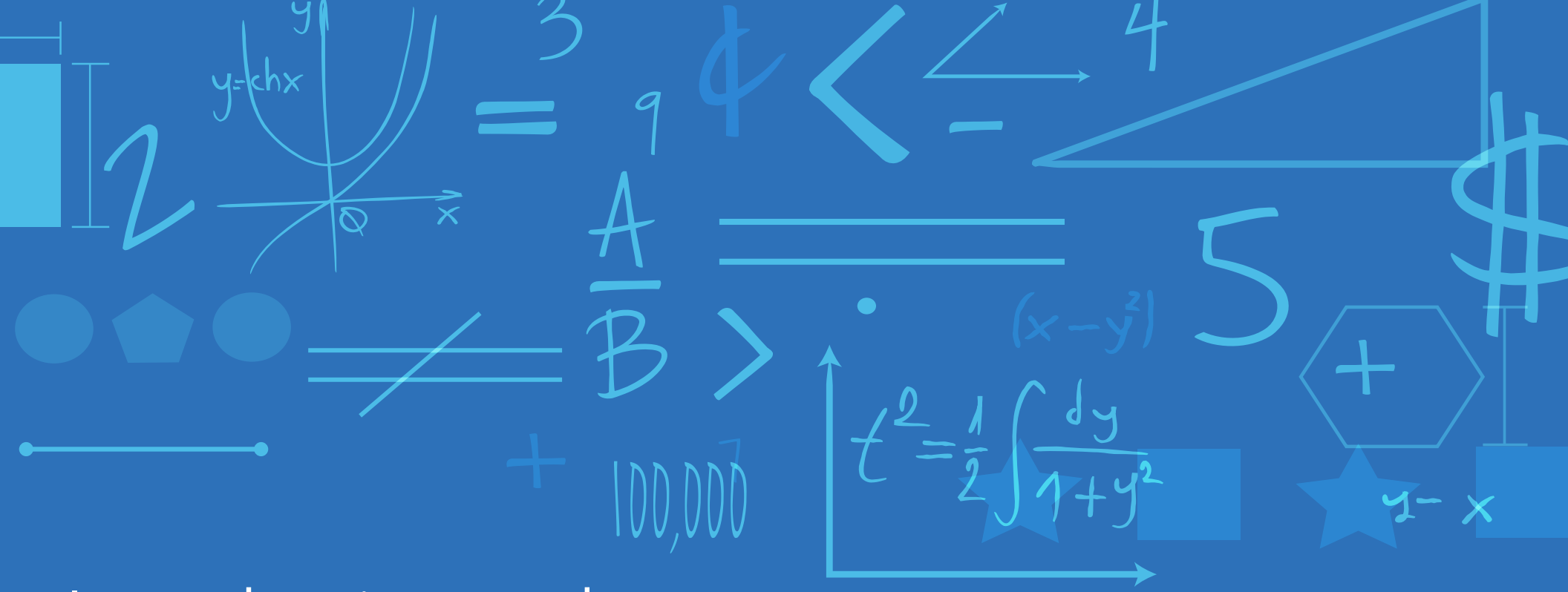

Introduction to the **Revised Mathematics TEKS**

SIDE-BY-SIDE TEKS COMPARISON
GRADE 1

TEA™
TEXAS EDUCATION AGENCY

Old TEKS	Current TEKS (2012)	Supporting Information	Notes
(a) Introduction. (1) Within a well-balanced mathematics curriculum, the primary focal points at Grade 1 are building number sense through number relationships, adding and subtracting whole numbers, organizing and analyzing data, and working with two- and three-dimensional geometric figures.	(a) Introduction. (1) The desire to achieve educational excellence is the driving force behind the Texas essential knowledge and skills for mathematics, guided by the college and career readiness standards. By embedding statistics, probability, and finance, while focusing on computational thinking, mathematical fluency, and solid understanding, Texas will lead the way in mathematics education and prepare all Texas students for the challenges they will face in the 21st century.	The definition of a well-balanced mathematics curriculum has expanded to include the CCRS. A focus on mathematical fluency and solid understanding allows for rich exploration of the primary focal points.	
(a) Introduction. (2) Throughout mathematics in Kindergarten-Grade 2, students build a foundation of basic understandings in number, operation, and quantitative reasoning; patterns, relationships, and algebraic thinking; geometry and spatial reasoning; measurement; and probability and statistics. Students use numbers in ordering, labeling, and expressing quantities and relationships to solve problems and translate informal language into mathematical language and symbols. Students use objects to create and identify patterns and use those patterns to express relationships, make predictions, and solve problems as they build an understanding of number, operation, shape, and space. Students progress from informal to formal language to describe two- and three-dimensional geometric figures and likenesses in the physical world. Students begin to develop measurement concepts as they identify and compare attributes of objects and situations. Students collect, organize, and display data and use information from graphs to answer questions, make summary statements, and make informal predictions based on their experiences.	(a) Introduction. (4) The primary focal areas in Grade 1 are understanding and applying place value, solving problems involving addition and subtraction, and composing and decomposing two-dimensional shapes and three-dimensional solids. (A) Students use relationships within the numeration system to understand the sequential order of the counting numbers and their relative magnitude. (B) Students extend their use of addition and subtraction beyond the actions of joining and separating to include comparing and combining. Students use properties of operations and the relationship between addition and subtraction to solve problems. By comparing a variety of solution strategies, students use efficient, accurate, and generalizable methods to perform operations. (C) Students use basic shapes and spatial reasoning to model objects in their environment and construct more complex shapes. Students are able to identify, name, and describe basic two-dimensional shapes and three-dimensional solids.	The 2012 paragraph that highlights more specifics about grade 1 mathematics content follows paragraphs about the mathematical process standards and mathematical fluency. This supports the notion that the TEKS should be learned in a way that integrates the mathematical process standards in an effort to develop fluency. The 2012 paragraph has been updated to align to the 2012 grade 1 mathematics TEKS. The 2012 paragraph highlights focal areas or topics that receive emphasis in this grade level. These are different from focal points which are part of the *Texas Response to Curriculum Focal Points [TXRCFP]*. "[A] curriculum focal point is not a single TEKS statement; a curriculum focal point is a mathematical idea or theme that is developed through appropriate arrangements of TEKS statements at that grade level that lead into a connected grouping of TEKS at the next grade level" (TEA, 2010, p. 5). The focal areas are found within the focal points. The focal points may represent a subset of a focal area, or a focal area may represent a subset of a focal point. The focal points within the *TXRCFP* list related grade-level TEKS.	

