

Texas Essential Knowledge and Skills **Excel Math Lesson Numbers**

Activity / Exercise 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;	22, 45, 57, 66, 67, 68, 70, 73, 74, 77, 85, 100, 101, 105, 115, 120, 125, 131, 132, 134, 138, 141, 142, 143, 145	6, 14, 16, 21, 62, 63, 67, 71, 72, 76, 79, 83, 89, 91, 92, 93, 95, 99, 102, 104, 105, 116, 120, 123, 134, 136, 138, 139, 141, 142, 143, 146, 147, 149, 151 Exercise 6, 8, 9, 10, 11, 12
(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;	22, 45, 57, 66, 67, 68, 70, 73, 74, 77, 85, 100, 101, 105, 115, 120, 125, 131, 132, 134, 138, 141, 142, 143, 145	6, 14, 16, 21, 62, 63, 67, 71, 72, 76, 79, 83, 89, 91, 92, 93, 95, 99, 102, 104, 105, 116, 120, 123, 134, 136, 138, 139, 141, 142, 143, 146, 147, 149, 151 Exercise 6, 8, 9, 10, 11, 12
(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;	22, 45, 57, 66, 67, 68, 70, 73, 74, 77, 85, 100, 101, 105, 115, 120, 125, 131, 132, 134, 138, 141, 142, 143, 145	6, 14, 16, 21, 62, 63, 67, 71, 72, 76, 79, 83, 89, 91, 92, 93, 95, 99, 102, 104, 105, 116, 120, 123, 134, 136, 138, 139, 141, 142, 143, 146, 147, 149, 151 Exercise 6, 8, 9, 10, 11, 12
(D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate;	22, 45, 57, 66, 67, 68, 70, 73, 74, 77, 85, 100, 101, 105, 115, 120, 125, 131, 132, 134, 138, 141, 142, 143, 145	6, 14, 16, 21, 62, 63, 67, 71, 72, 76, 79, 83, 89, 91, 92, 93, 95, 99, 102, 104, 105, 116, 120, 123, 134, 136, 138, 139, 141, 142, 143, 146, 147, 149, 151 Exercise 6, 8, 9, 10, 11, 12
(E) create and use representations to organize, record, and communicate mathematical ideas;	22, 45, 57, 66, 67, 68, 70, 73, 74, 77, 85, 100, 101, 105, 115, 120, 125, 131, 132, 134, 138, 141, 142, 143, 145	6, 14, 16, 21, 62, 63, 67, 71, 72, 76, 79, 83, 89, 91, 92, 93, 95, 99, 102, 104, 105, 116, 120, 123, 134, 136, 138, 139, 141, 142, 143, 146, 147, 149, 151 Exercise 6, 8, 9, 10, 11, 12

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(F) analyze mathematical relationships to connect and communicate mathematical ideas; and	22, 45, 57, 66, 67, 68, 70, 73, 74, 77, 85, 100, 101, 105, 115, 120, 125, 131, 132, 134, 138, 141, 142, 143, 145	6, 14, 16, 21, 62, 63, 67, 71, 72, 76, 79, 83, 89, 91, 92, 93, 95, 99, 102, 104, 105, 116, 120, 123, 134, 136, 138, 139, 141, 142, 143, 146, 147, 149, 151 Exercise 6, 8, 9, 10, 11, 12
(G) display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.	22, 45, 57, 66, 67, 68, 70, 73, 74, 77, 85, 100, 101, 105, 115, 120, 125, 131, 132, 134, 138, 141, 142, 143, 145	6, 14, 16, 21, 62, 63, 67, 71, 72, 76, 79, 83, 89, 91, 92, 93, 95, 99, 102, 104, 105, 116, 120, 123, 134, 136, 138, 139, 141, 142, 143, 146, 147, 149, 151 Exercise 6, 8, 9, 10, 11, 12
NUM	BER AND OPERATION	ONS
(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) recognize instantly the quantity of structured arrangements;	1, 2, 3, 4, 6, 7, 11, 12, 13, 14, 15, 16, 18, 21, 22, 24, 28, 30, 31, 32, 33, 34, 35, 37, 38, 41, 42, 43, 44, 45, 46, 47, 54, 57, 58, 61, 63, 64, 66, 67, 69, 70, 72, 74, 82, 86, 88, 94, 96, 98, 103, 109, 113, 118, 130, 138, 141, 147	
(B) 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;	1, 2, 3, 4, 6, 13, 14, 15, 16, 18, 21, 22, 28, 30, 31, 32, 33, 34, 35, 37, 38, 41, 44, 45, 46, 47, 57, 58, 61, 63, 64, 667, 69, 70, 72, 74, 76, 82, 84, 85, 86, 892, 94, 96, 97, 98, 109, 110, 111, 113, 118, 130, 138, 141, 147	2, 118, 127
(C) use objects, pictures, and expanded and standard forms to represent numbers up to 120;	1, 2, 3, 6, 11, 12, 13, 14, 15, 16, 18, 21 22, 30, 35, 37, 38, 41, 42, 45, 46, 47, 5 59, 61, 63, 69, 70, 72, 74, 82, 84, 85, 8 92, 94, 96, 97, 98, 109, 110, 111, 113, 118, 130, 141, 147	8,
(D) generate a number that is greater than or less than a given whole number up to 120;	10, 17, 19, 24, 28, 34, 36, *39, 40, 80, 112, 121, 126, 129	81, *33, 38, 98, 106 Exercise 1, 10



