CURRICULUM
Correlation

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OVERVIEW

This document provides a detailed correlation of WATERFORD MATH & SCIENCE, CLASSROOM ADVANTAGE *and* INDIANA MATHEMATICS ACADEMIC STANDARDS.

Waterford Math & Science provides young learners comprehensive instruction in the major areas of early math: numbers and operation, geometry, algebraic reasoning, geometry and measurement, and data analysis. The integrated science curriculum emphasizes exploration and the scientific method while teaching earth, life, and physical science.

Classroom Advantage puts Waterford's award-winning, comprehensive online reading curriculum at teachers' fingertips for use with whole- and small-group lessons.

Over the years, Waterford curriculum has been formally evaluated in dozens of studies. In each study, Waterford classrooms outperform comparison-group classes in most, if not all, of the examined measures. In particular, Waterford stands out for providing significant learning gains for at-risk students and English Language Learners.

PERSONALIZED LEARNING FOR STUDENTS

Students will experience the curriculum listed in this correlation chart based on their individual needs, as determined by their performance as follows:

Placement Assessment: Students begin their experience with a Placement Tool. Based on rigorous research, the Placement Tool evaluates a student's abilities and determines an appropriate starting point in the following levels:

- Level One (kindergarten)
- Level Two (first grade)
- Level Three (second grade)

Ongoing Assessment: Waterford Math & Science provides a mastery-based curriculum. As such, Waterford automatically provides instruction, remediation, and review to support students toward mastery of learning objectives based on student performance in ongoing assessment.

COLLABORATIVE LEARNING FOR GROUPS

Teachers can easily create and share Playlists of Waterford activities to use with whole and small-group lessons. Tools in Classroom Advantage make it easy and fun to present activities on an interactive whiteboard or other projection device. In addition, teachers have access to a library of PDF Teacher Materials with lesson plans and reproducibles they can use on and off the computer.

DOCUMENT ORGANIZATION

This document includes a correlation chart with the following columns:

- Indiana Standard: lists the standard.
- Waterford Digital Resources: lists Waterford online activities presented to students during their personalized instruction and also available for collaborative instruction in Classroom Advantage.
- Waterford Print Resources: lists PDF materials and activities that can be viewed in the Waterford Manager by using the Search feature in the Curriculum Tab.

INDIANA STANDARD	WATERFORD DIGITAL RESOURCES	WATERFORD PRINT RESOURCES
KINDERGARTEN		
NUMBER SENSE		
K.NS.1: Count to at least 100 by ones and tens and count on by one from any number.	• Songs (see list at end of document) • Counting Songs (see list at end of document) • Books (see list at end of document) • Number Counting Extended Practice: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 • Order Numbers 1-5, 6-10: Instruction, Practice, Assessment, Play & Practice, Application • Order Numbers Extended Play: 0-10, 0-15, 0-20 • Count on by 1: Instruction, Practice, Assessment • Number Sense and Recognition: Instruction (30-39; 40-49; 50-59; 60-69; 70-79; 80-89; 90-99) • Skip Count by 10: Instruction, Extension, Assessment, Practice, Extended Play, Story Problem Solving, Navajo Beans • Bug Bits 1-10 • Moving Target: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 • Number Instruction, Practice, Assessment: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 • Picture and Shape Puzzle: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 • Telephone • Counting Puzzle: 1-10, 11-20 • Dot to Dot: 1-10, 0-9, 6-15, 11-20 • Number Line (0-10): Instruction, Assessment, Extension • Number Line (10-20): Instruction, Assessment, Extension • Greater Than, Less Than (1-digit Numbers) Instruction	• K.CC.1.pdf: Count to 100 by ones and tens. – Missing Numbers *Practice Pages:* – Count On By 1 – Numbers 1-5 – Numbers 6-10 – Math Newsletters – Count By 10s – Numbers 60-69 – I Can Count to 100

NUMBER SENSE *continued*		
K.NS.2: Write whole numbers from 0 to 20 and recognize number words from 0 to 10. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).	• Number Counting: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 • Books (see list at end of document) • Counting Songs (see list at end of document) • Moving Target 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 • Number Instruction, Practice, Assessment 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 • Number Recognition and Sense 0-9, 10-19, 20-29, 30-39; 40-49: Pre-Assessment, Instruction, Assessment, Practice, Extended Play • Picture and Shape Puzzle: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 • Counting Puzzle: 0-10, 11-20 • Telephone - Number 9	• K.CC.3.pdf: Write numbers from 0 to 20. Represent a number of objects with a written numeral. *Practice Pages:* – Numbers Practice: 1-20 (one per number) – Numbers 1-5 – Add groups – Count on by 1 – Number Writing Practice: 0-20 (one per number)
K.NS.3: Find the number that is one more than or one less than any whole number up to 20.	• Number Instruction, Practice, Assessment 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 • Number Recognition and Sense 0-9, 10-19, 20-29, 30-39; 40-49: Pre-Assessment, Instruction, Assessment, Practice, Extended Play	• K.CC.3.pdf: Write numbers from 0 to 20. Represent a number of objects with a written numeral. *Practice Pages:* – Numbers Practice: 1-20 (one per number) – Numbers 1-5 – Add groups – Count on by 1 – Number Writing Practice: 0-20 (one per number)

NUMBER SENSE *continued*		
K.NS.4: Say the number names in standard order when counting objects, pairing each object with one and only one number name and each number name with one and only one object. Understand that the last number name said describes the number of objects counted and that the number of objects is the same regardless of their arrangement or the order in which they were counted.	• Make and Count Groups 1-5: Instruction, Practice, Assessment • Number Counting Extended Practice: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 • Order Numbers 1-5: Practice, Extended Play • Order Numbers 0-10, 0-15, 0-20: Extended Play • Make and Count Groups 6-10: Instruction, Practice, Assessment • Books (see list at the end of document) • Counting Songs (see list at the end of document) • Moving Target: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 • Number Instruction, Practice, Assessment: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 • Number Recognition and Sense 0-9, 10-19, 20-29, 30-39; 40-49: Pre-Assessment, Instruction, Assessment, Practice, Extended Play • Picture and Shape Puzzle: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13,4, 15, 16, 17, 18, 19, 20 • Counting Puzzle: 1-10, 11-20 • Dot-to-dot: 1-10, 0-9, 6-15, 11-20 • Number Chart 0-9, 0-19: Instruction, Assessment, Review	• K.CC.4a.pdf: When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object. – Number Walk
K.NS.5: Count up to 20 objects arranged in a line, a rectangular array, or a circle. Count up to 10 objects in a scattered configuration. Count out the number of objects, given a number from 1 to 20.	• Make and Count Groups 1-5: Instruction, Practice, Assessment • Make and Count Groups 6-10: Instruction, Practice, Assessment • Number Instruction, Practice, Assessment: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20	• K.CC.5.pdf: Count to answer “how many?” questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects. – Hoop Addition
K.NS.6: Recognize sets of 1 to 10 objects in patterned arrangements and tell how many without counting.	• Number Instruction, Practice, Assessment: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 **Classroom Advantage Only** • Dominoes 0-10	