Old TEKS	Current TEKS (2012)	Supporting Information	Notes
		The Revised TEKS (2012) include the use of the words "automaticity," "fluency"/"fluently," and "proficiency" with references to standard algorithms. Attention is being given to these descriptors to indicate benchmark levels of skill to inform intervention efforts at each grade level. These benchmark levels are aligned to national recommendations for the development of algebra readiness for enrollment in Algebra I.	
(a) Introduction. (3) Throughout mathematics in Kindergarten-Grade 2, students develop numerical fluency with conceptual understanding and computational accuracy. Students in Kindergarten-Grade 2 use basic number sense to compose and decompose numbers in order to solve problems requiring precision, estimation, and reasonableness. By the end of Grade 2, students know basic addition and subtraction facts and are using them to work flexibly, efficiently, and accurately with numbers during addition and subtraction computation.	(a) Introduction. (3) For students to become fluent in mathematics, students must develop a robust sense of number. The National Research Council's report, "Adding It Up," defines procedural fluency as "skill in carrying out procedures flexibly, accurately, efficiently, and appropriately." As students develop procedural fluency, they must also realize that true problem solving may take time, effort, and perseverance. Students in Grade 1 are expected to perform their work without the use of calculators.	Automaticity refers to the rapid recall of facts and vocabulary. For example, we would expect a fifth-grade student to recall rapidly the sum of 5 and 3 or to identify rapidly a closed figure with 3 sides and 3 angles. "To be mathematically proficient, students must develop conceptual understanding, procedural fluency, strategic competence, adaptive reasoning, and productive disposition" (National Research Council, 2001, p. 116). "Procedural fluency refers to knowledge of procedures, knowledge of when and how to use them appropriately, and skill in performing them flexibly, accurately, and efficiently" (National Research Council, 2001, p. 121). "Students need to see that procedures can be developed that will solve entire classes of problems, not just individual problems" (National Research Council, 2001, p. 121). Procedural fluency and conceptual understanding weave together to develop mathematical proficiency.	

Old TEKS	Current TEKS (2012)	Supporting Information	Notes
(a) Introduction. (4) Problem solving, language and communication, connections within and outside mathematics, and formal and informal reasoning underlie all content areas in mathematics. Throughout mathematics in Kindergarten-Grade 2, students use these processes together with technology and other mathematical tools such as manipulative materials to develop conceptual understanding and solve meaningful problems as they do mathematics.	(a) Introduction. (2) The process standards describe ways in which students are expected to engage in the content. The placement of the process standards at the beginning of the knowledge and skills listed for each grade and course is intentional. The process standards weave the other knowledge and skills together so that students may be successful problem solvers and use mathematics efficiently and effectively in daily life. The process standards are integrated at every grade level and course. When possible, students will apply mathematics to problems arising in everyday life, society, and the workplace. Students will use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution. Students will select appropriate tools such as real objects, manipulatives, algorithms, paper and pencil, and technology and techniques such as mental math, estimation, number sense, generalization and abstraction to solve problems. Students will effectively communicate mathematical ideas, reasoning, and their implications using multiple representations such as symbols, diagrams, graphs, computer programs, and language. Students will use mathematical relationships to generate solutions and make connections and predictions. Students will analyze mathematical relationships to connect and communicate mathematical ideas. Students will display, explain, or justify mathematical ideas and arguments using precise mathematical language in written or oral communication.	This 2012 paragraph occurs second in the Revised TEKS (2012) instead of fourth as in the current TEKS. This highlights the continued emphasis on process skills that now continue from Kindergarten through high school mathematics. The language of this 2012 introductory paragraph is very similar to the Mathematical Process Standard strand within the Revised TEKS (2012). This 2012 introductory paragraph includes generalization and abstraction with the text from 1(C). This 2012 introductory paragraph includes computer programs with the text from 1(D). This 2012 introductory paragraph states, "students will use mathematical relationships to generate solutions and make connections and predictions" instead of the text from 1(E).	
	(a) Introduction. (5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.	The State Board approved the retention of some "such as" statements within the TEKS where needed for clarification of content.	

