: Unit Pre Assessment (pp xxiii-xxviii)</li> <li>• TG: L08-11 (pp 63-94)</li> <li>• TG: Post Assessment L08-11 (pp 60-61)</li> </ul>
CONTENT STANDARD / COURSE	WV.MA.S.2.5.	<p>Data Analysis and Probability: Through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics, students will formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them, select and use appropriate statistical methods to analyze data, develop and evaluate inferences and predictions that are based on models, and apply and demonstrate an understanding of basic concepts of probability.</p>
CONTENT STANDARD / OBJECTIVE	MA.O.2.5.1.	<p>Create, read, and interpret a pictograph with each picture representing greater than or equal to a single unit.</p> <ul style="list-style-type: none"> <li>• <b>Developing Algebraic Thinking: Collecting and Sorting</b></li> <li>• TG: L11 (pp 99-108)</li> <li>• TG: L14-18 (pp 129-174)</li> <li>• TG: L20 (pp 183-188)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.2.5.2.	<p>Conduct simple experiments with more than two outcomes and use the data to predict which event is more, less, or equally likely to occur if the experiment is repeated.</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: More and Less Module B</b></li> <li>• TG: L18-20 (pp 155-172)</li> </ul>

**Math Out of the Box® Correlation to West Virginia  
Content Standards and Objectives for Mathematics  
Grades K-5**

		<ul style="list-style-type: none"> <li>• TG: Post Assessment L18-20 (p 173)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.2.5.3.	<p>Analyze data represented on a graph using grade-appropriate questions.</p> <ul style="list-style-type: none"> <li>• <b>Developing Algebraic Thinking: Collecting and Sorting</b></li> <li>• TG: Unit Pre Assessment (pp xxiv-xxxiii)</li> <li>• TG: L11-19 (pp 99-182)</li> <li>• TG: Post Assessment L14-16 (p 128)</li> <li>• TG: Post Assessment L17-20 (pp 156-157)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.2.5.4.	<p>Formulate questions, collect data, organize and display as a chart, table or bar graph.</p> <ul style="list-style-type: none"> <li>• <b>Developing Algebraic Thinking: Collecting and Sorting</b></li> <li>• TG: L11-19 (pp 99-182)</li> <li>• <b>Developing Geometric Logic: Rows and Columns</b></li> <li>• TG: L02 (pp 17-23)</li> <li>• TG: L04-05 (pp 33-46)</li> <li>• <b>Developing Number Concepts: More and Less Module B</b></li> <li>• TG: L18-20 (pp 155-172)</li> <li>• TG: Post Assessment L18-20 (p 173)</li> </ul>

## Math Out of the Box® Correlation to West Virginia Content Standards and Objectives for Mathematics Grades K-5

### Grade 3

CONTENT STANDARD / COURSE	WV.MA.S.3.1.	Number and Operations: Through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics, students will demonstrate understanding of numbers, ways of representing numbers, and relationships among numbers and number systems, demonstrate meanings of operations and how they relate to one another, and compute fluently and make reasonable estimates.
CONTENT STANDARD / OBJECTIVE	MA.O.3.1.1.	<p>Read, write, order, and compare numbers to 10,000 using a variety of strategies (e.g., symbols, manipulatives, number line).</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Ordering and Arranging Module A</b></li> <li>• TG: L10-14 (pp 101-143)</li> <li>• TG: Post Assessment L09-14 (pp 144-145)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.3.1.2.	<p>Read, write, order, and compare decimals to hundredths, with manipulatives.</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Ordering and Arranging Module B</b></li> <li>• TG: L05-07 (pp 47-71)</li> <li>• TG: Post Assessment L05-07 (pp 72-73)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.3.1.3.	<p>Identify place value of each digit utilizing standard and expanded form to 10,000.</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Ordering and Arranging Module A</b></li> <li>• TG: L09-16 (pp 91-170)</li> <li>• TG: Post Assessment L09-14 (pp 144-145)</li> <li>• <b>Developing Number Concepts: Ordering and Arranging Module B</b></li> <li>• TG: L06 (pp 57-64)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.3.1.4.	<p>Apply estimation skills (rounding, benchmarks, compatible numbers) to solve and evaluate reasonableness of an answer.</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Ordering and Arranging Module A</b></li> <li>• TG: L16 (pp 161-170)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.3.1.5.	<p>Demonstrate an understanding of fractions as part of a whole/one and as part of a set/group using models and pictorial representations.</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Ordering and Arranging Module B</b></li> <li>• TG: L01-05 (pp 5-55)</li> <li>• TG: L07 (pp 65-71)</li> <li>• TG: Post Assessment L01-04 (pp 40-41)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.3.1.6.	<p>Create concrete models and pictorial representations to compare and order fractions with like and unlike denominators, add and subtract fractions with like denominators, and verify results.</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Ordering and Arranging Module B</b></li> <li>• TG: L02-04 (pp 13-39)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.3.1.7.	<p>Use concrete models and pictorial representations to demonstrate an understanding of equivalent fractions, proper and improper fractions, and mixed numbers.</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Ordering and Arranging Module A</b></li> </ul>

