Kentucky Academic Standards for Mathematics: Grade 1 Overview

Operations/Algebraic Thinking (OA)	Number and Operations in Base Ten (NBT)	Measurement and Data (MD)	Geometry (G)
• Represent and solve problems involving addition and subtraction. • Understand an apply properties of operations and the relationship between addition and subtraction. • Add and subtract within 20. • Work with addition and subtraction equations.	• Extend the counting sequence. • Understand place value. • Use place value understanding and properties of operations to add and subtract.	• Measure lengths indirectly and by iterating length in units. • Work with time and money. • Understand and apply the statistics process.	• Reason with shapes and their attributes.

In grade 1, instructional time should focus on four critical areas:

1. **In the Operations and Algebraic Thinking domain, students will:**
   - develop strategies for adding and subtracting whole numbers based on their prior work with small numbers;
   - use a variety of models, including discrete objects and length-based models (e.g., cubes connected to form lengths), to model add-to, take-from, put-together, take apart and compare situations to develop meaning for the operations of addition and subtraction, and to develop strategies to solve arithmetic problems with these operations;
   - understand connections between counting and addition and subtraction (e.g., adding two is the same as counting on two);
   - use properties of addition to add whole numbers and to create and use increasingly sophisticated strategies based on these properties (e.g., "making tens") to solve addition and subtraction problems within 20; and
   - build their understanding of the relationship between addition and subtraction by comparing a variety of solution strategies.

2. **In the Number and Operations in Base Ten domain, students will:**
   - develop, discuss and use efficient, accurate and generalizable methods to add within 100 and subtract multiples of 10;
   - compare whole numbers (at least to 100) to develop understanding of and solve problems involving their relative sizes;
   - think of whole numbers between 10 and 100 in terms of tens and ones (especially recognizing the numbers 11 to 19 as composed of a ten and some ones); and
   - understand the order of the counting numbers and their relative magnitudes through activities that build number sense.

3. **In the Measurement and Data domain, students will:**
   - develop an understanding of the meaning and processes of measurement, including underlying concepts such as iterating (the mental activity of building up the length of an object with equal-sized units) and the transitivity principle for indirect measurement.*

4. **In the Geometry domain, students will:**

- compose and decompose plane or solid figures and build understanding of part-whole relationships as well as the properties of the original and composite shapes;
- recognize them from different perspectives and orientations;
- describe their geometric attributes;
- determine how they are alike and different, to develop the background for measurement and for initial understandings of properties such as congruence and symmetry.

* Note: students should apply the principle of transitivity of measurement to make direct comparisons, but they need not use this technical term.

Operations and Algebraic Thinking

Standards for Mathematical Practice

MP.1. Make sense of problems and persevere in solving them.	MP.5. Use appropriate tools strategically.
MP.2. Reason abstractly and quantitatively.	MP.6. Attend to precision.
MP.3. Construct viable arguments and critique the reasoning of others.	MP.7. Look for and make use of structure.
MP.4. Model with mathematics.	MP.8. Look for and express regularity in repeated reasoning.

Cluster: Represent and solve problems using addition and subtraction.

Standards	Clarifications
KY.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. **MP. 1**, **MP.2**	Students flexibly model or represent addition and subtraction situations or context problems (involving sums and differences up to 20). **See Table 1 in Appendix A.** Note: Drawings need not show detail, but accurately represent the quantities involved in the task. KY.1.MD.4 Coherence KY.K.OA.2→ KY.1.OA.1→KY.2.OA.1
KY.1.OA.2 Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, by using objects, drawings and equations with a symbol for one unknown number to represent the problem. **MP. 1**, **MP.4**, **MP.5**	Students flexibly model or represent addition situations or context problems (involving adding three quantities and have a sum less than or equal to 20). Note: Drawings need not show detail, but accurately represent the quantities involved in the task. KY.1.MD.4 Coherence KY.1.OA.2.→KY.2.NBT.6

Attending to the Standards for Mathematical Practice

Students realize mathematics involves interpreting the meaning of problems and endeavoring to solve problems by selecting useful and appropriate tools and manipulatives (**MP.1**, **MP.5**). When reading/interpreting word problems, students recognize a number (seven or 17) represents a quantity (7 dots or 17 people) and consider what is happening to these quantities in the context of the problem (**MP.2**). Students represent situations using numbers and symbols. For example, students translate "There are ten apples. Some were eaten. Three remain. How many were eaten?" into an equation such as 10 – __ = 3? (**MP.4**).

