

Standards / Objectives

Excel Math Lesson Numbers

Operations and Algebraic Thinking			
Represent and solve problems involvi	ng multiplication and division.		
1. Interpret products of whole numbers, e.g., interpret 5 × 7 as the total number of objects in 5 groups of 7 objects each.	39, 46, 53, 61, 68, 71, 73, 81, 91, 92, 96, 97, 100, 117, 126, 127, 131, 151		
2. Interpret whole-number quotients of whole numbers, e.g., interpret 56 ÷ 8 as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each.	58, 59, 71, 81, 87, 88, 93, 94, 101, 102, 103, 111, 117, 118, 132, 133, 151, 153, 154		
3. Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.	59, 68, 74, 85, 87, 88, 91, 93, 96, 100, 105, 111, 121, 126, 127, 146, 151	55, 81, 96, 100, 105, 106, 110, 152 Activity 5	
Determine the unknown whole number in a multiplication or division equation relating three whole numbers.	76, 81, 99, 105, 107 Addition / Subtraction: 21, 28, 36, 122	70, 73, 75, 83, 89, 94, 101, 107, 110, 114, 119, 124, 129, 134, 141, 149, 154 Addition / Subtraction: 1, 11, 19, 24, 31, 33, 39, 40, 44, 49, 56, 63, 68, 77, 79, 85, 101, 102, 107, 110, 114, 125 Activity 5	



Standards / Objectives	Excel Math Lesson Numbers	Stretch Lesson Numbers Activity Numbers	
Understand properties of multiplication and the relationship between multiplication and division.			
5. Apply properties of operations as strategies to multiply and divide.2 Examples: If 6 × 4 = 24 is known, then 4 × 6 = 24 is also known. (Commutative property of multiplication.) 3 × 5 × 2 can be found by 3 × 5 = 15, then 15 × 2 = 30, or by 5 × 2 = 10, then 3 × 10 = 30. (Associative property of multiplication.) Knowing that 8 × 5 = 40 and 8 × 2 = 16, one can find 8 × 7 as 8 × (5 + 2) = (8 × 5) + (8 × 2) = 40 + 16 = 56. (Distributive property.)	46, 53, 58, 59, 61, 68, 71, 73, 91, 92, 95, 96, 97, 103, 107, 117, 118, 131, 142, 151 Multiples: 111, 117 Factors: 143 Prime Factors: 144		
6. Understand division as an unknown- factor problem. For example, find 32 ÷ 8 by finding the number that makes 32 when multiplied by 8.	*58, 71, *87, *88, 93, 96, 103, 117, 118, 132, 133, 142, 151, 153, 154		
Multiply and divide within 100.			
7. Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 × 5 = 40, one knows 40 ÷ 5 = 8) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.	39, 44, 46, 47, 48, 49, 51, 52, 53, 56, 57, 58, 59, 61, 64, 67, 68, 69, 71, 72, 73, 74, 76, 79, 81, 82, 83, 84, 86, 89, 92, 94, 96, 97, 99, 100, 104, 107, 108, 113, 117, 118, 119, 124, 126, 127, 136, 142, 143, 144, 146, 148, 151, 152, 153, 154	138	
Solve problems involving the four ope	rations, and identify and explain	n patterns in arithmetic.	
8. Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.	11, 15, 22, 26, 40, 75, 83, 84, 85, 87, 88, 96, 98, 105, 114, 121, 122, 126, 127, 132, 133, 137, 146 Reasoning: 25, 70, 123	3, 5, 7, 8, 10, 12, 13, 14, 18, 22, 23, 25, 26, 29, 30, 32, 34, 37, 38, 43, 45, 48, 52, 54, 55, 57, 62, 64, 69, 71, 79, 81, 91, 92, 95, 96, 97, 103, 105, 106, 109, 112, 114, 122, 127, 128, 130, 137, 138, 139, 143, 144, 151, 152 Reasoning: 20, 27, 29, 32, 42, 47, 51, 53, 59, 61, 66, 67, 74, 80, 82, 84, 88, 93, 97, 98, 99, 113, 118, 120, 131, 133, 135, 140, 142, 148, 153, Activity 1, 6	
9. Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations.	2, 6, 31, 37, 39, 46, 48, 68, 73, 80 , *96, 97, 104, 113, 126, 127, 131, 155 Shapes: 77, 130	35, 116, 123 Shapes: 78	