**Math Out of the Box® Correlation to West Virginia  
Content Standards and Objectives for Mathematics  
Grades K-5**

		<ul style="list-style-type: none"> <li>• TG: L26 (pp 259-268)</li> <li>• <b>Developing Number Concepts: Ordering and Arranging Module B</b></li> <li>• TG: L01-05 (pp 5-55)</li> <li>• TG: Post Assessment L01-04 (pp 40-41)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.3.1.8.	<p>Add and subtract 2- and 3-digit whole numbers and money with and without regrouping.</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Ordering and Arranging Module A</b></li> <li>• TG: L18-19 (pp 181-198)</li> <li>• TG: L21-24 (pp 209-243)</li> <li>• TG: Post Assessment L15-24 (pp 244-246)</li> <li>• <b>Developing Number Concepts: Ordering and Arranging Module B</b></li> <li>• TG: L08-12 (pp 79-119)</li> <li>• TG: Post Assessment L08-12 (pp 120-121)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.3.1.9.	<p>Demonstrate and model multiplication (repeated addition, arrays) and division (repeated subtraction, partitioning).</p> <ul style="list-style-type: none"> <li>• <b>Developing Algebraic Thinking: Plotting and Growing</b></li> <li>• TG: Unit Pre Assessment (pp xxiv-xxxviii)</li> <li>• TG: L08 (pp 87-96)</li> <li>• TG: Post Assessment L06-08 (pp 66-67)</li> <li>• <b>Developing Number Concepts: Ordering and Arranging Module A</b></li> <li>• TG: L06-07 (pp 61-76)</li> <li>• TG: L25-30 (pp 251-301)</li> <li>• TG: Post Assessment L01-08 (pp 84-86)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.3.1.10.	<p>Use and explain the operations of multiplication and division including the properties (e.g., identity element of multiplication, commutative property, property of zero, associative property, inverse operations).</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Ordering and Arranging Module A</b></li> <li>• TG: L06-08 (pp 61-83)</li> <li>• TG: L15-16 (pp 151-170)</li> <li>• TG: L25-30 (pp 251-301)</li> <li>• TG: Post Assessment L01-08 (pp 84-86)</li> <li>• TG: Post Assessment L25-30 (pp 302-304)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.3.1.11.	<p>Recall basic multiplication facts and the corresponding division facts.</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Ordering and Arranging Module A</b></li> <li>• TG: L06-08 (pp 61-83)</li> <li>• TG: L25-30 (pp 251-301)</li> <li>• TG: Post Assessment L01-08 (pp 84-86)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.3.1.12.	<p>Model the distributive property in multiplication of 2- and 3-digit numbers by a 1-digit number.</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Ordering and Arranging Module A</b></li> <li>• TG: L27 (pp 269-277)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.3.1.13.	<p>Use models to demonstrate division of 2- and 3-digit numbers by a 1-digit number.</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Ordering and Arranging Module A</b></li> <li>• TG: L28-30 (pp 277-301)</li> </ul>

**Math Out of the Box® Correlation to West Virginia  
Content Standards and Objectives for Mathematics  
Grades K-5**

		<ul style="list-style-type: none"> <li>TG: Post Assessment L25-30 (pp 302-304)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.3.1.14.	<p>Create grade-appropriate real-world problems involving any of the four operations using multiple strategies, explain the reasoning used, and justify the procedures selected when presenting solutions.</p> <ul style="list-style-type: none"> <li><b>Developing Number Concepts: Ordering and Arranging Module A</b></li> <li>TG: L04 (pp 47-50)</li> <li>TG: L07-08 (pp 69-83)</li> <li>TG: Post Assessment L01-08 (pp 84-86)</li> </ul>
CONTENT STANDARD / COURSE	WV.MA.S.3.2.	<p>Algebra: Through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics, students will demonstrate understanding of patterns, relations and functions, represent and analyze mathematical situations and structures using algebraic symbols, use mathematical models to represent and understand quantitative relationships, and analyze change in various contexts.</p>
CONTENT STANDARD / OBJECTIVE	MA.O.3.2.1.	<p>Analyze and extend geometric and numeric patterns.</p> <ul style="list-style-type: none"> <li><b>Developing Algebraic Thinking: Plotting and Growing</b></li> <li>TG: Unit Pre Assessment (pp xxiv-xxxviii)</li> <li>TG: L03-04 (pp 35-56)</li> <li>TG: L06 (pp 69-76)</li> <li>TG: L08-09 (pp 87-112)</li> <li>TG: L12 (pp 135-142)</li> <li>TG: Post Assessment L03-05 (pp 32-34)</li> <li>TG: Post Assessment L06-08 (pp 66-67)</li> <li>TG: Post Assessment L09-12 (pp 100-101)</li> <li><b>Developing Number Concepts: Ordering and Arranging Module A</b></li> <li>TG: L09 (pp 91-100)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.3.2.2.	<p>Create an input/output model using addition, subtraction, multiplication or division.</p> <ul style="list-style-type: none"> <li><b>Developing Algebraic Thinking: Plotting and Growing</b></li> <li>TG: Unit Pre Assessment (pp xxiv-xxxviii)</li> <li>TG: L07 (pp 77-86)</li> <li>TG: L09-12 (pp 103-142)</li> <li>TG: Post Assessment L09-12 (pp 100-101)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.3.2.3.	<p>Analyze a given pattern and write the rule.</p> <ul style="list-style-type: none"> <li><b>Developing Algebraic Thinking: Plotting and Growing</b></li> <li>TG: Unit Pre Assessment (pp xxiv-xxxviii)</li> <li>TG: Post Assessment L06-08 (pp 66-67)</li> <li>TG: Post Assessment L09-12 (pp 100-101)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.3.2.4.	<p>Write equivalent numerical expressions and justify equivalency.</p> <ul style="list-style-type: none"> <li><b>Developing Number Concepts: Ordering and Arranging Module A</b></li> <li>TG: L09-13 (pp 91-136)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.3.2.5.	<p>Use symbol and letter variables to represent an unknown quantity and determine the value of the variable.</p> <ul style="list-style-type: none"> <li><b>Developing Number Concepts: Ordering and Arranging Module A</b></li> <li>TG: L03-05 (pp 33-60)</li> </ul>