NUMBER SENSE *continued*		
K.NS.7: Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group (e.g., by using matching and counting strategies).	• More Than, Fewer Than: Instruction, Practice, Assessment, Pre-assessment, Practice & Play • More Than: Introduction, Instruction, Practice, Assessment • Fewer Than: Introduction, Instruction, Practice, Assessment • Make a Math Story: More Than, Fewer Than • Book: For the Birds	• K.CC.6.pdf: Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group. – Beans and More – More Than Buttons – Short Names, Long Names – Noodle Necklaces – Grouped Do Count! – More Than, Fewer Than, Equal *Practice Pages:* – Which Has More? 1 – Fewer Than – More or Fewer – Which Has More? 2 – Greater or Less – More Than/Fewer Than Flashcard Sets
K.NS.8: Compare the values of two numbers from 1 to 20 presented as written numerals.	• Order Numbers 1-5: Practice, Extended Play, Assessment, Application, Play and Practice • Order Numbers 6-10: Practice, Extended Play, Assessment, Application, Play and Practice • Book: For the Birds • More Than, Fewer Than: Instruction, Practice, Assessment, Pre-assess • Greater Than, Less Than (1-digit Numbers): Pre-assessment, Assessment, Review, Instruction	• K.CC.7.pdf: Compare two numbers between 1 and 10 presented as written numerals. – More or Less Spinner – Catch Me If You Can! *Practice Pages:* – Greater or Less – Less or Greater – Spinner – Board game – Number cards
K.NS.9: Use correctly the words for comparison, including: one and many; none, some and all; more and less; most and least; and equal to, more than and less than.	• More Than, Fewer Than: Instruction, Practice, Assessment, Pre-assess • Greater Than, Less Than (1-digit Numbers): Pre-assessment, Assessment, Review, Instruction • More Than, Fewer Than song	• K.CC.7.pdf: Compare two numbers between 1 and 10 presented as written numerals. – More or Less Spinner – Catch Me If You Can! *Practice Pages:* – Greater or Less – Less or Greater – Spinner – Board game – Number cards
K.NS.10: Separate sets of ten or fewer objects into equal groups.	• Fractions song • Equal-parts Fractions	

NUMBER SENSE *continued*		
K.NS.11: Develop initial understandings of place value and the base 10 number system by showing equivalent forms of whole numbers from 10 to 20 as groups of tens and ones using objects and drawings.	• Place Value (10-19)	• K.NBT.1.pdf: Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation; understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones. *Practice Pages:* – Place Value 11-19 – Place Value 11-19 (2)
COMPUTATION AND ALGEBRAIC THINKING		
K.CA.1: Use objects, drawings, mental images, sounds, etc., to represent addition and subtraction within 10.	• Add Groups: Instruction, Practice, Assessment, Application, Addition, Review, Extended Play • Subtract Groups • Add Groups to 5 • Add Groups to 10 • Minuends to 5 • Minuends to 9 • Sums to 4-10 and Subtract from 4-9 • Act Out Addition/Subtraction	
K.CA.2: Solve real-world problems that involve addition and subtraction within 10 (e.g., by using objects or drawings to represent the problem).	• Add Groups to 5: Instruction, Practice, Assessment, Application, Pirates Can Add Song • Add Groups to 10: Introduction, Instruction, Practice, Assessment, On the Bayou Song • Minuends to 5: Introduction, Instruction, Practice, Assessment, Review, Five Delicious Muffins, Bakery Subtraction • Minuends to 9: Introduction, Instruction, Practice, Assessment, Application, Circus Subtraction • Add Groups: Instruction, Practice, Assessment, Application, Addition, Review, Extended Play • Subtract Groups: Instruction, Assessment, Application, Subtract Those Cars • Sums to 4-10 and Subtract from 4-9	• K.OA.2.pdf: Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem. – Additions Stories – Act It Out Stories – Manipulative Stories – Edible Stories – One, Two, Three, Show – Circus Subtraction – Partner Subtraction – Farmer's Market – Green and Speckled Frogs – Cars and Trucks Subtraction – Yummy Subtraction

COMPUTATION AND ALGEBRAIC THINKING *continued*		
K.CA.2 *continued*	• Act Out Addition/Subtraction: Instruction, Assessment • Flower Story Problems: Add 1 and 1-5; Add 3 and 1-5; Add 5 and 1-5; Add 0 and 1-5; Subtract 2 from 2-7; Subtract 4 from 4-9; Add 0 and 6-10; Add 2 and 6-10; Add 4 and 6-10; Subtract 0 from 6-10; Missing addends; Missing minuends and subtrahends • Story Problem Strategies: Add 2 and 1-5; Add 4 and 1-5; Subtract 1 from 1-6; Subtract 3 from 3-8; Subtract 5 from 5-10; Doubles Plus 1, Sums to 10; Doubles, Minuends to 10; Add 1 and 6-10; Add 3 to 6-10; Doubles Sums to 10	*Practice Pages:* – Act Out Addition – Act Out Subtraction – Addition Newsletter – Subtraction Newsletter – Subtraction Flashcards
K.CA.3: Use objects, drawings, etc., to decompose numbers less than or equal to 10 into pairs in more than one way, and record each decomposition with a drawing or an equation (e.g., 5 = 2 + 3 and 5 = 4 + 1). [In Kindergarten, students should see equations and be encouraged to trace them, however, writing equations is not required.]	• Add Groups to 5: Instruction, Practice, Assessment, Application • Add Groups to 10: Introduction, Instruction, Practice, Assessment • Add Groups to 5: Instruction, Practice, Assessment, Application, Pirates Can Add • Minuends to 5: Introduction, Instruction, Practice, Assessment, Review, Five Delicious Muffins, Bakery Subtraction • Add Groups: Instruction, Practice, Assessment, Application, Addition, Review, Extended Play • Subtract Groups: Instruction, Assessment, Application, Subtract Those Cars • Sums to 4, Sums to 5 • Subtract from 4, Subtract from 5 • Minuends to 9: Circus Subtraction • Sums to 10: On the Bayou • Act Out Addition: Instruction, Assessment • Act Out Subtraction: Instruction, Assessment • Mental Math Games: Add 1 and 1-5; Add 2 and 1-5; Add 3 and 1-5; Add 4 and 1-5; Add 5 and 1-5; Add 0 and 1-5; Subtract 1 from 1-6; Subtract 2 from 2-7; Subtract 3 from 3-8; Subtract 4 from 4-9; Subtract 5 from 5-10; Subtract 0 from 0-5	

