Texas 2nd Grade TEKS / *Excel* Math Correlation

Texas Essential Knowledge and Skills	*Excel* Math Lesson Numbers	Stretch Lesson Numbers Activity Numbers
MATHEMATICAL PROCESS STANDARDS		
(1) The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:		
(A) apply mathematics to problems arising in everyday life, society, and the workplace;	7, 27, 30, 33, 35, 38, 40, 44, 50, 55, 57, 65, 66, 76, 77, 81, 95, 99, 100, 104, 105, 109, 111, 113, 114, 115, 117, 125, 127, 128, 130, 131, 134, 153, 154	40, 53, 55 Activity 8, 14 Create A Problems: 1-24
(B) 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;	7, 27, 30, 33, 35, 38, 40, 44, 50, 55, 57, 65, 66, 76, 77, 81, 95, 99, 100, 104, 105, 109, 111, 113, 114, 115, 117, 125, 127, 128, 130, 131, 134, 153, 154	40, 53, 55 Activity 8, 14 Create A Problems: 1-24
(C) 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;	7, 27, 30, 33, 35, 38, 40, 44, 50, 55, 57, 65, 66, 76, 77, 81, 95, 99, 100, 104, 105, 109, 111, 113, 114, 115, 117, 125, 127, 128, 130, 131, 134, 153, 154	40, 53, 55 Activity 8, 14 Create A Problems: 1-24
(D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate;	7, 27, 30, 33, 35, 38, 40, 44, 50, 55, 57, 65, 66, 76, 77, 81, 95, 99, 100, 104, 105, 109, 111, 113, 114, 115, 117, 125, 127, 128, 130, 131, 134, 153, 154	40, 53, 55 Activity 8, 14 Create A Problems: 1-24
(E) create and use representations to organize, record, and communicate mathematical ideas;	7, 27, 30, 33, 35, 38, 40, 44, 50, 55, 57, 65, 66, 76, 77, 81, 95, 99, 100, 104, 105, 109, 111, 113, 114, 115, 117, 125, 127, 128, 130, 131, 134, 153, 154	40, 53, 55 Activity 8, 14 Create A Problems: 1-24
(F) analyze mathematical relationships to connect and communicate mathematical ideas; and	7, 27, 30, 33, 35, 38, 40, 44, 50, 55, 57, 65, 66, 76, 77, 81, 95, 99, 100, 104, 105, 109, 111, 113, 114, 115, 117, 125, 127, 128, 130, 131, 134, 153, 154	40, 53, 55 Activity 8, 14 Create A Problems: 1-24
(G) display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.	7, 27, 30, 33, 35, 38, 40, 44, 50, 55, 57, 65, 66, 76, 77, 81, 95, 99, 100, 104, 105, 109, 111, 113, 114, 115, 117, 125, 127, 128, 130, 131, 134, 153, 154	40, 53, 55 Activity 8, 14 Create A Problems: 1-24

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Texas Essential Knowledge and Skills	*Excel* Math Lesson Numbers	Stretch Lesson Numbers Activity Numbers
NUMBER AND OPERATIONS		
(2) The student applies mathematical process standards to understand how 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:		
(A) use concrete and pictorial models to compose and decompose numbers up to 1,200 in more than one way as a sum of so many thousands, hundreds, tens, and ones;	1, 3, 4, 6, 9, 11, 13, 16, 22, 23, 24, 25, 31, 37, 39, 42, 46, 47, 49, 51, 54, 56, 59, 61, 64, 67, 70, 71, 72, 73, 74, 82, 88, 91, 92, 93, 94, 106, 107, 116, 118, 122, 123, 129, 139, 141, 142, 145, 148	
(B) use standard, word, and expanded forms to represent numbers up to 1,200;	16, 17, 18, 22, 23, 24, 26, 28, 31, 33, 38, 39, 41, 46, 49, 51, 54, 59, 64, 70, 71, 72, 73, 74, 76, 82, 88, 91, 92, 93, 94, 106, 107, 109, 116, 118, 122, 123, 129, 139, 141, 142, 145, 148	
(C) generate a number that is greater than or less than a given whole number up to 1,200;	2, 3, 6, 11, 12, 26, 37, 97, 112, 124, 142	
(D) use place value to compare and order whole numbers up to 1,200 using comparative language, numbers, and symbols (>, <, or =);	3, 12, 14, 18, 22, 23, 26, 40, 61, 70, 73, 103, 112, 122, 124, 142	25, 32, 48, 91, 113, 118, 131, 149
(E) locate the position of a given whole number on an open number line; and	4, 6, 9, 11, 13, 14, 18, 22, 26, 37, 39, 40, 42, 47, 48, 56, 67, 70, 87	
(F) name the whole number that corresponds to a specific point on a number line.	4, 6, 9, 11, 13, 14, 18, 22, 26, *37, *39, 40, *42, *47, 48, *56, *67, 87	
NUMBER AND OPERATIONS		
(3) The student applies mathematical process standards to recognize and represent fractional units and communicates how they are used to name parts of a whole. The student is expected to:		
(A) partition objects into equal parts and name the parts, including halves, fourths, and eighths, using words;,	45, 63, 77, 80, 96, 111, 113, 114, 115, 120, 126, 127, 128, 136, 150, 155	Activity 6, 7
(B) explain that the more fractional parts used to make a whole, the smaller the part; and the fewer the fractional parts, the larger the part;	*45, *63, 80, *96, 120, 126, *150, 155	Activity 6, 7
(C) use concrete models to count fractional parts beyond one whole using words and recognize how many parts it takes to equal one whole; and	*63, *77, *80, 113, 114, 115, 120, *150, *155	Activity *6, 7