## Math Out of the Box® Correlation to West Virginia Content Standards and Objectives for Mathematics Grades K-5

		<ul style="list-style-type: none"> <li>• TG: L25-28 (pp 251-285)</li> <li>• TG: Post Assessment L01-08 (pp 84-86)</li> </ul>
CONTENT STANDARD / COURSE	WV.MA.S.3.3.	Geometry: Through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics, students will analyze characteristics and properties of two- and three-dimensional geometric shapes and develop mathematical arguments about geometric relationships, specify locations and describe spatial relationships using coordinate geometry and other representational systems, apply transformations and use symmetry to analyze mathematical situations, and solve problems using visualization, spatial reasoning, and geometric modeling.
CONTENT STANDARD / OBJECTIVE	MA.O.3.3.1.	<p>Identify and create new polygons by transforming, combining and decomposing polygons.</p> <ul style="list-style-type: none"> <li>• <b>Developing Geometric Logic: Shapes and Paths</b></li> <li>• TG: Unit Pre Assessment (pp xxiv-xxiii)</li> <li>• TG: L10 (pp 99-105)</li> <li>• TG: L12-16 (pp 121-170)</li> <li>• TG: Post Assessment L12-15 (pp 118-119)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.3.3.2.	<p>Identify, describe, and classify the following geometric solids according to the number of faces, edges, and vertices: cube, rectangular solid, cylinder, cone, pyramid</p> <ul style="list-style-type: none"> <li>• <b>Developing Geometric Logic: Shapes and Paths</b></li> <li>• TG: L01 (pp 7-14)</li> <li>• TG: L03-04 (pp 23-39)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.3.3.3.	<p>Construct and identify a solid figure from a plane drawing.</p> <ul style="list-style-type: none"> <li>• <b>Developing Geometric Logic: Shapes and Paths</b></li> <li>• TG: L11 (pp 107-113)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.3.3.4.	<p>Identify, describe and draw lines of symmetry in two-dimensional shapes.</p> <ul style="list-style-type: none"> <li>• <b>Developing Geometric Logic: Shapes and Paths</b></li> <li>• TG: Unit Pre Assessment (pp xxiv-xxiii)</li> <li>• TG: L09 (pp 89-97)</li> <li>• TG: L16 (pp 165-170)</li> <li>• TG: Post Assessment L08-11 (pp 79-80)</li> <li>• TG: Post Assessment L16-20 (pp 162-163)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.3.3.5.	<p>Model, describe, and draw: lines, rays, angles including right, obtuse, and acute angles.</p> <ul style="list-style-type: none"> <li>• <b>Developing Geometric Logic: Shapes and Paths</b></li> <li>• TG: L05-08 (pp 47-88)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.3.3.6.	<p>Draw an example of a flip, slide and turn (reflection, translation, and rotation) given a model.</p> <ul style="list-style-type: none"> <li>• <b>Developing Geometric Logic: Shapes and Paths</b></li> <li>• TG: Unit Pre Assessment (pp xxiv-xxiii)</li> <li>• TG: L12-16 (pp 121-170)</li> <li>• TG: Post Assessment L12-15 (pp 118-119)</li> </ul>

**Math Out of the Box® Correlation to West Virginia  
Content Standards and Objectives for Mathematics  
Grades K-5**

CONTENT STANDARD / OBJECTIVE	MA.O.3.3.7.	Name the location of a point on a first-quadrant grid, represent using ordered pairs. <ul style="list-style-type: none"> <li>• <b>Developing Geometric Logic: Shapes and Paths</b></li> <li>• TG: Unit Pre Assessment (pp xxiv-xxiii)</li> <li>• TG: Post Assessment L16-20 (pp 162-163)</li> </ul>
CONTENT STANDARD / COURSE	WV.MA.S.3.4.	Measurement: Through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics, students will demonstrate understanding of measurable attributes of objects and the units, systems, and processes of measurement, and apply appropriate techniques, tools and formulas to determine measurements.
CONTENT STANDARD / OBJECTIVE	MA.O.3.4.1.	Within a project based investigation, identify a real life situation, consider a number of variables and use appropriate measurement tools, overtime, make a hypothesis as to the change overtime; with more precision than whole units; length in centimeters and inches, temperature in Celsius and Fahrenheit, weight/mass in pounds and kilograms, and design and implement a method to collect, organize, and analyze data; analyze results to make a conclusion; evaluate the validity of the hypothesis upon collected data; design a mode of presentation (with and without technology). <ul style="list-style-type: none"> <li>• <b>Developing Measurement Benchmarks: Scales and Balances</b></li> <li>• TG: L15 (pp 127-134)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.3.4.2.	Estimate and find the perimeter and area of familiar geometric shapes, using manipulatives, grids, or appropriate measuring tools. <ul style="list-style-type: none"> <li>• <b>Developing Geometric Logic: Shapes and Paths</b></li> <li>• TG: Unit Pre Assessment (pp xxiv-xxiii)</li> <li>• TG: L10 (pp 99-105)</li> <li>• TG: Post Assessment L08-11 (pp 79-80)</li> <li>• <b>Developing Measurement Benchmarks: Scales and Balances</b></li> <li>• TG: Unit Pre Assessment (pp xxiii-xxvi)</li> <li>• TG: L04-09 (pp 35-80)</li> <li>• TG: Post Assessment L01-06 (pp 5-6)</li> <li>• TG: Post Assessment L07-11 (p 58)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.3.4.3.	Determine the formula the area of a rectangle and explain reasoning through modeling. <ul style="list-style-type: none"> <li>• <b>Developing Measurement Benchmarks: Scales and Balances</b></li> <li>• TG: L07-09 (pp 59-80)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.3.4.4.	Read time to 5-minute intervals using (am and pm) analog and digital clocks, compute elapsed time to the quarter-hour using a clock. <ul style="list-style-type: none"> <li>• <b>Developing Measurement Benchmarks: Scales and Balances</b></li> <li>• TG: L12-14 (pp 103-126)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.3.4.5.	Identify, count and organize coins and bills to display a variety of price values from real-life examples with a total value of \$100 or less and model making change using manipulatives. <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Ordering and Arranging Module B</b></li> <li>• TG: L08-12 (pp 79-119)</li> <li>• TG: Post Assessment L08-12 (pp 120-121)</li> </ul>

**Math Out of the Box® Correlation to West Virginia  
Content Standards and Objectives for Mathematics  
Grades K-5**

CONTENT STANDARD / COURSE	WV.MA.S.3.5.	Data Analysis and Probability: Through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics, students will formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them, select and use appropriate statistical methods to analyze data, develop and evaluate inferences and predictions that are based on models, and apply and demonstrate an understanding of basic concepts of probability.
CONTENT STANDARD / OBJECTIVE	MA.O.3.5.1.	<p>Collect and organize grade-appropriate real-world data from observation, surveys, and experiments, and identify and construct appropriate ways to display data.</p> <ul style="list-style-type: none"> <li>• <b>Developing Algebraic Thinking: Plotting and Growing</b></li> <li>• TG: L16-17 (pp 177-194)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.3.5.2.	<p>Develop and conduct grade-appropriate experiments using concrete objects (e.g. counters, number cubes, spinners) to determine the likeliness of events and list all outcomes.</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Ordering and Arranging Module B</b></li> <li>• TG: L13-17 (pp 127-164)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.3.5.3.	<p>Analyze real-world data represented on a graph using grade-appropriate questions.</p> <ul style="list-style-type: none"> <li>• <b>Developing Algebraic Thinking: Plotting and Growing</b></li> <li>• TG: Unit Pre Assessment (pp xxiv-xxxviii)</li> <li>• TG: L15 (pp 171-176)</li> <li>• TG: L19 (pp 209-216)</li> <li>• TG: Post Assessment L01-02 (pp 4-5)</li> <li>• TG: Post Assessment L15-17 (pp 168-169)</li> <li>• TG: Post Assessment L18-20 (pp 198-199)</li> </ul>