	Old TEKS: Number, operation, and quantitative reasoning	Current TEKS (2012)	Supporting Information	Notes
–	1(1)(A) **Number, operation, and quantitative reasoning.** The student uses whole numbers to describe and compare quantities. **The student is expected to compare and order whole numbers up to 99 (less than, greater than, or equal to) using sets of concrete objects and pictorial models.**		This skill is not included within the Revised TEKS (2012). It is an instructional strategy that may be used to support the revised SE 1(2)(E) and 1(2)(F).	
●	1(1)(B) **Number, operation, and quantitative reasoning.** The student uses whole numbers to describe and compare quantities. **The student is expected to create sets of tens and ones using concrete objects to describe, compare, and order whole numbers.**	1(2)(B) **Number and operations.** The student applies mathematical process standards to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value**.** **The student is expected to use concrete and pictorial models to compose and decompose numbers up to 120 in more than one way as so many hundreds, so many tens, and so many ones.**	Specificity is added to the use of concrete models or objects. These models are used to compose and decompose numbers in more than one way as a means to describe the value of whole numbers. Specificity has been added with "so many hundreds, so many tens, and so many ones." It may include decomposing 67 into 5 tens and 17 ones. It may also include decomposing 67 into the sum of 60, 10, and 7 to prepare for work with compatible numbers when adding whole numbers with fluency. The number has increased from "up to 99" to "up to 120." Students are expected to use pictorial models in addition to concrete models or objects. Comparing and ordering whole numbers using concrete objects is not included within the Revised TEKS (2012). It is an instructional strategy that may be used to support the revised SE 1(2)(E) and 1(2)(F).	
●+	1(1)(C) **Number, operation, and quantitative reasoning.** The student uses whole numbers to describe and compare quantities. **The student is expected to identify individual coins by name and value and describe relationships among them.**	1(4)(A) **Number and operations.** The student applies mathematical process standards to identify coins, their values, and the relationships among them in order to recognize the need for monetary transactions. **The student is expected to identify U.S. coins including pennies, nickels, dimes, and quarters by value and describe the relationships among them.**	Specificity has been added to indicate that coins are to be U.S. coins including pennies, nickels, dimes, and quarters.	

	Old TEKS: Number, operation, and quantitative reasoning	Current TEKS (2012)	Supporting Information	Notes
	1(1)(C) **Number, operation, and quantitative reasoning.** The student uses whole numbers to describe and compare quantities. **The student is expected to identify individual coins by name and value and describe relationships among them.**	1(4)(B) **Number and operations.** The student applies mathematical process standards to identify coins, their values, and the relationships among them in order to recognize the need for monetary transactions. **The student is expected to write a number with the cent symbol to describe the value of a coin.**	The revised SE expects students to label the value of a coin with the cent symbol.	
●+	1(1)(C) **Number, operation, and quantitative reasoning.** The student uses whole numbers to describe and compare quantities. **The student is expected to identify individual coins by name and value and describe relationships among them.**	1(4)(C) **Number and operations.** The student applies mathematical process standards to identify coins, their values, and the relationships among them in order to recognize the need for monetary transactions. **The student is expected to use relationships to count by twos, fives, and tens to determine the value of a collection of pennies, nickels, and/or dimes.**	Specificity has been added regarding the relationships among the coins with connections to skip counting. One may count nickels by fives and dimes by tens. One may count two pennies together to count by twos. With a collection of pennies, nickels, and dimes, a student may begin counting by tens to determine the value of the dimes, continue from that amount counting by fives to determine the value of the dimes and the nickels, and count by ones or twos to include the pennies in the value of the collection. The maximum value of the collection is 120 cents.	
●+	1(1)(D) **Number, operation, and quantitative reasoning.** The student uses whole numbers to describe and compare quantities. **The student is expected to read and write numbers to 99 to describe sets of concrete objects.**	1(2)(C) **Number and operations.** The student applies mathematical process standards to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value. **The student is expected to use objects, pictures, and expanded and standard forms to represent numbers up to 120.**	Specificity has been added with what students are expected to write with the inclusion of "expanded and standard forms." In addition to objects, students may use pictures to represent numbers. Representing numbers has increased from 99 to 120.	
○+	1(2)(A) **Number, operation, and quantitative reasoning.** The student uses pairs of whole numbers to describe fractional parts of whole objects or sets of objects. **The student is expected to separate a whole into two, three, or four equal parts and use appropriate language to describe the parts such as three out of four equal parts.**	1(6)(G) **Geometry and measurement.** The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties. **The student is expected to partition two-dimensional figures into two and four fair shares or equal parts and describe the parts using words.**	Specificity has been added for the mathematical meaning of equal parts with "fair shares or equal parts." Two–dimensional figures include circles and rectangles. Describing the parts using words such as "halves," "fourths," or "quarters" and phrases such as "half of." Separating a whole into three equal parts has moved to grade 3: *Number and operations* 3(3)(A)	

	Old TEKS: Number, operation, and quantitative reasoning	Current TEKS (2012)	Supporting Information	Notes
		1(6)(H) **Geometry and measurement.** The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties. **The student is expected to identify examples and non-examples of halves and fourths.**	Specificity has been added to illustrate how students might justify their thinking related to halves and fourths. A non-example of a half would be a two-dimensional figure that has been partitioned into two unequal parts. The focus of this SE, given revised SE 1(6)(G), is on the fair sharing or equal parts of the two-dimensional figure.	
–	1(2)(B) **Number, operation, and quantitative reasoning.** The student uses pairs of whole numbers to describe fractional parts of whole objects or sets of objects. **The student is expected to use appropriate language to describe part of a set such as three out of the eight crayons are red.**		This skill is not included within the Revised TEKS (2012).	
●+	1(3)(A) **Number, operation, and quantitative reasoning.** The student recognizes and solves problems in addition and subtraction situations. **The student is expected to model and create addition and subtraction problem situations with concrete objects and write corresponding number sentences.**	1(3)(A) **Number and operations.** The student applies mathematical process standards to develop and use strategies for whole number addition and subtraction computations in order to solve problems. **The student is expected to use concrete and pictorial models to determine the sum of a multiple of 10 and a one-digit number in problems up to 99.**	Specificity has been added regarding the addition problems including the sum of a multiple of ten and a one-digit number up to 99. In addition to objects, students may use pictorial models to model and add whole numbers up to 99 with sums of multiples of 10 and one-digit numbers.	
		1(3)(B) **Number and operations.** The student applies mathematical process standards to develop and use strategies for whole number addition and subtraction computations in order to solve problems. **The student is expected to use objects and pictorial models to solve word problems involving joining, separating, and comparing sets within 20 and unknowns as any one of the terms in the problem such as 2 + 4 = [ ]; 3 + [ ] = 7; and 5 = [ ] - 3.**	Specificity has been added regarding number sentences and the placement of the unknown. Specificity has been added regarding the description of addition as "joining" and "subtraction" as "separating" or "comparing." Students may use pictorial models.	
		1(3)(E) **Number and operations.** The student applies mathematical process standards to develop and use strategies for whole number addition and subtraction computations in order to solve problems. **The student is expected to explain strategies used to solve addition and subtraction problems up to 20 using spoken words, objects, pictorial models, and number sentences.**	Specificity has been added regarding the size of the sum or the original amount when subtracting as "up to 20." When the current SE is paired with the current 1(12)(A), students are expected to explain and record observations which may include strategies.	

