## Excel Math Lesson Numbers <br> Stretch Lesson Numbers <br> Activity Numbers

## Operations and Algebraic Thinking

Represent and solve problems involving multiplication and division.

| 1. Interpret products of whole numbers, e.g., interpret $5 \times 7$ as the total number of objects in 5 groups of 7 objects each. | $\begin{aligned} & 39,46,53,61,68,71,73,81,91, \\ & 92,96,97,100,117,126,127, \\ & 131,151 \end{aligned}$ |  |
| :---: | :---: | :---: |
| 2. Interpret whole-number quotients of whole numbers, e.g., interpret $56 \div$ 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. | $\begin{aligned} & 58,59,71,81,87,88,93,94,101 \\ & 102,103,111,117,118,132,133 \\ & 151,153,154 \end{aligned}$ |  |
| 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. | $\begin{aligned} & 59,68,74,85,87,88,91,93,96 \\ & 100,105,111,121,126,127,146, \\ & 151 \end{aligned}$ | $55,81,96,100,105,106,110,152$ <br> Activity 5 |
| 4. Determine the unknown whole number in a multiplication or division equation relating three whole numbers. | $\begin{aligned} & 76,81,99,105,107 \\ & \text { Addition / Subtraction: 21, 28, 36, } \\ & 122 \end{aligned}$ | $\begin{aligned} & 70,73,75,83,89,94,101,107,110,114 \text {, } \\ & 119,124,129,134,141,149,154 \end{aligned}$ <br> Addition / Subtraction: 1, 11, 19, 24, 31, 33, $39,40,44,49,56,63,68,77,79,85,101$, 102, 107, 110, 114, 125 <br> 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 $6 \times 4=24$ is known, then $4 \times 6=24$ is also known. <br> (Commutative property of multiplication.) $3 \times 5 \times 2$ can be found by $3 \times 5=$ 15 , then $15 \times 2=30$, or by $5 \times 2=$ 10 , then $3 \times 10=30$. (Associative property of multiplication.) <br> Knowing that $8 \times 5=40$ and $8 \times 2=$ 16 , one can find $8 \times 7$ as $8 \times(5+2)$ $=(8 \times 5)+(8 \times 2)=40+16=56$. <br> (Distributive property.) | $\begin{aligned} & 46,53,58,59,61,68,71,73,91, \\ & 92,95,96,97,103,107,117,118 \\ & 131,142,151 \end{aligned}$ <br> Multiples: 111, 117 <br> Factors: 143 <br> Prime Factors: 144 |  |
| 6. Understand division as an unknownfactor problem. For example, find $32 \div 8$ by finding the number that makes 32 when multiplied by 8 . | $\begin{aligned} & * 58,71, * 87, * 88,93,96,103 \\ & 117,118,132,133,142,151,153 \\ & 154 \end{aligned}$ |  |
| 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 $8 \times$ $5=40$, one knows $40 \div 5=8$ ) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers. | $\begin{aligned} & 39,44,46,47,48,49,51,52,53, \\ & 56,57,58,59,61,64,67,68,69 \\ & 71,72,73,74,76,79,81,82,83 \\ & 84,86,89,92,94,96,97,99,100, \\ & 104,107,108,113,117,118,119 \\ & 124,126,127,136,142,143,144, \\ & 146,148,151,152,153,154 \end{aligned}$ | 138 |
| Solve problems involving the four operations, and identify and explain 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. | $\begin{aligned} & 11,15,22,26,40,75,83,84,85, \\ & 87,88,96,98,105,114,121,122, \\ & 126,127,132,133,137,146 \\ & \text { Reasoning: } 25,70,123 \end{aligned}$ | $\begin{aligned} & 3,5,7,8,10,12,13,14,18,22,23,25,26, \\ & 29,30,32,34,37,38,43,45,48,52,54,55, \\ & 57,62,64,69,71,79,81,91,92,95,96,97, \\ & 103,105,106,109,112,114,122,127,128, \\ & 130,137,138,139,143,144,151,152 \end{aligned}$ <br> 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. | $\begin{aligned} & \text { 2, 6, 31, 37, 39, 46, 48, 68, 73, 80, } \\ & \text { *96, 97, 104, 113, 126, 127, 131, } \\ & 155 \\ & \text { Shapes: } 77,130 \end{aligned}$ | $\begin{aligned} & 35,116,123 \\ & \text { Shapes: } 78 \end{aligned}$ |

## Standards / Objectives

## Excel Math <br> Lesson Numbers

Stretch Lesson Numbers
Activity Numbers

## Number and Operations in Base Ten

Use place value understanding and properties of operations to perform multi-digit arithmetic. 4

| 1. Use place value understanding to round whole numbers to the nearest 10 or 100. | $\begin{aligned} & 43,60,75,90,95,115,134 \\ & \text { Place Value: } 1,4,12,14,27,34, \\ & 38,49,51,53,64,79,91,100 \\ & 102,104,131,132,133,150 \end{aligned}$ |  |