Standards / Objectives

Excel Math Lesson Numbers

Number and Operations in Base Ten			
Use place value understanding and pr	operties of operations to perfor	m multi-digit arithmetic.4	
1. Use place value understanding to round whole numbers to the nearest 10 or 100.	43, 60, 75, 90, 95, 115, 134 Place Value: 1, 4, 12, 14, 27, 34, 38, 49, 51, 53, 64, 79, 91, 100, 102, 104, 131, 132, 133, 150		
2. Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.	1, 2, 3, 6, 7, 8, 9, 11, 12, 13, 14, 16, 17, 19, 22, 23, 24, 26, 27, 28, 29, 31, 33, 34, 36, 38, 41, 42, 43, 44, 45, 47, 51, 52, 57, 58, 64, 67, 68, 69, 73, 74, 79, 81, 84, 92, 96, 115, 136, 146	1, 2, 6, 9, 13, 16, 21, 28, 31, 33, 35, 36, 39, 48, 65, 79, 91, 102, 117, 121, 123, 144, 146	
3. Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., 9×80 , 5×60) using strategies based on place value and properties of operations.	53, *71, 100		
Number and Operations - Fractions			
Develop understanding of fractions as	numbers.		
1. Understand a fraction 1/b as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size 1/b.	31, 54, *58, 66, 82, 109, 137, 140, 147, 148, 149	Activity 3, 8	
2. Understand a fraction as a number on the number line; represent fractions on a number line diagram.			
a. Represent a fraction 1/b on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size 1/b and that the endpoint of the part based at 0 locates the number 1/b on the number line.	*31, *54, *66, *82, *109, *140, *147, *148, *149		



Standards / Objectives	Excel Math Lesson Numbers	Stretch Lesson Numbers Activity Numbers
b. Represent a fraction a/b on a number line diagram by marking off a lengths 1/b from 0. Recognize that the resulting interval has size a/b and that its endpoint locates the number a/b on the number line.	*31, *54, *66, *82, *109, *140, *147, *148, *149	
3. Explain equivalence of fractions in specia	l cases, and compare fractions by reas	soning about their size.
a. Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.	*140, *147, 148, 149	Activity 8
b. Recognize and generate simple equivalent fractions, e.g., $1/2 = 2/4$, $4/6 = 2/3$). Explain why the fractions are equivalent, e.g., by using a visual fraction model.	*66, *140, *147, 148, 149	Activity 8
c. Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers.	*31, *54, *66, *82, *109, *140, *147, *148, *149	
d. Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model.	*147, 148, 149 Addition / Subtraction: 140	Activity 8



Standards / Objectives

Excel Math Lesson Numbers

Measurement and Data				
Solve problems involving measurement objects.	Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.			
1. Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.	18, 65, 78, 84, 89, 112, 152	3, 64		
2. Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l).6 Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem. ⁷	50, 63, 135, 145 Distance / Weight: 62	29 Activity 7		
Represent and interpret data.				
3. Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step "how many more" and "how many less" problems using information presented in scaled bar graphs.	20, 35, 126, 127, 141 Probability: 5 Combinations: 30	*97		
4. Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units—whole numbers, halves, or quarters.	32, 108, *125 Angles: 138 Lines: 56, 128, 129, 138 Equivalents: 74, 83, 125	Activity 10		



Standards / Objectives

Excel Math Lesson Numbers

Geometric measurement: understand	Geometric measurement: understand concepts of area and relate area to multiplication and to addition.		
5. Recognize area as an attribute of plane fig	gures and understand concepts	s of area measurement.	
a. A square with side length 1 unit, called "a unit square," is said to have "one square unit" of area, and can be used to measure area.	72, 124, 135, 145	*4, *17, -58, 60, 86, *87, 90, *104, *111, *115, 126, 132, *136, *147, 151 Activity 2, 7	
b. A plane figure which can be covered without gaps or overlaps by n unit squares is said to have an area of n square units.	72, 124, 135, 145	*86, *87, *90, *111, *115, *126, *132, *147, 151 Activity 2	
6. Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).	72, 124, 135, 145	*86, *87, *90, *111, *115, *126, *132, *147, 151 Activity 2	
7. Relate area to the operations of multiplica	tion and addition.	·	
a. Find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths.	72, 124, 135, 145	*126, *132, *147 Activity 2	
b. Multiply side lengths to find areas of rectangles with whole number side lengths in the context of solving real world and mathematical problems, and represent wholenumber products as rectangular areas in mathematical reasoning.	124, 135, 145	*4, *17, -58, 60, 86, *87, 90, *104, *111, *115, 126, 132, *136, *147, 151 Triangles: 41, 46, 50, 72, 76, 126	
c. Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths a and b + c is the sum of a × b and a × c. Use area models to represent the distributive property in mathematical reasoning.	*124, 135, 145	60*, *86, *111, *115, *126, *132, 151 Activity 2	
d. Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems.	*72, *124, 135	*126, *132, 151 Activity 2	



Standards / Objectives	Excel Math Lesson Numbers	Stretch Lesson Numbers Activity Numbers	
Geometric measurement: recognize po	erimeter as an attribute of plane	e figures and distinguish between linear	
8. Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.	86, 116	145, 150	
	Geometry		
Reason with shapes and their attribute	es.		
1. Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.	8, 41, 77, *86, 106, 119, 120, 129, 139 3- dimensional: 69, 141	4, 17, 41, 46, 50, 58, 60, 72, 76, 86, 87, 90, 104, 111, 115, 126, 132, 136, 147, 150, 151 Activity 2, 12	
2. Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. For example, partition a shape into 4 parts with equal area, and describe the area of each part as 1/4 of the area of the shape.	109	*86, *126 Activity 3	