The identified mathematical practices, coherence connections and clarifications are possible suggestions; however, they are not the only pathways.

Operations and Algebraic Thinking
Standards for Mathematical Practice

MP.1. Make sense of problems and persevere in solving them.	MP.5. Use appropriate tools strategically.
MP.2. Reason abstractly and quantitatively.	MP.6. Attend to precision.
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MP.4. Model with mathematics.	MP.8. Look for and express regularity in repeated reasoning.

Cluster: **Understand and apply properties of operations and the relationship between addition and subtraction.**

Standards	Clarifications
KY.1.OA.3 Apply properties of operations as strategies to add and subtract. **MP. 2**, **MP.7**	Students are not responsible for knowing the formal language of the different properties, but have the conceptual understanding of each property (commutative and associative property). Coherence KY.K.OA.2→KY.1.OA.3→KY.2.NBT.9
KY.1.OA.4 Understand subtraction as an unknown-addend problem. **MP. 2**, **MP.7**	Students connect addition and subtraction as operations. (I can solve 10 - 8 by thinking about what adds to 8 to make 10 [__+ 8 = 10].) Coherence KY.K.OA.2→KY.1.OA.4→KY.2.NBT.9

Attending to the Standards for Mathematical Practice

Students understand an equation such as 8 + 3 = 11, the numerals "8" and 3" represent two quantities combine to form a combined quantity of 11. Students explain the order in which the addends are combined does not affect the resulting sum (**MP.3**). Students generalize this idea (the commutative property) to all addition situations, for example, explaining that switching two piles of counters doesn't change how many are there (**MP.7**). Similarly, students notice the order and manner in which multiple addends are combined does not affect the sum (the associative property). Students reason 10 - 8 = ? also means 8 + ? = 10; therefore, they solve the problem by asking themselves what is the number added to 8 to make 10 (**MP.2**).

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Operations and Algebraic Thinking
Standards for Mathematical Practice

MP.1. Make sense of problems and persevere in solving them. MP.2. Reason abstractly and quantitatively. MP.3. Construct viable arguments and critique the reasoning of others. MP.4. Model with mathematics.	MP.5. Use appropriate tools strategically. MP.6. Attend to precision. MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning.

Cluster: **Add and subtract within 20.**

Standards	Clarifications
KY.1.OA.5 Relate counting to addition and subtraction. **MP.5**, **MP.8**	Strategies used when relating addition to subtraction: counting all (addition); counting on (addition); counting all (subtraction); counting back (subtraction); counting on (subtraction). KY.K.CC.4→KY.1.OA.5→KY.1.OA.6

KY.1.OA.6 Add and subtract within 20.
  a. Fluently add and subtract within 10.
  b. Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making 10; decomposing a number leading to a 10; using the relationship between addition and subtraction; creating equivalent but easier or known sums.
MP.2, **MP.7**, **MP.8**
	Students solve addition and subtraction tasks (with sums and differences within 10) efficiently, accurately, flexibly and appropriately. Being fluent means students choose flexibly among methods and strategies to solve contextual and mathematical problems, they understand and explain their approaches, and they produce accurate answers efficiently.
	
	Students make 10 (8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decompose a number leading to a ten (13 - 4 = 13 – 3 - 1 = 10 – 1 = 9); know 8 + 4 = 12 and know 12 - 8 = 4 using the relationship between addition and subtraction; create equivalent, but easier or known sums, adding 6 + 7 by creating 6 + 6 + 1 = 12 + 1 = 13.
	