**Math Out of the Box® Correlation to West Virginia  
Content Standards and Objectives for Mathematics  
Grades K-5**

**Grade 4**

CONTENT STANDARD / COURSE	WV.MA.S.4.1.	Number and Operations: Through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics, students will demonstrate understanding of numbers, ways of representing numbers, and relationships among numbers and number systems, demonstrate meanings of operations and how they relate to one another, and compute fluently and make reasonable estimates.
CONTENT STANDARD / OBJECTIVE	MA.O.4.1.1.	<p>Read, write, order, and compare whole numbers to the millions place and decimals to thousandths place using a variety of strategies (e.g. symbols, manipulatives, number line, pictorial representations).</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Stories and Statements Module A</b></li> <li>• TG: L08-12 (pp 73-106)</li> <li>• TG: Post Assessment L08-12 (pp 107-110)</li> <li>• <b>Developing Number Concepts: Stories and Statements Module B</b></li> <li>• TG: L08 (pp 67-74)</li> <li>• TG: Post Assessment L04-09 (pp 83-84)</li> <li>• TG: Post Assessment L10-12 (p 114)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.4.1.2.	<p>Demonstrate an understanding of the place value of each digit utilizing standard and expanded form through 1,000,000 with multiples of 10 [(5 X 10,000) + (3 X 1,000) + (4 X 10) + 2].</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Stories and Statements Module A</b></li> <li>• TG: L08-10 (pp 73-96)</li> <li>• TG: Post Assessment L08-12 (pp 107-110)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.4.1.3.	<p>Estimate solutions to problems including rounding, benchmarks, compatible numbers and evaluate the reasonableness of the solution, justify results.</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Stories and Statements Module A</b></li> <li>• TG: L13-15 (pp 115-140)</li> <li>• TG: Post Assessment L13-18 (pp 165-170)</li> <li>• <b>Developing Number Concepts: Stories and Statements Module B</b></li> <li>• TG: L11-12 (pp 97-113)</li> <li>• TG: L14-15 (pp 125-140)</li> <li>• TG: Post Assessment L13-15 (pp 141-142)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.4.1.4.	<p>Using concrete models, benchmark fractions, number line: compare and order fractions with like and unlike denominators; add and subtract fractions with like and unlike denominators; model equivalent fractions; model addition and subtraction of mixed numbers with and without regrouping.</p> <ul style="list-style-type: none"> <li>• <b>Developing Measurement Benchmarks: Inside and Outside</b></li> <li>• TG: L02 (pp 19-28)</li> <li>• <b>Developing Number Concepts: Stories and Statements Module B</b></li> <li>• TG: L01-03 (pp 5-28)</li> <li>• TG: L11-12 (pp 97-113)</li> <li>• TG: L14-15 (pp 125-140)</li> <li>• TG: Post Assessment L01-03 (pp 29-30)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.4.1.5.	<p>Analyze the relationship of fractions to decimals using concrete objects and pictorial representations.</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Stories and Statements Module B</b></li> <li>• TG: L04-05 (pp 35-50)</li> </ul>

**Math Out of the Box® Correlation to West Virginia  
Content Standards and Objectives for Mathematics  
Grades K-5**

		<ul style="list-style-type: none"> <li>• TG: L07 (pp 59-66)</li> <li>• TG: Post Assessment L04-09 (pp 83-84)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.4.1.6.	<p>Round decimals to the nearest whole, 10th, or 100th place.</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Stories and Statements Module B</b></li> <li>• TG: L10-11 (pp 89-106)</li> <li>• TG: Post Assessment L10-12 (p 114)</li> <li>• TG: Post Assessment L13-15 (pp 141-142)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.4.1.7.	<p>Add and subtract whole numbers(up to five -digit number) and decimals to the 1000th place, multiply (up to three digits by two-digits, and divide(up to a three digit number with a one and two-digit number).</p> <ul style="list-style-type: none"> <li>• <b>Developing Geometric Logic: Corners and Containers</b></li> <li>• TG: L18 (pp 167-174)</li> <li>• <b>Developing Number Concepts: Stories and Statements Module A</b></li> <li>• TG: L01-03 (pp 5-30)</li> <li>• TG: L06-07 (pp 49-62)</li> <li>• TG: L13-27 (pp 115-256)</li> <li>• TG: L29 (pp 265-272)</li> <li>• TG: L30 (pp 273-278)</li> <li>• TG: Post Assessment L01-07 (pp 63-67)</li> <li>• TG: Post Assessment L13-18 (pp 165-170)</li> <li>• TG: Post Assessment L19-30 (pp 273-278)</li> <li>• <b>Developing Number Concepts: Stories and Statements Module B</b></li> <li>• TG: L11-12 (pp 97-113)</li> <li>• TG: L14-15 (pp 125-140)</li> <li>• TG: Post Assessment L10-12 (p 114)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.4.1.8.	<p>Solve multi-digit whole number multiplication problems using a variety of strategies, including the standard algorithm, justify methods used.</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Stories and Statements Module A</b></li> <li>• TG: L05-07 (pp 39-62)</li> <li>• TG: L19-25 (pp 175-240)</li> <li>• TG: L30 (pp 273-278)</li> <li>• TG: Post Assessment L01-07 (pp 63-67)</li> <li>• TG: Post Assessment L19-30 (pp 273-278)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.4.1.9.	<p>Quick recall of basic multiplication facts and corresponding division facts.</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Stories and Statements Module A</b></li> <li>• TG: L05-07 (pp 39-62)</li> <li>• TG: L26-29 (pp 241-272)</li> <li>• TG: Post Assessment L19-30 (pp 273-278)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.4.1.10.	<p>Create grade-level real-world appropriate story problems using multiple strategies including simple ratios, justify the reason for choosing a particular strategy and present results.</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Stories and Statements Module A</b></li> <li>• TG: Post Assessment L01-07 (pp 63-67)</li> </ul>
CONTENT STANDARD / COURSE	WV.MA.S.4.2.	<p>Algebra: Through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics, students will demonstrate understanding of patterns, relations and functions, represent and analyze mathematical situations and structures</p>