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Texas Essential Knowledge and Skills	*Excel* Math Lesson Numbers	Stretch Lesson Numbers Activity Numbers
(D) identify examples and non-examples of halves, fourths, and eighths.	45, 63, 77, 80, 96, 114, 115, 120, 126, 150, 155	Activity 6, 7
NUMBER AND OPERATIONS		
(4) The student applies mathematical process standards to develop and use strategies and methods for whole number computations in order to solve addition and subtraction problems with efficiency and accuracy. The student is expected to:		
(A) recall basic facts to add and subtract within 20 with automaticity;	1, 2, 3, 4, 6, 7, 8, 9, 11, 12, 13, 14, 16, 17, 18, 19, 20, 21, 23, 24, 25, 26, 28, 31, 32, 34, 36, 38, 41, 42, 43, 44, 46, 48, 49, 51, 52, 53, 54, 56, 58, 59, 61, 62, 64, 66, 67, 68, 69, 70, 76, 77, 79, 81, 82, 83, 84, 87, 90, 92, 97, 98, 99, 101, 102, 103, 106, 107, 108, 109, 111, 112, 114, 116, 119, 124, 126, 131, 133, 137, 140, 142, 146, 147, 148, 152	21, 22, 26, 31, 33, 38, 39, 42, 46, 47, 51, 52, 56, 60, 68, 124, 142 Activity 11, 12, 15
(B) add up to four two-digit numbers and subtract two-digit numbers using mental strategies and algorithms based on knowledge of place value and properties of operations;	11, 16, 21, 22, 23, 24, 25, 28, 31, 34, 36, 39, 42, 43, 46, 48, 49, 51, 54, 59, 66, 68, 69, 70, 71, 72, 73, 76, 77, 82, 88, 89, 92*, 94, 104, 106, 107, 116, 118, 121, 122, 131, 133, 139*, 140, 145, 146, 147 Three digit: 92, 106, 129, 133, 139	40, 49, 65, 70, 75, 82, 87, 90, 104, 115, 118, 124, 133, 136, 150, 153 Activity 12, 15
(C) solve one-step and multi-step word problems involving addition and subtraction within 1,000 using a variety of strategies based on place value, including algorithms; and	11, 25, 27, 30, 38, 39, 57, 65, 66, 81, 95, 97, 104, 109, 111, 114, 117, 125, 127, 128, 130	28, 29, 30, 33, 35, 37, 40, 43, 44, 49, 58, 63, 67, 69, 71, 72, 76, 78, 79, 83, 86, 90, 93, 99, 100, 104, 108, 110, 117, 121, 123, 126, 128, 131, 132, 133, 136, 140, 146, 150, 152, 154 Activity 8
(D) generate and solve problem situations for a given mathematical number sentence involving addition and subtraction of whole numbers within 1,000.	1, 6, 9, 11, 12, 14, 20, 21, 22, 23, 25, 27, 31, 36, 38, 48, 51, 52, 56, 57, 58, 66, 67, 81, 95, 103, 108, 111, 114, 115, 117, 120, 121, 130, 139, 143, 147, 153 Multiplication: 125 Division: 127, 153	21, 28, 29, 30, 33, 37, 40, 42, 43, 47, 58, 63, 67, 69, 71, 76, 78, 79, 83, 86, 90, 96, 99, 100, 118, 121, 125, 126, 128, 130, 131, 132, 133, 140, 146 Activity 8, 12, 15
NUMBER AND OPERATIONS		
(5) The student applies mathematical process standards to determine the value of coins in order to solve monetary transactions. The student is expected to:		