	Note: Reaching fluency is an ongoing process that will take much of the year.
	KY.1.NBT.4
	Coherence KY.K.OA.2→KY.1.OA.6→KY.2.OA.2
	KY.K.OA.3

Standards	Clarifications
	KY.K.OA.4 KY.K.OA.5

Attending to the Standards for Mathematical Practice
Students use tools to show sums and differences (**MP.5**). Students notice when they count two groups and count the total number of items, the total count is the sum (**MP.8**). Students employ counting strategies (forward and/or back) as strategies for adding and subtracting (**MP.2**). As students count on, they count on from the larger addend (solving 9 + 3 instead of 3 + 9) recognizing this is more efficient and addition is commutative (**MP.7**). Students recognize sums such as 8 + 9 are not efficiently solved by counting on and number relationships can be used to determine the sum. With repeated experiences, students notice relationships such as 9 + 8 = 10 + 7 (**MP.8**).

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Operations and Algebraic Thinking

Standards for Mathematical Practice

MP.1. Make sense of problems and persevere in solving them.	MP.5. Use appropriate tools strategically.
MP.2. Reason abstractly and quantitatively.	MP.6. Attend to precision.
MP.3. Construct viable arguments and critique the reasoning of others.	MP.7. Look for and make use of structure.
MP.4. Model with mathematics.	MP.8. Look for and express regularity in repeated reasoning.

Cluster: **Work with addition and subtraction equations.**

Standards	Clarifications
KY.1.OA.7 Understand the meaning of the equal sign and determine if equations involving addition and subtraction are true or false. **MP. 2**, **MP.3**	Students determine which of the following equations are true and which are false: 6 = 6, 7 = 8 − 1, 5 + 2 = 2 + 5, 4 + 1 = 5 + 2. Coherence KY.1.OA.7→KY.2.OA.4
KY.1.OA.8 Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. **MP. 1**, **MP.2**	Students determine the unknown number that makes the equation true in each of the equations 8 + ? = 11, 5 = ? − 3, 6 + 6 = __. KY.1.OA.7 Coherence KY.1.OA.8

Attending to the Standards for Mathematical Practice

Students make sense of equations such as 4 + 6 = 7 + 3, interpreting the equal sign to mean expressions on each side represent the same quantity (**MP.1**). Students justify whether an equation is true or false, not just by solving both sides, but by using relational thinking. For example, in the equation 10 + 5 = 6 + 11 students recognize both addends on the right are larger than the ones on the left, so the equation is false (**MP.3**). This reasoning is used to solve missing-value problems such as 8 + 5 = __ + 6. Students reason that because 6 is one more than 5, the missing addend must be one less than 8 (**MP.2**).

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Numbers and Operations in Base Ten

Standards for Mathematical Practice

MP.1. Make sense of problems and persevere in solving them. MP.2. Reason abstractly and quantitatively. MP.3. Construct viable arguments and critique the reasoning of others. MP.4. Model with mathematics.	MP.5. Use appropriate tools strategically. MP.6. Attend to precision. MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning.

Cluster: **Extend the counting sequence.**

Standards	Clarifications

KY.1.NBT.1 Count and represent numbers.
  a. Count forward to and backward from 120, starting at any number less than 120.
  b. In this range, read and write numerals and represent a number of objects with a written numeral.
MP.2, **MP.5**, **MP.8**
	Students use strategies based on place value, properties of operations and the relationship between addition and subtraction; however, when solving any problem, students choose any strategy. A written representation shows a strategy using words, pictures and/or numbers.
	
	Coherence KY.K.CC.2→KY.1.NBT.1→KY.2.NBT.2

Attending to the Standards for Mathematical Practice

Students recognize repeated sequences emerge as they cross into decade families and use those patterns to start a count from anywhere between 0 and 120 (**MP.8**). For example, counting within the 20s decade family involves repeated counting by ones in the range of 0-9 (20, 21, 22, 23…) and this pattern holds even as they go over 100 (100, 101, 102, 103…) (**MP.8**). In creating a representation of a number, students select a tool or picture that can be grouped to show tens and ones (**MP.5**). For example, students bundle sticks into 2 bundles of 10 and 3 remaining sticks, connect this to the numeral "23."

