Math Grade 5

ORExt Standard Code	Equivalent OR Standard Code	2021 Oregon Mathematics Standards	Oregon Alternate Academic Achievement Standard (Essentialized Standard)	Low (L), Medium (M), High (H) Parameters
M05GEO1.2	5.GM.A.2, 5.GM.A.1	Represent authentic contexts and mathematical problems by graphing points in the first quadrant of the coordinate plane. Interpret the meaning of the coordinate values based on the context of a given situation.	Identify points graphed in the first quadrant of the coordinate plane.	**L:** Identify value of Y when provided with X and verbal directions to X. **M:** Identify location of a point when provided a verbal direction to its location. **H:** Identify a point given its coordinates.
M05GEO2.4	5.GM.B.3, 5.GM.D.6	Classify two-dimensional figures within a hierarchy based on their geometrical properties, and explain the relationship across and within different categories of these figures.	Match a description with a two dimensional figure.	**L:** Match a description of triangle with a triangle figure. **M:** Match a description of a square/circle with a square/circle figure. **H:** Match a description of a rectangle with a rectangle figure.

Math Grade 5

ORExt Standard Code	Equivalent OR Standard Code	2021 Oregon Mathematics Standards	Oregon Alternate Academic Achievement Standard (Essentialized Standard)	Low (L), Medium (M), High (H) Parameters
M05MED1.1	5.GM.C.4	Convert between different-sized standard measurement units within a given measurement system. Use these conversions in solving multi-step problems in authentic contexts.	Convert inches into feet given a verbal and visual model.	**L:** Convert inches into feet using 1/2 increments (6 inches, 12 inches, 18 inches). **M:** Convert inches into feet using 1/4 increments (3 inches, 6 inches, 9 inches, 12 inches, 15 inches, 18 inches). **H:** Convert inches into feet using 1/3 and .5 increments (4 inches, 6 inches, 8 inches, 12 inches, 16 inches, 18 inches, 20 inches).
M05MED2.2	5.DR.B.2	Analyze graphical representations and describe the distribution of the numerical data through line plots or categorical data through bar graphs. Interpret information presented to answer investigative questions.	Use a line plot to solve addition/subtraction problems with whole numbers 1-60, 1/2, 1/4, 1/3, and .5.	**L:** Use a line plot to determine frequencies at a given value (0-10). **M:** Use a line plot to add/subtract (11-30). **H:** Use a line plot to add/subtract (31-60, 1/2, 1/4, 1/3, and .5).
M05MED3.4	5.GM.D.5, 5.GM.D.6	Measure the volume of a rectangular prism by counting unit cubes using standard and nonstandard units.	Solve real world addition problems using unit cubic inches.	**L:** Solve problems involving volumes 1-10. **M:** Solve problems involving volumes 11-20. **H:** Solve problems involving volumes 21-30.

Math Grade 5

ORExt Standard Code	Equivalent OR Standard Code	2021 Oregon Mathematics Standards	Oregon Alternate Academic Achievement Standard (Essentialized Standard)	Low (L), Medium (M), High (H) Parameters
M05MED3.5B	5.GM.D.7	Relate volume of rectangular prisms to the operations of multiplication and addition. Solve problems in authentic contexts involving volume using a variety of strategies.	Solve V = b x h volume problems when provided a model that includes the area measure.	**L:** Solve problems involving volumes 0-10. **M:** Solve problems involving volumes 11-20. **H:** Solve problems involving volumes 21-30.
M05NBT1.1	5.NBT.A.1	Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.	Use place value to compare numbers that are multiples of 10, ones versus tens place, and .5.	**L:** Identify multiples of 10 (10, 20, 30, 40, 50, 60). **M:** Identify the relation between the place values for the double-digit numbers (11, 22, 33, 44, 55). **H:** Identify which number is in the tens place and ones place.
M05NBT1.2	5.NBT.A.2	Use whole number exponents to denote powers of 10 and explain the patterns in placement of digits that occur when multiplying and/or dividing whole numbers and decimals by powers of 10.	Recognize that each place value to the left is 10 times greater and each to the right is 1/10 as much.	**L:** Identify which place is greater between the ones and tens place in a 2-digit number. **M:** Identify that the tens place is 10 times the ones place or the tenths place is 1/10 of the ones place. **H:** Compare place values across a number with digits in the tens, ones, and tenths places using a visual model or number line.