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Texas Essential Knowledge and Skills	*Excel* Math Lesson Numbers	Stretch Lesson Numbers Activity Numbers
(A) determine the value of a collection of coins up to one dollar; and	32, 43, 66, 79, 83, 86, 109, 119, 149	117
(B) use the cent symbol, dollar sign, and the decimal point to name the value of a collection of coins.	32, 43, 66, 79, 83, 86, 109, 119, 138, 149	108, 117, 123, 126, 132, 140, 146 Activity 8
NUMBER AND OPERATIONS		
(6) The student applies mathematical process standards to connect repeated addition and subtraction to multiplication and division situations that involve equal groupings and shares. The student is expected to:		
(A) model, create, and describe contextual multiplication situations in which equivalent sets of concrete objects are joined; and	95, 108, 121, 125, 131, 137, 141, 152 Multiplication Basic Facts: 124, 126, 131, 132, 133, 134, 137, 139, 142, 144, 146, 149	72, 95, 101, 109, 119, 126, 130, 132, 140, 144, 147, 151, 155
(B) model, create, and describe contextual division situations in which a set of concrete objects is separated into equivalent sets.	77, 111, 113, 114, 115, 127, 128, 136, 137, 152, 153, 154	
ALGEBRAIC REASONING		
(7) 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:		
(A) determine whether a number up to 40 is even or odd using pairings of objects to represent the number;	*70, 99, 111, 113, 114, 115	115, 128
(B) use an understanding of place value to determine the number that is 10 or 100 more or less than a given number up to 1,200; and	13, *22, 37, 47, 54, 75, 93, 141	97 Activity 12
(C) represent and solve addition and subtraction word problems where unknowns may be any one of the terms in the problem.	*38, *58, *101, 103, *117, 130	21, 28, 29, 30, 37, 41, 45, 52, 57, 61, 63, 65, 70, 71, 75, 76, 78, 79, 80, 82, 86, 87, 93, 96, 114, 125, 130, 134, 137, 143 Multiply 94, 101, 109, 119, 137, 143, 147

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Texas Essential Knowledge and Skills	*Excel* Math Lesson Numbers	Stretch Lesson Numbers Activity Numbers
GEOMETRY AND MEASUREMENT		
(8) 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:		
(A) create two-dimensional shapes based on given attributes, including number of sides and vertices;	8, 10, 36, 78	23, 24, 27, 34, 36, 62, 66, 74, 77, 85, 92, 94, 103, 105, 112, 127, 138, 139, 144 Activity 5, 9, 13
(B) classify and sort three-dimensional solids, including spheres, cones, cylinders, rectangular prisms (including cubes as special rectangular prisms), and triangular prisms, based on attributes using formal geometric language;	110	Activity 5, 9, 10
(C) classify and sort polygons with 12 or fewer sides according to attributes, including identifying the number of sides and number of vertices;	8, 10, 36, 78, 101, *132, *135, *144	24, 34, 36, 62, 66, 74, 77, 85, 94, 103, 105, 127, 129, 138, 139, 144 Activity 5, 9, 13
(D) compose two-dimensional shapes and three-dimensional solids with given properties or attributes; and:	8, 10, 36, 78, 80, 96, 110	23, 24, 36, 62, 66, 74, 77, 92, 94, 103, 112, 127, 138, 139, 144 Activity 5, 9, 10, 13
(E) decompose two-dimensional shapes such as cutting out a square from a rectangle, dividing a shape in half, or partitioning a rectangle into identical triangles and identify the resulting geometric parts.	80, 96	23, 24, 34, 36, 74, 77, 85, 92, 94, 103, 112, 127, 139, 144 Activity 5, *9, 13
GEOMETRY AND MEASUREMENT		
(9) The student applies mathematical process standards to select and use units to describe length, area, and time. The student is expected to:		
(A) find the length of objects using concrete models for standard units of length;	53, 55, 60, 65, 84, 85	Activity 1, 2 (3, 4, 5)
(B) describe the inverse relationship between the size of the unit and the number of units needed to equal the length of an object;	*53, 55, 60, 65, *84, *85	Activity 1, 2 (1, 2, 3, 4, 5)
(C) represent whole numbers as distances from any given location on a number line;	*55, *65, *84, *85	Activity 2 (1, 2, 3, 4, 5)

