Power Standards 2022-2023
Fifth Grade Math

Standards
5OA.1 Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols. (Also cover OA 2 with this standard.)
5NBT.3a. Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., 347.392 = 3 × 100 + 4 × 10 + 7 × 1 + 3 × (1/10) + 9 × (1/100) + 2 × (1/1000).
5NBT.3b. Compare two decimals to thousandths based on meanings of the digits in each place, using >, < and = symbols to record the results of comparisons**.**
5NBT.7 Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. **(Cover NBT5 and NBT 6 before NBT 7, But do not worry about mastery because of division and multiplication in NBT 7)**   **(Split this standard up into parts: 7a Add decimals, 7b Subtract decimals, 7c Multiply decimals by decimals, and 7d Divide decimals by decimals) This takes about 4 to 6 weeks to teach all parts.**
5NF.1 Add and subtract fractions and mixed numbers with unlike denominators by finding a common denominator and equivalent fractions to produce like denominators. **(Cover NF 2 Word Problem Practice)**   **(Split this standard up into parts: 1a Add fractions with unlike denominators, 1b Subtract fractions with unlike denominators, 1c Add Mixed numbers with unlike denominators, 1d Subtract Mixed numbers with unlike denominators.) This takes about 4 weeks to work on this whole standard.**
5NF.4a. Apply and use understanding of multiplication to multiply a fraction or whole number by a fraction. Examples: $a/b \times q$ as $a/b \times q/1$ and $a/b \times c/d = ac/bb$. (**5NF.4b Word Problem Practice)**
5NF.7a. Interpret division of a unit fraction by a non-zero whole number and compute such quotients. For example, create a story context for (1/3) ÷ 4, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that (1/3) ÷ 4 = 1/12 because (1/12) × 4 = 1/3.
5NF.7b. Interpret division of a whole number by a unit fraction and compute such quotients. For example, create a story context for 4 ÷ (1/5), and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that 4 ÷ (1/5) = 20 because 20 × (1/5) = 4. **(Cover 5 NF 7c Word Problem Practice)**
5 MD 2 Make a line plot to display a data set of measurements in fractions of a unit (1/2, ¼, 1/8). Use operations on fractions for this grade to solve problems involving information presented in line plots. For example, given different measurements of liquid in identical

beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally.
5MD.5b. Apply the formulas $V = l \times w \times h$ and $V = b \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole number edge lengths in the context of solving real world and mathematical problems.
5MD.5c. Recognize volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real world problems.
5G.1 Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., x-axis and x-coordinate, y-axis and y-coordinate).
5G.2 Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane and interpret coordinate values of points in the context of the situation.
5G.4 Classify two-dimensional figures in a hierarchy based on properties (polygons, triangles, and quadrilaterals).