**Math Out of the Box® Correlation to West Virginia  
Content Standards and Objectives for Mathematics  
Grades K-5**

		using algebraic symbols, use mathematical models to represent and understand quantitative relationships, and analyze change in various contexts.
CONTENT STANDARD / OBJECTIVE	MA.O.4.2.1.	<p>Determine the rule and explain how change in one variable relates to the change in the second variable, given an input/output model using two operations.</p> <ul style="list-style-type: none"> <li>• <b>Developing Algebraic Thinking: Signs and Symbols</b></li> <li>• TG: Unit Pre Assessment (pp xxiii-xxxiii)</li> <li>• TG: L04-06 (pp 43-70)</li> <li>• TG: Post Assessment L01-03 (pp 4-5)</li> <li>• TG: Post Assessment L04-06 (pp 40-41)</li> <li>• TG: Post Assessment L07-10 (pp 74-75)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.4.2.2.	<p>Recognize and describe relationships in which quantities change proportionally.</p> <ul style="list-style-type: none"> <li>• <b>Developing Algebraic Thinking: Signs and Symbols</b></li> <li>• TG: L04-06 (pp 43-70)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.4.2.3.	<p>Represent the idea of a variable as an unknown quantity using a letter, write an expression using a variable to describe a real-world situation.</p> <ul style="list-style-type: none"> <li>• <b>Developing Algebraic Thinking: Signs and Symbols</b></li> <li>• TG: L06 (pp 63-70)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.4.2.4.	<p>Solve real-world problems involving order of operations including grouping symbols and the four operations.</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Stories and Statements Module A</b></li> <li>• TG: L01-02 (pp 5-22)</li> <li>• TG: L04-06 (pp 31-58)</li> </ul>
CONTENT STANDARD / COURSE	WV.MA.S.4.3.	<p>Geometry: Through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics, students will analyze characteristics and properties of two- and three-dimensional geometric shapes and develop mathematical arguments about geometric relationships, specify locations and describe spatial relationships using coordinate geometry and other representational systems, apply transformations and use symmetry to analyze mathematical situations, and solve problems using visualization, spatial reasoning, and geometric modeling.</p>
CONTENT STANDARD / OBJECTIVE	MA.O.4.3.1.	<p>Identify, classify, compare and contrast two-dimensional (including quadrilateral shapes) and three-dimensional geometric figures according to attributes.</p> <ul style="list-style-type: none"> <li>• <b>Developing Geometric Logic: Corners and Containers</b></li> <li>• TG: Unit Pre Assessment (pp xxiv-xxxii)</li> <li>• TG: L01-06 (pp 7-63)</li> <li>• TG: L10 (pp 91-100)</li> <li>• TG: L20 (pp 179-183)</li> <li>• TG: Post Assessment L01-04 (pp 5-6)</li> <li>• TG: Post Assessment L05-09 (pp 47-48)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.4.3.2.	<p>Recognize and describe three-dimensional objects from different perspectives.</p> <ul style="list-style-type: none"> <li>• <b>Developing Geometric Logic: Corners and Containers</b></li> </ul>

**Math Out of the Box® Correlation to West Virginia  
Content Standards and Objectives for Mathematics  
Grades K-5**

		<ul style="list-style-type: none"> <li>• TG: L01-04 (pp 7-42)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.4.3.3.	<p>Identify, draw, label, compare and contrast, and classify lines (intersecting, parallel, and perpendicular) angles (acute, right, obtuse, and straight)</p> <ul style="list-style-type: none"> <li>• <b>Developing Geometric Logic: Corners and Containers</b></li> <li>• TG: Unit Pre Assessment (pp xxiv-xxxii)</li> <li>• TG: L06-07 (pp 57-72)</li> <li>• TG: Post Assessment L05-09 (pp 47-48)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.4.3.4.	<p>Identify and create a two-dimensional design with one line of symmetry.</p> <ul style="list-style-type: none"> <li>• <b>Developing Geometric Logic: Corners and Containers</b></li> <li>• TG: Unit Pre Assessment (pp xxiv-xxxii)</li> <li>• TG: L14 (pp 131-137)</li> <li>• TG: Post Assessment L13-16 (pp 118-119)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.4.3.5.	<p>Graph/plot ordered pairs on a first-quadrant grid and use the coordinate system to specify location and describe path.</p> <ul style="list-style-type: none"> <li>• <b>Developing Geometric Logic: Corners and Containers</b></li> <li>• TG: Unit Pre Assessment (pp xxiv-xxxii)</li> <li>• TG: L17-19 (pp 159-178)</li> <li>• TG: Post Assessment L17-20 (pp 156-158)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.4.3.7.	<p>Select, analyze and justify appropriate use of transformations (translations, rotations, flips) to solve geometric problems including congruency and tiling (tessellations).</p> <ul style="list-style-type: none"> <li>• <b>Developing Geometric Logic: Corners and Containers</b></li> <li>• TG: Unit Pre Assessment (pp xxiv-xxxii)</li> <li>• TG: L13-16 (pp 121-152)</li> <li>• TG: Post Assessment L13-16 (pp 118-119)</li> </ul>
CONTENT STANDARD / COURSE	WV.MA.S.4.4.	<p>Measurement: Through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics, students will demonstrate understanding of measurable attributes of objects and the units, systems, and processes of measurement, and apply appropriate techniques, tools and formulas to determine measurements.</p>
CONTENT STANDARD / OBJECTIVE	MA.O.4.4.1.	<p>Select appropriate measuring tools, apply and convert standard units within a system to estimate, measure, compare and order real-world measurements including: lengths using customary (to the nearest one-fourth inch) and metric units, weight, capacity, temperature, and justify and present results.</p> <ul style="list-style-type: none"> <li>• <b>Developing Measurement Benchmarks: Inside and Outside</b></li> <li>• TG: Unit Pre Assessment (pp xxiii-xxviii)</li> <li>• TG: L01-05 (pp 7-60)</li> <li>• TG: L11 (pp 115-126)</li> <li>• TG: L17-19 (pp 171-192)</li> <li>• TG: Post Assessment L11-14 (p 114)</li> <li>• TG: Post Assessment L15-20 (pp 155-156)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.4.4.2.	<p>Quantify area by finding the total number of same sized units that cover a shape, develop a rule and justify the formula for the area of a rectangle using the area model representing multiplication.</p>