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Numbers and Operations in Base Ten

Standards for Mathematical Practice

MP.1. Make sense of problems and persevere in solving them.	MP.5. Use appropriate tools strategically.
MP.2. Reason abstractly and quantitatively.	MP.6. Attend to precision.
MP.3. Construct viable arguments and critique the reasoning of others.	MP.7. Look for and make use of structure.
MP.4. Model with mathematics.	MP.8. Look for and express regularity in repeated reasoning.

Cluster: **Understand place value.**

Standards	Clarifications

KY.1.NBT.2 Understand 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).
MP.5, **MP.7**
	Students use concrete models and drawings, as well as strategies based on place value, properties of operations, and the relationship between addition and subtraction. When solving any problem, students choose to use a concrete model or a drawing. Their strategy is based on place value, properties of operations or the relationship between addition and subtraction. A written representation shows a strategy using words, pictures and/or numbers.
	
	Coherence KY.K.NBT.1→KY.1.NBT.2→KY.2.NBT.1

KY.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 <. **MP. 2**	Students use tools such as objects on place value charts, tens frames, hundreds charts and number lines to compare two two-digit numbers. Students describe the comparisons using terms such as greater than, more than, less than, fewer than, equal to and same as. Students justify their reasoning. Students compare two two-digit numbers written as numerals. Coherence KY.K.CC.7→KY.1.NBT.3→KY.2.NBT.4

Attending to the Standards for Mathematical Practice
Students understand the individual digits in a two-digit numeral each represent units of ten and one respectively. Students use tools to represent numbers, selecting tools such as popsicle sticks, linking cubes and straws that can physically be grouped in tens (**MP.5**). In representing numbers with concrete tools, students see one ten unit (a bundle) can be thought of as "10, two as twenty and so forth (**MP.7**). When comparing two two-digit numbers, students interpret the inherent value of each digit (22 is two tens with two remaining ones) and determine which number is larger (**MP.2**). For example, students realize that 32 is greater than 23 because of the value of its digits.

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Numbers and Operations in Base Ten	
Standards for Mathematical Practice	
MP.1. Make sense of problems and persevere in solving them. MP.2. Reason abstractly and quantitatively. MP.3. Construct viable arguments and critique the reasoning of others. MP.4. Model with mathematics.	MP.5. Use appropriate tools strategically. MP.6. Attend to precision. MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning.

Cluster: **Use place value understanding and properties of operations to add and subtract.**

Standards	Clarifications

KY.1.NBT.4 Add within 100 including adding a two-digit number and a one-digit number. Add a two-digit number and a multiple of 10.
   a. Add within 100 using…
      • concrete models or drawings;
      • strategies based on place value;
      • properties of operations;
      • the relationship between addition and subtraction.
   b. Relate the addition 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.
MP.7, **MP.2**, **MP.3**
	Students model addition examples with sums to 100 using concrete materials, pictures and numerals. Students use mental computation strategies to develop conceptual understanding and number sense around adding one- and two-digit numbers.
	
	KY.2.NBT.7
	Coherence KY.1.NBT.4→KY.2.NBT.5

KY.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. **MP.2**, **MP.8**	Students use materials and strategies to add or subtract 10 from any given number in the range 1 to 100. Coherence KY.1.NBT.5→KY.2.NBT.8

KY.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).
   a. Subtract using:
      • concrete models or drawings;
      • strategies based on place value;
      • properties of operations;
      • the relationship between addition and subtraction
   b. Relate the subtraction strategy to a written method and explain the reasoning used.
	Students use strategies to subtract groups of ten from more tens. 80 – 30 can be expressed at 8 tens with 3 tens taken away which leaves 5 tens. Students explore using hundreds chart, base ten blocks, number lines and other tools.
	