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(E) use place value to compare whole numbers up to 120 using comparative language;	7, 10, 11, 12, *19, 28, *36, 40, 52, 53, 80, 81, 90, 91, 102, 112, 121	11, 12, 77, 78, 93, 98, 106, 131
(F) order whole numbers up to 120 using place value and open number lines;	5, *10, *17, *19, 36, 40, *52, *53, 61, 82, 90, 91, 112	38, 44, 77, 78, 106, 132
(G) represent the comparison of two numbers to 100 using the symbols >, <, or =.	*28, 38, 39, 57, 72, 78, *80, *81, 102, 121, 127	73, *77, *78, 93, 98 Exercise 10
NUM	BER AND OPERATION	IS
(3) The student applies mathematical pro and subtraction computations in orde	cess standards to develop and use strateg r to solve problems. The student is expec	
(A) use concrete and pictorial models to determine the sum of a multiple of 10 and a one-digit number in problems up to 99;	24, 41, 43, 45, 48, 51, 54, 58, 63, 64, 66, 69, 70, 76, 78, 82, 84, 85, 88, 89, 90, 92, 96, 97, 103, 104, 105, 117, 118, 129, 130, 131, 132, 141	33, 73, 104, 111, 118 Exercise 11
(B) 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;	22, 24, 30, 37, 41, 44, 45, 54, 57, 66, 67, 68, 70, 76, 77, 85, 90, 92, 97, 100, 101, 103, 104, 105, 114, 131, 132, 138, 141, 142, 145	27, 33, 42, 43, 44, 59, 69, 73, 92, 93, 104, 111, 118, 139 Exercise 3, 8, 11
(C) compose 10 with two or more addends with and without concrete objects;	22, *32, 35, 41, 43, 45, 48, 49, 54, 55, 58, 63, 64, 66, 67, 71, 72, 76, 78, 88, 89, 90, *99, 104, 105, 127	33, 42, 43, 44, 59, 73, 111 Exercise 11
(D) apply basic fact strategies to add and subtract within 20, including making 10 and decomposing a number leading to a 10;	14, 15, 18, 22, 28, 29, 30, 31, 32, 33, 34, 35, 37, 38, 39, 41, 42, 43, 44, 45, 46, 48, 49, 53, 54, 55, 56, 57, 58, 60, 61, 63, 64, 66, 67, 68, 69, 70, 71, 72, 74, 76, 78, 79, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 96, 97, 98, 99, 100, 103, 104, 105, 106, 109, 110, 113, 114, 116, 117, 118, 126, 127, 128, 131, 132, 133, 138, 139, 141, 142, 143, 145, 146, 149	18, 27, 31, 33, 42, 43, 44, 58, 59, 66, 67, 69, 73, 92, 93, 104, 111, 117, 127, 139, 151 Exercise 1, 3, 11



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(E) explain strategies used to solve addition and subtraction problems up to 20 using spoken words, objects, pictorial models, and number sentences; and	14, 15, 18, 22, 24, 28, 29, 30, 31, 32, 34, 35, 37, 38, 39, 41, 43, 44, 45, 48, 49, 51, 54, 55, 57, 58, 60, 64, 66, 67, 68, 69, 70, 71, 72, 74, 76, 78, 79, 84, 85, 86, 88, 89, 90, 92, 93, 96, 97, 99, 100, 101, 103, 104, 105, 106, 110, 114, 116, 117, 122, 123, 127, 129, 131, 132, 133, 136, 137, 138, 139, 141, 142, 145, 146, 147, 149	18, 27, 31, 33, 42, 43, 44, 59, 66, 67, 69, 73, 92, 93, 104, 111, 117, 118, 123, 127, 139, 151 Exercise 3, 8, 11		
(F) generate and solve problem situations when given a number sentence involving addition or subtraction of numbers within 20.	29, 30, 38, 39, 45, 55, 57, 60, 66, 67, 68, 69, 70, 71, 72, 76, 78, 79, 84, 85, 86, 88, 89, 90, 92, 93, 96, 97, 100, 101, 103, 104, 105, 106, 110, 114, 116, 117, 122, 123, 127, 129, 131, 132, 133, 136, 137, 138, 139, 141, 142, 145, 146, 147, 149	33, 59, 69, 73, 92, 93, 104, 111, 117, 118, 123, 139, 151 Exercise 3, 11		
NUME	NUMBER AND OPERATIONS			
(4) 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:				
(A) identify U.S. coins, including pennies, nickels, dimes, and quarters, by value a describe the relationships among them;		68, 81, 84, 144 Exercise 10		
(B) write a number with the cent symbol to describe the value of a coin; and	23, 29, 51, 68, 139, 154	68, 81, 84, 144 Exercise 10		
(C) use relationships to count by twos, fives tens to determine the value of a collection pennies, nickels, and/or dimes.		68, 87, 144		



