

Excel Math Fourth Grade

Standards for Mathematical Practice

The Common Core State Standards for Mathematical Practice are integrated into Excel Math lessons. Below are some examples of how we include these Practices into the tasks and activities your students will complete throughout the year.

Mathematical Practices (see page 8 for practices by lesson #)

1. Make sense of problems and persevere in solving them. Mathematically proficient students know that doing mathematics involves solving problems and discussing how they solved them. Students explain to themselves the meaning of a problem and look for ways to solve it. They consider analogous problems. Students use concrete objects or pictures to help them conceptualize and solve problems. They check their thinking by asking, "Does this make sense?" Students listen to the strategies of others and try various approaches. They may use another method to check their answers.

2. Reason abstractly and quantitatively. Mathematically proficient students recognize that a number represents a specific quantity. They connect the quantity to written symbols and create a logical representation of the problem, considering both the appropriate units involved and the meaning of quantities. They extend this understanding from whole numbers to fractions and decimals.

3. Construct viable arguments and critique the reasoning of others. Mathematically proficient students construct arguments using concrete references such as objects, pictures, and drawings. They explain their thinking and make connections between models and equations. They justify their conclusions in discussions and ask questions such as "How did you get that?" and "Why is that true?" They explain their thinking, construct arguments and respond to others' thinking.

4. Model with mathematics. Mathematically proficient students represent problem situations in multiple ways including numbers, mathematical words, drawing pictures, using objects, acting out, making a chart (or list or graph), creating equations, etc. Students need opportunities to connect various mathematical representations and explain the connections. Students should evaluate their results in the context of the situation and decide whether the results make sense.

5. Use appropriate tools strategically. In fourth grade, mathematically proficient students consider the available tools (including estimation) when solving a problem and decide which tools might be helpful. They use graph paper or a number line to represent and compare decimals and use protractors to measure angles. They use other measurement tools to find the relative size of units within a system and express measurements given in larger units in terms of smaller units.

6. Attend to precision. As fourth grade students develop their mathematical communication skills, they try to use clear and precise language in their discussions with others and in their own reasoning. They are careful to specify units of measure and state the meaning of the symbols they choose. For example, they use appropriate labels when creating a number line or a line plot.

7. Look for and make use of structure. Mathematically proficient students look closely to discover a pattern or structure. For example, they use properties of operations to explain calculations (partial products model). They use visual representations of fractions such as models and number lines to generate equivalent fractions. They generate number patterns that follow a given rule.

8. Look for and express regularity in repeated reasoning. Mathematically proficient students notice repetitive actions in computation to make generalizations. Students use models to explain calculations and understand how algorithms work. They also use models to examine patterns and generate their own algorithms. They ask, "Does this make sense?"

Standards / Objectives	Excel Math Lesson Numbers	Stretch Lesson Numbers Activity Numbers
Operations and Algebraic Thinking		
Use the four operations with whole numbers to solve problems.		
1. Interpret a multiplication equation as a comparison, e.g., interpret $35 = 5 \times 7$ as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.	4, 12, 16, 21, 24, 31, *32, 34, 36, 49, 55, 56, 72, 74, 87, 108, 116, 151	16, 104, 129, 132 Activity 6, 8
2. Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.	4, 16, 21, 31, 33, 34, 55, 56, 72, 87, 121, 123, 124, 134, 139, 146, 152 Equations / unknowns: 22	16, 27, 117, 121, 135, 142 Equations / unknowns: 9, 15, 19, 31, 39, 45, 52, 56, 67, 69, 75, 80, 89, 92, 96, 99, 104, 109, 126, 128 Activity 6, 8
3. Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. 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.	1, 4, 9, 16, 19, 20, 26, *34, 55, 56, 57, 72, 77, 104, 111, 121, 122, 123, 124, 126, 129, 134, 139, 150, 152	3, 5, 10, 14, 16, 18, 20, 21, 25, 27, 28, 29, 33, 41, 43, 47, 48, 55, 70, 71, 72, 79, 83, 86, 90, 91, 92, 95, 101, 102, 103, 111, 113, 115, 121, 122, 125, 126, 130, 135, 136, 138, 145, 147, 151, 153 Activity 6, 8
Gain familiarity with factors and multiples.		
4. Find all factor pairs for a whole number in the range 1–100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1–100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1–100 is prime or composite	12, 13, 33, 49, 51, *55, 73, 89, 91, 92, 93, 94, *106, 135, 151	115
Generate and analyze patterns.		
5. Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself.	6, 17, 21, 23, 25, 27, 28, 42, 43, 46, 48, 52, 53, 56, 57, 58, 61, 101, 102, 103, 113, 117, 126, 152 Negative / Positive: 133	12, 16, 20, 21, 28, 35, 59, 60, 62, 63, 68, 77, 90, 92, 102, 105, 106, 113, 116, 122, 124, 128, 130, 136, 138, 140, 141, 143

*Gives opportunity to teach specific Standard

Standards / Objectives	Excel Math Lesson Numbers	Stretch Lesson Numbers Activity Numbers
Number and Operations in Base Ten <small>4.NBT</small>		
Generalize place value understanding for multi-digit whole numbers.		
1. Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right.	1, 2, *3, 7, 22, *42, *43, 50, *52, *53, 55, *69, 102, *104, 126, 129	
2. Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.	1, 2, 3, 7, 8, 14, 22, 50, 102, 126, 129 Equations: 35, 74 Negative numbers: 133	13
3. Use place value understanding to round multi-digit whole numbers to any place.	45, 55, 69, 104, 129 Decimals: 131	
Use place value understanding and properties of operations to perform multi-digit arithmetic.		
4. Fluently add and subtract multi-digit whole numbers using the standard algorithm.	1, 3, 6, 7, 8, 11, 26, 36, 41, 45, 57, 126, 129	3, 6, 7, 8, 9, 10, 11, 12, 13, 16, 17, 18, 20, 21, 25, 26, 29, 35, 48, 62, 70, 116, 124, 153 Activity 10
5. Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.	12, 14, 16, 17, 18, 19, 21, 22, 23, 24, 27, 28, 31, 32, 34, 36, 46, 47, 48, 49, 51, 52, 53, 55, 56, 59, 62, 72, 73, 77, 78, 81, 84, 87, 89, 91, 92, 93, 103, 108, 116, 142, 146, 151, 152 Decimals: 116	
6. Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.	21, 22, 23, 24, 27, 28, 33, 42, 43, 46, 48, 49, 51, 52, 53, 56, 59, 70, 72, 73, 74, 77, 78, 81, 82, 83, 84, 87, 89, 91, 92, 93, 103, 107, 108, 124, 138, 151 Decimals: 61, 107, 109, 115	117