	Coherence KY.1.NBT.6→KY.2.NBT.8

Standards	Clarifications
MP.3, **MP.5**	

Attending to the Standards for Mathematical Practice
Students recognize when solving a problem such as 33 + 20 that the 3 in the ones place will not change, but the 3 in the tens place will; additionally, they will reason this is because they are adding two tens (**MP.7**, **MP.8**). Students generalize this idea, explaining units of tens can be added or subtracted and apply this idea to adding multiples of 10 (**MP.2**). Students select a strategy for adding or subtracting, including the following: using tools, drawing pictures, jumps on a number line and/or jumps on a hundred chart. They explain which tool or model they selected, how they reasoned about the problem and how they know their answer is correct (**MP.1**, **MP.3**). Students apply strategies used to solve single-digit addition/subtraction situations in the range of 1-9 to solve addition/subtraction situations in the range of 10-90. For example, extending the Make 10 Strategy to a Make 40 strategy for adding 38 + 9 (**MP.2**).

The identified mathematical practices, coherence connections and clarifications are possible suggestions; however, they are not the only pathways.

Measurement and Data

MP.1. Make sense of problems and persevere in solving them.	MP.5. Use appropriate tools strategically.
MP.2. Reason abstractly and quantitatively.	MP.6. Attend to precision.
MP.3. Construct viable arguments and critique the reasoning of others.	MP.7. Look for and make use of structure.
MP.4. Model with mathematics.	MP.8. Look for and express regularity in repeated reasoning.

Cluster: **Measure lengths indirectly and by iterating length units.**

Standards	Clarifications
KY.1.MD.1 Order three objects by length; compare the lengths of two objects indirectly by using a third object. **MP.6**	Students use nonstandard tools to estimate and measure objects. They compare lengths of three different objects. Coherence KY.K.MD.1→KY.1.MD.1→KY.2.MD.4
KY.1.MD.2 Express the length of an object as a whole number of same-size length units, by laying multiple copies of a shorter object (the length unit) end to end with no gaps or overlaps. **MP.2**, **MP.5**	Students measure numerous items with different sizes of nonstandard units. The smaller the unit, the more units needed to measure the object. Coherence KY.1.MD.2→KY.2.MD.2

Attending to the Standards for Mathematical Practice

Students compare and order objects by analyzing their lengths. For example, they wonder which desk is taller and use their leg or a piece of string to compare each desk and determine its relative height (**MP.2**). Students describe the objects' length in relation to one another using precise language, understanding "bigger" and "smaller" are not as specific as "longer" and "shorter" for describing the attribute of length (**MP.6**). Students understand they use an object as a unit of measure. For example, a paperclip can be used to see how long a pencil is (**MP.5**). Students use a pencil to measure the length of a book and a desk. If it takes two pencils for the length of the book and four pencils for the length of the desk, students can determine the desk is longer than the book (**MP.2**).

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Measurement and Data

Standards for Mathematical Practice

MP.1. Make sense of problems and persevere in solving them.	MP.5. Use appropriate tools strategically.
MP.2. Reason abstractly and quantitatively.	MP.6. Attend to precision.
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MP.4. Model with mathematics.	MP.8. Look for and express regularity in repeated reasoning.

Cluster: **Work with time and money.**

Standards	Clarifications

KY.1.MD.3 Assign values to time and money.
  a. Tell and write time in hours and half-hours using analog and digital clocks.
  b. Identify the coins by values (penny, nickel, dime, quarter).
MP.6, **MP.8**
	a. Students understand 60 minutes = 1 hour.
	b. A penny has a value of one cent; a nickel has a value of five cents; a dime has a value of 10 cents; a quarter has a value of 25 cents.
	Note: This standard requires students to identify coins by name along with their corresponding value only (e.g. a quarter is worth twenty five cents). In grade one, coins should not be used as models or manipulatives for the purposes of teaching place value, counting (by ones or skip counting), or addition and subtraction.
	KY.2.MD.7
	Coherence KY.K.MD.4→KY.1.MD.3→KY.2.MD.8

Attending to the Standards for Mathematical Practice
Students realize the specific logic of an analog clock, recognizing the shorter moving part on an analog clock is called the "hour hand" and its position (relative to the encircling numerals) indicates what hour it is (**MP.6**). Students recognize patterns in how the hour and minute hands operate. For example, they notice at 4:30, the minute hand is halfway around the clock (at the six) and the hour hand is halfway between the four and the five (**MP.8**). Students understand four-thirty is expressed numerically using a digital clock (**MP.2**). With money, students use appropriate terms to describe coins and connect the coin names to their values (**MP.2**, **MP.6**).

