2nd Grade Scope and Sequence

Contents

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Common Core 2nd Grade Descriptors

Common Core Instructional Focus

In 2nd Grade, instructional time should focus on four critical areas:
Place value: extending understanding of base-ten notation;
Number: building fluency with addition and subtraction;
Measurement: using standard units of measure; and
Geometry: describing and analyzing shapes.

Place Value

Students extend their understanding of the base-ten system. This includes ideas of counting in fives, tens, and multiples of hundreds, tens, and ones, as well as number relationships involving these units, including comparing. Students understand multi-digit numbers (up to 1,000) written in base-ten notation, recognizing that the digits in each place represent amounts of thousands, hundreds, tens, or ones (e.g., 853 is 8 hundreds + 5 tens + 3 ones).

Number and Algebraic Thinking

Students use their understanding of addition to develop fluency with addition and subtraction within 100. They solve problems within 1,000 by applying their understanding of models for addition and subtraction, and they develop, discuss, and use efficient, accurate, and generalizable methods to compute sums and differences of whole numbers in base-ten notation, using their understanding of place value and the properties of operations. They select and accurately apply methods that are appropriate for the context and the numbers involved to mentally calculate sums and differences for numbers with only tens or only hundreds.

Measurement

Students recognize the need for standard units of measure (centimeter and inch) and they use rulers and other measurement tools with the understanding that linear measure involves an iteration of units. They recognize that the smaller the unit, the more iterations they need to cover a given length.

Shape and Space

Students describe and analyze shapes by examining their sides and angles. Students investigate, describe, and reason about decomposing and combining shapes to make other shapes. Through building, drawing, and analyzing two- and three-dimensional shapes, students develop a foundation for understanding area, volume, congruence, similarity, and symmetry in later grades.

Descriptions from Common Core State Standards for Mathematics 2025

2nd Grade Overview

Place Value	Addition & Subtraction	Multiplication & Division
Understand place value. (2.NBT.A.1) (2.NBT.A.3) (2.NBT.A.4)	Use place value understanding and properties of operations to add and subtract. Represent and solve problems involving addition and subtraction. Add and subtract within 20. (2.OA.B.2) (2.MD.B.6) (2.NBT.C.5) (2.NBT.C.6) (2.NBT.C.7) (2.NBT.C.8) (2.NBT.C.9) (2.OA.A.1)	Work with equal groups of objects to gain foundations for multiplication. (2.OA.C.3) (2.OA.C.4) (2.NBT.A.2)

Measurement	Shape and Space	Data Handling	Money and Time
Measure and estimate lengths in standard units. Relate addition and subtraction to length. (2.MD.A.1) (2.MD.A.2) (2.MD.A.3) (2.MD.A.4) (2.MD.B.5)	Reason with shapes and their attributes. (2.G.A.1) (2.G.A.2) (2.G.A.3)	Represent and interpret data. (2.MD.D.9) (2.MD.D.10)	Work with time and money. (2.MD.C.7)

Place Value

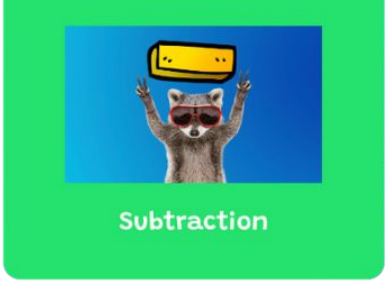
Common Core Learning Standards	Awesomenicity Lessons
Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 605 equals 6 hundreds, 0 tens, and 5 ones. (2.NBT.A.1) Read and write numbers to 1,000 using base-ten numerals, number names, and expanded form. (2.NBT.A.3) Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons. (2.NBT.A.4)	Lesson 1: Using place value in large numbers Lesson 2: Writing numbers in expanded form (partitioning) Lesson 3: Apply understanding of expanded numbers Lesson 4: Comparing numbers Lesson 5: Ordering numbers Lesson 6: Create and compare numbers Lesson 7: Writing numbers in written form Lesson 8: Consolidating writing numbers in written form Lesson 9: Construct numbers: Applying place value knowledge
Additional place value related lessons that could be explored in 2nd Grade. **Note, regrouping is used in addition and subtraction strategies in the future and is an important skill that shows applied knowledge of place value. Hence, we have included it in place value.*	Lesson 10: Introduction to regrouping Lesson 11: Apply regrouping knowledge Lesson 12: Rounding numbers to the nearest ten Lesson 13: Apply rounding to the nearest ten skills Lesson 14: Rounding numbers to the nearest hundred Lesson 15: Apply rounding to the nearest 100 skills
Consolidation and assessment.	Lesson 16: Solve Place Value Puzzles Lesson 17: Place Value Assessment