| :---: | :---: | :---: |
| 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. | $1,2,3,6,7,8,9,11,12,13,14$, $16,17,19,22,23,24,26,27,28$, $29,31,33,34,36,38,41,42,43$, $44,45,47,51,52,57,58,64,67$, $68,69,73,74,79,81,84,92,96$, $115,136,146$ | $\begin{aligned} & 1,2,6,9,13,16,21,28,31,33,35,36,39 \\ & 48,65,79,91,102,117,121,123,144,146 \end{aligned}$ |
| 3. Multiply one-digit whole numbers by multiples of 10 in the range 10-90 (e.g., $9 \times 80,5 \times 60$ ) 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 $\mathrm{a} / \mathrm{b}$ 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
147, 148, 149
```

2. Understand a fraction as a number on the number line; represent fractions on a number line diagram.
a. Represent a fraction $1 / \mathrm{b}$ 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
Stretch Lesson Numbers Activity Numbers

| b. Represent a fraction $\mathrm{a} / \mathrm{b}$ on a number line diagram by marking off a lengths $1 / b$ from 0 . Recognize that the resulting interval has size $\mathrm{a} / \mathrm{b}$ and that its endpoint locates the number $\mathrm{a} / \mathrm{b}$ on the number line. | $\begin{aligned} & * 31, * 54, * 66, * 82,{ }^{*} 109,{ }^{*} 140, \\ & * 147,{ }^{*} 148, * 149 \end{aligned}$ |  |
| :---: | :---: | :---: |
| 3. Explain equivalence of fractions in special cases, and compare fractions by reasoning 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. | $\begin{aligned} & * 31, * 54, * 66, * 82,{ }^{*} 109, * 140, \\ & * 147, * 148, * 149 \end{aligned}$ |  |
| 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. | $\text { *147, 148, } 149$ <br> Addition / Subtraction: 140 | Activity 8 |

## Standards / Objectives

Excel Math Lesson Numbers

## Stretch Lesson Numbers

 Activity Numbers
## Measurement and Data

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 (1). 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 ${ }^{7}$ | $50,63,135,145$ <br> Distance / Weight: 62 | 29 <br> 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. | $20,35,126,127,141$ <br> Probability: 5 <br> 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 unitswhole numbers, halves, or quarters. | $32,108, * 125$ <br> Angles: 138 <br> Lines: 56, 128, 129, 138 <br> Equivalents: 74, 83, 125 | Activity 10 |

## Standards / Objectives

Excel Math Lesson Numbers

## Stretch Lesson Numbers Activity Numbers

| 5. Recognize area as an attribute of plane figures and understand concepts 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 | $\begin{aligned} & * 4, * 17,-58,60,86, * 87,90, * 104, * 111, \\ & * 115,126,132, * 136, * 147,151 \end{aligned}$ <br> 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 | $\begin{aligned} & * 86, * 87, * 90, * 111, * 115, * 126, * 132, \\ & * 147,151 \end{aligned}$ <br> Activity 2 |
| 6. Measure areas by counting unit squares (square cm , square m , square in, square ft , and improvised units). | 72, 124, 135, 145 | $\begin{aligned} & * 86, * 87, * 90, * 111, * 115, * 126, * 132, \\ & * 147,151 \end{aligned}$ <br> Activity 2 |
| 7. Relate area to the operations of multiplication 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 <br> 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 | $* 4, * 17,-58,60,86, * 87,90, * 104, * 111,$ <br> *115, 126, 132, *136, *147, 151 <br> 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 $\mathrm{a} \times \mathrm{b}$ and $\mathrm{a} \times \mathrm{c}$. Use area models to represent the distributive property in mathematical reasoning. | *124, 135, 145 | $60^{*}, * 86, * 111, * 115, * 126, * 132,151$ <br> Activity 2 |
| d. Recognize area as additive. Find areas of rectilinear figures by decomposing them into nonoverlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems. | *72, *124, 135 | $\text { *126, *132, } 151$ <br> Activity 2 |

Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.