Math Grade 5

ORExt Standard Code	Equivalent OR Standard Code	2021 Oregon Mathematics Standards	Oregon Alternate Academic Achievement Standard (Essentialized Standard)	Low (L), Medium (M), High (H) Parameters
M05NBT1.3a	5.NBT.A.3	Read, write, and compare decimals to thousandths.	Identify whole numbers 41-60 and decimals (1.5, 2.5, 3.5, 4.5, 5.5) and compare their magnitudes using <, =, and > symbols.	**L:** Identify which is greater: a whole number or a .5 decimal (e.g., 3 vs 3.5). **M:** Compare two decimals (.25, .5, or .75) using symbols (<, >, =). **H:** Use comparison symbols to compare a whole number and a decimal in a real-world context (e.g., Which costs more: $2.50 or $2?).
M05NBT1.4	5.NBT.A.4	Use place value understanding to round decimals to any place.	Identify the location of .5 decimals between two whole numbers on a number line; round .5 decimals up to the nearest whole number.	**L:** Identify location of 1.5, 2.5, 3.5. **M:** Identify location of 4.5, 5.5, 6.5, 7.5. **H:** Identify location of 8.5 and 9.5. Round all .5 decimals 1.5 to 9.5 up to the nearest whole number.

Math Grade 5

ORExt Standard Code	Equivalent OR Standard Code	2021 Oregon Mathematics Standards	Oregon Alternate Academic Achievement Standard (Essentialized Standard)	Low (L), Medium (M), High (H) Parameters
M05NBT2.5	5.NBT.B.5	Fluently multiply multi-digit whole numbers using accurate, efficient, and flexible strategies and algorithms based on place value and properties of operations.	Multiply whole numbers (under 20) using place value strategies.	**L:** Multiply single-digit numbers using visual models (e.g., 3 × 2). **M:** Multiply two-digit by one-digit numbers using area models (e.g., 12 × 3). **H:** Multiply two-digit numbers using place value strategies (e.g., 21 × 12).
M05NBT2.6	5.NBT.B.6	Use a variety of representations and strategies to find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors.	Identify the quotient of a whole number divided by 2, 5, or 10 using visual models.	**L:** Identify the quotient of a whole number (up to 10) divided by 2 using grouped visual models. **M:** Identify the quotient of a whole number (up to 20) divided by 5 or 10 using arrays or area models. **H:** Identify the quotient of a whole number (up to 30) divided by 2, 5, or 10 using contextual story problems or unlabeled diagrams.

Math Grade 5

ORExt Standard Code	Equivalent OR Standard Code	2021 Oregon Mathematics Standards	Oregon Alternate Academic Achievement Standard (Essentialized Standard)	Low (L), Medium (M), High (H) Parameters
M05NBT2.7	5.NBT.B.7	Use a variety of representations and strategies to add, subtract, multiply, and divide decimals to hundredths. Relate the strategy to a written method and explain the reasoning used.	Use models to solve problems involving addition and subtraction of whole numbers 1-30; add decimals ending in .5.	**L:** Add numbers 0-10. **M:** Add and subtract numbers 11-20. **H:** Add and subtract numbers 21-30 and even multiples of .5.
M05NOF1.1	5.NF.A.1	Add and subtract fractions with unlike denominators, including common fractions larger than one and mixed numbers.	Add and subtract fractions ½, ¼, and ⅓ using visual or graphic models.	**L:** Add or subtract ½ using visual supports (e.g., ½ + ½ or 1 − ½). **M:** Add or subtract ¼ or ⅓ using graphic models (e.g., ¼ + ¼, 1 − ⅓). **H:** Add or subtract combinations of ½, ¼, and ⅓ using labeled visuals with unlike denominators.
M05NOF1.2	5.NF.A.2, 5.NF.B.3	Interpret a fraction as division of the numerator by the denominator (a/b = a ÷ b). Solve problems in authentic contexts involving division of whole numbers that result in answers that are common fractions or mixed numbers.	Divide a small set of objects into equal parts and express the result as a fraction.	**L:** Show 4 cookies shared by 2 people = 2 cookies each. **M:** Show 6 apples shared by 3 people = 2 apples each, written as 6 ÷ 3 = 2. **H:** Show 5 apples shared by 2 people = 2 ½ apples each, written as 5 ÷ 2 = 2½.