COMPUTATION AND ALGEBRAIC THINKING *continued*		
K.CA.3 *continued*	• Speed Games: Add 1 to 1-5 Automaticity; Add 2 to 1-5 Automaticity; Add 3 to 1-5 Automaticity; Add 4 to 1-5 Automaticity; Add 5 to 1-5 Automaticity; Add 0 to 1-5 Automaticity; Subtract 1 from 1-6 Automaticity; Subtract 2 from 2-7 Automaticity; Subtract 3 from 3-8 Automaticity; Subtract 4 from 4-9 Automaticity; Subtract 5 from 5-10 Automaticity; Subtract 0 from 0-5 Automaticity	
K.CA.4: Find the number that makes 10 when added to the given number for any number from 1 to 9 (e.g., by using objects or drawings), and record the answer with a drawing or an equation.	• Missing Addends: Instruction, Assessment • Kingdom of Counting: Missing Addends • Flower Story Problems: Missing Addends • Mental Math Games: Missing Addends, Sums to 10	
K.CA.5: Create, extend, and give an appropriate rule for simple repeating and growing patterns with numbers and shapes.	**Classroom Advantage Only** • Train Stations Pattern Song • Patterns • Pattern AB • Pattern ABB • Pattern ABC • Taking Turns with Patterns	
GEOMETRY		
K.G.1: Describe the positions of objects and geometric shapes in space using the terms inside, outside, between, above, below, near, far, under, over, up, down, behind, in front of, next to, to the left of and to the right of.	• Over, Under, Above, Below: Introduction, Instruction, Application, Practice, Assessment • Inside, Outside, Between: Introduction, Instruction, Practice, Assessment, Extended Play • Circle, Square, Triangle, Rectangle: Instruction, Instruction, Application, Play & Practice, Assessment, Review • Songs: Position; Kites; Get Over the Bugs; Shapes, Shapes, Shapes; Up in the Air • Books: The Shape of Things; Imagination Shapes • Star, Semicircle, Octagon, Oval, Diamond: Instruction, Practice, Assessment, Review • Solid Shapes: Application, Play & Practice • World Shapes: Introduction, Instruction, Practice, Assessment, Assessment 2 • Above, Below, Next to, On: Assessment, Review, Extended Play, Play & Practice, Instruction, Positioning • Story Problem Strategies: Shapes	• K.G.1.pdf: Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to. – Shapes Scavenger Hunt

GEOMETRY *continued*		
K.G.2: Compare two- and three-dimensional shapes in different sizes and orientations, using informal language to describe their similarities, differ	• Circle, Square, Triangle, Rectangle Instruction • Book: The Shape of Things • Songs: Kites; Shapes, Shapes, Shapes • Circle, Square, Triangle, Rectangle: Instruction, Instruction, Application, Play & Practice, Imagination Shapes, Assessment, Review, Kites • Star, Semicircle, Octagon, Oval, Diamond: Instruction, Practice, Assessment, Review • Solid Shapes: Application, Play & Practice • World Shapes: Introduction, Instruction, Practice, Assessment, Assessment 2 • Story Problem Strategies: Shapes. Similar Figures • Space Shapes: Play & Practice, Assessment, Instruction • Congruence: Assessment, Play & Practice, Instruction, Congruent Parts • Tangrams: Play & Practice • Similar Figures: Assessment, Review, Instruction, Corners and Sides song	• K.G.2.pdf: Correctly name shapes regardless of their orientations or overall size. – Shapes Scavenger Hunt – Shapes and Positioning – Shapes Flashcards
K.G.3: Model shapes in the world by composing shapes from objects (e.g., sticks and clay balls) and drawing shapes.	• Solid Shapes: Application, Play & Practice • Space Shapes: Play & Practice, Review, Assessment, Instruction • Geoboard: Play & Practice • Tangrams: Play & Practice	
K.G.4: Compose simple geometric shapes to form larger shap	• Geoboard: Play & Practice • Tangrams: Play & Practice	

MEASUREMENT		
K.M.1: Make direct comparisons of the length, capacity, weight, and temperature of objects, and recognize which object is shorter, longer, taller, lighter, heavier, warmer, cooler, or holds more.	• Measuring Plants song • Length Instruction and Assessment • Order Size: Instruction • Capacity: Introduction, Practice, Assessment • Length: Instruction, Assessment • Songs: Savanna Size, Measuring Plants • Big and Little: Introduction, Instruction, Practice, Assessment • Tall and Short: Introduction, Instruction, Practice, Assessment • Heavy and Light: Introduction, Instruction, Practice, Assessment • Size: Application, Play & Practice • Order Size: Introduction, Practice, Assessment, Application	• K.MD.1.pdf: Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. – Filling Table – Order It Up – Straw Rulers – Measuring Walk – Heavy or Light – Make A Balance • K.MD.2.pdf: Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. – Filling Table – Order It Up – Straw Rulers – Measuring Walk – Heavy or Light – Make A Balance – Size Scavenger Hunt – Big and Little Sort – Boxes in a Line – Teddy Bear Line-Up – Magazine Sorting – Tall and Short *Practice Pages:* – Big and Little – Tall and Short – Heavy and Light – Small, Medium, Large – Measuring Length – Measurable Attributes
K.M.2: Understand concepts of time, including: morning, afternoon, evening, today, yesterday, tomorrow, day, week, month, and year. Understand that clocks and calendars are tools that measure time.	• Daily Calendar activities • Clock Hands song • Months of the Year song • Days of the Week song	

DATA ANALYSIS		
K.DA.1: Identify, sort, and classify objects by size, number, and other attributes. Identify objects that do not belong to a particular group and explain the reasoning used.	• Match: Introduction, Instruction, Practice, Assessment • Book: Buttons, Buttons • Matching Application • Songs: Same and Different, All Sorts of Laundry • Sort: Instruction, Practice, Assessment, Review • Logic Game (Sorting)	• K.MD.3.pdf: Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. – Let's Sort *Practice Pages:* – Sort
FIRST GRADE		
NUMBER SENSE		
1.NS.1: Count to at least 120 by ones, fives, and tens from any given number. In this range, read and write numerals and represent a number of objects with a written numeral.	• Number Chart 0-99: Hooray, Hooray for the One Hundredth Day! book • Count On: Instruction, Practice, Assessment, Extension, Play & Practice, Extended Play • Number Recognition and Sense Instruction: 0-9, 10-19, 20-29, 30-39, 40-49, 50-59, 60-69, 70-79, 80-89, 90-99 • Number Chart 0-9: Extension • Number Chart 0-19: Extension • Number Chart 0-89: Extended Play • Number Chart 20-29: Instruction, Assessment • Number Chart 30-39: Instruction, Assessment • Number Chart 40-49: Instruction, Assessment • Number Chart 50-59: Instruction, Assessment, Review • Number Chart 60-69: Instruction, Assessment • Number Chart 70-79: Instruction, Assessment • Number Chart 80-89: Instruction, Assessment • Number Chart 90-99: Instruction, Assessment, Review • Counting On song	• 1.NBT.1.pdf: Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral. – Mystery Numbers *Practice Pages:* – I Can Write Numbers to 99 – Numbers 20–29 – Numbers 30–39 – Numbers 40–49 – Numbers 50–59 – Numbers 60–69 – Counting to 89 *Counting Charts:* – I Can Count to 50 – I Can Count to 100 – I Can Count to 99 – I Can Count to 120