	Old TEKS: Number, operation, and quantitative reasoning	Current TEKS (2012)	Supporting Information	Notes
●+	1(3)(A) **Number, operation, and quantitative reasoning.** The student recognizes and solves problems in addition and subtraction situations. **The student is expected to model and create addition and subtraction problem situations with concrete objects and write corresponding number sentences.**	1(3)(F) **Number and operations.** The student applies mathematical process standards to develop and use strategies for whole number addition and subtraction computations in order to solve problems**.** **The student is expected to generate and solve problem situations when given a number sentence involving addition or subtraction of numbers within 20.**	Students are expected to generate or create problem situations. Specificity has been added regarding the size of the sum or the original amount when subtracting as "up to 20." Students are expected to solve the problem situations that they generate. Students are provided the number sentence for which they are writing a problem situation.	
●	1(3)(A) **Number, operation, and quantitative reasoning.** The student recognizes and solves problems in addition and subtraction situations. **The student is expected to model and create addition and subtraction problem situations with concrete objects and write corresponding number sentences.**	1(5)(D) **Algebraic reasoning.** The student applies mathematical process standards to identify and apply number patterns within properties of numbers and operations in order to describe relationships. **The student is expected to represent word problems involving addition and subtraction of whole numbers to 20 using concrete and pictorial models and number sentences.**	Specificity has been added regarding the size of the sum or the original amount when subtracting as "up to 20."	
○+	1(3)(B) **Number, operation, and quantitative reasoning.** The student recognizes and solves problems in addition and subtraction situations. **The student is expected to use concrete and pictorial models to apply basic addition and subtraction facts (up to 9 + 9 = 18 and 18 – 9 = 9).**	1(3)(C) **Number and operations.** The student applies mathematical process standards to develop and use strategies for whole number addition and subtraction computations in order to solve problems**.** **The student is expected to compose 10 with two or more addends with and without concrete objects.**	The revised SE 1(3)(C) represents a subset of the current SE. The focus is on flexible thinking with composing 10 with two or more addends to support basic fact strategies such as "making 10." Students are expected to compose 10 with and without concrete objects.	
		1(3)(D) **Number and operations.** The student applies mathematical process standards to develop and use strategies for whole number addition and subtraction computations in order to solve problems**.** **The student is expected to apply basic fact strategies to add and subtract within 20 using strategies, including making 10 and decomposing a number leading to a 10.**	Applying basic fact strategies with concrete and pictorial models is not included in the revised SE. Basic facts for addition and subtraction within 18 have been extended to basic facts for addition and subtraction within 20.	
+		1(2)(A) **Number and operations.** The student applies mathematical process standards to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value**.** **The student is expected to recognize instantly the quantity of structured arrangements.**	Structured arrangements include ten frames and the arrangements of dots on random-number generators.	

Content that is deleted by 2012 TEKS | Content that remains or is clarified in 2012 TEKS (●Stay) (●+ Addition) (○ Deletion) | Content that is new in 2012 TEKS

	Old TEKS: Patterns, relationships, and algebraic thinking	Current TEKS (2012)	Supporting Information	Notes
–	1(4) **Patterns, relationships, and algebraic thinking.** The student uses repeating patterns and additive patterns to make predictions. **The student is expected to identify, describe, and extend concrete and pictorial patterns in order to make predictions and solve problems.**		Repeating patterns have been removed from the Revised TEKS (2012). Patterns that are additive in nature have moved to grade 5: *Algebraic reasoning* 5(4)(C) 5(4)(D)	
●+	1(5)(A) **Patterns, relationships, and algebraic thinking.** The student recognizes patterns in numbers and operations. **The student is expected to use patterns to skip count by twos, fives, and tens.**	1(5)(B) **Algebraic reasoning.** The student applies mathematical process standards to identify and apply number patterns within properties of numbers and operations in order to describe relationships. **The student is expected to skip count by twos, fives, and tens to determine the total number of objects up to 120 in a set.**	Specificity has been added to the number to which a student counts as up to 120. When the revised SE is paired with 1(1)(F), students may still use patterns to connect mathematical ideas related to skip counting. The focus of the counting is on determining the total number of objects in a set.	
–	1(5)(B) **Patterns, relationships, and algebraic thinking.** The student recognizes patterns in numbers and operations. **The student is expected to find patterns in numbers, including odd and even.**		The content of this SE has moved to grade 2: *Algebraic reasoning* 2(7)(A)	
●+	1(5)(C) **Patterns, relationships, and algebraic thinking.** The student recognizes patterns in numbers and operations. **The student is expected to compare and order whole numbers using place value.**	1(2)(D) **Number and operations.** The student applies mathematical process standards to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value. **The student is expected to generate a number that is greater than or less than a given whole number up to 120.**	This revised SE extends revised SE K(2)(F) where students are expected to generate a number that is one more or one less than another number up to 20	
		1(2)(E) **Number and operations.** The student applies mathematical process standards to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value. **The student is expected to use place value to compare whole numbers up to 120 using comparative language.**	Specificity is added regarding the use of comparative language instead of symbols with this revised SE. Specificity has been added for the numbers being compared as "whole numbers up to 120." In comparing numbers up to 120, one may use the hundreds, tens, and ones places with a set of whole numbers like 118, 108, 98, and 89. The revised SE 1(2)(E) focuses on comparing whole numbers.	