*Gives opportunity to teach specific Standard

Standards / Objectives	<i>Excel Math</i> Lesson Numbers	Stretch Lesson Numbers Activity Numbers
------------------------	-------------------------------------	--

Number and Operations - Fractions

Extend understanding of fraction equivalence and ordering.

1. Explain why a fraction a/b is equivalent to a fraction $(n \times a)/(n \times b)$ by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.	*15, *16, *54, 67, 75, *79, 88, 95, 99, 110, 114, 118, 125, 127, 128, 143	*59 Activity 4, 16, 17
2. Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as $1/2$. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.	67, 75, 79, 88, 95, 99, 110, 118, 125, 143	Activity 4, 16, 17

Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.

3. Understand a fraction a/b with $a > 1$ as a sum of fractions $1/b$.		
a. Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.	*16, 37, 67, 76 Mixed Numbers: 81	
b. Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model.	*15, 16, 54, 67, 75, *76, 88, 95, 110, 112, *114	59
c. Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction.	37, 81, 112	
d. Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem.	16, 37, *54, *67, *76, *81	*55, 59

*Gives opportunity to teach specific Standard

Standards / Objectives	Excel Math Lesson Numbers	Stretch Lesson Numbers Activity Numbers
4. Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.		
a. Understand a fraction a/b as a multiple of $1/b$. For example, use a visual fraction model to represent $5/4$ as the product $5 \times (1/4)$, recording the conclusion by the equation $5/4 = 5 \times (1/4)$.	*16, 67, *75, *79, *88, *95, 99, 127, 128, *136, 143, 153, 154	
b. Understand a multiple of a/b as a multiple of $1/b$, and use this understanding to multiply a fraction by a whole number. For example, use a visual fraction model to express $3 \times (2/5)$ as $6 \times (1/5)$, recognizing this product as $6/5$. (In general, $n \times (a/b) = (n \times a)/b$.)	67, *75, *79, *88, *95, 99, 127, 128, *136, *153, 154 Division: 110	
c. Solve word problems involving multiplication of a fraction by a whole number, e.g., by using visual fraction models and equations to represent the problem.	99, *118, *153, *154 Decimals: 141, 142 Percents: 143	*55
Understand decimal notation for fractions, and compare decimal fractions.		
5. Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100.4 For example, express $3/10$ as $30/100$, and add $3/10 + 4/100 = 34/100$.	85, 100, 118, 127, 128, 136, 137, 143	Activity 16
6. Use decimal notation for fractions with denominators 10 or 100. For example, rewrite 0.62 as $62/100$; describe a length as 0.62 meters; locate 0.62 on a number line diagram.	85, 100, *104, *117, 118, *128, *131, 136, 137, 145, 148 Percents: 127, 128	Activity 16
7. Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual model.	100, 104, 105, *115, *117, 137 Rounding: 131 Money: 9, 11, 16, 26 Add / Subtract: 86 Multiply: 141, 142	

*Gives opportunity to teach specific Standard

Standards / Objectives	Excel Math Lesson Numbers	Stretch Lesson Numbers Activity Numbers
Measurement and Data		
Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.		
<p>1. Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two column table. For example, know that 1 ft is 12 times as long as 1 in.</p> <p>Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ...</p>	<p>*9, 11, 18, 19, 29, 30, 37, 57, 63, 64, 73, *80, 87, 111, 123, 133, 139</p> <p>Graphs: 119</p>	<p>23, 49, 118</p> <p>Activity 2, 11(Vol. 1-7), 12 (Wgt.1-7)</p>
<p>2. Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.</p>	<p>9, 11, 18, 19, 26, 30, 41, 57, 63, 66, 90, 92, 104, 109, 111, 121, 123, 124, 133, 139</p> <p>Money: 12, 16, 55, 61, 116, 139</p>	<p>18, 23, 30, 43, 54, 70, 76, 83, 87, 91, 95, 101, 103, 111, 114, 118, 133, 134, 135, 139, 144, 146, 148, 149, 154</p> <p>Activity 2, 3, 5, 11(Vol. 1-7), 12 (Wgt.1-7), 15</p>
<p>3. Apply the area and perimeter formulas for rectangles in real world and mathematical problems. For example, find the width of a rectangular room given the area of the flooring and the length, by viewing the area formula as a multiplication equation with an unknown factor.</p>	<p>64, 68, 96, 120, 147, 149, 155</p> <p>Volume: 95, 105</p>	<p>118, 125, 137, 150</p> <p>Activity 7, 8, 9</p>

*Gives opportunity to teach specific Standard

Standards / Objectives	Excel Math Lesson Numbers	Stretch Lesson Numbers Activity Numbers
Represent and interpret data.		
4. Make a line plot to display a data set of measurements in fractions of a unit ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$). Solve problems involving addition and subtraction of fractions by using information presented in line plots. For example, from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection.	*37, *145	Activity 3, 4
Geometric measurement: understand concepts of angle and measure angles.		
5. Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement:		
a. An angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle. An angle that turns through $\frac{1}{360}$ of a circle is called a “one-degree angle,” and can be used to measure angles.	70, 71, 132	Activity 14
b. An angle that turns through n one-degree angles is said to have an angle measure of n degrees.	70, *78, *98, *132	Activity 14
6. Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure	70, 78, *98, *132	Activity 14
7. Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure.	70, *78, *98, 132	Activity 14