NUMBER SENSE *continued*		
1.NS.2: Understand that 10 can be thought of as a group of ten ones — called a "ten." Understand that the numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones. Understand that the numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).	• Place Value: 10-19 song • Place Value of 2-digit Numbers: Instruction, EP, Story Problem Strategies • Expanded Notation: Instruction, Play & Practice, Assessment • Add with Manipulatives: Add 10 and 6-10 • Flower Story Problems: Add 10 and 6-10 • Place Value: 10-19 song	• 1.NBT.2a.pdf: 10 can be thought of as a bundle of ten ones—called a "ten." – Popsicles to Ten • 1.NBT.2b.pdf: The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones. – Toss It – Make a Number – Numbers Flashcards *Practice Pages:* – Numbers 10-19 – More Numbers 10-19
1.NS.3: Match the ordinal numbers first, second, third, etc., with an ordered set up to 10 items.	• First, Middle, Last • Monster Trucks song • Sequencing Events song • The Circus Came to Town book • Ordinals song • Ordinal Numbers	
1.NS.4: Use place value understanding to compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <.	• Greater Than, Less Than (2-digit Numbers): Pre-assessment, Instruction, Play & Practice, Extension, Assessment • You Be the Teacher: Greater Than, Less Than	
1.NS.5: Find mentally 10 more or 10 less than a given two-digit the number without having to count, and explain the thinking process used to get the answer.	• Add 10 and 6-10 Pre-assessment • Subtract 10 from 10-20 Pre-assessment, Assessment • Add 10 and 6-10 Assessment • Kingdom of Counting: Add 10 and 6-10; Subtract 10 from 10-20 Flower Story Problems: Add 10 and 6-10; Subtract 10 from 10-20	• 1.NBT.5.pdf: Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used. – Ten-O – Toss It – Make a Number *Practice Pages:* – Subtract 10 – Flashcards – Bingo – Addition of Tens

NUMBER SENSE *continued*		
1.NS.6: Show equivalent forms of whole numbers as groups of tens and ones, and understand that the individual digits of a two-digit number represent amounts of tens and ones.	• Add Tens: Instruction, Practice, Assessment • Kingdom of Counting: Doubles, Sums to 20; Doubles plus 1, Sums to 20 • Add with Beads Instruction: Add 1 to 6-10; Add 4 to 6-10; Add 5 to 6-10; Add 9 to 6-10	• 1.NBT.4.pdf: The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones). – Drawing Tens – Beans, Beans, and More Beans – The Kingdome of Popsicle Stick-Filled Purses – Straws and Macaroni – Bean Addition *Practice Pages:* – Newsletter – Adding Tens and Ones – Color Adds Up – Cookies and Milk! – Addition of Two-Digit Numbers – Addition and Subtraction of Large Numbers – 1 set of flashcards
COMPUTATION AND ALGEBRAIC THINKING		
1.CA.1: Demonstrate fluency with addition facts and the corresponding subtraction facts within 20. Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 – 4 = 13 – 3 – 1 = 10 – 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 – 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13). Understand the role of 0 in addition and subtraction.	• Facts about Families book • Fact Families song • Addition Sentences • Subtraction Sentences • Addition and Subtraction Relationship • Missing Addends • Missing Minuends and Subtrahends • Add 3 One-digit Numbers • Subtraction Patterns • Missing Addends, Sums to 10: Mental Math Games • Missing Subtrahends, Differences to 5: Mental Math Games	• 1.OA.6.pdf: Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. – The Three Little Bears – Fact Family Bingo – A Graph of Fact Families – Bean Facts

COMPUTATION AND ALGEBRAIC THINKING *continued*		
1.CA.1 *continued*	• Combination of Pre-assessment, Assessment, Mental Math Games, Kingdom of Counting, Use Manipulatives, Add with Manipulatives, Add Vertical Squares, Add with Beads Instruction, Make 10 Addition Strategy, Make 10 Subtraction Strategy, Use Beads: Add 1 and 1-5, Add 2 and 1-5, Add 3 and 1-5, Add 4 and 1-5, Add 5 and 1-5, Add 0 and 1-5, Subtract 1 from 1-6, Subtract 2 from 2-7, Subtract 3 from 3-8, Subtract 4 from 4-9, Subtract 5 from 5-10, Subtract 0 from 0-5, Add 0 and 6-10, Add 1 and 6-10, Add 2 and 6-10, Add 3 and 6-10, Add 4 and 6-10, Add 5 and 6-10, Add 6 and 6-10, Add 7 and 6-10, Add 8 and 6-10, Add 9 and 6-10, Add 10 and 6-10, Subtract 0 from 6-10, Subtract 1 from 7-11, Subtract 2 from 8-12, Subtract 3 from 9-13, Subtract 4 from 10-14, Subtract 5 from 11-15, Subtract 8 from 8-18, Subtract 4 from 4-9, Subtract 9 from 9-19, Subtract 6 from 6-16, Subtract 7 from 7-17, Subtract 8 from 8-18, Subtract 9 from 9-19, Subtract 10 from 10-20, Commutative Property of Addition, Subtraction Patterns, Make 10, Subtract Doubles to 10, Doubles Sums to 10, Doubles Plus 1 Sums to 10, Doubles Sums to 20, Doubles Plus 1 Sums to 20, Subtract Doubles to 20 • Missing Minuends, Differences to 5 • Missing Minuends, Differences to 10 • Skip Count by 5 • Skip Count by 2 • Addition and Subtraction Fact Families to 10 • Addition and Subtraction Fact Families to 20 • Facts about Families • Addition Sentences • Missing Addends: Instruction • Missing Minuends and Subtrahends • Add 3 One-digit Numbers Subtraction Patterns Instruction • Add 1 and 1-5 • Add 2 and 1-5 • Add 3 and 1-5 • Add 4 and 1-5 • Add 5 and 1-5	*20 Practice Pages:* – Draw a Picture – Addition – Number Pyramid – Subtraction Sentences – Model the Story – Fact Families – Add _ and 1–5 – Add _ and 6–10 – Order Property of Addition – Add Doubles +1 to 11 – Add Doubles to 20 – Add Doubles +1 to 21) – Make 10 – Subtract _ from – Subtract – Subtraction Patterns – Fact Families to 10 – Fact Families to 20 – Add and Subtract Doubles to 10 – Add and Subtract Doubles to 20 *5 sets of flashcards:* – Addition—horizontal – Subtraction—horizontal – Addition—vertical – Subtraction—horizontal

COMPUTATION AND ALGEBRAIC THINKING *continued*		
1.CA.1 *continued*	• Add 0 and 1-5 • Subtract 1 from 1-6 • Subtract 2 from 2-7 • Subtract 3 from 3-8 • Subtract 4 from 4-9 • Subtract 5 from 5-10 • Subtract 0 from 0-5 • Add 0 and 6-10 • Add 1 and 6-10 • Add 2 and 6-10 • Add 3 and 6-10 • Add 4 and 6-10 • Add 5 and 6-10 • Add 5 and 6-10 • Subtract 0 from 6-10 • Subtract 1 from 7-11 • Subtract 2 from 8-12 • Subtract 3 from 9-13 • Subtract 4 from 10-14 • Subtract 5 from 11-15 • Add 6 and 6-10 • Add 7 and 6-10 • Add 8 and 6-10 Add 9 and 6-10 • Add 10 and 6-10 • Subtract 6 from 6-16 • Subtract 7 from 7-17 • Subtract 8 from 8-18 • Subtract 9 from 9-19 • Subtract 10 from 10-20 • Commutative Property of Addition • Subtraction Patterns • Doubles, Sums to 10 • Doubles Plus 1, Sums to 10 • Subtract Doubles to 10 • Make 10 • Doubles, Sums to 20 • Doubles Plus 1, Sums to 20 • Subtract Doubles to 20	