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ALGEBRAIC REASONING		
(5) 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) recite numbers forward and backward from any given number between 1 and 120;	1, 2, 3, 4, 5, 6, 7, 10, 11, 12, 13, 16, 17, 19, 22, 24, 28, 29, 31, 33, 36, 40, 42, 44, 45, 46, 47, 51, 57, 61, 63, 64, 69, 70, 72, 74, 78, 79, 82, 84, 88, 86, 91, 92, 94, 102, 109, 112, 113, 124, 126, 130, 144, 146	2, 4, 6, 27, 29, 33, 38, 42, 44, 47, 82, 87, 117 Exercise 1
(B) skip count by twos, fives, and tens to determine the total number of objects up to 120 in a set;	69, 70, 72, 74, 82, 84, 86, 90, 94, 102, 109, 112, 113, 124, 130, 133, 144	82, 87, 131
(C) use relationships to determine the number that is 10 more and 10 less than a given number up to 120;	24, 76, *82, 90, 102, *112, 129, 133, 134	27, *33, 42, 127, 131 Exercise 11
(D) represent word problems involving addition and subtraction of whole numbers up to 20 using concrete and pictorial models and number sentences;	22, 24, 30, 31, 32, 37, 41, 44, 45, 54, 57, 66, 67, 68, 70, 74, 85, 97, 100, 101, 103, 104, 105, 114, 116, 117, 131, 132, 138, 142, 145	27, 42, 59, 69, 92, 93, 104, 111, 117, 139, 151 Exercise 8, 11
(E) understand that the equal sign represents a relationship where expressions on each side of the equal sign represent the same value(s);	7, 38, 39, 45, 57, 60, 66, 67, 68, 69, 71, 72, 74, 78, 79, 85, 87, 89, 92, 96, 97, 100, 101, 103, 104, 111, 114, 117, 122, 123, 127, 132, 136, 137, 138, 139, 141, 142, 145, 147	59, 66, 69, 73, 92, 123, 139, 151 Exercise 8, 10
(F) 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; and	38, 39, 45, 57, 60, 66, 67, 68, 69, 71, 72, 74, 78, 79, 85, 87, 89, 92,100, 101, 103, 104, 114, 117, 122, 123, 127, 132, 138, 141, 142, 145, 147	69, 73, 92, 106, 123, 139, 151 Exercise 8, 10
(G) apply properties of operations to add and subtract two or three numbers.	14, 18, 22, 24, 32, 37, 38, 39, 41, 44, 45, 48, 57, 60, 66, 67, 68, 69, 71, 72, 74, 78, 79, 84, 85, 87, 88, 89, 92, 96, 97, 99, 100, 101, 103, 104, 106, 111, 114, 116, 117, 122, 123, 127, 132, 136, 137, 138, 139, 141, 142, 145, 147	18, 31, 33, 59, 66, 69, 73, 92, 106, 123, 139, 151 Exercise 8, 10