Math Grade 5

ORExt Standard Code	Equivalent OR Standard Code	2021 Oregon Mathematics Standards	Oregon Alternate Academic Achievement Standard (Essentialized Standard)	Low (L), Medium (M), High (H) Parameters
M05NOF2.4a	5.NF.B.4	Apply and extend previous understanding and strategies of multiplication to multiply a fraction or whole number by a fraction. Multiply fractional side lengths to find areas of rectangles, and represent fractional products as rectangular areas.	Identify representation that matches a verbal description involving the product of whole numbers and whole numbers with 1/2, 1/4, 1/3, and .5.	**L:** Identify products of whole numbers with solutions 0- 10. **M:** Identify products of whole numbers with solutions 11-30. **H:** Identify products of whole numbers, and whole numbers with fractions (1/2, 1/3, 1/4), and .5 with solutions 31-60.
M05NOF2.4b	5.NF.B.4	Apply and extend previous understanding and strategies of multiplication to multiply a fraction or whole number by a fraction. Multiply fractional side lengths to find areas of rectangles, and represent fractional products as rectangular areas.	Find the area of rectangles using models and simple multiplication.	**L:** Use unit squares to count area (e.g., 3 rows of 2 = 6). **M:** Multiply side lengths of rectangles with whole numbers (e.g., 4 × 5). **H:** Multiply side lengths with simple fractions (e.g., 1/2 × 6 = 3).

Math Grade 5

ORExt Standard Code	Equivalent OR Standard Code	2021 Oregon Mathematics Standards	Oregon Alternate Academic Achievement Standard (Essentialized Standard)	Low (L), Medium (M), High (H) Parameters
M05NOF2.5B	5.NF.B.5	Apply and extend previous understandings of multiplication and division to represent and calculate multiplication and division of fractions. Interpret multiplication as scaling (resizing) by comparing the size of products of two factors.	Recognize that multiplication by numbers greater than 1 increases magnitude while multiplying by a number less than one decreases magnitude.	**L:** Identify scaling when provided with a multiplication problem with factors 6-10. **M:** Identify scaling when provided with a multiplication problem involving factors -2 to -5. **H:** Identify scaling when provided with a multiplication problem involving factors 1/2, 1/4, 1/3, or .5.
M05NOF2.7a	5.NF.B.6, 5.NF.B.7	Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions, including solving problems in authentic contexts.	Use verbal and graphic models to solve problems involving addition and subtraction of whole numbers 1-30, fractions (1/2, 1/4, 1/3), and decimals ending in .5.	**L:** Add numbers 0-10. **M:** Add and subtract numbers 11-20, 1/2, and 1/4. **H:** Add and subtract numbers 21-30, multiples of .5.
M05OAT1.1	5.OA.A.1	Write and evaluate numerical expressions that include parentheses.	Solve expressions that use parentheses given a verbal/visual model.	**L:** Solve expressions involving add/subtract of 0-10. **M:** Solve expressions involving add/subtract of 11-20. **H:** Solve expressions involving add/subtract of 41-60.

Math Grade 5

ORExt Standard Code	Equivalent OR Standard Code	2021 Oregon Mathematics Standards	Oregon Alternate Academic Achievement Standard (Essentialized Standard)	Low (L), Medium (M), High (H) Parameters
M05OAT1.2	5.OA.A.2	Write expressions that record calculations with numbers, and interpret numerical expressions without evaluating them.	Identify numerical expressions using whole numbers 1-60 with up to three terms that match a verbal description.	**L:** Match one-operation numerical expressions using addition and subtraction of 0-10. **M:** Match two-operation numerical expressions using addition and subtraction of 11-20. **H:** Match two-operation numerical expressions using 41-60.
M05OAT2.3	5.OA.B.3	Generate two numerical patterns using two given rules. Identify and analyze relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns and graph them on a coordinate plane.	Identify missing numeral in a pattern when given the rule.	**L:** Identify missing numeral in +1 patterns (1-10). **M:** Identify missing numeral in +2, +3, +4, +5, and +10 patterns (2-40). **H:** Identify missing numeral in +6, +7, +8, +9 patterns (6-60).

Standards not Essentialized:
Please refer to Oregon's published content standards for the full description and context of these codes.
5.NF.B.5