COMPUTATION AND ALGEBRAIC THINKING *continued*		
1.CA.1 *continued*	• Missing Addends • Missing Addends, Sums to 10 • Missing Minuends and Subtrahends • Missing Subtrahends, Differences to 5 • Missing Minuends, Differences to 5 • Missing Minuends, Differences to 10 • Kingdom of Counting: Introduction, Final Adventure • Story Problem Strategies: Subtract 1 from 1-6; Fact Families, • Sums to 10 • Skip Count by 5 • Skip Count by 2 • Addition and Subtraction Fact Families to 10 • Addition and Subtraction Fact Families to 20 • Doubles: 1-5; 6-10	
1.CA.2: Solve real-world problems involving addition and subtraction within 20 in situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all parts of the addition or subtraction problem (e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem).	• Jump Rope Rhymes • Skip Count by 10: Instruction, Assessment, Extended Play • Skip Count by 2: Instruction, Assessment, Extended Play • Count On: Instruction, Practice, Extended Play, Assessment • Counting On song • Circus 20 book	• 1.OA.5.pdf: Relate counting to addition and subtraction. – Skip Counting Chant – Jump Rope Counting *Practice Pages:* – Related Facts (p. 40) – Count by 10s (p. 55) – Count by 5s (p. 56) – Count by 2s (p. 57)
1.CA.3: Create a real-world problem to represent a given equation involving addition and subtraction within 20.	• Problem Solving song • Story Problem Strategies • Problem Solving Strategies • Red Rock, River Rock book • Flower Story Problems	
1.CA.4: Solve real-world problems that call for addition of three whole numbers whose sum is within 20 (e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem).	• Missing Addends: Instruction, Practice, Assessment, Mental Math Games • Missing Minuends and Subtrahends: Instruction, Practice, Assessment, Mental Math Games	

COMPUTATION AND ALGEBRAIC THINKING *continued*		
1.CA.5: Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; describe the strategy and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones, and that sometimes it is necessary to compose a ten.	• Addition Introduction • Add Tens: Instruction, Practice, Assessment • Kingdom of Counting: Doubles, Sums to 20; Doubles plus 1, • Sums to 20 • Doubles, Sums to 20: Assessment • Doubles Plus 1, Sums to 20: Instruction, Assessment • Add with Manipulatives: Add 3 and 6-10; Add 10 and 6-10 • Add Vertical Squares: Add 2 to 6-10; Add 6 to 6-10; Add 7 to 6-10; Add 8 to 6-10 • Add with Beads Instruction: Add 1 to 6-10; Add 4 to 6-10; • Add 5 to 6-10; Add 9 to 6-10 • Flower Story Problems: Add 2 and 6-10; Add 4 and 6-10; Add • 10 and 6-10 • Story Problem Strategies: Add 1 and 6-10; Add 3 and 6-10; • Add 5 and 6-10; Doubles, Sums to 10; Add 6 and 6-10; Add 7 to 6-10; Add 8 to 6-10; Add 9 to 6-10; Addition Strategy (Doubles, Sums to 20); Addition Strategy (Doubles Plus 1, Sums to 20) • Mental Math Games Missing Addends, and Sums to 20 • Speed Games: Missing Addends, Sums to 10; Missing • Addends, Sums to 15; Missing Addends, Sums to 20 • Story Problem Strategies: Add 2-digit without Regrouping; • Add 3-digit without Regrouping; 2-digit plus 1-digit with Regrouping; Add 2-digit Numbers with Regrouping; Add 3 Two-digit Numbers with Regrouping; Add 3-digit Numbers with Regrouping; Add with Regrouping	• 1 NBT 4.pdf: The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, ve, six, seven, eight, or nine tens (and 0 ones) – Drawing Tens – Beans, Beans, and More Beans – The Kingdome of Popsicle Stick-Filled Purses – Straws and Macaroni – Bean Addition *Practice Pages:* – Newsletter – Adding Tens and Ones – Color Adds Up – Cookies and Milk! – Addition of Two-Digit Numbers – Addition and Subtraction of Large Numbers – 1 set of flashcards
1.CA.6: Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false (e.g., Which of the following equations are true and which are false? 6 = 6, 7 = 8 – 1, 5 + 2 = 2 + 5, 4 + 1 = 5 + 2).	• Circus 20 book • Addition Sentences: Instruction, Review, Assessment • Subtraction Sentences: Instruction, Review, Assessment • Finding the Difference song	

COMPUTATION AND ALGEBRAIC THINKING *continued*		
1.CA.7: Create, extend, and give an appropriate rule for number patterns using addition within 100.		• 2.NBT.2.pdf: Count within 1,000; skip-count by 5s, 10s, and 100s. – Chart Patterns • Practice Pages: – My 199 Picture – My 200 Picture – My 299 Picture – My 300 Picture – My 399 Picture – My 400 Picture – My 499 Picture – My 500 Picture – My 599 Picture – My 600 Picture – My 699 Picture – My 700 Picture – 900 Chart
GEOMETRY		
1.G.1: Identify objects as two-dimensional or three- dimensional. Classify and sort two-dimensional and three-dimensional objects by shape, size, roundness and other attributes. Describe how two-dimensional shapes make up the faces of three-dimensional objects.	• Space Shapes	
1.G.2: Distinguish between defining attributes of two- and three-dimensional shapes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size). Create and draw two- dimensional shapes with defining attributes.	• Corners and Sides song	

GEOMETRY *continued*		
1.G.3: Use two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape. [In grade 1, students do not need to learn formal names such as "right rectangular prism."]	• Space Shapes • Story Problem Strategies: Space Shapes • Geoboard: Play & Practice • Tangrams: Play & Practice	
1.G.4: Partition circles and rectangles into two and four equal parts; describe the parts using the words halves, fourths, and quarters; and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of, the parts. Understand for partitioning circles and rectangles into two and four equal parts that decomposing into equal parts creates smaller parts.	• Halves and Fourths and Thirds • Equal-part Fractions • Label Parts of Fractions • Story Problem Strategies: Equal-part Fraction, Label Parts of Fractions	
MEASUREMENT		
1.M.1: Use direct comparison or a nonstandard unit to compare and order objects according to length, area, capacity, weight, and temperature.	• Nonstandard Units: Instruction, Practice, Assessment • Story Problem Strategies: Nonstandard Units • Painting by Number • Problem Solving • Problem Solving Strategies: Make and Use a Picture	• 1.MD.2.pdf: Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. – Measures of Me – Measure a Handful – Estimating Length – A Fruit and Vegetable *Practice Pages:* – Measure Up! – Inches/Centimeters Rulers

