PA Common Core - Common Core - PA Academic Standards Crosswalk Grades K-8

PA Common Core Standard	Common Core State Standard	PA Academic Standards
	Grade 1	
CC.2.2.1.A.1 Represent and solve problems involving addition and subtraction within 20.	1.OA.1 Use Addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.	2.2.1.A Apply concepts of addition and subtraction to solve problems up to ten.
CC.2.2.1.A.1 Represent and solve problems involving addition and subtraction within 20.	1.OA.2 Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.	2.1.1.F Select the appropriate operation (addition or subtraction) to solve problems.
CC.2.2.1.A.2 Understand and apply properties of operations and the relationship between addition and subtraction.	1.OA.3 Apply properties of operations as strategies to add and subtract. (Note: Students need not use formal terms for these properties.) Examples: If $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known. (Commutative property of addition.) To add $2 + 6 + 4$, the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$. (Associative property of addition.)	2.8.1.A Use the concept of equality and concrete objects to demonstrate understanding of the commutative and associative properties.
CC.2.2.1.A.2 Understand and apply properties of operations and the relationship between addition and subtraction.	1.OA.4 Understand subtraction as an unknown-addend problem. For example, subtract $10 - 8$ by finding the number that makes 10 when added to 8.	2.8.1.A Use the concept of equality and concrete objects to demonstrate understanding of the commutative and associative properties.

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CC.2.2.1.A.1 Represent and solve problems involving addition and subtraction within 20.	1.OA.5 Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).	2.2.1.A Apply concepts of addition and subtraction to solve problems up to ten.
CC.2.2.1.A.1 Represent and solve problems involving addition and subtraction within 20.	1.OA.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. 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 $6 + 6 + 1 = 12 + 1 = 13$).	2.2.1.A Apply concepts of addition and subtraction to solve problems up to ten.
CC.2.2.1.A.2 Understand and apply properties of operations and the relationship between addition and subtraction.	1.OA.7 Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. *For example, which of the following equations are true and which are false? 6 = 6, 7 = 8 – 1, 5 + 2 = 2 + 5, 4 + 1 = 5 + 2.*	Intentionally Blank
CC.2.2.1.A.2 Understand and apply properties of operations and the relationship between addition and subtraction.	1.OA.8 Determine the unknown whole number in an addition or subtraction equation relating to three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 + ? = 11, 5 = \square - 3, 6 + 6 = \square$.	2.8.1.B Use concrete objects and trial and error to solve number sentences.

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CC.2.1.1.B.1 Extend the counting sequence to read and write numerals to represent objects.	1.NBT.1 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.	2.1.1.A Demonstrate the relationship between numbers and quantities, including place value, one-to-one correspondence, rote counting, counting by twos to 20, counting by tens and fives, and comparing values of whole numbers up to 100.
CC.2.1.1.B.1 Extend the counting sequence to read and write numerals to represent objects.	1.NBT.1 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.	2.1.1.B Represent equivalent forms of the same number through the use of pictures and concrete objects (including penny, nickel, dime, and quarter), up to 100.
CC.2.1.1.B.2 Use place value concepts to represent amounts of tens and ones and to compare two digit numbers.	1.NBT.2 Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases: a. 10 can be thought of as a bundle of ten ones — called a "ten."b. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.c. 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).	2.1.1.D Apply place value concepts and base-ten numeration to order and compare whole numbers up to 100.
CC.2.1.1.B.2 Use place value concepts to represent amounts of tens and ones and to compare two digit numbers.	1.NBT.3 Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <.	2.1.1.D Apply place value concepts and base-ten numeration to order and compare whole numbers up to 100.

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CC.2.1.1.B.3 Use place value concepts and properties of operations to add and subtract within 100.	1.NBT.4 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 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 and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.	2.2.1.B Demonstrate strategies for addition and subtraction in order to solve single- and double-digit addition and subtraction problems.
CC.2.1.1.B.3 Use place value concepts and properties of operations to add and subtract within 100.	1.NBT.5 Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.	2.2.1.B Demonstrate strategies for addition and subtraction in order to solve single- and double-digit addition and subtraction problems.
CC.2.1.1.B.3 Use place value concepts and properties of operations to add and subtract within 100.	1.NBT.6 Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), 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 and explain the reasoning used.	2.2.1.B Demonstrate strategies for addition and subtraction in order to solve single- and double-digit addition and subtraction problems.
CC.2.4.1.A.1 Order lengths and measure them both indirectly and by repeating length units.	1.MD.1 Order three objects by length; compare the lengths of two objects indirectly by using a third object.	2.3.1.B Use concrete objects to measure length by repeating the number of nonstandard or standard units.

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CC.2.4.1.A.1 Order lengths and measure them both indirectly and by repeating length units.	1.MD.2 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. *Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.*	2.3.1.F Compare concrete objects to determine greater or lesser attributes (length, weight, capacity).
CC.2.4.1.A.2 Tell and write time to the nearest half hour using both analog and digital clocks.	1.MD.3 Tell and write time in hours and half-hours using analog and digital clocks.	2.3.1.C. Tell time on an analog and digital clock to the nearest hour and half hour.
CC.2.4.1.A.4 Represent and interpret data using tables/charts.	1.MD.4 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.	2.6.1.B Organize and display data using pictures, tallies, charts, bar graphs and pictographs.
CC.2.4.1.A.4 Represent and interpret data using tables/charts.	1.MD.4 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.	2.6.1.C Describe data displayed in a diagram, graph or table.
CC.2.4.1.A.4 Represent and interpret data using tables/charts.	1.MD.4 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.	2.6.1.D Answer comparative questions based on representations of data.
CC.2.3.1.A.1 Compose and distinguish between two- and three-dimensional shapes based on their attributes.	1.G.1 Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes.	2.9.1.A Name, describe and draw/build 2-dimensional shapes

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CC.2.3.1.A.1 Compose and distinguish between two- and three-dimensional shapes based on their attributes.	1.G.2 Compose 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. (Note: Students do not need to learn formal names such as "right rectangular prism.")	2.9.1.A Name, describe and draw/build 2-dimensional shapes
CC.2.3.1.A.2 Use the understanding of fractions to partition shapes into halves and quarters.	1.G.3 Partition circles and rectangles into two and four equal shares, describe the shares 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 shares. Understand for these examples that decomposing into more equal shares creates smaller shares.	Intentionally Blank

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