	Old TEKS: Patterns, relationships, and algebraic thinking	Current TEKS (2012)	Supporting Information	Notes
●+	1(5)(C) **Patterns, relationships, and algebraic thinking.** The student recognizes patterns in numbers and operations. **The student is expected to compare and order whole numbers using place value.**	1(2)(F) **Number and operations.** The student applies mathematical process standards to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value. **The student is expected to order whole numbers up to 120 using place value and open number lines.**	Specificity has been added for the numbers being ordered as "whole numbers up to 120." The revised SE 1(2)(F) focuses on ordering whole numbers. Students are expected to use open number lines.	
		1(2)(G) **Number and operations.** The student applies mathematical process standards to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value. **The student is expected to represent the comparison of two numbers to 100 using the symbols >, <, or =.**	Students are expected to represent the comparison of two numbers using the symbols >, <, or =. When writing these comparisons using symbols, students are expected to compare numbers up to 100 instead of 120 as with revised SE 1(2)(E).	
		1(5)(C) **Algebraic reasoning.** The student applies mathematical process standards to identify and apply number patterns within properties of numbers and operations in order to describe relationships. **The student is expected to use relationships to determine the number that is 10 more and 10 less than a given number up to 120.**	This revised SE extends revised SE K(2)(F) where students are expected to generate a number that is one more or one less than another number up to 20. The relationship that students use should focus on place value. For example, 99 = 90 + 9. If a student wants a number that is 10 more than 99, the student can think (90+10) + 9 or 100+9 or 109.	
●+	1(5)(D) **Patterns, relationships, and algebraic thinking.** The student recognizes patterns in numbers and operations. **The student is expected to use patterns to develop strategies to solve basic addition and basic subtraction problems.**	1(5)(G) **Algebraic reasoning.** The student applies mathematical process standards to identify and apply number patterns within properties of numbers and operations in order to describe relationships. **The student is expected to apply properties of operations to add and subtract two or three numbers.**	Fact families with addition build on the commutative property of addition. If 2+3=5 is known, then 3+2=5. Strategies such as "make 10" reflect properties of operations such as 6+7=6+(4+3)=(6+4)+3=10+3=13.	
●+	1(5)(E) **Patterns, relationships, and algebraic thinking.** The student recognizes patterns in numbers and operations. **The student is expected to identify patterns in related addition and subtraction sentences (fact families for sums to 18) such as 2 + 3 = 5, 3 + 2 = 5, 5 – 2 = 3, and 5 – 3 = 2.**		The revised SE has extended to include the addition and subtraction of three numbers. For example, students may be expected to add 3+8+6 as 3+(7+1)+6=(3+7)+1+6=10+(1+6)=10+7=17.	

Content that is deleted by 2012 TEKS | Content that remains or is clarified in 2012 TEKS (●Stay) (●+ Addition) (⭘ Deletion) | Content that is new in 2012 TEKS

Old TEKS: Patterns, relationships, and algebraic thinking	Current TEKS (2012)	Supporting Information	Notes
+	1(5)(A) **Algebraic reasoning.** The student applies mathematical process standards to identify and apply number patterns within properties of numbers and operations in order to describe relationships. **The student is expected to recite numbers forward and backward from any given number between 1 and 120.**	This revised SE extends revised SE K(5) where students are expected to recite numbers up to at least 100 by ones and tens beginning with any given number.	
+	1(5)(E) **Algebraic reasoning.** The student applies mathematical process standards to identify and apply number patterns within properties of numbers and operations in order to describe relationships. **The student is expected to understand that the equal sign represents a relationship where expressions on each side of the equal sign represent the same value(s).**	This SE requires students to understand that the problem 4+2+3 is not represented as 4+2=6+3=9. When paired with revised SE 1(1)(G), students may be expected to explain that 4+2+2=4+4 because the sum on each side of the equal sign is 8.	
+	1(5)(F) **Algebraic reasoning.** The student applies mathematical process standards to identify and apply number patterns within properties of numbers and operations in order to describe relationships. **The student is expected to determine the unknown whole number in an addition or subtraction equation when the unknown may be any one of the three or four terms in the equation.**	Examples of equations with three terms and one unknown include 6+[ ]=14, 14-[ ]=6, or 14-6=[ ]. Examples of equations with four terms include 6+[ ]=4+8.	

