

Pennsylvania Common Core Standards for Mathematics [JAN. 2013]

Common Core State Standards for Mathematics

SADLIER

Common Core Progress Mathematics

Crosswalk

Grade 2

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2.1 Numbers and Operations

(B) Numbers & Operations in Base Ten

PA COMMON CORE STANDARDS FOR MATHEMATICS, GRADE 2

CC.2.1.2.B.1

Use place-value concepts to represent amounts of tens and ones and to compare three digit numbers.

CC.2.1.2.B.2

Use place-value concepts to read, write, and skip count to 1000.

CC.2.1.1.B.3

Use place-value understanding and properties of operations to add and subtract within 1000.

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 2

2.NBT.1

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 the following as special cases:

- 100 can be thought of as a bundle of ten tens — called a “hundred.”
- 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).

2.NBT.2

Count within 1000; skip-count by 5s, 10s, and 100s.

2.NBT.3

Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.

2.NBT.5

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.6

Add up to four two-digit numbers using strategies based on place value and properties of operations.

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Lesson 6

Place Value: Hundreds, Tens, and Ones—pp. 56–63

Lesson 6

Place Value: Hundreds, Tens, and Ones—pp. 56–63

Lesson 7

Skip Count by 5s, 10s, and 100s—pp. 64–71

Lesson 8

Read and Write Numbers to 1,000—pp. 72–79

Lesson 10

Add Two-Digit Numbers—pp. 88–95

Lesson 11

Subtract Two-Digit Numbers—pp. 96–103

Lesson 12

Add More than Two Numbers—pp. 104–111

2.1 Numbers and Operations

(B) Numbers & Operations in Base Ten

PA COMMON CORE STANDARDS FOR MATHEMATICS, GRADE 2

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 2

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2.NBT.7

Add and subtract within 1000, 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. (also aligns to PA Standard 2.8.2.E)

2.NBT.8

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.9

Explain why addition and subtraction strategies work, using place value and the properties of operations. (Explanations may be supported by drawings or objects.)

Lesson 13

Add Three-Digit Numbers within 1,000—pp. 112–119

Lesson 14

Subtract Three-Digit Numbers within 1,000—pp. 120–127

Lesson 15

Mentally Add and Subtract 10 or 100—pp. 128–145

Lesson 10

Add Two-Digit Numbers—pp. 88–95

Lesson 11

Subtract Two-Digit Numbers—pp. 96–103

2.2 Algebraic Concepts

(A) Operations and Algebraic Thinking

PA COMMON CORE STANDARDS IN MATHEMATICS, GRADE 2

CC.2.2.2.A.1

Represent and solve problems involving addition and subtraction within 100.

CC.2.2.2.A.2

Use mental strategies to add and subtract within 20.

CC.2.2.2.A.3

Work with equal groups of objects to gain foundations for multiplication.

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 2

2.OA.1

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. (also aligns to PA Standard 2.8.2.E)

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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.2

Add and subtract within 20. Fluently add and subtract with 20 using mental strategies. By the end of Grade 2 know from memory all sums of two one-digit numbers.

2.OA.3

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.4

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 addends.

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Lesson 1

Problem Solving: Addition—pp. 10–17

Lesson 2

Problem Solving: Subtraction—pp. 18–25

Lesson 1

Problem Solving: Addition—pp. 10–17

Lesson 2

Problem Solving: Subtraction—pp. 18–25

Lesson 3

Addition and Subtraction Facts to 20 (fluency)—pp. 26–33

Lesson 4

Odd and Even Numbers—pp. 34–41

Lesson 5

Arrays—pp. 42–55

2.3 Geometry

(A) Geometry

PA COMMON CORE STANDARDS FOR MATHEMATICS, GRADE 2

CC.2.3.2.A.1

Analyze and draw two- and three- dimensional shapes having specified attributes.

CC.2.3.2.A.2

Use the understanding of fractions to partition shapes into halves, quarters, and thirds.

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2.G.1

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. (Sizes are compared directly or visually, not compared by measuring.)

2.G.2

Partition a rectangle into rows and columns of same-size squares and count to find the total number of them. I

2.G.3

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.

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Lesson 28

Identify and Draw Shapes—pp. 248–255

Lesson 29

Partition Rectangles into Same-Size—pp. 256–263

Lesson 30

Equal Shares—pp. 264–271

2.4 Measurement, Data, and Probability

(A) Measurement and Data

PA COMMON CORE STANDARDS FOR MATHEMATICS, GRADE 2

CC.2.4.2.A.1

Measure and estimate lengths in standard units using appropriate tools.

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2.MD.1

Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.

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Lesson 16

Measure Length: Inches and Feet—pp. 146–153

Lesson 17

Measure Length: Centimeters and Meters—pp. 154–161

2.4 Measurement, Data, and Probability

(A) Measurement and Data

PA COMMON CORE STANDARDS FOR MATHEMATICS, GRADE 2

CC.2.4.2.A.2

Tell and write time to the nearest five minutes using both analog and digital clocks.

CC.2.4.2.A.3

Solve problems using coins and paper currency with appropriate symbols.

CC.2.4.2.A.4

Represent and interpret data using line plots, picture graphs, and bar graphs.

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 2

2.MD.2

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.3

Estimate lengths using units of inches, feet, centimeters, and meters.

2.MD.4

Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.

2.MD.7

Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.

2.MD.8

Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ (dollars) and ¢ (cents) symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have? |

2.MD.9

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.

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Lesson 18

Use Different Units to Measure Length—pp. 162–169

Lesson 19

Estimate Length—pp. 170–177

Lesson 20

Compare Lengths—pp. 178–185

Lesson 23

Tell and Write Time—pp. 202–209

Lesson 24

Money—pp. 210–217

Lesson 25

Line Plots—pp. 218–225

2.4 Measurement, Data, and Probability

(A) Measurement and Data

PA COMMON CORE STANDARDS FOR MATHEMATICS, GRADE 2

CC.2.4.2.A.6

Extend the concepts of addition and subtraction to problems involving length.

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2.MD.5

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.6

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.

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Lesson 21

Add and Subtract Lengths—pp. 186–193

Lesson 22

Number Line Diagrams—pp. 194–201