**Math Out of the Box® Correlation to West Virginia  
Content Standards and Objectives for Mathematics  
Grades K-5**

		<ul style="list-style-type: none"> <li>• <b>Developing Geometric Logic: Corners and Containers</b></li> <li>• TG: Unit Pre Assessment (pp xxiii-xxviii)</li> <li>• TG: L11-12 (pp 101-114)</li> <li>• TG: L07-08 (pp 75-94)</li> <li>• TG: Post Assessment L07-10 (pp 72-73)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.4.4.3.	<p>Read time to the minute, calculate elapsed time in hours/minutes within a 24-hour period.</p> <ul style="list-style-type: none"> <li>• <b>Developing Measurement Benchmarks: Inside and Outside</b></li> <li>• TG: Unit Pre Assessment (pp xxiii-xxviii)</li> <li>• TG: L12-14 (pp 127-150)</li> <li>• TG: Post Assessment L11-14 (p 114)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.4.4.4.	<p>Given real-world situations, count coins and bills and determine correct change.</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Stories and Statements Module B</b></li> <li>• TG: L15 (pp 133-140)</li> </ul>
CONTENT STANDARD / COURSE	WV.MA.S.4.5.	<p>Data Analysis and Probability: Through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics, students will: formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them, select and use appropriate statistical methods to analyze data, develop and evaluate inferences and predictions that are based on models, and apply and demonstrate an understanding of basic concepts of probability.</p>
CONTENT STANDARD / OBJECTIVE	MA.O.4.5.2.	<p>Pose a grade-appropriate question that can be addressed with data, collect, organize, display, and analyze data in order to answer the question.</p> <ul style="list-style-type: none"> <li>• <b>Developing Algebraic Thinking: Signs and Symbols</b></li> <li>• TG: L13 (pp 129-136)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.4.5.3.	<p>Design and conduct a simple probability experiment using concrete objects, examine and list all possible combinations using a tree diagram, represent the outcomes as a ratio and present the results.</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Stories and Statements Module B</b></li> <li>• TG: L19-21 (pp 177-198)</li> <li>• TG: Post Assessment L19-21 (p 199)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.4.5.4.	<p>Solve real world problems using mean, median and mode.</p> <ul style="list-style-type: none"> <li>• <b>Developing Algebraic Thinking: Signs and Symbols</b></li> <li>• TG: Unit Pre Assessment (pp xxiii-xxxiii)</li> <li>• TG: Post Assessment L14-16 (pp 140-141)</li> </ul>

## Math Out of the Box® Correlation to West Virginia Content Standards and Objectives for Mathematics Grades K-5

### Grade 5

CONTENT STANDARD / COURSE	WV.MA.S.5.1.	Number and Operations: Through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics, students will demonstrate understanding of numbers, ways of representing numbers, and relationships among numbers and number systems, demonstrate meanings of operations and how they relate to one another, and compute fluently and make reasonable estimates.
CONTENT STANDARD / OBJECTIVE	MA.O.5.1.1.	<p>Read, write, order and compare all whole numbers, fractions, mixed numbers and decimals using multiple strategies (e.g., symbols, manipulatives, number line).</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Values and Variables Module A</b></li> <li>• TG: L10-14 (pp 93-132)</li> <li>• TG: Post Assessment L09-14 (pp 133-134)</li> <li>• <b>Developing Number Concepts: Values and Variables Module B</b></li> <li>• TG: L01-16 (pp 5-144)</li> <li>• TG: Post Assessment L05-12 (pp 110-111)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.5.1.2.	<p>Demonstrate an understanding of place value of each digit utilizing standard and expanded form in any whole number using powers of 10 [(3 X 10 to the 5th) + (4 X 10 to the 3rd) + 7 X 10 to the 2nd) + (1 X 10 to the 1st) + 6].</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Values and Variables Module A</b></li> <li>• TG: L09 (pp 85-92)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.5.1.3.	<p>Estimate solutions to problems involving whole numbers, decimals, fractions, and percents to determine reasonableness using benchmarks.</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Values and Variables Module A</b></li> <li>• TG: L15-18 (pp 139-174)</li> <li>• TG: L27 (pp 251-257)</li> <li>• <b>Developing Number Concepts: Values and Variables Module B</b></li> <li>• TG: L09-10 (pp 81-93)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.5.1.4.	<p>Use inductive reasoning to identify the divisibility rules of 2, 3, 5, 9 and 10 and apply the rules to solve application problems.</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Values and Variables Module A</b></li> <li>• TG: L24-27 (pp 221-257)</li> <li>• TG: Post Assessment L21-27 (pp 258-260)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.5.1.5.	<p>Determine and apply greatest common factor and lowest common multiple to write equivalent fractions and to real-world problem situations.</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Values and Variables Module B</b></li> <li>• TG: L01-16 (pp 5-144)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.5.1.6.	<p>Model and write equivalencies of fractions decimals, percents, and ratios.</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Values and Variables Module A</b></li> <li>• TG: L12-14 (pp 111-132)</li> <li>• <b>Developing Number Concepts: Values and Variables Module B</b></li> <li>• TG: L01-16 (pp 5-144)</li> <li>• TG: Post Assessment L13-16 (pp 145-146)</li> </ul>