Standards / Objectives	Excel Math Lesson Numbers	Stretch Lesson Numbers Activity Numbers
Geometry		
Draw and identify lines and angles, and classify shapes by properties of their lines and angles.		
1. Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.	37, 38, 39, 65, 70, 71, 97, 120, 130, 140, *155	
2. Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles.	15, 25, 38, 39, 58, 71, 98, 144, 155 Three Dimensional: 40	4, 24, 32, 36, 44, 53, 58, 60, 65, 66, 78, 82, 94, 100, 107, 110, 119, 123, 131, 140, 141 Activity 13
3. Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line- symmetric figures and draw lines of symmetry.	30 Flips / Slide / Turn: 60	Activity 13
Mathematical Practices		
1. Make sense of problems and persevere in solving them.	1, 4, 5, 9, 10, 14, 16, 17, 18, 19, 20, 25, 26, 28, 29, 31, 33, 35, 41, 44, 46, 51, 54, 55, 56, 57, 63, 67, 68, 69, 72, 74, 77, 80, 89, 90, 91, 92, 93, 94, 96, 100, 104, 106, 109, 111, 119, 121, 122, 123, 124, 125, 129, 131, 132, 133, 134, 139, 143, 150, 151, 152, 155	1, 2, 3, 5, 6, 8, 13, 14, 16, 22, 23, 25, 26, 27, 28, 29, 30, 33, 34, 35, 38, 40, 41, 46, 47, 48, 50, 51, 54, 55, 57, 59, 64, 70, 73, 76, 84, 88, 91, 98, 101, 103, 105, 106, 108, 111, 115, 116, 117, 118, 120, 121, 124, 125, 127, 130, 132, 133, 134, 135, 136, 138, 145, 147, 151 Activity 1, 2, 3, 5, 6, 7, 11, 12, 15
2. Reason abstractly and quantitatively.	1, 4, 5, 9, 10, 14, 16, 17, 18, 19, 20, 25, 26, 28, 29, 31, 33, 35, 41, 44, 46, 51, 54, 55, 56, 57, 63, 67, 68, 69, 72, 74, 77, 80, 89, 90, 91, 92, 93, 94, 96, 100, 104, 106, 109, 111, 119, 121, 122, 123, 124, 125, 129, 131, 132, 133, 134, 139, 143, 150, 151, 152, 155	1, 2, 3, 5, 6, 8, 13, 14, 16, 22, 23, 25, 26, 27, 28, 29, 30, 33, 34, 35, 38, 40, 41, 46, 47, 48, 50, 51, 54, 55, 57, 59, 64, 70, 73, 76, 84, 88, 91, 98, 101, 103, 105, 106, 108, 111, 115, 116, 117, 118, 120, 121, 124, 125, 127, 130, 132, 133, 134, 135, 136, 138, 145, 147, 151 Activity 1, 2, 3, 5, 6, 7, 11, 12, 15

*Gives opportunity to teach specific Standard



4th Grade Common Core Standards / Excel Math Correlation

Standards / Objectives	Excel Math Lesson Numbers	Stretch Lesson Numbers Activity Numbers
3. Construct viable arguments and critique the reasoning of others.	1, 4, 5, 9, 10, 14, 16, 17, 18, 19, 20, 25, 26, 28, 29, 31, 33, 35, 41, 44, 46, 51, 54, 55, 56, 57, 63, 67, 68, 69, 72, 74, 77, 80, 89, 90, 91, 92, 93, 94, 96, 100, 104, 106, 109, 111, 119, 121, 122, 123, 124, 125, 129, 131, 132, 133, 134, 139, 143, 150, 151, 152, 155	1, 2, 3, 5, 6, 8, 13, 14, 16, 22, 23, 25, 26, 27, 28, 29, 30, 33, 34, 35, 38, 40, 41, 46, 47, 48, 50, 51, 54, 55, 57, 59, 64, 70, 73, 76, 84, 88, 91, 98, 101, 103, 105, 106, 108, 111, 115, 116, 117, 118, 120, 121, 124, 125, 127, 130, 132, 133, 134, 135, 136, 138, 145, 147, 151 Activity 1, 2, 3, 5, 6, 7, 11, 12, 15
4. Model with mathematics.	9, 26, 31, 32, 33, 34, 35, 41, 42, 43, 45, 47, 48, 49, 52, 53, 54, 56, 59, 61, 63, 64, 67, 68, 69, 72, 74, 75, 76, 77, 80, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 99, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 115, 117, 118, 119, 120, 121, 122, 123, 124, 126, 127, 128, 129, 132, 134, 135, 139, 141, 142, 143, 147, 148, 149, 150, 151, 152, 155	3, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 25, 26, 27, 28, 29, 30, 31, 33, 35, 38, 39, 41, 43, 45, 47, 48, 52, 55, 56, 59, 62, 67, 69, 70, 71, 75, 76, 77, 79, 80, 83, 86, 87, 89, 90, 91, 92, 93, 95, 96, 97, 99, 101, 102, 103, 104, 105, 109, 111, 113, 114, 115, 116, 117, 118, 121, 122, 124, 125, 126, 129, 130, 132, 133, 135, 136, 137, 138, 142, 145, 146, 147, 148, 150, 151, 153 Activity 1, 2, 3, 5, 6, 7, 11, 12, 15
5. Use appropriate tools strategically.	1, 4, 5, 9, 10, 14, 16, 17, 18, 19, 20, 25, 26, 28, 29, 31, 33, 35, 41, 44, 46, 51, 54, 55, 56, 57, 63, 67, 68, 69, 72, 74, 77, 80, 89, 90, 91, 92, 93, 94, 96, 100, 104, 106, 109, 111, 119, 121, 122, 123, 124, 125, 129, 131, 132, 133, 134, 139, 143, 150, 151, 152, 155	1, 2, 3, 5, 6, 8, 13, 14, 16, 22, 23, 25, 26, 27, 28, 29, 30, 33, 34, 35, 38, 40, 41, 46, 47, 48, 50, 51, 54, 55, 57, 59, 64, 70, 73, 76, 84, 88, 91, 98, 101, 103, 105, 106, 108, 111, 115, 116, 117, 118, 120, 121, 124, 125, 127, 130, 132, 133, 134, 135, 136, 138, 145, 147, 151 Activity 1, 2, 3, 5, 6, 7, 11, 12, 15
6. Attend to precision.	1, 4, 5, 9, 10, 14, 16, 17, 18, 19, 20, 25, 26, 28, 29, 31, 33, 35, 41, 44, 46, 51, 54, 55, 56, 57, 63, 67, 68, 69, 72, 74, 77, 80, 89, 90, 91, 92, 93, 94, 96, 100, 104, 106, 109, 111, 119, 121, 122, 123, 124, 125, 129, 131, 132, 133, 134, 139, 143, 150, 151, 152, 155	1, 2, 3, 5, 6, 8, 13, 14, 16, 22, 23, 25, 26, 27, 28, 29, 30, 33, 34, 35, 38, 40, 41, 46, 47, 48, 50, 51, 54, 55, 57, 59, 64, 70, 73, 76, 84, 88, 91, 98, 101, 103, 105, 106, 108, 111, 115, 116, 117, 118, 120, 121, 124, 125, 127, 130, 132, 133, 134, 135, 136, 138, 145, 147, 151 Activity 1, 2, 3, 5, 6, 7, 11, 12, 15
7. Look for and make use of structure.	1, 4, 5, 9, 10, 14, 16, 17, 18, 19, 20, 25, 26, 28, 29, 31, 33, 35, 41, 44, 46, 51, 54, 55, 56, 57, 63, 67, 68, 69, 72, 74, 77, 80, 89, 90, 91, 92, 93, 94, 96, 100, 104, 106, 109, 111, 119, 121, 122, 123, 124, 125, 129, 131, 132, 133, 134, 139, 143, 150, 151, 152, 155	1, 2, 3, 5, 6, 8, 13, 14, 16, 22, 23, 25, 26, 27, 28, 29, 30, 33, 34, 35, 38, 40, 41, 46, 47, 48, 50, 51, 54, 55, 57, 59, 64, 70, 73, 76, 84, 88, 91, 98, 101, 103, 105, 106, 108, 111, 115, 116, 117, 118, 120, 121, 124, 125, 127, 130, 132, 133, 134, 135, 136, 138, 145, 147, 151 Activity 1, 2, 3, 5, 6, 7, 11, 12, 15