	Old TEKS: Geometry and spatial reasoning	Current TEKS (2012)	Supporting Information	Notes
●+	1(6)(A) **Geometry and spatial reasoning.** The student uses attributes to identify two- and three-dimensional geometric figures. The student compares and contrasts two-and three-dimensional geometric figures or both. **The student is expected to describe and identify two-dimensional geometric figures, including circles, triangles, rectangles, and squares (a special type of rectangle).**	1(6)(D) **Geometry and measurement.** The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties. **The student is expected to identify two-dimensional shapes, including circles, triangles, rectangles, squares, as special rectangles, rhombuses, and hexagons and describe their attributes using formal geometric language.**	Students are expected to identify and describe attributes of specified two-dimensional geometric figures. The revised SE has added rhombuses and hexagons to the list of two-dimensional geometric figures. Students are expected to use formal geometric language such as "vertex" and "side."	
		1(6)(B) **Geometry and measurement.** The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties. **The student is expected to distinguish between attributes that define a two-dimensional or three-dimensional figure and attributes that do not define the shape.**	When paired with revised SE 1(6)(D), the expectation is that students distinguish between attributes in order to identify two-dimensional shapes. For example, a closed figure with three sides is a triangle. A triangle is not defined by its orientation or color.	
●+	1(6)(B) **Geometry and spatial reasoning.** The student uses attributes to identify two- and three-dimensional geometric figures. The student compares and contrasts two-and three-dimensional geometric figures or both. **The student is expected to describe and identify three-dimensional geometric figures, including spheres, rectangular prisms (including cubes), cylinders, and cones.**	1(6)(E) **Geometry and measurement.** The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties. **The student is expected to identify three-dimensional solids, including spheres, cones, cylinders, rectangular prisms (including cubes), and triangular prisms, and describe their attributes using formal geometric language.**	Students are expected to identify and describe attributes of specified three-dimensional geometric figures. The revised SE has added triangular prisms to the list of three-dimensional geometric figures. Students are expected to use formal geometric language such as "vertex," "edge," and "face."	
		1(6)(B) **Geometry and measurement.** The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties. **The student is expected to distinguish between attributes that define a two-dimensional or three-dimensional figure and attributes that do not define the shape.**	When paired with revised SE 1(6)(E), the expectation is that students distinguish between attributes in order to identify three-dimensional shapes. For example, a solid with exactly six rectangular faces is a rectangular prism. A prism is not defined by its orientation or color.	

	Old TEKS: Geometry and spatial reasoning	Current TEKS (2012)	Supporting Information	Notes
⭘+	1(6)(C) **Geometry and spatial reasoning.** The student uses attributes to identify two- and three-dimensional geometric figures. The student compares and contrasts two-and three-dimensional geometric figures or both. **The student is expected to describe and identify two- and three-dimensional geometric figures in order to sort them according to a given attribute using informal and formal language.**	1(6)(A) **Geometry and measurement.** The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties. **The student is expected to classify and sort regular and irregular two-dimensional shapes based on attributes using informal geometric language.**	Students are expected to sort two-dimensional figures Language used to describe the classifying and sorting include informal language. The two-dimensional figures include rectangles, squares as special rectangles, rhombuses, hexagons, and regular and irregular triangles. The use of formal language with classifying and sorting two-dimensional figures is not part of the revised SE.	
●+	1(6)(D) **Geometry and spatial reasoning.** The student uses attributes to identify two- and three-dimensional geometric figures. The student compares and contrasts two-and three-dimensional geometric figures or both. **The student is expected to use concrete models to combine two-dimensional geometric figures to make new geometric figures.**	1(6)(F) **Geometry and measurement.** The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties. **The student is expected to compose two-dimensional shapes by joining two, three, or four figures to produce a target shape in more than one way if possible.**	Specificity is added to the number of concrete models being combined. Specificity is added regarding the new geometric figure. It should be a target shape. When possible, students are expected to produce the target shape in more than one way.	
+		1(6)(C) **Geometry and measurement.** The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties. **The student is expected to create two-dimensional figures, including circles, triangles, rectangles, and squares, as special rectangles, rhombuses, and hexagons.**	Students may create two-dimensional figures by sketching figures, cutting figures out of paper, etc.	

	Old TEKS: Measurement	Current TEKS (2012)	Supporting Information	Notes
●	1(7)(A) **Measurement.** The student directly compares the attributes of length, area, weight/mass, capacity, and temperature. The student uses comparative language to solve problems and answer questions. The student selects and uses nonstandard units to describe length. **The student is expected to estimate and measure length using nonstandard units such as paper clips or sides of color tiles.**	1(7)(A) **Geometry and measurement.** The student applies mathematical process standards to select and use units to describe length and time. **The student is expected to use measuring tools to measure the length of objects to reinforce the continuous nature of linear measurement.**	Measuring tools that illustrate the continuous natures of length include real-world objects such as adding machine tape, ribbon, or string.	
		1(7)(B) **Geometry and measurement.** The student applies mathematical process standards to select and use units to describe length and time. **The student is expected to illustrate that the length of an object is the number of same-size units of length that, when laid end-to-end with no gaps or overlaps, reach from one end of the object to the other.**	Units of length may include manipulatives such as proportional rods and objects such as paperclips and craft sticks.	
		1(7)(D) **Geometry and measurement.** The student applies mathematical process standards to select and use units to describe length and time. **The student is expected to describe a length to the nearest whole unit using a number and a unit.**	When students measure length using manipulatives or objects that are linear in nature, they should use a number and a label to identify the length, such as 5 yellow rods or 5 craft sticks.	
–	1(7)(B) **Measurement.** The student directly compares the attributes of length, area, weight/mass, capacity, and temperature. The student uses comparative language to solve problems and answer questions. The student selects and uses nonstandard units to describe length. **The student is expected to compare and order two or more concrete objects according to length (from longest to shortest).**		This skill is not included within the Revised TEKS (2012).	
●	1(7)(C) **Measurement.** The student directly compares the attributes of length, area, weight/mass, capacity, and temperature. The student uses comparative language to solve problems and answer questions. The student selects and uses nonstandard units to describe length. **The student is expected to describe the relationship between the size of the unit and the number of units needed to measure the length of an object.**	1(7)(C) **Geometry and measurement.** The student applies mathematical process standards to select and use units to describe length and time. **The student is expected to measure the same object/distance with units of two different lengths and describe how and why the measurements differ.**	In describing how and why the measurements differ, students are expected to describe the relationship between the size of the unit and the number of units needed to measure the length of an object. For example, a student may say, "I measured the distance with the white rods and the yellow rods. It took more white rods to measure the distance than yellow rods. The white rods are shorter, so I had to use more to measure the length."	