**Math Out of the Box® Correlation to West Virginia  
Content Standards and Objectives for Mathematics  
Grades K-5**

CONTENT STANDARD / OBJECTIVE	MA.O.5.1.7.	Analyze and solve application problems and justify reasonableness of solution in problems involving addition and subtraction of: fractions and mixed numbers, decimals. <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Values and Variables Module A</b></li> <li>• TG: L16-17 (pp 149-166)</li> <li>• TG: L19-20 (pp 175-188)</li> <li>• TG: Post Assessment L15-20 (pp 189-190)</li> <li>• <b>Developing Number Concepts: Values and Variables Module B</b></li> <li>• TG: L10-12 (pp 87-109)</li> <li>• TG: Post Assessment L05-12 (pp 110-111)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.5.1.8.	Apply the distributive property as it relates to multiplication over addition. <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Values and Variables Module A</b></li> <li>• TG: L01-08 (pp 5-78)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.5.1.9.	Solve multi-digit whole number division problems using a variety of strategies, including the standard algorithm and justify the solutions. <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Values and Variables Module A</b></li> <li>• TG: L07 (pp 63-72)</li> <li>• TG: L24-27 (pp 221-257)</li> <li>• TG: Post Assessment L21-27 (pp 258-260)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.5.1.10.	Demonstrate fluency in addition, subtraction, multiplication and division of whole numbers. <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Values and Variables Module A</b></li> <li>• TG: L01-30 (pp 5-287)</li> <li>• TG: Post Assessment L01-08 (pp 79-80)</li> <li>• TG: Post Assessment L15-20 (pp 189-190)</li> <li>• TG: Post Assessment L21-27 (pp 258-260)</li> <li>• <b>Developing Number Concepts: Values and Variables Module B</b></li> <li>• TG: L01-24 (pp 5-213)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.5.1.11.	Solve real-world problems involving whole numbers, decimals and fractions using multiple strategies and justify the reasonableness by estimation. <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Values and Variables Module A</b></li> <li>• TG: L01-02 (pp 5-24)</li> <li>• TG: L04-05 (pp 35-52)</li> <li>• TG: L07-08 (pp 63-78)</li> <li>• TG: L16-17 (pp 149-166)</li> <li>• TG: L19-20 (pp 175-188)</li> <li>• TG: L23-27 (pp 215-257)</li> <li>• TG: Post Assessment L15-20 (pp 189-190)</li> <li>• TG: Post Assessment L21-27 (pp 258-260)</li> <li>• <b>Developing Number Concepts: Values and Variables Module B</b></li> <li>• TG: L10-12 (pp 87-109)</li> <li>• TG: Post Assessment L05-12 (pp 110-111)</li> </ul>
CONTENT STANDARD / COURSE	WV.MA.S.5.2.	Algebra: Through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics, students will demonstrate understanding of patterns, relations and functions, represent and analyze mathematical situations and structures using algebraic symbols, use mathematical models to represent and understand quantitative relationships, and analyze change in various contexts.

## Math Out of the Box® Correlation to West Virginia Content Standards and Objectives for Mathematics Grades K-5

CONTENT STANDARD / OBJECTIVE	MA.O.5.2.1.	<p>Use inductive reasoning to find missing elements in a variety of patterns (e.g., square numbers, arithmetic sequences).</p> <ul style="list-style-type: none"> <li>• <b>Developing Algebraic Thinking: Steps and Distance</b></li> <li>• TG: Unit Pre Assessment (pp xxiii-xxxiii)</li> <li>• TG: L02-06 (pp 19-60)</li> <li>• TG: Post Assessment L01-03 (pp 4-5)</li> <li>• TG: Post Assessment L04-06 (p 38)</li> <li>• TG: Post Assessment L07-10 (pp 64-65)</li> <li>• <b>Developing Number Concepts: Values and Variables Module A</b></li> <li>• TG: L09 (pp 85-92)</li> <li>• TG: L24-25 (pp 221-240)</li> <li>• TG: L28-29 (pp 265-280)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.5.2.2.	<p>Given an input/output model using two operations, determine the rule, output or input.</p> <ul style="list-style-type: none"> <li>• <b>Developing Algebraic Thinking: Steps and Distance</b></li> <li>• TG: Unit Pre Assessment (pp xxiii-xxxiii)</li> <li>• TG: Post Assessment L01-03 (pp 4-5)</li> <li>• TG: Post Assessment L04-06 (p 38)</li> <li>• TG: Post Assessment L07-10 (pp 64-65)</li> <li>• <b>Developing Number Concepts: Values and Variables Module B</b></li> <li>• TG: L19 (pp 165-171)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.5.2.3.	<p>Solve simple equations and inequalities using patterns and models of real-world situations, create graphs on number lines of the equations and interpret the results.</p> <ul style="list-style-type: none"> <li>• <b>Developing Algebraic Thinking: Steps and Distance</b></li> <li>• TG: L04-06 (pp 39-60)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.5.2.4.	<p>Model identify and describe square, prime and composite numbers.</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Values and Variables Module A</b></li> <li>• TG: L28-30 (pp 265-287)</li> <li>• TG: Post Assessment L28-30 (p 288)</li> <li>• <b>Developing Number Concepts: Values and Variables Module B</b></li> <li>• TG: L01-02 (pp 5-24)</li> </ul>
CONTENT STANDARD / COURSE	WV.MA.S.5.3.	<p>Geometry: Through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics, students will analyze characteristics and properties of two- and three-dimensional geometric shapes and develop mathematical arguments about geometric relationships, specify locations and describe spatial relationships using coordinate geometry and other representational systems, apply transformations and use symmetry to analyze mathematical situations, and solve problems using visualization, spatial reasoning, and geometric modeling.</p>
CONTENT STANDARD / OBJECTIVE	MA.O.5.3.1.	<p>Classify and compare triangles by sides and angles; measure the angles of a triangle using a protractor.</p> <ul style="list-style-type: none"> <li>• <b>Developing Geometric Logic: Conjectures and Transformations</b></li> <li>• TG: L08-09 (pp 79-93)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.5.3.2.	<p>Construct and analyze three-dimensional shapes using properties (i.e. edges,</p>