*Gives opportunity to teach specific Standard



4th Grade Common Core Standards / *Excel Math* Correlation

Standards / Objectives	<i>Excel Math</i> Lesson Numbers	Stretch Lesson Numbers Activity Numbers
8. Look for and express regularity in repeated reasoning.	1, 4, 5, 9, 10, 14, 16, 17, 18, 19, 20, 25, 26, 28, 29, 31, 33, 35, 41, 44, 46, 51, 54, 55, 56, 57, 63, 67, 68, 69, 72, 74, 77, 80, 89, 90, 91, 92, 93, 94, 96, 100, 104, 106, 109, 111, 119, 121, 122, 123, 124, 125, 129, 131, 132, 133, 134, 139, 143, 150, 151, 152, 155	1, 2, 3, 5, 6, 8, 13, 14, 16, 22, 23, 25, 26, 27, 28, 29, 30, 33, 34, 35, 38, 40, 41, 46, 47, 48, 50, 51, 54, 55, 57, 59, 64, 70, 73, 76, 84, 88, 91, 98, 101, 103, 105, 106, 108, 111, 115, 116, 117, 118, 120, 121, 124, 125, 127, 130, 132, 133, 134, 135, 136, 138, 145, 147, 151 Activity 1, 2, 3, 5, 6, 7, 11, 12, 15

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

Concept	Lesson	Stretch
Real / Whole Numbers		Activity 14
4 Basic Operations w/ Decimals	86, 107, 109, 141, 142	
Probability / Combinations	5	85 Activity 1, 2, 6, 7, 8
Reasoning / Order	10, 41	1, 2, 4, 22, 23, 34, 37, 38, 40, 42, 46, 50, 51, 57, 61, 64, 73, 74, 81, 84, 88, 98, 108, 120, 127, 152, Activity 6, 7, 8, 9
Charts / Graphs	5, 20, 80, 119	86, 97, 112, Activity 1, 2, 3, 4, 5
Venn diagrams / Intersecting sets	44	145, 151
Coordinate Points	65, 97, 120, 130, 140	
Average, Mean, Median, Mode	122, 123, 150	
Percents	127, 128, 136	
Volume	95, 105	
Three Dimensional figures	40	
Negative and Positive numbers	133, 140	

*Gives opportunity to teach specific Standard



**Common Core 4th Grade Standards /
Excel Math Correlation by Lesson Number**

Lesson (Activity) Number	Excel Math Lesson Objective	Common Core Standard
L1	Recognizing the thousands, hundreds, tens and ones places; solving multi-step story problems using addition and subtraction; adding 4 four-digit numbers with regrouping and subtracting two three-digit numbers	Operations / Algebraic 3 Number / Operations Base Ten *1, 2, 4 Mathematical Practices 1, 2, 3, 5, 6, 7, 8
L2	Subtracting two three-digit numbers with regrouping	Number / Operations Base Ten 1, 2,
L3	Recognizing any number less than 1,000	Number / Operations Base Ten *1, 2, 4
L4	Solving word problems using deductive reasoning	Mathematical Practices 1, 2, 3, 5, 6, 7, 8
L5	Calculating probability, interpreting pie graphs	Mathematical Practices 1, 2, 3, 5, 6, 7, 8
L6	Filling in missing numbers in sequences counting by 1, 2, 3, 4, 5, or 10	Operations / Algebraic 5 Number / Operations Base Ten 4
L7	Recognizing any number less than 10,000	Number / Operations Base Ten *1, 2, 4
L8	Recognizing the symbols and terms < less than, > greater than; arranging 4 four-digit numbers in order from least to greatest and from greatest to least	Number / Operations Base Ten 2, 4
L9	Learning change equivalents up to \$1.00 for dimes, nickels and pennies; recognizing coins	Operations / Algebraic 3 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L10	Determining if there is sufficient information to answer the question; determining what information is needed to answer a question	Mathematical Practices 1, 2, 3, 5, 6, 7, 8
L11	Recognizing the dollar symbol and decimal point; recognizing money number words; regrouping with money amounts when adding or subtracting	Measurement / Data 1, 2
L12	Learning the multiplication facts with products up through 20 and products with 5 (up to 45), 10 (up to 90), 11 (up to 99) or 12 (up to 48) as a factor; multiplying a one-digit times a two or three-digit number; multiplying money amounts	Operations / Algebraic 1, 4 Number / Operations Base Ten 5
L13	Recognizing addition and subtraction fact families; bridging 20 or 30 when adding	Operations / Algebraic 4



