Mathematical Practices:
1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Common Core Coding Explanation

3rd Grade   Cluster   Standard

3.OA.A.1
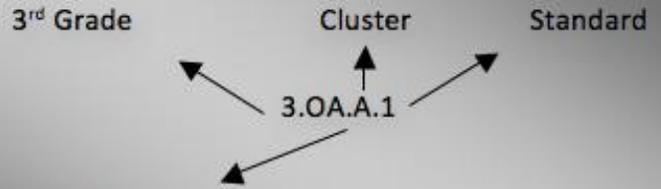
Domain:
OA: Operations and Algebraic Thinking
NBT: Number and Operations in Base Ten
NF: Numbers and Operations in Fractions
MD: Measurement and Data
G: Geometry

Common Core State Standard	Aligned Textbook Lessons/Activities
Apply Multiplication and Division Strategies – Suggested 15 Days	
3. OA.A.4. Determine the unknown whole number in a multiplication or division equation relating three whole numbers. *For example, determine the unknown number that makes the equation true in each of the equations $8 × ? = 48$, $5 = \_ ÷ 3$, $6 × 6 = ?$*	
3. OA.C.7. Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 × 5 = 40$, one knows $40 ÷ 5 = 8$) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.	
3.OA.D.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.[3] This	

standard is limited to problems posed with whole numbers and having whole-number answers; students should know how to perform operations in the conventional order when there are no parentheses to specify a particular order.	

Solving Problems Using Area – Suggested 12 Days

3. MD.C.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.	
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.	
3. MD.C.6. Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).	

Exploring Area and Perimeter – Suggested 18 Days

3.MD.C.7. Relate area to the operations of multiplication and addition. A. 3.MD.c.7a. 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.	
B. 3.MD.c.7b. 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 whole-number products as rectangular areas in mathematical reasoning.	
C. 3.MD.c.7c. Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths *a* and *b*	

+ *c* is the sum of *a* × *b* and *a* × *c*. Use area models to represent the distributive property in mathematical reasoning.	
D. D. Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems.	
3. MD.D.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.	
3. G.A.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.	