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GEOMETRY AND MEASUREMENT		
(6) 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) classify and sort regular and irregular two-dimensional shapes based on attributes using informal geometric language;	8, 9, 25, 65, 75, 107, 108, 119, 125, 128, 135, 140, 148	7, 8, 9, 17, 19, 22, 23, 26, 28, 34, 37, 49, 57, 61, 64, 86, 88, 94, 96, 97, 101, 103, 109, 112, 113, 119, 121, 122, 124, 126, 129, 137, 147, 148, 152, 153, 154 Exercise 3, 4, 7
(B) distinguish between attributes that define a two-dimensional or three-dimensional figure and attributes that do not define the shape;	*75, *107, *108, 150, 151	34, 37, 101, 103, *122, 147 Exercise 7
(C) create two-dimensional figures, including circles, triangles, rectangles, and squares, as special rectangles, rhombuses, and hexagons;	8, 9, 20, 25, 65, 75, 107, 108, 119, *128, 135	7, 8, 9, 19, 23, 34, 49, 56, 57, 61, 64, 86, 88, 94, 96, 97, 101, 103, 107, 108, 109, 112, 113, 119, 121, 122, 124, 126, 129, 133, 148, 152, 153 Exercise 4
(D) identify two-dimensional shapes, including circles, triangles, rectangles, and squares, as special rectangles, rhombuses, and hexagons and describe their attributes using formal geometric language;	8, 9, 20, 25, 65, 75, 107, 108, 119, 125, 128, 135, 140, 148	7, 8, 9, 19, 22, 23, 26, 28, 34, 37, 49, 54, 56, 57, 61, 64, 86, 88, 89, 94, 96, 97, 101, 103, 107, 108, 109, 112, 113, 119, 121, 122, 124, 126, 129, 133, 148, 151, 152, 153, 154 Exercise 3, 4, 7
(E) identify three-dimensional solids, including spheres, cones, cylinders, rectangular prisms (including cubes), and triangular prisms, and describe their attributes using formal geometric language;	150, 151	*37, *147 Exercise 7
(F) compose two-dimensional shapes by joining two, three, or four figures to produce a target shape in more than one way if possible;	25, 65, 107, 108, 125, *128, 135, 148	7, 8, 9, 19, 23, 34, 49, 56, 57, 61, 64, 86, 88, 94, 96, 97, 101, 103, 107, 108, 109, 112, 113, 119, 121, 122, 124, 126, 129, 133, 148, 152, 153 Exercise 10



Texas 1st Grade TEKS / Excel Math Correlation

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(G) partition two-dimensional figures into two and four fair shares or equal parts and describe the parts using words; and	25, 65, 107, 108, 119, 125, *128, 135, 140, 148, 154, 155	19, 49, 54, 61, 64, *86, 88, 94, 107, 108, 121, 126, 128, 133, 154
(H) identify examples and non- examples of halves and fourths.	25, 107, 108, 119, *128, 131, 135, 140, 148, 154, 155	19, *49, 54, *61, 88, 94, 107, 108, *126, 128, 133, 154 Exercise 10
GEOME	TRY AND MEASUR	EMENT
(7) The student applies mathematical prostudent is expected to:	ocess standards to select and use ur	nits to describe length and time. The
(A) use measuring tools to measure the length of objects to reinforce the continuous nature of linear measurement;	50, 56, 83	13, 24, 32, 91 Exercise 5
(B) 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;	50, 56, 83	13, 24, 32, 91 Exercise 5
(C) measure the same object/distance with units of two different lengths and describe how and why the measurements differ;	50, 56, 83	13, 24, 32, 91 Exercise 5
(D) describe a length to the nearest whole unit using a number and a unit; and	50, 56, 83, 143 (length of time)	13, 24, 32, 91 Exercise 5
(E) tell time to the hour and half hour using analog and digital clocks.	26, 27, 62, 95, 138, 143, 152, 153	*76, 95, 138, 143 Exercise 9, 10



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DATA ANALYSIS			
(8) 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) collect, sort, and organize data in up to three categories using models/representations such as tally marks or T-charts;	73, 115, 120	13, 14, 24, 32, 41, 52, 53, 99, 102, 120, 134, 136, 141, 142 Exercise 5, 12	
(B) use data to create picture and bartype graphs; and	73, 115, 120	13, 14, 24, 32, 41, 52, 53, 99, 102, 120, 134, 136, 141, 142 Exercise *5, 12	
(C) draw conclusions and generate and answer questions using information from picture and bartype graphs	73, 115, 120	13, 14, 24, 32, 41, 52, 53, 99, 102, 120, 134, 136, 141, 142 Exercise *5, 12	
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) define money earned as income;	*23, *29, *51, 68, *139, *154	16, 51, 68, *81, *83, *84, *144, 146	
(B) identify income as a means of obtaining goods and services, oftentimes making choices between wants and needs;	*23, *29, *51, 68, *139, *154	16, 51, 68, *81, *83, *84, *144, 146	
(C) distinguish between spending and saving; and	*23, *29, *51, 68, *139, *154	16, 51, 68, *81, *83, *84, *144, 146	
(D) consider charitable giving.	*23, *29, *51, 68, *139, *154	83	

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 TEKS for Grade 1 but may be required by some districts:

Concept	Lesson Number	Activity / Exercise Number
Patterns	25	22, 34, 51
Weight, Mass, Volume		21, 39, 48, 52, 53, 63, 71, 136



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Deductive Reasoning	77, 105	62, 72, 89, 149
Estimate quantities / scales / temperature	87, 134	29, 41, Exercise 11
Probability	55	66, 67, 94, 102
Ordinals	59, 132	132
Days of Week	76, 95	76, Exercise 9
Directions	145	36, 79, 116
Order Events	105	105, 132
Odd / Even	131	
Symmetry	153	
Dollar Signs	154	

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