Common Core 4th Grade Standards /
Excel Math Correlation by Lesson Number

Lesson (Activity) Number	Excel Math Lesson Objective	Common Core Standard
L14	Filling in a missing number in an equation; determining the value of a letter that has been substituted for a number	Number / Operations Base Ten 2, 5 Mathematical Practices 1, 2, 3, 5, 6, 7, 8
L15	Recognizing squares, circles, triangles and rectangles; recognizing the numerator and denominator; determining the fractional part of a group of items when modeled or given in words, sometimes including extraneous information or the word “not”	Number / Operations – Fractions *1, 3b Geometry 2
L16	Learning that the whole is the sum of its parts; learning change equivalents up to \$1.00 for quarters and half-dollars	Operations / Algebraic 1, 2, 3 Number / Operations Base Ten 5 Number / Operations – Fractions *1, *3a, 3b, 3d, *4a Mathematical Practices 1, 2, 3, 5, 6, 7, 8
L17	Computing half of a group; recognizing odd and even numbers less than 100	Operations / Algebraic 5 Number / Operations Base Ten 5 Mathematical Practices 1, 2, 3, 5, 6, 7, 8
L18	Telling time to the minute; recognizing a quarter past or to the hour, half past the hour; calculating minutes before the hour; learning 60 minutes = 1 hour; calculating elapsed time	Number / Operations Base Ten 5 Measurement / Data 2 Mathematical Practices 1, 2, 3, 5, 6, 7, 8
L19	Computing the date within one week; learning 7 days = 1 week; learning the abbreviations for days and months	Operations / Algebraic 3 Number / Operations Base Ten 5 Measurement / Data 2 Mathematical Practices 1, 2, 3, 5, 6, 7, 8
L20	Interpreting bar graphs and picture graphs	Operations / Algebraic 3 Mathematical Practices 1, 2, 3, 5, 6, 7, 8
L21	Learning division facts with dividends up through 20 and dividends with 5 as a factor	Operations / Algebraic 5 Number / Operations Base Ten 5, 6
L22	Selecting the correct operation; recognizing numbers greater than 1,000	Number / Operations Base Ten 1, 2, 5, 6
L23	Filling in missing numbers in sequences counting by 6, 7, 8, or 9	Operations / Algebraic 5 Number / Operations Base Ten 5, 6



**Common Core 4th Grade Standards /
Excel Math Correlation by Lesson Number**

Lesson (Activity) Number	Excel Math Lesson Objective	Common Core Standard
L24	Learning multiplication facts with products up to 30; recognizing multiplication and division fact families; learning the terminology for multiplication and division	Operations / Algebraic 1 Number / Operations Base Ten 5, 6
L25	Completing patterns in a chart	Operations / Algebraic 5 Geometry 2 Mathematical Practices 1, 2, 3, 5, 6, 7, 8
L26	Solving word problems using mental multiplication of coins; calculating change using the least number of coins	Operations / Algebraic 3 Measurement / Data 2 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L27	Dividing a one-digit divisor into a two-digit dividend with a two-digit quotient, no regrouping or remainders	Operations / Algebraic 5 Number / Operations Base Ten 5, 6
L28	Dividing a one-digit divisor into a three-digit dividend with a three digit quotient, no regrouping or remainders	Operations / Algebraic 5 Number / Operations Base Ten 5, 6 Mathematical Practices 1, 2, 3, 5, 6, 7, 8
L29	Estimating standard measurements	Measurement / Data 1 Mathematical Practices 1, 2, 3, 5, 6, 7, 8
L30	Recognizing lines of symmetry; reading measuring devices	Measurement / Data 1 Geometry 3
L31	Solving word problems involving multiplication and division	Operations / Algebraic 1, 2 Number / Operations Base Ten 5 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L32	Multiplying with a two-digit multiplier without a zero in the ones place in the multiplier and without regrouping	Operations / Algebraic *1 Number / Operations Base Ten 5 Mathematical Practices 4
L33	Learning division facts with remainders with dividends up through 20; solving word problems involving division with remainders	Operations / Algebraic 2, 4 Number / Operations Base Ten 6 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L34	Filling in missing numbers in equations with parentheses; learning the order of operations when solving an equation; replacing letters with numbers in an equation	Operations / Algebraic 1, 2, *3 Mathematical Practices 4
L35	Changing a number sentence from \neq to $=$; finding the value of an unknown by performing the same operation on both sides of an equation	Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8