Addition

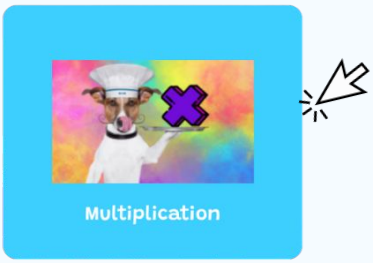
Common Core Learning Standards	Awesomenicity Lessons
Fluently add and subtract within 20 using mental strategies. By the end of 2nd Grade, know from memory all sums of two one-digit numbers. (2.OA.B.2) Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. (2.NBT.C.5) 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. (2.NBT.C.7) Mentally add 10 or 100 to a given number 100-900, and mentally subtract 10 or 100 from a given number 100-900. (2.NBT.C.8) Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram. (2.MD.B.6)	Lesson 1: Identifying number bonds Lesson 2: Finding the next multiple of ten Lesson 3: Introduction to bridging to the next ten strategy Lesson 4: Applying bridging to the next ten strategy Lesson 5: Using doubles and near doubles Lesson 6: Introduction to jump strategy Lesson 7: Explore Split Strategy Lesson 8: Using rounding to problem-solve Lesson 9: Adding like digits Lesson 10: Adding like digits up to hundreds
Explain why addition and subtraction strategies work, using place value and the properties of operations. (2.NBT.C.9) Add up to four two-digit numbers using strategies based on place value and properties of operations. (2.NBT.C.6)	Lesson 11: Column method with regrouping Lesson 12: Using column addition to problem-solve Lesson 13: Consolidating column method with regrouping
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. (2.OA.A.1)	Lesson 14: Solving addition word problems
Consolidation and assessment.	Lesson 15: Consolidating addition strategies Lesson 16: Addition Assessment

Subtraction

Common Core Learning Standards	Awesomenicity Lessons
Fluently add and subtract within 20 using mental strategies. By the end of 2nd Grade, know from memory all sums of two one-digit numbers. (2.OA.B.2) Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. (2.NBT.C.5) Mentally add 10 or 100 to a given number 100-900, and mentally subtract 10 or 100 from a given number 100-900. (2.NBT.C.8) Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram. (2.MD.B.6)	Lesson 1: Subtracting within 10 Lesson 2: Adding and subtracting 1, 10 and 100 Lesson 3: Use counting on to subtract Lesson 4: Bridging down to the next ten Lesson 5: Using patterns to subtract Lesson 6: Exploring related facts Lesson 7: Using jump & split strategy to subtract Lesson 8: Applying split/jump strategy to subtract
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. (2.NBT.C.7)	Lesson 9: Use column method to subtract Lesson 10: Subtracting up to 3-digit numbers
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. (2.OA.A.1)	Lesson 11: Solving word problems Lesson 12: Using flexible numbers and regrouping
Explain why addition and subtraction strategies work, using place value and the properties of operations. (2.NBT.C.9) Add up to four two-digit numbers using strategies based on place value and properties of operations. (2.NBT.C.6)	Lesson 13: Apply subtraction strategies to problem-solve
Consolidation and assessment.	Lesson 14: Subtraction Assessment



Multiplication & Division

Common Core Learning Standards	Awesomenicity Lessons
Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends. (2.OA.C.3) Use addition to find the total number of objects arranged in rectangular arrays with up to five rows and up to five columns; write an equation to express the total as a sum of equal addends. (2.OA.C.4) Count within 1,000; skip-count by 5s, 10s, and 100s. (2.NBT.A.2)	**Multiplication** Lesson 1: Introduction to equal groups Lesson 2: Introduction to skip counting to multiply Lesson 3: Applying skip counting to multiply Lesson 4: Introduction to using arrays to multiply Lesson 5: Using arrays to show multiplication Lesson 6: Multiplying by 1 and 0 Lesson 7: Multiplying by 2 Lesson 8: Multiplying by 10 Lesson 9: Multiplying by 5 **Division** Lesson 1: Sharing in equal groups Lesson 2: Using picture dots to divide Lesson 3: Using skip counting and grouping to divide Lesson 4: Applying grouping/skip counting to divide
Additional multiplication lessons that could be explored in 2nd Grade, but are not explicitly addressed in the Common Core curriculum. 	Lesson 10: Multiplying by 3 Lesson 11: Multiplying by 4 Lesson 12: Multiplying by 8 Lesson 13: Solve multiplication word problems Lesson 14: Applying multiplication to calculate the area of rectangles Lesson 15: Multiplying 2-digit numbers by 1-digit numbers Lesson 16: Creating and solving 2-digit multiplication problems
Additional division lessons that could be explored in 2nd Grade, but are not explicitly addressed in the Common Core curriculum. 	Lesson 5: Introduction to division vocabulary Lesson 6: Identify and explore remainders Lesson 7: Investigating divisibility and identifying patterns Lesson 8: Introduction to inverse operations Lesson 9: Applying inverse operations Lesson 10: Introduction to place value dot division Lesson 11: Problem-solving with place value dot division Lesson 12: Problem solving using division and other operations Lesson 13: Solving division word problems Lesson 14: Using division questions to problem-solve Lesson 15: Division Assessment
Consolidation and assessment.	Lesson 17: Multiplication Assessment