MEASUREMENT *continued*		
1.MD.3 Tell and write time in hours and half-hours using analog and digital clocks..	• Mr. Romano's Secret: A Time Story • How Long is a Minute? • Tell Time to the Hour: Introduction, Instruction, Review, Extended Play, Play & Practice, Assessment • Tell Time to the Half-Hour: Introduction, Instruction, Review, Assessment, Extended Play, Play and Practice, Extended Play 2, Play and Practice 2 • Compare Minutes to Hours: Instruction, Review, Play & Practice, Extension, Assessment • Story Problem Strategies: Time • Clock Hands	• 1.MD.3.pdf: Tell and write time in hours and half-hours using analog and digital clocks. – What Comes After, Before, Or Between? – Make Your Own Clock – Learning to Tell Time – Matching Time *Practice Pages:* – What Numbers are Missing? – What Time Is It? – Time of Day – Clock flashcards
1.M.3: Find the value of a collection of pennies, nickels, and dimes.	• Money songs • Equivalent Sums of Money • Story Problem Strategies: Equivalent Sums of Money • Coin Value Instruction	
DATA ANALYSIS		
1.DA.1: Organize and interpret data with up to three choices (What is your favorite fruit? apples, bananas, oranges); ask and answer questions about the total number of data points, how many in each choice, and how many more or less in one choice compared to another.	• Venn Diagrams: The Birds, the Beasts, and the Bat, Instruction, Review, Extended Play, Play & Practice, Assessment • Tally Marks: One More Cat, Instruction, Extension, Play & Practice, Review, Assessment • Problem Solving Strategy: Make a Graph, Make a Table • Graphs: Instruction, Play & Practice, Extended Play, Extension, Review, Assessment • Make a Table: Introduction • Story Problem Strategies: Graphs	• 1.MD.4.pdf: Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another. – Ice Cream Sundae – Make A Real Object Graph – Make a Weather Bar Graph – Weather Flashcards *Practice Pages:* – Our Favorite Foods – Make a Graph – Make a table – How Many? – Bugs! – Use Graphs and Tables – How Big is Your Family?

SECOND GRADE		
NUMBER SENSE		
2.NS.1: Count by ones, twos, fives, tens, and hundreds up to at least 1,000 from any given number.	• Skip Count by 10: Instruction, Assessment, Extended Practice, Extensions • Skip Count by 5: Instruction, Assessment, Extended Practice, Extensions • Skip Counting • Story Problem Strategies: Skip Count • Skip Count: Instruction, Extended Play, Play & Practice, Assessment • Number Sequences and Patterns Introduction	• 2.NBT.2.pdf: Count within 1,000; skip-count by 5s, 10s, and 100s. – Chart Patterns *Practice Pages:* – My 199 Picture – My 200 Picture – My 299 Picture – My 300 Picture – My 399 Picture – My 400 Picture – My 499 Picture – My 500 Picture – My 599 Picture – My 600 Picture – My 699 Picture – My 700 Picture – 900 Chart
2. NS.2: Read and write whole numbers up to 1,000. Use words, models, standard form and expanded form to represent and show equivalent forms of whole numbers up to 1,000.	• Problem Solving Strategies (Make a List): Introduction • Story Problem Strategies: Sequences of 2-digit Numbers; Sequences of 3-digit Numbers; Place Value of 2-digit Numbers; Place Value of 3-digit Numbers • Sequences of 2-digit Numbers: Instruction, Practice, Review, Assessment • Sequences of 3-digit Numbers: Instruction, Practice, Review, Assessment • Place Value of 3-digit Numbers: Instruction, Review, Assessment, Extended Play, Play & Practice	
2. NS.3: Plot and compare whole numbers up to 1,000 on a number line.	• Number Line • Problem Solving song	
2. NS.4: Match the ordinal numbers first, second, third, etc., with an ordered set up to 30 items.	• Ordinals song • Ordinal Numbers • The Circus Came to Town book	

NUMBER SENSE *continued*		
2. NS.5; Determine whether a group of objects (up to 20) has an odd or even number of members (e.g., by placing that number of objects in two groups of the same size and recognizing that for even numbers no object will be left over and for odd numbers one object will be left over, or by pairing objects or counting them by 2s).	• Odd Todd and Even Steven song	• 2.OA.3.pdf: Determine whether a group of objects (up to 20) has an odd or even number of members – Missing Patterns – Counting by 2's – What's My Number?
2. NS.6: Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones (e.g., 706 equals 7 hundreds, 0 tens, and 6 ones). Understand that 100 can be thought of as a group of ten tens — called a "hundred." Understand that the numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).	• Place Value of 3-digit Numbers: Instruction, Practice, Assessment, Story Problem Strategies • Place Value Song	• 2.NBT.1a.pdf: 100 can be thought of as a bundle of ten tens—called a "hundred." – The Kingdom of Popsicle Stick-Filled Purses • 2.NBT.1b.pdf: The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, ve, six, seven, eight, or nine hundreds (and 0 tens and 0 ones) *Practice Pages:* – My Three-Digit Numbers
2.NS.7: Use place value understanding to compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons.	• Story Problem Strategies: Greater Than, Less Than 3-digit; Add 3-digit with Regrouping • Greater Than, Less Than (3-digit Numbers): Instruction, Review, Extended Play, Play & Practice, Assessment • Place Value of 3-digit Numbers: Extended Play	• 2.NBT.4.pdf: Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons. – More or Less – The Hands Have It! – Larger or Smaller? – Comparing Number Cards *Practice Pages:* – Number Cards – <,>, = Cards – Greater Than, Less Than, Equal To

COMPUTATION AND ALGEBRAIC THINKING		
2.CA.1: Add and subtract fluently within 100.	• Mental Math Games (Missing Addends) • Mental Math Games (Missing Addends, Addends to 10) • Mental Math Games (Missing Addends, Sums to 20) • Story Problem Strategies: Add 3 Two-digit Numbers with Regrouping • Add 2-digit and 1-digit Numbers with Regrouping: Instruction, Review, Assessment, Extended Play, Play & Practice • Add 2-digit Numbers with Regrouping: Instruction, Review, Assessment, Extended Play, Play & Practice • Add 3 Two-digit Numbers with Regrouping: Instruction, Review, Assessment, Extended Play, Play & Practice • 2-digit Minus 1-digit Numbers with Regrouping: Instruction, Review, Assessment, Extended Play, Play & Practice • Add with Regrouping Concept: Instruction, Extension, Play & Practice, Review, Assessment	• 2.NBT.5.pdf: Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. – Addition Flashcards – Addition of Two-Digit Numbers – Tic Tac Toe – Subtraction of Two-Digit Numbers
2.CA.2: Solve real-world problems involving addition and subtraction within 100 in situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all parts of the addition or subtraction problem (e.g., by using drawings and equations with a symbol for the unknown number to represent the problem). Use estimation to decide whether answers are reasonable in addition problems.	• Painting by Number • Story Problem Strategies: Perimeter; Make Change; Picture Graphs; Bar Graphs; Count Coins; Count Bills and Coins; Multiply Using Repeated Addition; Multiply Using Arrays; Patterns of 2-digit Numbers; Patterns of 3-digit Numbers; Place Value of 2-digit Numbers; Place Value of 3-digit Numbers; Greater Than, Less Than 3-digit; Add 2-digit without Regrouping; Add 3-digit without Regrouping; Subtract 2-digit without Regrouping; Subtract 3-digit without Regrouping; 2-digit plus 1-digit with Regrouping; Add 2-digit with Regrouping; Add 3 Two-digit with Regrouping; Add 3-digit with Regrouping; 2-digit Minus 1-digit with Regrouping; Subtract 2-digit with Regrouping; Subtract 3-digit with Regrouping; Add with Regrouping; Subtract with Regrouping	• 2.OA.1.pdf: Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. – Animal Math – Picture Problems *Practice Pages:* – Act it Out – Guess and Check