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 attributes.

| 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. | $\begin{aligned} & 8,41,77, * 86,106,119,120,129, \\ & 139 \\ & \text { 3- dimensional: } 69,141 \end{aligned}$ | $\begin{aligned} & 4,17,41,46,50,58,60,72,76,86,87,90 \\ & 104,111,115,126,132,136,147,150,151 \end{aligned}$ <br> 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 | $* 86, * 126$ <br> 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. | $\begin{aligned} & 5,10,11,15,20,22,25,26,30, \\ & 32,35,36,40,58,62,63,65,68, \\ & 70,71,74,80,82,83,84,85,87, \\ & 88,89,105,110,111,112,114, \\ & 115,122,123,126,127,137,151, \\ & 152 \end{aligned}$ | $2,4,5,6,7,8,9,11,12,13,16,17,18,19$, $20,21,22,23,24,25,26,27,28,31,32,34$, $36,37,38,39,40,43,44,45,47,49,51,53$, $56,58,59,61,62,63,66,67,68,69,70,71$, $73,74,75,76,79,80,81,82,83,84,87,88$, $89,92,94,95,97,98,99,100,101,102$, $103,104,106,107,108,109,110,111,112$, $114,115,117,118,119,120,121,122,124$, $127,128,129,131,133,134,135,136,141$, 143, 147, 149, 154 <br> Activity $1,2,3,4,5,6,8,9,10,11$ |
| :---: | :---: | :---: |
| 2. Reason abstractly and quantitatively. | $\begin{aligned} & 5,10,11,15,20,22,25,26,30, \\ & 32,35,36,40,58,62,63,65,68, \\ & 70,71,74,80,82,83,84,85,87, \\ & 88,89,105,110,111,112,114, \\ & 115,122,123,126,127,137,151, \\ & 152 \end{aligned}$ | $2,4,5,6,7,8,9,11,12,13,16,17,18,19$, $20,21,22,23,24,25,26,27,28,31,32,34$, $36,37,38,39,40,43,44,45,47,49,51,53$, $56,58,59,61,62,63,66,67,68,69,70,71$, $73,74,75,76,79,80,81,82,83,84,87,88$, $89,92,94,95,97,98,99,100,101,102$, $103,104,106,107,108,109,110,111,112$, $114,115,117,118,119,120,121,122,124$, $127,128,129,131,133,134,135,136,141$, 143, 147, 149, 154 <br> Activity 1, 2, 3, 4, 5, 6, 8, 9, 10, 11 |
| 3. Construct viable arguments and critique the reasoning of others. | $\begin{aligned} & 5,10,11,15,20,22,25,26,30 \\ & 32,35,36,40,58,62,63,65,68, \\ & 70,71,74,80,82,83,84,85,87, \\ & 88,89,105,110,111,112,114 \\ & 115,122,123,126,127,137,151, \\ & 152 \end{aligned}$ | $2,4,5,6,7,8,9,11,12,13,16,17,18,19$, $20,21,22,23,24,25,26,27,28,31,32,34$, $36,37,38,39,40,43,44,45,47,49,51,53$, $56,58,59,61,62,63,66,67,68,69,70,71$, $73,74,75,76,79,80,81,82,83,84,87,88$, $89,92,94,95,97,98,99,100,101,102$, $103,104,106,107,108,109,110,111,112$, $114,115,117,118,119,120,121,122,124$, 127, 128, 129, 131, 133, 134, 135, 136, 141, 143, 147, 149, 154 <br> Activity $1,2,3,4,5,6,8,9,10,11$ |
| 4. Model with mathematics. | $\begin{aligned} & 5,11,18,20,22,26,32,35,36, \\ & 40,58,62,65,68,71,74,80,82, \\ & 83,84,85,87,88,89,105,110, \\ & 111,112,114,115,122,123,126 \text {, } \\ & 127,137,151,152 \end{aligned}$ | $1,2,3,5,6,7,9,10,11,12,13,16,18,19$, $21,22,23,24,25,26,28,29,30,32,33,34$, $36,38,39,40,43,44,45,47,48,49,52,54$, $55,56,57,62,63,64,65,68,69,70,71,73$, $75,79,81,82,83,89,91,92,94,95,96,97$, $100,101,102,103,105,106,107,109,110$, $112,114,117,119,122,123,124,125,127$, $128,129,130,134,135,137,138,139,140$, $141,143,144,145,146,149,150,152,154$ <br> 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, <br> $32,35,36,40,58,62,63,65,68$, <br> $70,71,74,80,82,83,84,85,87$, <br> $88,89,105,110,111,112,114$, <br> $115,122,123,126,127,137,151$, 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, <br> $32,35,36,40,58,62,63,65,68$, <br> $70,71,74,80,82,83,84,85,87$, <br> $88,89,105,110,111,112,114$, <br> $115,122,123,126,127,137,151$, 