	Old TEKS: Measurement	Current TEKS (2012)	Supporting Information	Notes
–	1(7)(D) **Measurement.** The student directly compares the attributes of length, area, weight/mass, capacity, and temperature. The student uses comparative language to solve problems and answer questions. The student selects and uses nonstandard units to describe length. **The student is expected to compare and order the area of two or more two-dimensional surfaces (from covers the most to covers the least).**		This skill is not included within the Revised TEKS (2012).	
–	1(7)(E) **Measurement.** The student directly compares the attributes of length, area, weight/mass, capacity, and temperature. The student uses comparative language to solve problems and answer questions. The student selects and uses nonstandard units to describe length. **The student is expected to compare and order two or more containers according to capacity (from holds the most to holds the least).**		This skill is not included within the Revised TEKS (2012).	
–	1(7)(F) **Measurement.** The student directly compares the attributes of length, area, weight/mass, capacity, and temperature. The student uses comparative language to solve problems and answer questions. The student selects and uses nonstandard units to describe length. **The student is expected to compare and order two or more objects according to weight/mass (from heaviest to lightest).**		This skill is not included within the Revised TEKS (2012).	
–	1(7)(G) **Measurement.** The student directly compares the attributes of length, area, weight/mass, capacity, and temperature. The student uses comparative language to solve problems and answer questions. The student selects and uses nonstandard units to describe length. **The student is expected to compare and order two or more objects according to relative temperature (from hottest to coldest).**		This skill is not included within the Revised TEKS (2012).	
–	1(8)(A) **Measurement.** The student understands that time can be measured. The student uses time to describe and compare situations. **The student is expected to order three or more events according to duration.**		This skill is not included within the Revised TEKS (2012).	

	Old TEKS: Measurement	Current TEKS (2012)	Supporting Information	Notes
●	1(8)(B) **Measurement.** The student understands that time can be measured. The student uses time to describe and compare situations. **The student is expected to read time to the hour and half-hour using analog and digital clock**s	1(7)(E) **Geometry and measurement.** The student applies mathematical process standards to select and use units to describe length and time. **The student is expected to tell time to the hour and half hour using analog and digital clocks.**	The phrase "half-hour" indicates that students would recognize that 1:27 is closer to 1:30 than 1:00, so the time would be estimated as 1:30. Comparing the minutes on a digital clock aligns to comparing two numbers as described in revised SE 1(2)(E). When looking at an analog clock, students may compare the location of the minute hand between 12 and 6 to determine if a time is closer to an hour, such as 1:00, or closer to a half hour, such as 1:30. Because students begin work with fraction concepts such as halves in grade 1, it is appropriate to focus on 30 minutes as an indicator of a half hour.	

	Old TEKS: Probability and statistics	Current TEKS (2012)	Supporting Information	Notes
●+	1(9)(A) **Probability and statistics**. The student displays data in an organized form. **The student is expected to collect and sort data.**	1(8)(A) **Data analysis.** The student applies mathematical process standards to organize data to make it useful for interpreting information and solving problems. **The student is expected to collect, sort, and organize data in up to three categories using models/representations such as tally marks or T-charts.**	Specificity has been added for sorting data. Data are to be sorted into up to three categories. Specificity has been added with organizing data and the "such as" statement suggesting T-charts and tally marks.	
●	1(9)(B) **Probability and statistics.** The student displays data in an organized form. **The student is expected to use organized data to construct real-object graphs, picture graphs, and bar-type graphs.**	1(8)(B) **Data analysis.** The student applies mathematical process standards to organize data to make it useful for interpreting information and solving problems. **The student is expected to use data to create picture and bar-type graphs.**	Data values should align to the Number and operations standards for grade 1. Real-object graphs have moved to Kindergarten: *Data analysis* K(8)(B)	
●+	1(10)(A) **Probability and statistics.** The student uses information from organized data. **The student is expected to draw conclusions and answer questions using information organized in real-object graphs, picture graphs, and bar-type graphs.**	1(8)(C) **Data analysis.** The student applies mathematical process standards to organize data to make it useful for interpreting information and solving problems. **The student is expected to draw conclusions and generate and answer questions using information from picture and bar-type graphs.**	Answers to questions should align to the Number and operations standards for grade 1. Students are expected to generate questions using information from picture and bar-type graphs. Real-object graphs have moved to kindergarten: *Data analysis* K(8)(B)	
●	1(10)(B) **Probability and statistics.** The student uses information from organized data. **The student is expected to identify events as certain or impossible such as drawing a red crayon from a bag of green crayons.**		This skill is not included within the Revised TEKS (2012).	