Measurement

Common Core Learning Standards	Awesomenicity Lessons
Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes. (2.MD.A.1) Estimate lengths using units of inches, feet, centimeters, and meters. (2.MD.A.3)	Lesson 1: Exploring non-standard units (distance) Lesson 2: Exploring standard units of measurement Lesson 3: Measuring length with accuracy
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.A.2) Use addition and subtraction within 100 to solve word problems 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. (2.MD.B.5)	Lesson 4: Comparing measurements in cm and m Lesson 5: Adding and subtracting measurements Lesson 6: Estimate, measure and compare distance
Consolidation and assessment.	Lesson 7: Measurement Olympics! Lesson 8: US Measurement Assessment

Shape and Space

Common Core Learning Standards	Awesomenicity Lessons
Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes. (2.G.A.1) Partition a rectangle into rows and columns of same-size squares and count to find the total number of them. (2.G.A.2) Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape. (2.G.A.3)	Lesson 1: Exploring compass directions Lesson 2: Introduction to position and turns Lesson 3: Introduction to angles Lesson 4: Introduction to lines Lesson 5: Identifying 2D shapes Lesson 6: Creating 2D shapes Lesson 7: Identifying lines of symmetry Lesson 8: Exploring 3D shapes Lesson 9: Constructing 3D shapes Lesson 10: Consolidating shape knowledge
Consolidation and assessment.	Lesson 11: Shape and Space Assessment

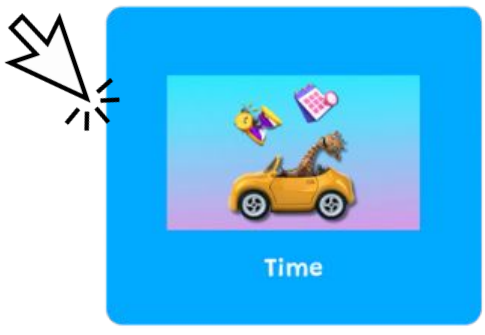
Statistics and Data Handling

Common Core Learning Standards	Awesomenicity Lessons
Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units. (2.MD.D.9) Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using the information presented in a bar graph. (2.MD.D.10)	Lesson 1: Exploring compass directions Lesson 2: Introduction to position and turns Lesson 3: Introduction to angles Lesson 4: Introduction to lines Lesson 5: Identifying 2D shapes Lesson 6: Creating 2D shapes
Describe possible everyday events and order their chances of occurring. Conduct chance experiments, identify and describe possible outcomes and recognise variation in results. **Note, these outcomes are not explicitly stated in the curriculum. Feel free to disregard these lessons if necessary. If these lessons are not taught, avoid printing question 9 on page 7 of the assessment printables as it pertains to these objectives.*	Lesson 7: Identifying lines of symmetry Lesson 8: Exploring 3D shapes Lesson 9: Constructing 3D shapes
Consolidation and assessment.	Lesson 10: Consolidating shape knowledge Lesson 11: Shape and Space Assessment

Data and probability

Time

Common Core Learning Standards	Awesomenicity Lessons
Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m. (2.MD.C.7)	Lesson 1: Reading time (half and quarter time) Lesson 2: Creating and using time (to the nearest minute) Lesson 3: Reading 24 hour time Lesson 4: Exploring seconds, minutes, hours Lesson 5: Exploring days, weeks and months Lesson 6: Calculating elapsed time
Consolidation and assessment.	Lesson 7: Summative assessment



Money

Common Core Learning Standards	Awesomenicity Lessons
Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using $ and ¢ symbols appropriately. Example: If you have 3 dimes and 4 pennies, how many cents do you have? (2.MD.C.8)	Lesson 1: Introduction to money (coins) Lesson 2: Converting dollars and cents Lesson 3: Adding money Lesson 4: Subtracting Money Lesson 5: Adding and subtracting money Lesson 6: Summative Assessment
Consolidation and assessment.	Lesson 7: Summative assessment

2nd Grade Checklist

Operations and Algebraic Thinking

Objective	✓
Represent and solve problems involving addition and subtraction.	
Add and subtract within 20.	
Work with equal groups of objects to gain foundations for multiplication.	
Understand place value.	
Use place value understanding and properties of operations to add and subtract.	

Number and Operations in Base Ten

Objective	✓
Understand place value.	
Use place value understanding and properties of operations to add and subtract.	

Measurement and Data

Objective	✓
Measure and estimate lengths in standard units	
Relate addition and subtraction to length.	
Work with time and money	
Represent and interpret data.	

Geometry

Objective	✓
Reason with shapes and their attributes.	

Wave goodbye to maths anxiety

Every primary age child deserves to feel **good** about maths

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