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, <br> $32,35,36,40,58,62,63,65,68$, <br> $70,71,74,80,82,83,84,85,87$, <br> $88,89,105,110,111,112,114$, <br> $115,122,123,126,127,137,151$, 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. | $\begin{aligned} & 5,10,11,15,20,22,25,26,30 \\ & 32,35,36,40,58,62,63,65,68, \\ & 70,71,74,80,82,83,84,85,87, \\ & 88,89,105,110,111,112,114, \\ & 115,122,123,126,127,137,151, \\ & 152 \end{aligned}$ | $2,4,5,6,7,8,9,11,12,13,16,17,18,19$, $20,21,22,23,24,25,26,27,28,31,32,34$, $36,37,38,39,40,43,44,45,47,49,51,53$, $56,58,59,61,62,63,66,67,68,69,70,71$, $73,74,75,76,79,80,81,82,83,84,87,88$, 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 <br> Activity $1,2,3,4,5,6,8,9,10,11$ |

## Standards / Objectives

Excel Math
Stretch Lesson Numbers 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 | $16,22,33,44,82,95,114,131$, <br> 134,146 | $45,55,71,92,105,122,130$ |
| Calendar | $26,27,84$ | Activity 4 |
| Coordinate points |  | Activity 8 |
| Percent | 55 |  |
| Symmetry | 120 |  |
| Similar / Congruent |  |  |

## Common Core $3^{\text {rd }}$ Grade Standards / Excel Math Correlation by Lesson Number

| Lesson <br> (Activity) <br> Number | Excel Math Lesson Objective | Common Core Standard |
| :---: | :--- | :--- |
| L1 | Learning about the tens place and the ones <br> place; adding and subtracting two-digit <br> numbers; learning addition and <br> subtraction facts up to 10 | Number / Operations Base Ten 2 |
| L2 | Recognizing a sequence counting by one, <br> two, five or ten | Operations / Algebraic 9 <br> Number / Operations Base Ten 2 |
| L3 | Recognizing ordinals 1st to 19th counting <br> from the left or the right | Number / Operations Base Ten 2 |
| L4 | Putting 3 two-digit numbers in order from <br> least to greatest; recognizing the symbols <br> <, >, = | Lalculating probability; interpreting <br> information given in circle (pie) graphs |
| L5 | Filling in missing number sequences <br> when counting by 1, 2, 5, or 10; learning <br> Lhe addition facts of 11, 12 and 13 | Operations / Algebraic 9 <br> Number / Operations Base Ten 2 |
| L18 | Regrouping when adding 2 two-digit <br> Lumbers using the facts of 10 | Number / Operations Base Ten 2 2 |

## Common Core $3^{\text {rd }}$ Grade Standards / Excel Math Correlation by Lesson Number

| 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 <br> Number / Operations Base Ten 2 <br> 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 <br> Number / Operations Base Ten 2 <br> 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 } Number / Operations Base Ten 2 Number / Operations - Fractions 1, *2a, *2b, *3c``` |
| L32 | Solving story problems involving comparisons | Measurement / Data 4 <br> 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 <br> Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8 |
| L36 | Calculating missing numbers in number sentences | Number / Operations Base Ten 2 <br> 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 <br> 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 <br> Number / Operations Base Ten 2 |
| L45 | Recognizing basic fact families | Number / Operations Base Ten 2 |

## Common Core $3^{\text {rd }}$ Grade Standards / Excel Math Correlation by Lesson Number

| Lesson <br> (Activity) <br> Number | Excel Math Lesson Objective | Common Core Standard |
