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

4th Grade　　　　　Cluster　　　　　Standard

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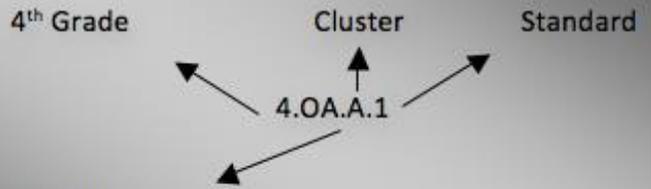
Domain:
OA: Operations and Algebraic Thinking
NBT: Number and Operations in Base Ten
NF: Numbers and Operations in Fractions
MD: Measurement and Data
G: Geometry

Common Core State Standard	Aligned Textbook Lessons/Activities
Place Value and Fluency with Addition and Subtraction - Suggested 20 Days	
4.NBT.A.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. *For example, recognize that 700 ÷ 70 = 10 by applying concepts of place value and division.* [1]Grade 4 expectations in this domain are limited to whole numbers less than or equal to 1,000,000.	
4.NBT.A.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.	
4.NBT.A.3. Use place value understanding to round multi-digit whole numbers to any place.	

4.NBT.B.4. Fluently add and subtract multi-digit whole numbers using the standard algorithm.	
4.OA.A.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.	
Multi-Digit Multiplication - Suggested 25 Days	
4.OA.A.1. Interpret a multiplication equation as a comparison, e.g., interpret 35 = 5 × 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.OA.B.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.	

4.OA.A.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.OA.A.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.	
4.OA.C.5 Generate a number or shape pattern that follows a given rule. Identify apparent features of pattern that were not explicit in the rule itself. *For example, given the rule "Add3" and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way.*	
4.NBT.A.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. *For example, recognize that 700 ÷ 70 = 10 by applying concepts of place value and division.* [1]Grade 4 expectations in this domain are limited to whole numbers less than or equal to 1,000,000.	

<mark>4.NBT.B.5.</mark> 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.	
<mark>4.OA.A.3</mark>. 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	