	Standards / Objectives	Excel Math Lesson Numbers	Stretch Lesson Numbers Activity Numbers	
	Mathematical Practices			
1.	Make sense of problems and persevere in solving them.	5, 10, 11, 15, 20, 22, 25, 26, 30, 32, 35, 36, 40, 58, 62, 63, 65, 68, 70, 71, 74, 80, 82, 83, 84, 85, 87, 88, 89, 105, 110, 111, 112, 114, 115, 122, 123, 126, 127, 137, 151, 152	2, 4, 5, 6, 7, 8, 9, 11, 12, 13, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 31, 32, 34, 36, 37, 38, 39, 40, 43, 44, 45, 47, 49, 51, 53, 56, 58, 59, 61, 62, 63, 66, 67, 68, 69, 70, 71, 73, 74, 75, 76, 79, 80, 81, 82, 83, 84, 87, 88, 89, 92, 94, 95, 97, 98, 99, 100, 101, 102, 103, 104, 106, 107, 108, 109, 110, 111, 112, 114, 115, 117, 118, 119, 120, 121, 122, 124, 127, 128, 129, 131, 133, 134, 135, 136, 141, 143, 147, 149, 154 Activity 1, 2, 3, 4, 5, 6, 8, 9, 10, 11	
2.	Reason abstractly and quantitatively.	5, 10, 11, 15, 20, 22, 25, 26, 30, 32, 35, 36, 40, 58, 62, 63, 65, 68, 70, 71, 74, 80, 82, 83, 84, 85, 87, 88, 89, 105, 110, 111, 112, 114, 115, 122, 123, 126, 127, 137, 151, 152	2, 4, 5, 6, 7, 8, 9, 11, 12, 13, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 31, 32, 34, 36, 37, 38, 39, 40, 43, 44, 45, 47, 49, 51, 53, 56, 58, 59, 61, 62, 63, 66, 67, 68, 69, 70, 71, 73, 74, 75, 76, 79, 80, 81, 82, 83, 84, 87, 88, 89, 92, 94, 95, 97, 98, 99, 100, 101, 102, 103, 104, 106, 107, 108, 109, 110, 111, 112, 114, 115, 117, 118, 119, 120, 121, 122, 124, 127, 128, 129, 131, 133, 134, 135, 136, 141, 143, 147, 149, 154 Activity 1, 2, 3, 4, 5, 6, 8, 9, 10, 11	
3.	Construct viable arguments and critique the reasoning of others.	5, 10, 11, 15, 20, 22, 25, 26, 30, 32, 35, 36, 40, 58, 62, 63, 65, 68, 70, 71, 74, 80, 82, 83, 84, 85, 87, 88, 89, 105, 110, 111, 112, 114, 115, 122, 123, 126, 127, 137, 151, 152	2, 4, 5, 6, 7, 8, 9, 11, 12, 13, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 31, 32, 34, 36, 37, 38, 39, 40, 43, 44, 45, 47, 49, 51, 53, 56, 58, 59, 61, 62, 63, 66, 67, 68, 69, 70, 71, 73, 74, 75, 76, 79, 80, 81, 82, 83, 84, 87, 88, 89, 92, 94, 95, 97, 98, 99, 100, 101, 102, 103, 104, 106, 107, 108, 109, 110, 111, 112, 114, 115, 117, 118, 119, 120, 121, 122, 124, 127, 128, 129, 131, 133, 134, 135, 136, 141, 143, 147, 149, 154 Activity 1, 2, 3, 4, 5, 6, 8, 9, 10, 11	
4.	Model with mathematics.	5, 11, 18, 20, 22, 26, 32, 35, 36, 40, 58, 62, 65, 68, 71, 74, 80, 82, 83, 84, 85, 87, 88, 89, 105, 110, 111, 112, 114, 115, 122, 123, 126, 127, 137, 151, 152	1, 2, 3, 5, 6, 7, 9, 10, 11, 12, 13, 16, 18, 19, 21, 22, 23, 24, 25, 26, 28, 29, 30, 32, 33, 34, 36, 38, 39, 40, 43, 44, 45, 47, 48, 49, 52, 54, 55, 56, 57, 62, 63, 64, 65, 68, 69, 70, 71, 73, 75, 79, 81, 82, 83, 89, 91, 92, 94, 95, 96, 97, 100, 101, 102, 103, 105, 106, 107, 109, 110, 112, 114, 117, 119, 122, 123, 124, 125, 127, 128, 129, 130, 134, 135, 137, 138, 139, 140, 141, 143, 144, 145, 146, 149, 150, 152, 154 Activity 3, 5, 8	