**Common Core 4th Grade Standards /
Excel Math Correlation by Lesson Number**

Lesson (Activity) Number	Excel Math Lesson Objective	Common Core Standard
L36	Subtracting four-digit numbers; learning multiplication facts with products to 50	Operations / Algebraic 1 Number / Operations Base Ten 4, 5
L37	Measuring line segments to the nearest half inch, quarter inch and half centimeter; learning the equivalents for feet, inches and yards	Number / Operations – Fractions 3a, 3c, 3d Measurement / Data 1, *4 Geometry 1
L38	Learning the terminology of parallel, intersecting and perpendicular	Geometry 1, 2
L39	Learning the terminology of plane figure, polygon, quadrilateral, parallelogram, and diagonal	Geometry 2
L40	Recognizing three-dimensional figures - sphere, cube, cone, cylinder, rectangular, square and triangular pyramid and rectangular prism; learning the terminology of flat and curved faces, vertices and edges	
L41	Solving word problems using reasoning	Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L42	Dividing a one-digit divisor into a three-digit dividend with a two-digit quotient, no regrouping or remainders	Operations / Algebraic 5 Number / Operations Base Ten *1, 6 Mathematical Practices 4
L43	Continued - Dividing a one-digit divisor into a three-digit dividend with a two-digit quotient, no regrouping or remainders	Operations / Algebraic 5 Number / Operations Base Ten *1, 6 Mathematical Practices 4
L44	Using Venn Diagrams to understand the union and intersection of sets	Mathematical Practices 1, 2, 3, 5, 6, 7, 8
L45	Rounding to the nearest ten; estimating range for an answer; estimating the answers for addition, subtraction and multiplication word problems using rounding	Number / Operations Base Ten 3, 4 Mathematical Practices 4
L46	Recognizing ordinal number words up to 100	Operations / Algebraic 5 Number / Operations Base Ten 5, 6 Mathematical Practices 1, 2, 3, 5, 6, 7, 8
L47	Multiplying two two-digit numbers when there is a zero in the ones place in the multiplier, no regrouping	Number / Operations Base Ten 5 Mathematical Practices 4
L48	Filling in missing numbers in sequences involving three-digit numbers	Operations / Algebraic 5 Number / Operations Base Ten 5, 6 Mathematical Practices 4



**Common Core 4th Grade Standards /
Excel Math Correlation by Lesson Number**

Lesson (Activity) Number	Excel Math Lesson Objective	Common Core Standard
L49	Learning multiplication facts with products to 81; learning division facts with dividends to 30 and dividends that are multiples of 10 (to 90), 11 (to 99) or 12 (to 48)	Operations / Algebraic 1, 4 Number / Operations Base Ten 5, 6 Mathematical Practices 4
L50	Recognizing numbers less than a million given in words, expanded notation or place value	Number / Operations Base Ten 2
L51	Recognizing multiples	Operations / Algebraic 4 Mathematical Practices 1, 2, 3, 5, 6, 7, 8
L52	Dividing a one-digit divisor into a three-digit dividend with a two-digit quotient, with regrouping and remainders	Operations / Algebraic 5 Number / Operations Base Ten *1, 5, 6 Mathematical Practices 4
L53	Continuing to divide a one-digit divisor into a three-digit dividend with a two-digit quotient, with regrouping and remainders	Operations / Algebraic 5 Number / Operations Base Ten *1, 5, 6 Mathematical Practices 4
L54	Computing 1/2 to 1/9 of a group	Number / Operations – Fractions *1, 3b, *3d Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L55	Rounding to the nearest hundred or thousand; using rounding in order to estimate; rounding to the nearest dollar	Operations / Algebraic 1, 2, 3, *4 Number / Operations Base Ten 1, 3, 5 Mathematical Practices 1, 2, 3, 5, 6, 7, 8
L56	Calculating ratios of 2 to 1 and 3 to 1	Operations / Algebraic 5 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L57	Calculating elapsed time (hours) involving AM and PM	Operations / Algebraic 3 Measurement / Data 2 Mathematical Practices 1, 2, 3, 5, 6, 7, 8
L58	Recognizing patterns; learning the terminology of pentagon, hexagon, and octagon; determining figures that do or do not belong in a set	Operations / Algebraic 5 Geometry 2
L59	Dividing a two-digit divisor into a dividend less than 100, no remainders	Number / Operations Base Ten 5, 6 Mathematical Practices 4
L60	Recognizing when figures are similar or congruent; recognizing flips, turns and slides	
L61	Recognizing sets of odd and even numbers; dividing money by a one-digit divisor	Operations / Algebraic 5 Mathematical Practices 4
L62	Multiplying two two-digit numbers, regrouping only with the ones or the tens place	Number / Operations Base Ten 5



**Common Core 4th Grade Standards /
Excel Math Correlation by Lesson Number**

Lesson (Activity) Number	Excel Math Lesson Objective	Common Core Standard
L63	Learning measurement equivalents for meters, kilometers, kilograms, dozen; converting 2 feet 3 inches to 27 inches; determining the measurement that is longer or shorter or heavier or lighter	Measurement / Data 1, 2 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L64	Calculating perimeters; learning length abbreviations	Measurement / Data 1, 3 Mathematical Practices 4
L65	Determining coordinate points	Geometry 1
L66	Learning the equivalent for one year in weeks and the number of days in each month	Measurement / Data 2
L67	Adding and subtracting fractions	Number / Operations – Fractions 3a, 3b, *3d Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L68	Calculating the area of a rectangle	Measurement / Data 3 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L69	Estimating answers to word problems rounding to the nearest hundred or thousand; using rounding to establish a range	Number / Operations Base Ten *1, 3 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L70	Learning division facts with remainders with dividends up to 30 and dividends with 5 as a factor; measuring angles; learning the sum of the angles for a rectangle and a triangle	Number / Operations Base Ten 6 Measurement / Data 5a, 5b, 6, 7 Geometry 1
L71	Recognizing the parts of a circle	Measurement / Data 5a Geometry 2
L72	Selecting the correct equation; learning about the Commutative Property of Addition and of Multiplication	Operations / Algebraic *2, 3 Number / Operations Base Ten 5, 6 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L73	Learning division facts with dividends up through 50; learning multiplication facts with products up through 81 and products less than 100 with 12 as a factor; converting measurements using division	Operations / Algebraic 4 Number / Operations Base Ten 5, 6 Measurement / Data 1
L74	Recognizing true and not true number sentences; selecting the correct symbol for a number sentence	Operations / Algebraic 1 Number / Operations Base Ten 6 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L75	Determining equivalent fractions using models or money	Number / Operations – Fractions 1, 2, 3b, *4a, *4b Mathematical Practices 4