Content that is deleted by 2012 TEKS | Content that remains or is clarified in 2012 TEKS (●Stay) (●+ Addition) (● Deletion) | Content that is new in 2012 TEKS

	Old TEKS: Underlying processes and mathematical tools	Current TEKS (2012)	Supporting Information	Notes
●	1(11)(A) **Underlying processes and mathematical tools.** The student applies Grade 1 mathematics to solve problems connected to everyday experiences and activities in and outside of school. **The student is expected to identify mathematics in everyday situations.**	1(1)(A) **Mathematical process standards.** The student uses mathematical processes to acquire and demonstrate mathematical understanding. **The student is expected to apply mathematics to problems arising in everyday life, society, and the workplace.**	The focus has shifted to application. The opportunities for application have been consolidated into three areas: everyday life, society, and the workplace. The revised SE, when tagged to a content SE, allows for increased rigor through connections outside the discipline.	
●	1(11)(B) **Underlying processes and mathematical tools.** The student applies Grade 1 mathematics to solve problems connected to everyday experiences and activities in and outside of school. **The student is expected to solve problems with guidance that incorporates the processes of understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness.**	1(1)(B) **Mathematical process standards.** The student uses mathematical processes to acquire and demonstrate mathematical understanding. **The student is expected to use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution.**	The revised SE restates and condenses 1(11)(B) and 1(11)(C). **Problem-Solving Model** **Current TEKS** / **Revised TEKS (2012)** Understanding the problem / Analyzing given information Making a plan / Formulating a plan or strategy Carrying out the plan / Determining a solution Justifying the solution Evaluating the solution for reasonableness / Evaluating the problem-solving process and the reasonableness of the solution	
●	1(11)(C) **Underlying processes and mathematical tools.** The student applies Grade 1 mathematics to solve problems connected to everyday experiences and activities in and outside of school. **The student is expected to select or develop an appropriate problem-solving plan or strategy including drawing a picture, looking for a pattern, systematic guessing and checking, or acting it out in order to solve a problem.**			
●	1(11)(D) **Underlying processes and mathematical tools.** The student applies Grade 1 mathematics to solve problems connected to everyday experiences and activities in and outside of school. **The student is expected to use tools such as real objects, manipulatives, and technology to solve problems.**	1(1)(C) **Mathematical process standards.** The student uses mathematical processes to acquire and demonstrate mathematical understanding. **The student is expected to select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems.**	The phrase "as appropriate" has been inserted into the revised TEKS. This implies that students are assessing which tool to apply rather than trying only one or all. The use of paper and pencil as a tool is now included in the list of tools that still includes real objects, manipulatives, and technology.	

	Old TEKS: Underlying processes and mathematical tools	Current TEKS (2012)	Supporting Information	Notes
●	1(12)(A) **Underlying processes and mathematical tools.** The student communicates about Grade 1 mathematics using informal language. **The student is expected to explain and record observations using objects, words, pictures, numbers, and technology.**	1(1)(D) **Mathematical process standards.** The student uses mathematical processes to acquire and demonstrate mathematical understanding. **The student is expected to communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate.**	Communication has expanded to include reasoning and the implications of mathematical ideas and reasoning. The list of representations is now summarized with "multiple representations" with specificity added with "symbols," "graphs," and "diagrams."	
●	1(12)(B) **Underlying processes and mathematical tools.** The student communicates about Grade 1 mathematics using informal language. **The student is expected to relate informal language to mathematical language and symbols.**	1(1)(E) **Mathematical process standards.** The student uses mathematical processes to acquire and demonstrate mathematical understanding. **The student is expected to create and use representations to organize, record, and communicate mathematical ideas.**	The use of representations is extended to include organizing and recording mathematical ideas in addition to communicating. As students use and create representations, it is implied that they will evaluate the effectiveness of their representations to ensure that they are communicating mathematical ideas clearly. Students are expected to use appropriate mathematical vocabulary and phrasing when communicating mathematical ideas.	
●	1(13) **Underlying processes and mathematical tools.** The student uses logical reasoning. **The student is expected to justify his or her thinking using objects, words, pictures, numbers, and technology.**	1(1)(F) **Mathematical process standards.** The student uses mathematical processes to acquire and demonstrate mathematical understanding. **The student is expected to analyze mathematical relationships to connect and communicate mathematical ideas.**	The Revised TEKS (2012) extends the current TEKS to allow for additional means to analyze relationships and to form connections with mathematical ideas past conjecturing and sets of examples and non-examples. Students are still expected to form conjectures based on patterns or sets of examples and non-examples.	
		1(1)(G) **Mathematical process standards.** The student uses mathematical processes to acquire and demonstrate mathematical understanding. **The student is expected to display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communications.**	The Revised TEKS (2012) clarifies "validates his/her conclusions" with displays, explanations, and justifications. The conclusions are expected to focus on mathematical ideas and arguments. Displays could include diagrams, visual aids, written work, etc. The intention is make one's work visible to others so that explanations and justifications may be shared in written or oral form. Precise mathematical language is expected. For example, students would use "vertex" instead of "corner" when referring to the point at which two edges intersect on a polygon.	

Old TEKS: Financial Literacy	Current TEKS (2012)	Supporting Information	Notes
+	1(9)(A) **Personal financial literacy.** The student applies mathematical process standards to manage one's financial resources effectively for lifetime financial security. **The student is expected to define money earned as income.**		
+	1(9)(B) **Personal financial literacy.** The student applies mathematical process standards to manage one's financial resources effectively for lifetime financial security. **The student is expected to identify income as a means of obtaining goods and services, oftentimes making choices between wants and needs.**		
+	1(9)(C) **Personal financial literacy.** The student applies mathematical process standards to manage one's financial resources effectively for lifetime financial security. **The student is expected to distinguish between spending and saving.**		
+	1(9)(D) **Personal financial literacy.** The student applies mathematical process standards to manage one's financial resources effectively for lifetime financial security. **The student is expected to consider charitable giving.**		