	Standards / Objectives	Excel Math Lesson Numbers	Stretch Lesson Numbers Activity Numbers
5.	Use appropriate tools strategically.	5, 10, 11, 15, 20, 22, 25, 26, 30, 32, 35, 36, 40, 58, 62, 63, 65, 68, 70, 71, 74, 80, 82, 83, 84, 85, 87, 88, 89, 105, 110, 111, 112, 114, 115, 122, 123, 126, 127, 137, 151, 152	2, 4, 5, 6, 7, 8, 9, 11, 12, 13, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 31, 32, 34, 36, 37, 38, 39, 40, 43, 44, 45, 47, 49, 51, 53, 56, 58, 59, 61, 62, 63, 66, 67, 68, 69, 70, 71, 73, 74, 75, 76, 79, 80, 81, 82, 83, 84, 87, 88, 89, 92, 94, 95, 97, 98, 99, 100, 101, 102, 103, 104, 106, 107, 108, 109, 110, 111, 112, 114, 115, 117, 118, 119, 120, 121, 122, 124, 127, 128, 129, 131, 133, 134, 135, 136, 141, 143, 147, 149, 154 Activity 1, 2, 3, 4, 5, 6, 8, 9, 10, 11
6.	Attend to precision.	5, 10, 11, 15, 20, 22, 25, 26, 30, 32, 35, 36, 40, 58, 62, 63, 65, 68, 70, 71, 74, 80, 82, 83, 84, 85, 87, 88, 89, 105, 110, 111, 112, 114, 115, 122, 123, 126, 127, 137, 151, 152	2, 4, 5, 6, 7, 8, 9, 11, 12, 13, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 31, 32, 34, 36, 37, 38, 39, 40, 43, 44, 45, 47, 49, 51, 53, 56, 58, 59, 61, 62, 63, 66, 67, 68, 69, 70, 71, 73, 74, 75, 76, 79, 80, 81, 82, 83, 84, 87, 88, 89, 92, 94, 95, 97, 98, 99, 100, 101, 102, 103, 104, 106, 107, 108, 109, 110, 111, 112, 114, 115, 117, 118, 119, 120, 121, 122, 124, 127, 128, 129, 131, 133, 134, 135, 136, 141, 143, 147, 149, 154 Activity 1, 2, 3, 4, 5, 6, 8, 9, 10, 11
7.	Look for and make use of structure.	5, 10, 11, 15, 20, 22, 25, 26, 30, 32, 35, 36, 40, 58, 62, 63, 65, 68, 70, 71, 74, 80, 82, 83, 84, 85, 87, 88, 89, 105, 110, 111, 112, 114, 115, 122, 123, 126, 127, 137, 151, 152	2, 4, 5, 6, 7, 8, 9, 11, 12, 13, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 31, 32, 34, 36, 37, 38, 39, 40, 43, 44, 45, 47, 49, 51, 53, 56, 58, 59, 61, 62, 63, 66, 67, 68, 69, 70, 71, 73, 74, 75, 76, 79, 80, 81, 82, 83, 84, 87, 88, 89, 92, 94, 95, 97, 98, 99, 100, 101, 102, 103, 104, 106, 107, 108, 109, 110, 111, 112, 114, 115, 117, 118, 119, 120, 121, 122, 124, 127, 128, 129, 131, 133, 134, 135, 136, 141, 143, 147, 149, 154 Activity 1, 2, 3, 4, 5, 6, 8, 9, 10, 11
8.	Look for and express regularity in repeated reasoning.	5, 10, 11, 15, 20, 22, 25, 26, 30, 32, 35, 36, 40, 58, 62, 63, 65, 68, 70, 71, 74, 80, 82, 83, 84, 85, 87, 88, 89, 105, 110, 111, 112, 114, 115, 122, 123, 126, 127, 137, 151, 152	2, 4, 5, 6, 7, 8, 9, 11, 12, 13, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 31, 32, 34, 36, 37, 38, 39, 40, 43, 44, 45, 47, 49, 51, 53, 56, 58, 59, 61, 62, 63, 66, 67, 68, 69, 70, 71, 73, 74, 75, 76, 79, 80, 81, 82, 83, 84, 87, 88, 89, 92, 94, 95, 97, 98, 99, 100, 101, 102, 103, 104, 106, 107, 108, 109, 110, 111, 112, 114, 115, 117, 118, 119, 120, 121, 122, 124, 127, 128, 129, 131, 133, 134, 135, 136, 141, 143, 147, 149, 154 Activity 1, 2, 3, 4, 5, 6, 8, 9, 10, 11

104040bf 9 www.excelmath.com



Standards / Objectives

Excel Math Lesson Numbers

Stretch Lesson Numbers Activity Numbers

The following are concepts not required by the CCS but are lessons in Excel Math:

Concept	Lesson	Stretch
Ordinals	3, 4, 53	
Following Directions	10	
Money and Decimals	16, 22, 33, 44, 82, 95, 114, 131, 134, 146	45, 55, 71, 92, 105, 122, 130
Calendar	26, 27, 84	
Coordinate points		Activity 4
Percent		Activity 8
Symmetry	55	
Similar / Congruent	120	