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Measurement and Data
Standards for Mathematical Practice

MP.1. Make sense of problems and persevere in solving them.	MP.5. Use appropriate tools strategically.
MP.2. Reason abstractly and quantitatively.	MP.6. Attend to precision.
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Cluster: Understand and apply the statistics process.

Standards	Clarifications

KY.1.MD.4 Investigate questions involving categorical data.
  a. Pose a question that can be answered by gathering data.
  b. Determine strategy for gathering data from peers.
  c. Organize and represent data in a table/chart with up to three categories.
  d. Interpret data to answer questions about the table/chart that connects to the question posed, including total number of data points, how many in each category and how many more or less are in one category than in another.
MP.1, **MP.3**, **MP.4**, **MP.6**
	Students create a table or chart to organize data.
	
	 KY.2.MD.9 Coherence KY.1.MD.4→KY.2.MD.10

Attending to the Standards for Mathematical Practice
Students create carefully worded questions to be answered by their peers and gather data (**MP.6**). For example, a student may wonder about the way each classmate gets to school (walk, ride bus, car-rider). In both gathering data and creating a representation of data, students design what makes sense to them and helps them to answer the question posed (**MP.1**). Students create a table/chart representing the data collected, knowing the table/chart provides insights to answer their question (**MP.4**). Students make observations from the data and listen and critique other student observations, ultimately explaining what they learned about the question they posed (**MP.3**). For example, students observe most students take a bus to school using the data in the table/chart.

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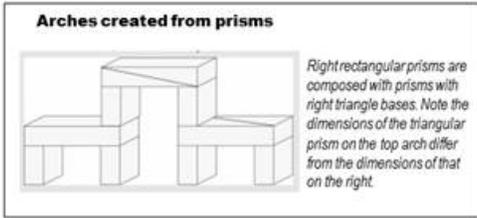
Geometry
Standards for Mathematical Practice

MP.1. Make sense of problems and persevere in solving them.	MP.5. Use appropriate tools strategically.
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Cluster: Reason with shapes and their attributes.

Standards	Clarifications
KY.1.G.1 Distinguish between defining attributes versus non-defining attributes; build and draw shapes to possess defining attributes. **MP.7**	Defining attributes include, but are not limited to, number of sides or open/closed shapes. Non-defining attributes include, but are not limited to, color, orientation or overall size. Coherence KY.K.G.4→KY.1.G.1→KY.2.G.1

KY.1.G.2 Compose shapes.
  a. Compose two-dimensional shapes to create rectangles, squares, trapezoids, triangles, half-circles, quarter-circles and composite shapes to compose new shapes from the composite shapes.
  b. Use 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 shapes.
MP.1, MP.4
	Students do not need to learn formal names such as "right rectangular prisms."
	b.
	
	Arches created from prisms
	Right rectangular prisms are composed with prisms with right triangle bases. Note the dimensions of the triangular prism on the top arch differ from the dimensions of that on the right.
	
	Coherence KY.K.G.6→KY.1.G.2

KY.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. **MP.3, MP.6**	Students see the relationship of taking the same shape and partitioning it into equal pieces. For example, they compare the size of the pieces when it's half of a shape or a fourth of the shape. Coherence KY.K.G.6→KY.1.G.3→KY.2.G.3

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Attending to the Standards for Mathematical Practice

Through analyzing many shapes and making sense of what they have in common, students determine what attributes define a shape versus attributes that do not define a shape (**MP.7**). For example, students describe defining characteristics of a triangle such as straight sides, three sides, three angles or three points and describe non-defining characteristics such as blue, big or heavy (**MP.3**, **MP.7**). Students use knowledge of defining attributes to build and/or draw examples and non-examples of these shapes, attending to those attributes which define the shape (**MP.6**). Students may compare their drawings and discover a square is a square regardless of its color, size or orientation (**MP.7**).

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