**Math Out of the Box® Correlation to West Virginia  
Content Standards and Objectives for Mathematics  
Grades K-5**

		<p>faces or vertices).</p> <ul style="list-style-type: none"> <li>• <b>Developing Geometric Logic: Conjectures and Transformations</b></li> <li>• TG: L01 (pp 7-15)</li> <li>• TG: L05 (pp 45-50)</li> <li>• TG: L20 (pp 189-195)</li> <li>• <b>Developing Measurement Benchmarks: Tools and Time</b></li> <li>• TG: L10 (pp 81-88)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.5.3.3.	<p>Create a design with more than one line of symmetry.</p> <ul style="list-style-type: none"> <li>• <b>Developing Geometric Logic: Conjectures and Transformations</b></li> <li>• TG: L15 (pp 143-149)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.5.3.5.	<p>Draw a similar figure using a scale, given a real-world situation.</p> <ul style="list-style-type: none"> <li>• <b>Developing Geometric Logic: Conjectures and Transformations</b></li> <li>• TG: L17 (pp 165-171)</li> </ul>
CONTENT STANDARD / COURSE	WV.MA.S.5.4.	<p>Measurement: Through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics, students will demonstrate understanding of measurable attributes of objects and the units, systems, and processes of measurement, and apply appropriate techniques, tools and formulas to determine measurements.</p>
CONTENT STANDARD / OBJECTIVE	MA.O.5.4.1.	<p>Estimate, measure, compare, order and draw lengths of real objects in parts of an inch up to 1/8 of an inch and millimeters.</p> <ul style="list-style-type: none"> <li>• <b>Developing Measurement Benchmarks: Tools and Time</b></li> <li>• TG: Unit Pre Assessment (pp xxii-xxix)</li> <li>• TG: L01-05 (pp 7-54)</li> <li>• TG: Post Assessment L01-04 (pp 4-5)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.5.4.2.	<p>Model, calculate and compare area of triangles and parallelograms using multiples strategies (including, but not limited to, formulas).</p> <ul style="list-style-type: none"> <li>• <b>Developing Geometric Logic: Conjectures and Transformations</b></li> <li>• TG: L12 (pp 115-122)</li> <li>• <b>Developing Measurement Benchmarks: Tools and Time</b></li> <li>• TG: Unit Pre Assessment (pp xxii-xxix)</li> <li>• TG: L07-08 (pp 61-74)</li> <li>• TG: Post Assessment L05-10 (pp 43-44)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.5.4.3.	<p>Develop strategies (i.e. finding number of same sized units of volume) to determine the volume of a rectangular prism; solve application problems involving estimating or measuring volume of rectangular prisms.</p> <ul style="list-style-type: none"> <li>• <b>Developing Measurement Benchmarks: Tools and Time</b></li> <li>• TG: L10 (pp 81-88)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.5.4.4.	<p>Describe the effects on the measurements of a two-dimensional shape (such as its perimeter and area) when the shape is changed in some way, justify changes.</p> <ul style="list-style-type: none"> <li>• <b>Developing Geometric Logic: Conjectures and Transformations</b></li> <li>• TG: L12 (pp 115-122)</li> <li>• <b>Developing Measurement Benchmarks: Tools and Time</b></li> </ul>

**Math Out of the Box® Correlation to West Virginia  
Content Standards and Objectives for Mathematics  
Grades K-5**

		<ul style="list-style-type: none"> <li>• TG: L07 (pp 61-68)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.5.4.5.	<p>Solve real-world problems requiring conversions within a system of measurement.</p> <ul style="list-style-type: none"> <li>• <b>Developing Measurement Benchmarks: Tools and Time</b></li> <li>• TG: L14-16 (pp 115-140)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.5.4.6.	<p>Estimate and/or measure the weight/mass of real objects in ounces, pounds, grams, and kilograms.</p> <ul style="list-style-type: none"> <li>• <b>Developing Measurement Benchmarks: Tools and Time</b></li> <li>• TG: Unit Pre Assessment (pp xxii-xxix)</li> <li>• TG: L19 (pp 153-158)</li> <li>• TG: Post Assessment L16-20 (pp 133-134)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.5.4.7.	<p>Collect, record, estimate and calculate elapsed times from real-world situations (with and without technology).</p> <ul style="list-style-type: none"> <li>• <b>Developing Measurement Benchmarks: Tools and Time</b></li> <li>• TG: Unit Pre Assessment (pp xxii-xxix)</li> <li>• TG: L11-13 (pp 95-114)</li> <li>• TG: Post Assessment L11-15 (pp 93-94)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.5.4.8.	<p>Determine the actual measurements of a figure from a scale drawing, using multiple strategies.</p> <ul style="list-style-type: none"> <li>• <b>Developing Geometric Logic: Conjectures and Transformations</b></li> <li>• TG: L06-10 (pp 59-101)</li> </ul>
CONTENT STANDARD / COURSE	WV.MA.S.5.5.	<p>Data Analysis and Probability: Through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics, students will formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them, select and use appropriate statistical methods to analyze data, develop and evaluate inferences and predictions that are based on models, and apply and demonstrate an understanding of basic concepts of probability.</p>
CONTENT STANDARD / OBJECTIVE	MA.O.5.5.1.	<p>Construct a sample space and make a hypothesis as to the probability of a real life situation overtime, test the prediction with experimentation, and present conclusions (with and without technology).</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Values and Variables Module B</b></li> <li>• TG: L20 (pp 179-185)</li> <li>• TG: L22 (pp 193-199)</li> <li>• TG: Post Assessment L20-24 (pp 214)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.5.5.2.	<p>Construct, read, and interpret tables, charts, and graphs including stem and leaf plots to draw reasonable inferences or verify predictions.</p> <ul style="list-style-type: none"> <li>• <b>Developing Algebraic Thinking: Steps and Distance</b></li> <li>• TG: Unit Pre Assessment (pp xxiii-xxxiii)</li> <li>• TG: L17-19 (pp 165-190)</li> <li>• TG: Post Assessment L11-13 (pp 102-103)</li> <li>• TG: Post Assessment L17-20 (pp 162-163)</li> <li>• <b>Developing Geometric Logic: Conjectures and Transformations</b></li> <li>• TG: L02 (pp (17-25)</li> <li>• TG: L12 (pp 115-122)</li> </ul>

**Math Out of the Box® Correlation to West Virginia  
Content Standards and Objectives for Mathematics  
Grades K-5**

		<ul style="list-style-type: none"> <li>• <b>Developing Measurement Benchmarks: Tools and Time</b></li> <li>• TG: Unit Pre Assessment (pp xxii-xxix)</li> <li>• TG: L07 (pp 61-68)</li> <li>• TG: L15 (pp 123-128)</li> <li>• TG: Post Assessment L11-15 (pp 93-94)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.5.5.3.	<p>Collect and organize real-world data to construct a circle graph (with and without technology), present data and draw conclusions.</p> <ul style="list-style-type: none"> <li>• <b>Developing Number Concepts: Values and Variables Module B</b></li> <li>• TG: L15 (pp 129-135)</li> <li>• TG: Post Assessment L13-16 (pp 145-146)</li> </ul>
CONTENT STANDARD / OBJECTIVE	MA.O.5.5.4.	<p>Collect and analyze data using mean, median and mode to determine the best statistical measure.</p> <ul style="list-style-type: none"> <li>• <b>Developing Algebraic Thinking: Steps and Distance</b></li> <li>• TG: L12-13 (pp 113-130)</li> </ul>

**Carolina Curriculum Publishing**

2700 York Road • Burlington NC 27215-3398  
800.227.1150 • [www.carolinacurriculum.com](http://www.carolinacurriculum.com)