Lesson (Activity) Number	Excel Math Lesson Objective	Common Core Standard
L1	Learning about the tens place and the ones place; adding and subtracting two-digit numbers; learning addition and subtraction facts up to 10	Number / Operations Base Ten 2
L2	Recognizing a sequence counting by one, two, five or ten	Operations / Algebraic 9 Number / Operations Base Ten 2
L3	Recognizing ordinals 1st to 19th counting from the left or the right	Number / Operations Base Ten 2
L4	Putting 3 two-digit numbers in order from least to greatest; recognizing the symbols <, >, =	
L5	Calculating probability; interpreting information given in circle (pie) graphs	Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L6	Filling in missing number sequences when counting by 1, 2, 5, or 10; learning the addition facts of 11, 12 and 13	Operations / Algebraic 9 Number / Operations Base Ten 2
L7	Regrouping when adding 2 two-digit numbers using the facts of 10	Number / Operations Base Ten 2
L8	Recognizing circles, triangles, squares and rectangles; adding and subtracting 3 two-digit numbers given in horizontal form	Number / Operations Base Ten 2 Geometry 1
L9	Recognizing any number less than 100; calculating a number more or less than a given number	Number / Operations Base Ten 2
L10	Drawing a map in order to solve a problem	Mathematical Practices 1, 2, 3, 5, 6, 7, 8
L11	Solving story problems using addition or subtraction	Operations / Algebraic 8 Number / Operations Base Ten 2 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L12	Learning about the hundreds place; adding and subtracting three- digit numbers	Number / Operations Base Ten 2
L13	Learning addition facts of 14-18; putting 4 two-digit numbers in order	Number / Operations Base Ten 2
L14	Regrouping using the addition facts of 11, 12, and 13	Number / Operations Base Ten 2
L15	Evaluating information to see if it is sufficient to answer the question	Operations / Algebraic 8 Mathematical Practices 1, 2, 3, 5, 6, 7, 8
L16	Recognizing coins; learning change equivalents	Number / Operations Base Ten 2
L17	Learning the subtraction facts of 11, 12 and 13	Number / Operations Base Ten 2
L18	Telling time to the minute and half past the hour	Measurement / Data 1 Mathematical Practices 4
L19	Adding with regrouping, using the facts of 14-18	Number / Operations Base Ten 2
L20	Interpreting information from vertical and horizontal bar graphs	Measurement / Data 3 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8



Lesson (Activity) Number	Excel Math Lesson Objective	Common Core Standard
L21	Evaluating number sentences using $<$, $>$, $=$ and \neq ; defining equation	
L22	Learning which coins to use to buy something; computing change in story problems	Operations / Algebraic 8 Number / Operations Base Ten 2 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L23	Regrouping when subtracting with the facts of 10, 11, 12, and 13	Number / Operations Base Ten 2
L24	Learning the subtraction facts of 14-18	Number / Operations Base Ten 2
L25	Using deductive reasoning to solve a story problem	Mathematical Practices 1, 2, 3, 5, 6, 7, 8
L26	Calculating the date within one week in the future; Learning the days of the week	Operations / Algebraic 8 Number / Operations Base Ten 2 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L27	Recognizing any number less than 1000; learning the months of the year	Number / Operations Base Ten 2
L28	Learning the order of operations when parentheses are involved	Number / Operations Base Ten 2
L29	Adding three-digit numbers, regrouping only to the tens place	Number / Operations Base Ten 2
L30	Determining possible combinations	Mathematical Practices 1, 2, 3, 5, 6, 7, 8
L31	Recognizing odd and even numbers up to 20; finding one-half of a group	Operations / Algebraic 9 Number / Operations Base Ten 2 Number / Operations – Fractions 1, *2a, *2b, *3c
L32	Solving story problems involving comparisons	Measurement / Data 4 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L33	Recognizing money words and symbols	Number / Operations Base Ten 2
L34	Adding three-digit numbers, regrouping once to the tens or the hundreds place	Number / Operations Base Ten 2
L35	Interpreting information from picture graphs	Measurement / Data 3 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L36	Calculating missing numbers in number sentences	Number / Operations Base Ten 2 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L37	Recognizing a sequence counting by 3, 4 or 10 (31, 41, 51, 61)	Operations / Algebraic 9
L38	Comparing and putting 3 three-digit numbers in order	Number / Operations Base Ten 2
L39	Multiplying single-digit numbers by 0, 1 or 2	Operations / Algebraic 1, 7, 9
L40	Solving two-step story problems	Operations / Algebraic 8 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L41	Adding three-digit numbers, regrouping twice; defining a right angle and a square	Number / Operations Base Ten 2 Geometry 1
L42	Subtracting three-digit numbers, regrouping only with the tens place; regrouping using the minuends of 14-18	Number / Operations Base Ten 2
L43	Learning about the thousands place	Number / Operations Base Ten 1, 2
L44	Learning change equivalents up to \$1.00 with pennies, nickels, and dimes	Operations / Algebraic 7 Number / Operations Base Ten 2
L45	Recognizing basic fact families	Number / Operations Base Ten 2