**Common Core 4th Grade Standards /
Excel Math Correlation by Lesson Number**

Lesson (Activity) Number	Excel Math Lesson Objective	Common Core Standard
L76	Adding and subtracting fractions with like denominators	Number / Operations – Fractions 3a *3b, *3d Mathematical Practices 4
L77	Solving word problems by listing possibilities	Operations / Algebraic 3 Number / Operations Base Ten 5, 6 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L78	Recognizing right, obtuse and acute angles	Number / Operations Base Ten 5, 6 Measurement / Data *5b, 6, *7
L79	Comparing fractions	Number / Operations – Fractions *1, 2, *4a, *4b
L80	Interpreting information given in a line graph	Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L81	Adding and subtracting mixed numbers	Number / Operations Base Ten 5, 6 Number / Operations – Fractions 3a, 3c, *3d
L82	Dividing a one-digit divisor into a four-digit dividend with a three-digit quotient	Number / Operations Base Ten 6
L83	Continued - Dividing a one-digit divisor into a four-digit dividend with a three-digit quotient	Number / Operations Base Ten 6
L84	Multiplying two two-digit numbers, regrouping twice	Number / Operations Base Ten 5, 6
L85	Recognizing tenths and hundredths places; recognizing decimal number words	Number / Operations – Fractions 5, 6
L86	Adding and subtracting decimal numbers	Mathematical Practices 4
L87	Learning division facts with dividends up to 81 and dividends less than 100 with 12 as a factor; using trial and error to replace letters with numbers in an equation; learning the equivalents of gallons, pounds, tons	Operations / Algebraic 1, 2 Number / Operations Base Ten 5, 6 Measurement / Data 1 Mathematical Practices 4
L88	Changing an improper fraction to a mixed number	Number / Operations – Fractions 1, 2, 3b, *4a, *4b Mathematical Practices 4
L89	Dividing with a two-digit divisor and a dividend less than 100 with remainders	Operations / Algebraic 4 Number / Operations Base Ten 5, 6 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L90	Determining the question, given the information and the answer; learning the equivalent for one year in days; estimating which answer is most reasonable	Measurement / Data 2 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8



**Common Core 4th Grade Standards /
Excel Math Correlation by Lesson Number**

Lesson (Activity) Number	Excel Math Lesson Objective	Common Core Standard
L91	Determining the lowest common multiple; learning the multiplication facts with products with 11 (up to 121) and 12 (up to 144) as a factor; learning division facts with remainders with dividends to 50	Operations / Algebraic 4 Number / Operations Base Ten 5, 6 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L92	Calculating distance, time and speed in word problems	Operations / Algebraic 4 Number / Operations Base Ten 5, 6 Measurement / Data 2 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L93	Determining factors	Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L94	Determining prime numbers and prime factors	Operations / Algebraic 4 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L95	Calculating the volume of a rectangular prism with one or more layers of cubes; determining the improper fraction with the greatest or least value in a set of fractions	Number / Operations – Fractions 2 Mathematical Practices 4
L96	Solving word problems involving area and perimeter; calculating the diameter, given the radius	Measurement / Data 3 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L97	Measuring vertical or horizontal lines by subtracting x or y-coordinates	Geometry 1 Mathematical Practices 4
L98	Recognizing equilateral, isosceles and scalene triangles	Measurement / Data *5b, *6, *7 Geometry 2
L99	Calculating equivalent fractions using multiplication	Number / Operations – Fractions 1, 2, 4a, 4b, 4c Mathematical Practices 4
L100	Comparing decimal numbers in true and not true statements and in less than and greater than problems	Number / Operations – Fractions 5, 6, 7 Mathematical Practices 1, 2, 3, 5, 6, 7, 8
L101	Recognizing the pattern in a sequence of figures or pattern of shading	Operations / Algebraic 5
L102	Recognizing numbers up through trillions; recognizing three-digit odd and even numbers	Operations / Algebraic 5 Number / Operations Base Ten 2
L103	Filling in missing numbers in sequences counting by 11 or 12	Operations / Algebraic 5 Number / Operations Base Ten 5, 6 Mathematical Practices 4



**Common Core 4th Grade Standards /
Excel Math Correlation by Lesson Number**

Lesson (Activity) Number	Excel Math Lesson Objective	Common Core Standard
L104	Rounding to the nearest whole number	Operations / Algebraic 3 Number / Operations Base Ten *1, 2, 3 Number / Operations – Fractions *6, 7 Measurement / Data 2 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L105	Calculating the volume of a rectangular prism using the formula $L \times W \times H$; putting decimal numbers in order from least to greatest and greatest to least	Number / Operations – Fractions 7 Mathematical Practices 4
L106	Determining the greatest common factor	Operations / Algebraic 4 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L107	Dividing decimal numbers by a whole number	Mathematical Practices 4
L108	Learning the Distributive Property of Multiplication and the Associative Property of Multiplication and Addition	Operations / Algebraic 1 Number / Operations Base Ten 5, 6 Mathematical Practices 4
L109	Dividing dollars by dollars	Measurement / Data 2 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L110	Calculating equivalent fractions using division	Number / Operations – Fractions 1, 2, 3b Mathematical Practices 4
L111	Calculating elapsed time in minutes across the 12 on a clock	Operations / Algebraic 3 Measurement / Data 2 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L112	Converting improper fractions as part of mixed numbers	Number / Operations – Fractions 3b, 3c Mathematical Practices 4
L113	Filling in missing numbers in sequences counting by varying amounts	Operations / Algebraic 5 Mathematical Practices 4
L114	Selecting the fraction that best represents a shaded region	Number / Operations – Fractions 1, *3b
L115	Calculating a decimal answer in division problems when zeroes need to be added to the right of the dividend	Number / Operations – Fractions 7 Mathematical Practices 4
L116	Multiplying a three-digit number by a two-digit number; multiplying money amounts with a two-digit multiplier	Number / Operation Base Ten 5
L117	Filling in missing numbers in a sequence of decimal numbers	Operations / Algebraic 5 Number / Operations – Fractions *6, *7 Mathematical Practices 4
L118	Converting mixed numbers to decimal numbers by setting up equivalent fractions	Number / Operations – Fractions 1, 2, *4c, 5, 6 Mathematical Practices 4