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Texas Essential Knowledge and Skills	*Excel* Math Lesson Numbers	Stretch Lesson Numbers Activity Numbers
(D) determine the length of an object to the nearest marked unit using rulers, yardsticks, meter sticks, or measuring tapes;	53, 55, 60, 65, 84, 85	Activity 2 (3, 4, 5)
(E) determine a solution to a problem involving length, including estimating lengths;	55, 60, *65, 81, 84, 85	Activity 1, 2 (3, 4, 5)
(F) use concrete models of square units to find the area of a rectangle by covering it with no gaps or overlaps, counting to find the total number of square units, and describing the measurement using a number and the unit; and	90 Perimeter: 132	
(G) read and write time to the nearest one-minute increment using analog and digital clocks and distinguish between a.m. and p.m.	19, 29, 44, 45, 62, 69, 89, 98, 143 Days of Week: 134	
DATA ANALYSIS		
(10) The student applies mathematical process standards to organize data to make it useful for interpreting information and solving problems. The student is expected to:		
(A) explain that the length of a bar in a bar graph or the number of pictures in a pictograph represents the number of data points for a given category;	*5, 15, 35, 50, *55, *100, 105 Create A Problem: 4, 9, 17, 22, 24	55 Activity 3, 4
(B) organize a collection of data with up to four categories using pictographs and bar graphs with intervals of one or more;	5, 15, 35, 50, 55, 65, *100, 105 Create A Problem: 4, 9, 17, 22, 24	55 Activity 3, 4
(C) write and solve one-step word problems involving addition or subtraction using data represented within pictographs and bar graphs with intervals of one; and	5,*15, 35, 50, 55, 65, 105 Create A Problem: 4, 9, 17, 22, 24	*40, *49, 55 Activity 3, 4
(D) draw conclusions and make predictions from information in a graph.	5, 15, 35, 50, 55, 65, *100, 105 Create A Problem: 4, 9, 17, 22, 24	55 Activity 3, 4

Texas Essential Knowledge and Skills	*Excel* Math Lesson Numbers	Stretch Lesson Numbers Activity Numbers
PERSONAL FINANCIAL LITERACY		
(11) The student applies mathematical process standards to manage one's financial resources effectively for lifetime financial security. The student is expected to:		
(A) calculate how money saved can accumulate into a larger amount over time;	*32, *43, *66, *79, *83, *109, *119, *149	Activity *8, 14
(B) explain that saving is an alternative to spending;	*32, *43, *66, *79, *83, *109, *119, *149	Activity *8, 14
(C) distinguish between a deposit and a withdrawal;	*32, *43, *66, *79, *83, *109, *119, *149	Activity *8
(D) identify examples of borrowing and distinguish between responsible and irresponsible borrowing;	*32, *43, *66, *79, *83, *109, *119, *149	Activity *8
(E) identify examples of lending and use concepts of benefits and costs to evaluate lending decisions; and	*32, *43, *66, *79, *83, *109, *119, *149	Activity *8
(F) differentiate between producers and consumers and calculate the cost to produce a simple item.	*32, *43, *66, *79, *83, *109, *119, *149	Activity 8, 14

Please Note: Excel Math does not have a specific curriculum component for **'Personal Financial Literacy,'** but the above referenced Lessons and Activities give opportunity for teachers to teach these concepts.

These are advanced Excel Math concepts that go beyond Texas Standards for Grade 2 but may be required by some districts. Alternate TEKS Activities are provided in the Teacher Edition for these Lessons:

Concept	Lesson	Stretch
Ordinals Algebra w/ parentheses	7, 76 102	
Probability / Possibilities	25, 100	50, 81
Order Events	40	
Days of the Week Months	44, 134 151	
Scales / Measuring devices / weight / Volume / Perimeter	53, 60, 65, 132	53
Deductive Reasoning	130	54, 59, 64, 73, 84, 88, 89, 98, 102, 106, 107, 111, 116, 120, 122, 135, 141, 145, 148
Symmetry Flips, Slides, Turns Similar / Congruent	75 135 144	
Patterns - figures	96, 101	
Add / Subtract money amounts	79, 86, 138, 140	

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