Lesson (Activity) Number	Excel Math Lesson Objective	Common Core Standard
L46	Learning multiplication facts with products up to 20 and with 5 as a factor; recognizing odd and even numbers less than 100	Operations / Algebraic 1, 5, 7, 9
L47	Subtracting three-digit numbers, regrouping only with the tens or the hundreds place	Operations / Algebraic 7 Number / Operations Base Ten 2
L48	Filling in numbers in a sequence counting by 3, 4 or 10 (31, 41, 51, 61)	Operations / Algebraic 7, 9
L49	Recognizing numbers less than 10,000 when the digit in the hundreds place is greater than zero	Operations / Algebraic 7
L50	Learning standard units of weight, distance and volume	Measurement / Data 2
L51	Regrouping with money amounts	Operations / Algebraic 7 Number / Operations Base Ten 2
L52	Subtracting three-digit numbers, regrouping twice	Operations / Algebraic 7 Number / Operations Base Ten 2
L53	Learning multiplication facts with factors of 10 (up to 90), 11 (up to 99) and 12 (up to 48); putting 4 three-digit numbers in order from greatest to least	Operations / Algebraic 1, 5, 7 Number / Operations Base Ten 3
L54	Solving fractional problems modeled with shading and groups of figures	Number / Operations – Fractions 1, *2a, *2b, *3c
L55	Recognizing lines of symmetry	
L56	Measuring a line segment to the nearest inch or centimeter	Operations / Algebraic 7
L57	Using numbers given within parentheses to complete number sentences	Operations / Algebraic 7 Number / Operations Base Ten 2
L58	Dividing numbers up to 10 by splitting into equal parts and using repeated subtraction	Operations / Algebraic 2, 5, *6, 7 Number / Operations Base Ten 2 Number / Operations – Fractions *1 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L59	Dividing numbers up to 14 by splitting into equal parts and using repeated subtraction	Operations / Algebraic 2, 3, 5, 7
L60	Rounding to the nearest ten using numbers less than 100	Number / Operations Base Ten 1
L61	Multiplying a one-digit number times a two-digit number, no regrouping	Operations / Algebraic 1, 5, 7
L62	Estimating standard and metric distance and weight measurements	Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L63	Learning the names for standard units of weight, distance and volume	Measurement / Data 2 Mathematical Practices 1, 2, 3, 5, 6, 7, 8
L64	Subtracting three-digit numbers, regrouping twice with zeroes or a 1 in the tens place	Operations / Algebraic 7 Number / Operations Base Ten 2
L65	Telling time before the hour	Measurement / Data 1 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8



Lesson (Activity) Number	Excel Math Lesson Objective	Common Core Standard
L66	Defining numerator and denominator; selecting the fraction that matches a given model	Number / Operations – Fractions 1, *2a, *2b, *3b, *3c
L67	Adding four-digit numbers where the sum for a single place is greater than 19 and less than 30	Operations / Algebraic 7 Number / Operations Base Ten 2
L68	Solving story problems using multiplication; learning multiplication facts with products up to 30	Operations / Algebraic 1, 3, 5, 7, 9 Number / Operations Base Ten 2 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L69	Recognizing three-dimensional figures	Operations / Algebraic 7 Number / Operations Base Ten 2
L70	Putting a series of events in order	Mathematical Practices 1, 2, 3, 5, 6, 7, 8
L71	Learning division facts with dividends up to 20	Operations / Algebraic 1, 2, 5, 6, 7 Number / Operations Base Ten *3 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L72	Computing the area of a plane figure given in square units	Operations / Algebraic 7 Measurement / Data 5a, 5b, 6, 7a, *7d
L73	Multiplying a one-digit number times a two-digit number with regrouping	Operations / Algebraic 1, 5, 7, 9 Number / Operations Base Ten 2
L74	Learning the measurement equivalents for dozen, yards, feet and inches	Operations / Algebraic 3, 7 Number / Operations Base Ten 2 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L75	Estimating answers to story problems, rounding to the nearest ten	Operations / Algebraic 8 Number / Operations Base Ten 1
L76	Selecting the correct process in an equation; filling in a missing number in an equation	Operations / Algebraic 4, 7
L77	Completing a pattern of shapes; recognizing shapes with common characteristics	Geometry 1
L78	Recognizing "a quarter to" and "a quarter past" on the clock; estimating time on a circular clock without the hour or minute marks	Measurement / Data 1
L79	Recognizing any number less than 10,000	Operations / Algebraic 7 Number / Operations Base Ten 2
L80	Completing number patterns that are in the form of a chart	Operations / Algebraic 9 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L81	Solving for an unknown in an equation	Operations / Algebraic 1, 2, 4, 7 Number / Operations Base Ten 2
L82	Solving fractional part story problems; learning \$1.00 equivalents	Operations / Algebraic 7 Number / Operations – Fractions 1, *2a, *2b, *3c Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L83	Solving multi-step word problems involving time	Operations / Algebraic 7, 8 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L84	Calculating the date within one week in the past	Operations / Algebraic 7, 8 Number / Operations Base Ten 2 Measurement / Data 1 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8



