Third Grade Major, Supporting and Additional Standards by Cluster

| Represent and solve problems involving multiplication and division |  |  |  |
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| ©3.0A. 1 | DOK 1,2 | Interpret products of whole numbers, e.g., interpret $5 \times 7$ as the total number of objects in 5 groups of 7 objects each. | Major |
| ©3.0A.2 | DOK 1,2 | 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. | Major |
| ©3.0A.3 | DOK 1,2 | Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities | Major |
| ©3.0A. 4 | DOK 1,2 | Determine the unknown whole number in a multiplication or division equation relating three whole numbers. | Major |
| Understand properties of multiplication and the relationship between multiplication and division |  |  |  |
| ©3.0A. 5 | DOK 1,2 | 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. | Major |
| ©3.0A. 6 | DOK 1,2 | Understand division as an unknown-factor problem | Major |
| Multiply and divide within 100. |  |  |  |
| ©3.0A. 7 | DOK 1,2,3 | Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division | Major |
| Solve problems involving the four operations, and identify and explain patterns in arithmetic. |  |  |  |
| ©3.0A.8 | DOK 1,2,3 | 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 | Major |
| ©3.0A.9 | DOK 1 | Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations | Major |
| Use place value understanding and properties of operations to perform multi-digit arithmetic. |  |  |  |
| 3.NBT. 1 | DOK 1,2 | Use place value understanding to round whole numbers to the nearest 10 or 100. | Additional |
| 3.NBT. 2 | DOK 1,2 | 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. | Additional |
| 3.NBT. 3 | DOK 1,2 | Multiply one-digit whole numbers by multiples of 10 in the range $10-90$ (e.g., $9 \times 80,5 \times 60$ ) using | Additional |


|  |  | strategies based on place value and properties of operations. |  |
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| Develop understanding of fractions as numbers. |  |  |  |
| (3.NF. 1 | DOK 1,2 | 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 $1 / b$. | Major |
| © ${ }^{\text {P.NF. } 2}$ | DOK 1,2 | Understand a fraction as a number on the number line; represent fractions on a number line diagram. | Major |
| © ${ }^{\text {P.NF. } 3}$ | DOK 1,2,3 | Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size. | Major |
| Solve problems involving measurement and estimation of intervals of time, liquid volumes and masses of objects. |  |  |  |
| ③.MD. 1 | DOK 1,2 | 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 minute | Major |
| ③.MD. 2 | DOK 1,2 | Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (I). ${ }^{1}$ Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units | Major |
| Represent and interpret data |  |  |  |
| ③.MD. 3 | DOK 1,2 | 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 | Supporting |
| ③.MD. 4 | DOK 2 | 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. | Supporting |
| Geometric measurement: understand concept of area and relate area to multiplication and to addition |  |  |  |
| ③.MD. 5 | DOK 1,2 | Recognize area as an attribute of plane figures and understand concepts of area measurement. | Major |
| ③.MD. 6 | DOK 1,2 | Measure areas by counting unit squares (square cm , square m , square in, square ft , and improvised units). | Major |
| ③.MD. 7 | DOK 1,2 | Relate area to the operations of multiplication and addition. | Major |
| Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish |  |  |  |


| between linear and area measurements |  |  |  |  |
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| 3.MD.8 | DOK 1,2 | Solve real world and mathematical problems <br> involving perimeters of polygons, including finding <br> the perimeter given the side lengths, finding an <br> unknown side length, and exhibiting rectangles <br> with the same perimeter and different areas or <br> with the same area and different perimeters. | Additional |  |
| 3.G.1 | DOK 1,2 | Understand that shapes in different categories <br> (e.g., rhombuses, rectangles, and others) may <br> share attributes (e.g., having four sides), and that <br> the shared attributes can define a larger category <br> (e.g., quadrilaterals). Recognize rhombuses, <br> rectangles, and squares as examples of <br> quadrilaterals, and draw examples of | Supporting |  |
| 3.G.2 | DOK 1,2 | Partition shapes into parts with equal areas. <br> Express the area of each part as a unit fraction of <br> the whole. | Supporting |  |

Total Priority Standards: 19