COMPUTATION AND ALGEBRAIC THINKING *continued*		
2.CA.3: Solve real-world problems involving addition and subtraction within 100 in situations involving lengths that are given in the same units (e.g., by using drawings, such as drawings of rulers, and equations with a symbol for the unknown number to represent the problem).	• Story Problem Strategies: Standard Units of Length • Book: Yangshi's Perimeter	
2.CA.4: Add and subtract within 1000, using models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; describe the strategy and explain the reasoning used. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones, and that sometimes it is necessary to compose or decompose tens or hundreds	• Add Two-digit Numbers with Regrouping: Instruction, Extended Play, Assessment, Story Problem Strategies • Story Problem Strategies: Add 3 Two-digit with Regrouping; Add 3-digit with Regrouping; Subtract 2-digit with Regrouping; Subtract 3-digit with Regrouping • Subtract 2-digit Numbers with Regrouping: Instruction, Review, Assessment, Extended Play, Play & Practice • Subtract 3-digit Numbers with Regrouping: Instruction, Review, Assessment, Extended Play, Play & Practice • Subtract with Regrouping Concept: Instruction, Review, Extension, Play & Practice, Assessment • Add 3 Two-digit Numbers with Regrouping: Instruction, Review, Assessment, Extended Play, Play & Practice • Add 3-digit Numbers with Regrouping: Instruction, Review, Assessment, Extended Play, Play & Practice	• 2.NBT.6.pdf: Add up to four two-digit numbers using strategies based on place value and properties of operations. – Add Four Two-Digit Numbers • 2.NBT.7.pdf: Add and subtract within 1,000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds. – Choose and Add – Mix and Match Addition – Expanded Subtraction – Subtracting Repeats – 999 – Prediction *Practice Pages:* – Up and Away – Regrouping Treasure Hunt – Play Ball – Squirrel Facts – Number Cards • 2.NBT.8.pdf: Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900. – Spin and Solve (with spinner and numbers cards)

COMPUTATION AND ALGEBRAIC THINKING *continued*		
2.CA.5: Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal groups.	• Story Problem Strategies (Multiply Using Repeated Addition) • Story Problem Strategies (Multiply Using Arrays) • Multiply Using Repeated Addition: Instruction, Review • Assessment, Extended Play, Play & Practice • Multiply Using Arrays: Instruction, Review, Play & Practice, • Assessment	
2.CA.6: Show that the order in which two numbers are added (commutative property) and how the numbers are grouped in addition (associative property) will not change the sum. These properties can be used to show that numbers can be added in any order.	• Story Problem Strategies: Add with Regrouping; Subtract with Regrouping • Add 2-digit and 1-digit Numbers with Regrouping: Instruction, Review, Assessment, Extended Play, Play & Practice • Add 2-digit Numbers with Regrouping: Instruction, Review, Extended Play, Play & Practice • Add 3 Two-digit Numbers with Regrouping: Instruction, Review, Assessment, Extended Play, Play & Practice • Add 3-digit Numbers with Regrouping: Instruction, Review, Assessment, Extended Play, Play & Practice • 2-digit Minus 1-digit Numbers with Regrouping: Instruction, Review, Assessment, Extended Play, Play & Practice • Add with Regrouping Concept: Introduction, Extension, Review, Assessment, Play & Practice • Subtract with Regrouping Concept: Introduction, Extension, Review, Assessment, Play & Practice • You Be the Teacher: Add 2-digit without Regrouping; Add with Regrouping, Subtract with Regrouping, Place Value, Subtract 3-digit with Regrouping	• 2.NBT.9.pdf: Explain why addition and subtraction strategies work, using place value and the properties of operations. – Cube Trails – Race for a Flat – High/Low Number Cube Throw – Lucky Five • Practice Pages: – Hundreds, Tens, Ones Chart – Numbers Cards
2.CA.7: Create, extend, and give an appropriate rule for number patterns using addition and subtraction within 1000.	• Number Patterns • Number Patterns of 2-digit Numbers • Number Patterns of 3-digit Numbers • Logic Game	

GEOMETRY		
2.G.1: Identify, describe, and classify two- and three- dimensional shapes (triangle, square, rectangle, cube, right rectangular prism) according to the number and shape of faces and the number of sides and/or vertices. Draw two-dimensional shapes.	• Space Shapes: Instruction, Practice, Assessment, Review • World Shapes: Introduction, Instruction, Practice, Assessment • The Shape of Things book • Shapes, Shapes, Shapes song • Story Problem Strategies: Space Shapes	
2.G.2: Create squares, rectangles, triangles, cubes, and right rectangular prisms using appropriate materials.		
2.G.3: Investigate and predict the result of composing and decomposing two- and three-dimensional shapes.		
2.G.4: Partition a rectangle into rows and columns of same-size (unit) squares and count to find the total number of same-size squares.	• Halves and Fourths and Thirds Label Parts of Fractions: Assessment • Label Parts of Fractions: Instruction, Play & Practice, Review • Story Problem Strategies: Label Parts of Fractions • Fractions song • Books: The Fraction Twins; Halves, and Fourths and Thirds • Geoboard Extension • Fractions of Regions: Instruction, Review, Assessment, Extended Play • Fractions of Groups: Instruction, Review, Assessment, Extended Play • Story Problem Strategies: Fractions of Regions, Fractions of Groups • You Be the Teacher: Fractions of Regions, Fractions of Groups • Fractions Introduction • Story Problem Strategies: Fractions of Regions, Fractions of Groups • You Be the Teacher: Fractions of Regions	

MEASUREMENT		
2.M.1: Describe the relationships among inch, foot, and yard. Describe the relationship between centimeter and meter.		• 2.MD.1.pdf: Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes. – Ready, Set, Measure – Treasure Hunt *Practice Pages:* – Centimeter ruler – Inch Ruler – Let's Measure in Centimeters! – Let's Measure in Inches!
2.M.2: Estimate and measure the length of an object by selecting and using appropriate tools, such as rulers, yardsticks, meter sticks, and measuring tapes to the nearest inch, foot, yard, centimeter and meter.	• Measurement Tools: Instruction, Introduction, Extension, Practice, Assessment, Review • Measuring Plants song • Standard Units of Length: Instruction, Review, Assessment • Story Problem Strategies: Standard Units of Length • Story Problem Strategies: Standard Units of Length • Book: Yangshi's Perimeter	• 2.MD.1.pdf: Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes. – Ready, Set, Measure – Treasure Hunt *Practice Pages:* – Centimeter ruler – Inch Ruler – Let's Measure in Centimeters! – Let's Measure in Inches!
2.M.3: Understand that the length of an object does not change regardless of the units used. Measure the length of an object twice using length units of different lengths for the two measurements. Describe how the two measurements relate to the size of the unit chosen.		• 2.MD.2.pdf: Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen. – Ready, Set, Measure
2.M.4: Estimate and measure volume (capacity) using cups and pints.	• Birds at My House book • Capacity (liters) • Capacity (quarts/pints)	