Lesson (Activity) Number	Excel Math Lesson Objective	Common Core Standard
L85	Estimating answers within a range	Operations / Algebraic 3, 8 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L86	Calculating perimeters to the nearest inch or centimeter	Operations / Algebraic 7 Measurement / Data 8 Geometry *1
L87	Solving division story problems given models	Operations / Algebraic 2, 3, *6, 8 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L88	Solving division story problems	Operations / Algebraic 2, 3, *6, 8 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L89	Calculating the time in the future or in the past when the elapsed time is in hours	Operations / Algebraic 7 Measurement / Data 1 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L90	Rounding to the nearest hundred or thousand	Number / Operations Base Ten 1
L91	Multiplying a three-digit number by a one-digit number, regrouping only once	Operations / Algebraic 1, 3, 5
L92	Learning the order of operations with multiplication and division when parentheses are involved	Operations / Algebraic 1, 5, 7 Number / Operations Base Ten 2
L93	Computing the quotient when there will be a remainder with dividends less than 11	Operations / Algebraic 2, 3, 6
L94	Continuing to compute the quotient when there will be a remainder with dividends less than 11	Operations / Algebraic 2, 7
L95	Multiplying money by a one digit number, regrouping only once	Operations / Algebraic 5 Number / Operations Base Ten 1
L96	Learning division facts with 5 as a factor	Operations / Algebraic 1, 3, 5, 6, 7, 8, *9 Number / Operations Base Ten 2
L97	Learning multiplication facts with products up to 40; recognizing a number sequence counting by 5 or 6	Operations / Algebraic 1, 5, 7, 9
L98	Finding the two-digit number closest to a given number	Operations / Algebraic 8
L99	Evaluating more difficult number sentences with $<$, $>$, $=$ or \neq	Operations / Algebraic 4, 7
L100	Recognizing expanded notation for numbers less than 10,000	Operations / Algebraic 1, 3, 7 Number / Operations Base Ten 3
L101	Solving division problems with a one- digit divisor, two-digit dividend, two-digit quotient, and no regrouping or remainders	Operations / Algebraic 2
L102	Continuing to solve division problems with a one-digit divisor, two-digit dividend,	Operations / Algebraic 2
L103	Continuing to solve division problems with a one-digit divisor, two-digit dividend, two-digit quotient, and no regrouping or remainders	Operations / Algebraic 2, 5, 6
L104	Comparing and putting 3 four-digit numbers in order from greatest to least	Operations / Algebraic 7, 9



Lesson (Activity) Number	Excel Math Lesson Objective	Common Core Standard
L105	Choosing the correct equation to solve a story problem	Operations / Algebraic 3, 4, 8 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L106	Defining polygon, quadrilateral, parallelogram, pentagon, hexagon and octagon	Geometry 1
L107	Learning to substitute numerical values for letters in an equation	Operations / Algebraic 4, 5, 7
L108	Measuring a line segment to the nearest half inch and half centimeter	Operations / Algebraic 7 Measurement / Data 4
L109	Learning that the whole is the sum of its parts; adding fractions	Number / Operations – Fractions 1, *2a, *2b, *3c Geometry 2
L110	Identifying what information is needed to answer the question in a story problem	Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L111	Calculating quotients with remainders with dividends up to 20; solving story problems using division with remainders	Operations / Algebraic 2, 3 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L112	Calculating elapsed time involving A.M. and P.M.	Measurement / Data 1 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L113	Filling in missing numbers in a sequence counting by 5 or 6; learning multiplication facts with products up to 50	Operations / Algebraic 7, 9
L114	Learning change equivalents; multiplying coins; calculating unit cost	Operations / Algebraic 8 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L115	Estimating answers to story problems rounding to the nearest hundred or thousand	Number / Operations Base Ten 1, 2 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L116	Computing the perimeters of a shape drawn to scale; abbreviations of measurements	Measurement / Data 8
L117	Recognizing multiples; learning division facts with dividends up to 30 and dividends that are multiples of 10 (up to 90), 11 (up to 99) and 12 (up to 48)	Operations / Algebraic 1, 2, 5, 6, 7
L118	Learning how to compute the quotient with a two-digit divisor and a two-digit dividend < 50	Operations / Algebraic 2, 5, 6, 7
L119	Learning the parts of a circle	Operations / Algebraic 7 Geometry 1
L120	Recognizing flips (reflections), slides (translations), turns (rotations); recognizing figures that are similar or congruent	Geometry 1
L121	Learning equivalents of pounds and ounces; calculating the answer to two-step measurement problems	Operations / Algebraic 3, 8
L122	Changing an inequality to an equation by moving values in the number statement	Operations / Algebraic 8 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L123	Solving word problems using logical reasoning	Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8