| :---: | :--- | :--- |
| L46 | Learning multiplication facts with <br> products up to 20 and with 5 as a factor; <br> recognizing odd and even numbers less <br> than 100 | Operations / Algebraic 1, 5, 7, 9 |
| L47 | Subtracting three-digit numbers, <br> regrouping only with the tens or the <br> hundreds place | Operations / Algebraic 7 <br> Number / Operations Base Ten 2 |
| L48 | Filling in numbers in a sequence counting <br> by 3, 4 or 10 (31, 41, 51, 61) | Operations / Algebraic 7, 9 |

## Common Core $3^{\text {rd }}$ Grade Standards / Excel Math Correlation by Lesson Number

| Lesson (Activity) Number | Excel Math Lesson Objective | Common Core Standard |
| :---: | :---: | :---: |
| L66 | Defining numerator and denominator; selecting the fraction that matches a given model | $\begin{aligned} & \text { Number / Operations - Fractions 1, *2a, *2b, } \\ & * 3 \mathrm{~b}, * 3 \mathrm{c} \end{aligned}$ |
| L67 | Adding four-digit numbers where the sum for a single place is greater than 19 and less than 30 | Operations / Algebraic 7 <br> 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 <br> Number / Operations Base Ten 2 <br> Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8 |
| L69 | Recognizing three-dimensional figures | Operations / Algebraic 7 <br> 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 <br> Number / Operations Base Ten *3 <br> 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 <br> 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 <br> Number / Operations Base Ten 2 |
| L74 | Learning the measurement equivalents for dozen, yards, feet and inches | Operations / Algebraic 3, 7 <br> Number / Operations Base Ten 2 <br> Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8 |
| L75 | Estimating answers to story problems, rounding to the nearest ten | Operations / Algebraic 8 <br> 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 <br> Number / Operations Base Ten 2 |
| L80 | Completing number patterns that are in the form of a chart | Operations / Algebraic 9 <br> Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8 |
| L81 | Solving for an unknown in an equation | Operations / Algebraic 1, 2, 4, 7 <br> 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, }``` |
| L83 | Solving multi-step word problems involving time | Operations / Algebraic 7, 8 <br> Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8 |
| L84 | Calculating the date within one week in the past | Operations / Algebraic 7, 8 <br> Number / Operations Base Ten 2 <br> Measurement / Data 1 <br> Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8 |

## Common Core $3{ }^{\text {rd }}$ Grade Standards / Excel Math Correlation by Lesson Number

| Lesson (Activity) Number | Excel Math Lesson Objective | Common Core Standard |
| :---: | :---: | :---: |
| L85 | Estimating answers within a range | Operations / Algebraic 3, 8 <br> Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8 |
| L86 | Calculating perimeters to the nearest inch or centimeter | Operations / Algebraic 7 <br> Measurement / Data 8 <br> Geometry * 1 |
| L87 | Solving division story problems given models | Operations / Algebraic 2, 3, *6, 8 <br> Mathematical Practices $1,2,3,4,5,6,7,8$ |