**Common Core 4th Grade Standards /
Excel Math Correlation by Lesson Number**

Lesson (Activity) Number	Excel Math Lesson Objective	Common Core Standard
L119	Comparing two or more sets of data using bar or line graphs	Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L120	Calculating area and perimeter given coordinates on a coordinate grid	Measurement / Data 3 Geometry 1 Mathematical Practices 4
L121	Reading maps drawn to scale	Operations / Algebraic 2, 3, Measurement / Data 2 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L122	Calculating averages	Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L123	Learning the abbreviations for quarts, gallons, kilograms, grams, pounds and ounces; continued - Calculating averages	Operations / Algebraic 2, 3 Measurement / Data 1 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L124	Learning the equivalent for one year in days; learning about leap year	Operations / Algebraic 2, 3 Number / Operations Base Ten 6 Measurement / Data 2 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L125	Comparing fractions in less than and greater than problems and in true and not true number sentences by setting up equivalent fractions	Number / Operations – Fractions 2 Mathematical Practices 1, 2, 3, 5, 6, 7, 8
L126	Recognizing Roman Numerals I, V, X, L, C, D, M	Operations / Algebraic 5 Number / Operations Base Ten 4 Mathematical Practices 4
L127	Converting fractions to percent by setting up equivalent fractions	Number / Operations -Fractions 1, 4a, 4b, 5 Mathematical Practices 4
L128	Continued - Converting fractions to percent by setting up equivalent fractions	Number / Operations – Fractions 1, 4a, 4b, 5 Mathematical Practices 4
L129	Estimating answers to problems involving nine-digit numbers	Operations / Algebraic 3 Number / Operations Base Ten 3, 4 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L130	Determining if coordinate points are on a given line	Geometry 1
L131	Recognizing the thousandth place; rounding decimal numbers to the nearest tenth or hundredth	Number / Operations – Fractions *6, *7 Mathematical Practices 1, 2, 3, 5, 6, 7, 8
L132	Associating the 360 degrees in a circle with one-quarter, one-half, three-quarter and full turns	Measurement / Data 5a, *5b, *6, 7 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L133	Comparing positive and negative numbers	Measurement / Data 1, 2 Mathematical Practices 1, 2, 3, 5, 6, 7, 8



Common Core 4th Grade Standards /
Excel Math Correlation by Lesson Number

Lesson (Activity) Number	Excel Math Lesson Objective	Common Core Standard
L134	Determining the equation that represents a problem and the one that solves the problem	Operations / Algebraic 2 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L135	Determining if a number, greater than 20, is a prime number	Operations / Algebraic 4 Mathematical Practices 4
L136	Selecting the percent that represents a shaded region	Number / Operations – Fractions *5
L137	Selecting the decimal that represents a shaded region	Number / Operations – Fractions 5, 6
L138	Dividing a two-digit divisor into a three-digit dividend with a two-digit quotient	Number / Operations Base Ten 6
L139	Calculating cost per unit	Operations / Algebraic 2, 3 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L140	Determining negative numbers using coordinate points	Geometry 1
L141	Computing products involving two decimal numbers	Mathematical Practices 4
L142	Continued - Computing products involving two decimal numbers	Mathematical Practices 4
L143	Solving word problems involving percent	Number / Operations – Fractions 5 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L144	Learning the terminology of rhombus and trapezoid	Geometry 2
L145	Arranging fractions, decimals, and mixed numbers on a number line	Number / Operations – Fractions 6 Measurement / Data *4
L146	Multiplying a three-digit number times a three-digit number	Operations / Algebraic 2
L147	Calculating the area of a parallelogram	Measurement / Data 3 Mathematical Practices 4
L148	Converting fractions to decimals using division	Number / Operations – Fractions 6 Mathematical Practices 4
L149	Calculating the surface area of a rectangular prism	Measurement / Data 3 Mathematical Practices 4
L150	Calculating the mean, mode and median	Operations / Algebraic 3 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L151	Dividing a two-digit divisor into a three-digit dividend with a one-digit quotient	Operations / Algebraic 1, 4 Number / Operations Base Ten 5, 6 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L152	Determining the rule that creates a pattern	Operations / Algebraic 2, 5 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
L153	Multiplying fractions	Number / Operations – Fractions 4b



Common Core 4th Grade Standards /
Excel Math Correlation by Lesson Number

Lesson (Activity) Number	Excel Math Lesson Objective	Common Core Standard
L154	Multiplying fractions and whole numbers	Number / Operations – Fractions 4b
L155	Calculating the area of a triangle	Measurement / Data 3 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
Activity 1	Recording & Interpreting Data	Mathematical Practices 1, 2, 3, 5, 6, 7, 8
Activity 2	Bar & Line Graphs	Mathematical Practices 1, 2, 3, 5, 6, 7, 8
Activity 3	Plotting Data on Graphs	Measurement / Data *2, *4 Mathematical Practices 1, 2, 3, 5, 6, 7, 8
Activity 4	Interpreting Line Graphs	Measurement / Data *4 Mathematical Practices 1, 2, 3, 5, 6, 7, 8
Activity 5	Pie Graphs	Measurement / Data *5a Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
Activity 6	Observation and Experimentation	Mathematical Practices 1, 2, 3, 5, 6, 7, 8
Activity 7	Reasoning by listing	Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
Activity 8	Reasoning by questioning	Mathematical Practices 1, 2, 3, 5, 6, 7, 8
Activity 9	Math in Advertising	Mathematical Practices 1, 2, 3, 5, 6, 7, 8
Activity 10	Word Problems / equations	Operations / Algebraic 1, 2, 3 Number / Operations Base Ten 4, 6 Measurement / Data *2 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
Activity 11	Pieces on a grid - area	Measurement / Data 3 Geometry 1, 2 Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8
Activity 12	Perimeter & Area: Squares and Rectangles	Measurement / Data 3
Activity 13	Perimeter & Area: Triangles	Measurement / Data 3 Geometry 2
Activity 14	Real and Whole Numbers	Operations / Algebraic 5