Lesson (Activity) Number	Excel Math Lesson Objective	Common Core Standard
L124	Computing the area of a rectangle that has been drawn to scale	Operations / Algebraic 7 Measurement / Data 5a, 5b, 6, 7a, 7b, *7c, *7d
L125	Recognizing the shorter or longer distance or the heavier or lighter weight	Measurement / Data *4
L126	Calculating the answer to a story problem using 2 to 1 and 3 to 1 ratios	Operations / Algebraic 1, 3, 7, 8, 9 Measurement / Data 3 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L127	Continuing to calculate the answer to a story problem using 2 to 1 and 3 to 1 ratios	Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8 Operations / Algebraic 1, 3, 7, 8, 9 Measurement / Data 3 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L128	Defining intersecting, parallel and perpendicular lines	
L129	Defining diagonal; recognizing parallel and perpendicular lines; learning equivalents of meters and centimeters	Geometry 1
L130	Recognizing the changing pattern in a sequence of figures	
L131	Learning multiplication facts with products up to 81; regrouping twice with multiplication	Operations / Algebraic 1, 5, 9
L132	Solving division problems with a one- digit divisor, three-digit dividend, two- digit quotient, and no regrouping or remainders	Operations / Algebraic 2, 6, 8
L133	Continuing to solve division problems with a one-digit divisor, three-digit dividend, two-digit quotient, and no regrouping or remainders	Operations / Algebraic 2, 6, 8
L134	Rounding to the nearest dollar; dividing dollar amounts	Number / Operations Base Ten 1
L135	Computing the volume of one layer of cubes	Measurement / Data 2, 5a, 5b, 6, 7a, 7b, 7c, 7d
L136	Subtracting four-digit numbers	Operations / Algebraic 7 Number / Operations Base Ten 2
L137	Solving story problems with fractional parts, the word "not", and unnecessary information	Operations / Algebraic 8 Number / Operations – Fractions 1 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L138	Recognizing right, obtuse and acute angles	
L139	Recognizing equilateral, isosceles and scalene triangles	Geometry 1
L140	Adding and subtracting simple fractions	Number / Operations – Fractions 1, *2a, *2b, *3a, *3b, *3c
L141	Recognizing faces, edges and vertices on rectangular prisms, cubes, rectangular pyramids, square pyramids, triangular prisms and pyramids	Measurement / Data 3
L142	Learning division facts with dividends less than 50	Operations / Algebraic 5, 6, 7
L143	Determining factors	Operations / Algebraic 7



Lesson (Activity) Number	Excel Math Lesson Objective	Common Core Standard
L144	Determining prime factors	Operations / Algebraic 7
L145	Computing the volume of several layers of cubes	Measurement / Data 2, 5a, 5b, 6, 7a, 7b, 7c
L146	Figuring change using the fewest coins	Operations / Algebraic 3, 7, 8 Number / Operations Base Ten 2
L147	Comparing fraction values	Number / Operations – Fractions 1, *2a, *2b, *3a, *3b, *3c, *3d
L148	Determining equivalent fractions using models	Operations / Algebraic 7 Number / Operations – Fractions 1, *2a, *2b, 3a, 3b, *3c, 3d
L149	Determining equivalent fractions using money	Number / Operations – Fractions 1, *2a, *2b, 3a, 3b, *3c, 3d
L150	Recognizing any number less than a million	
L151	Determining the question, given the story and the answer; division facts with dividends to 81	Operations / Algebraic 1, 2, 3, 5, 6, 7 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L152	Calculating elapsed time across the 12 on the clock	Operations / Algebraic 7 Measurement / Data 1 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L153	Learning how to compute the quotient with a two-digit divisor and a two-digit dividend < 100	Operations / Algebraic 2, 6, 7
L154	Continuing to learn how to compute the quotient with a two-digit divisor and a two-digit dividend < 100	Operations / Algebraic 2, 6, 7
L155	Filling in missing number sequences when counting by increasing or decreasing amounts	Operations / Algebraic 9
Activity 1	Deductive Reasoning	Mathematical Practices 1, 2, 3, 5, 6, 7, 8
Activity 2	Reasoning in Geometric figures	Measurement / Data 5a, 5b, 6, 7a, 7c, 7d Geometry 1 Mathematical Practices 1, 2, 3, 5, 6, 7, 8
Activity 3	Whole and Fractional parts	Number / Operations – Fractions 1 Geometry 2 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
Activity 4	Coordinate Points	Mathematical Practices 1, 2, 3, 5, 6, 7, 8
Activity 5	Problem Solving and Creating	Operations / Algebraic 4 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
Activity 6	Puzzles	Measurement / Data 2 Mathematical Practices 1, 2, 3, 5, 6, 7, 8
Activity 7	Volume and surface area	Measurement / Data 5a
Activity 8	Percent	Number / Operations – Fractions 1, 3a, 3b, 3d Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
Activity 9	Creating questions	Mathematical Practices 1, 2, 3, 5, 6, 7, 8
Activity 10	Line Graph	Measurement / Data 4 Mathematical Practices 1, 2, 3, 5, 6, 7, 8
Activity 11	Facts and Opinion	Mathematical Practices 1, 2, 3, 5, 6, 7, 8
Activity 12	Three-dimensional figures	Geometry 1