MEASUREMENT *continued*		
2.M.5: Tell and write time to the nearest five minutes from analog clocks, using a.m. and p.m. Solve real-world problems involving addition and subtraction of time intervals on the hour or half hour.	• Telling Time Tell song • Time to Five Minutes: Instruction, Extended Play, Play & Practice, Review, Assessment • Tell Time to the Quarter Hour: Instruction, Extended Play, Play & Practice, Review, Assessment • Tell Time to the Minute: Instruction, Extended Play, Play & Practice, Review, Assessment • Tell Time to the Hour: Play & Practice • Tell Time to the Half-hour: Play & Practice • Story Problem Strategies: Time to Five Minutes, Time to the Quarter Hour, Time to the Minute • You Be the Teacher: Tell Time • Tell Time Introduction	
2.M.6: Describe relationships of time, including: seconds in a minute; minutes in an hour; hours in a day; days in a week; and days, weeks, and months in a year.	• Telling Time Tell song • Time to Five Minutes: Instruction, Extended Play, Play & Practice, Review, Assessment • Tell Time to the Quarter Hour: Instruction, Extended Play, Play & Practice, Review, Assessment • Tell Time to the Minute: Instruction, Extended Play, Play & Practice, Review, Assessment • Tell Time to the Hour: Play & Practice • Tell Time to the Half-hour: Play & Practice • Story Problem Strategies: Time to Five Minutes, Time to the Quarter Hour, Time to the Minute • You Be the Teacher: Tell Time • Tell Time Introduction	

MEASUREMENT *continued*		
2.M.7: Find the value of a collection of pennies, nickels, dimes, quarters and dollars.	• Money Introduction • Make Change: Instruction, Play & Practice, Review, Extended Play, Assessment • Count Coins: Instruction, Review, Assessment, Extended Play • Count Bills and Coins: Instruction, Review, Extended Play, Play & Practice, Assessment • Story Problem Strategies: Make Change, Count Coins, Count Bills and Coins • You Be the Teacher: Make Change	• 2.MD.8.pdf: Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using $ and ¢ symbols appropriately. – Supermarket Hunt – Shopping for My Family – Money Combinations – Money Sums – Pizza Parlor – How Much Back? – Coin Count *Practice Pages:* – Bills and Coins – Let's Count Coins – Money Addition – Change is Good! – Make 45¢
DATA ANALYSIS		
2.DA.1: Draw a picture graph (with single-unit scale) and a bar graph (with single-unit scale) to represent a data set with up to four choices (What is your favorite color? red, blue, yellow, green). Solve simple put-together, take- apart, and compare problems using information presented in the graphs.	• Graphing Introduction • Sequences of 3-digit Numbers: The Boonville Nine • Picture Graphs: Instruction, Review, Play & Practice, • Assessment, Extended Play • Bar Graphs: Instruction, Review, Extended Play, Assessment • Problem Solving Strategies: Use Graphs and Tables • Story Problem Strategies: Picture Graphs, Bar Graphs	

MATH & SCIENCE LEVEL ONE

Math Books

One Day on the Farm; Two Feet; Look for Three; Four Fine Friends; Grandpa's Great Athlete: A Book About 5; Hide and Seek Six; Just Seven; Eight at the Lake; 9 Cat Night; Ten for My Machine; The Search for Eleven; The Tasty Number Twelve; Thirteen in My Garden; Fourteen Camel Caravan; Fifteen on a Spring Day; Dinner for Sixteen; The Seventeen Machine; Eighteen Carrot Stew; Nineteen Around the World; Twenty Clay Children; Poor Wandering 1; Snowy Twos Day; 1, 2, 3, 4 in the Jungle; Give Me 5; Suzy Ladybug; 7 Train; 8 Octopus Legs; Highway 9; 10 Astronauts; When I Saw 11; I Love the Number 12; 13 Clues; 14 Camels; Fun 15; 16 Ants; Counting to 17; 18 Carrot Stew; 19 Around the World; 20 Fingers and Toes

Science Books

That's What I Like: A Book about Seasons; I Want to Be a Scientist Like Jane Goodall; Mr. Mario's Neighborhood; Mela's Water Pot; I Want to Be a Scientist Like Wilbur and Orville Wright; Follow the Apples!; I Want to Be a Scientist Like George Washington Carver; Guess What I Am; Where in the World Would You Go Today?; Star Pictures; I Wish I Had Ears Like a Bat; Creepy Crawlers

Counting Songs

Asian Counting, Marching Band Counting, Flower Counting, Country Counting, Dixieland Counting, Funky Counting, Reggae Counting, Salsa Counting, Techno Counting, Bagpipe Counting, Counting on the Mountain

Number Songs

Count to 31; Hotel 100; Poor Wandering 1; Snowy Twos Day; 1, 2, 3, 4 in the Jungle; Give Me 5; Suzy Ladybug; 7 Train; 8 Octopus Legs; Highway 9; 10 Astronauts; When I Saw 11; I Love the Number 12; 13 Clues; 14 Camels; Fun 15; 16 Ants; Counting to 17; 18 Carrot Stew; 19 Around the World; 20 Fingers and Toes

MATH & SCIENCE LEVEL TWO

Math & Science Books

One More Cat; Can You Guess? A Story for Two Voices; I Want to Be a Scientist Like Carl Linnaeus; I I Want to Be a Scientist Like Antoni van Leeuwenhoek; Whatever the Weather; I Want to Be a Mathematician Like Sophie Germain; Water Is All Around; Mr. Romano's Secret: A Time Story; A Seed Grows; How Long is a Minute?; Marty's MIxed-up Mom; I Want to Be a Scientist Like Louis Pasteur; Pancakes Matter; Jump Rope Rhymes; Facts About Families; Fifteen Bayou Band; Hooray, Hooray for the One Hundredth Day!; Symmetry and Me; Animal Bodies; Everybody Needs to Eat; The Circus Came to Town; I Want to Be a Mathematician Like Thales; Bugs for Sale; Heads or Tails; Your Backyard; The Birds, the Beasts and the Bat; Halves and Fourths and Thirds; We All Exercise; Circus 20; Red Rock, River Rock; Painting by Number; I Want to Be a Scientist Like Joanne Simpson; Navajo Beads; Where in the World Would You Go Today?; I Want to Be a Scientist Like Wilbur and Orville Wright

MATH & SCIENCE LEVEL THREE

Math & Science Books

The Snow Project; Chloe's Cracker Caper; What Sounds Say; Fossils Under Our Feet; The Boonville Nine; I Want to Be a Scientist Like Alexander von Humboldt; I Want to Be a Scientist Like Marie Curie; I Want to Be a Scientist Like Stephen Hawking; George and Jack; The Old Maple Tree; A Dinosaur's First Day; I Want to Be a Scientist Like Isaac Newton; My Family Campout; I Want to Be a Scientist Like Thomas Edison; Warm Soup for Dedushka; How Did the Chicken Cross the Road?; Inventions All Around; The Beginning of Numbers; I Want to Be a Mathematician Like Ada Byron Lovelace; Lightning Bells; Tyrannosauraus X 1; Halves and Fourths and Thirds; Navajo Beads; Red Rock, River Rock; I Want to Be a Mathematician Like Srinivasa Ramanujan; The Fraction Twins; Yangshi's Perimeter; I Want to Be a Mathematician Like Archimedes; Birds at My House; Painting by Number; The Fable Fair