| L88 | Solving division story problems | Operations / Algebraic 2, 3, *6, 8 <br> 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 <br> Measurement / Data 1 <br> 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 <br> 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 <br> 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 <br> Number / Operations Base Ten 3 |
| L101 | Solving division problems with a onedigit 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 |

## Common Core $3^{\text {rd }}$ Grade Standards / Excel Math Correlation by Lesson Number

| 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 <br> 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 <br> 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 <br> Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8 |
| L112 | Calculating elapsed time involving A.M. and P.M. | Measurement / Data 1 <br> 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 <br> 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 <br> 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 |

## Common Core $3^{\text {rd }}$ Grade Standards / Excel Math Correlation by Lesson Number

| 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 <br> Measurement / Data 3 <br> 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 | Operations / Algebraic 1, 3, 7, 8, 9 <br> Measurement / Data 3 <br> 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 onedigit divisor, three-digit dividend, twodigit 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 <br> Number / Operations Base Ten 2 |
| L137 | Solving story problems with fractional parts, the word "not", and unnecessary information | Operations / Algebraic 8 <br> Number / Operations - Fractions 1 <br> 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 | $\begin{aligned} & \text { Number / Operations - Fractions } 1, * 2 \mathrm{a}, * 2 \mathrm{~b}, \\ & * 3 \mathrm{a}, * 3 \mathrm{~b}, * 3 \mathrm{c} \\ & \hline \end{aligned}$ |
| 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 |

## Common Core $3^{\text {rd }}$ Grade Standards / Excel Math Correlation by Lesson Number

| 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 | $\begin{aligned} & \text { Number / Operations - Fractions 1, *2a, *2b, } \\ & * 3 \mathrm{a}, * 3 \mathrm{~b}, * 3 \mathrm{c}, * 3 \mathrm{~d} \end{aligned}$ |
| L148 | Determining equivalent fractions using models | $\begin{aligned} & \text { Operations / Algebraic } 7 \\ & \text { Number / Operations - Fractions } 1, * 2 \mathrm{a}, * 2 \mathrm{~b} \text {, } \\ & 3 \mathrm{a}, 3 \mathrm{~b}, * 3 \mathrm{c}, 3 \mathrm{~d} \end{aligned}$ |
| L149 | Determining equivalent fractions using money | $\begin{aligned} & \text { Number / Operations - Fractions 1, *2a, *2b, } \\ & 3 \mathrm{a}, 3 \mathrm{~b}, * 3 \mathrm{c}, 3 \mathrm{~d} \end{aligned}$ |
| 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 <br> Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8 |
| L152 | Calculating elapsed time across the 12 on the clock | Operations / Algebraic 7 <br> Measurement / Data 1 <br> 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 <br> Mathematical Practices 1, 2, 3, 5, 6, 7, 8 |
| Activity 3 | Whole and Fractional parts | Number / Operations - Fractions 1 <br> Geometry 2 <br> 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 <br> Mathematical Practices 1, 2, 3, 4, 5, 6, 7, 8 |
| Activity 6 | Puzzles | Measurement / Data 2 <br> 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 <br> 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 |

