Priority Standards

Math Priority Standards – Grade 5

Below is a table of the priority standards.

Priority Standards	Description
5.NBT.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. – *Kansas Flipbooks**
5.NBT.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. – *Kansas Flipbooks**
5.MD.1	Convert among different-sized standard measurement units within a given measurement system (e.g. convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.
5.MD.5	Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume. • 5.MD.5a. Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent three-dimensional whole-number products as volumes, (e.g. to represent the associative property of multiplication.) • 5.MD.5b. Apply the formulas $V = l \cdot w \cdot h$ and $V = B \cdot h$ (B represents the area of the base) 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. • 5.MD.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.
5.NF.2	Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, (e.g. by using visual fraction models or equations to represent the problem.) Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. (See Table 1 to view situation types). For example, recognize an incorrect result $2/5 + 1/2 = 3/7$ by observing that $3/7 < ½$. – *Kansas Flipbooks**
5.NF.3	Interpret a fraction as division of the numerator by the denominator ($a/b = a \div b$). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g. by using visual fraction models or equations to represent the problem. For example, interpret 3/4 as the result of dividing 3 by 4,

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	noting that 3/4 multiplied by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size 3/4. If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie? – *Kansas Flipbooks**
5.NF.5	Interpret multiplication as scaling (resizing), by: – *Kansas Flipbooks** • 5.NF.5a. Comparing the size of a product to the size of one factor based on the size of the other factor, without performing the indicated multiplication (e.g. They see (1/2·3) as half the size of 3.). • 5.NF.5b. Explain why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case); explain why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence a/b=na/nb to the effect of multiplying a/b by 1. (e.g. Students may have the misconception that multiplication always produces a larger result. They need to have the conceptual understanding with examples like; 3/4 ×one dozen eggs will have a product that is less than 12.)
5.NF.7	Apply and extend previous understandings of division (3.OA.2, 3.OA.5), to divide unit fractions by whole numbers and whole numbers by unit fractions. Division of a fraction by a fraction is not a requirement at this grade. – *Kansas Flipbooks** • 5.NF.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. • 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. • Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g. by using visual fraction models and equations to represent the problem. For example, how much chocolate will each person get if 3 people share 1/2 lb of chocolate equally? How many 1/3 cup servings are in 2 cups of raisins?
5.OA.1	Use parentheses in numerical expressions and evaluate expressions with these symbols. – *Kansas Flipbooks**
5.G.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). – *Kansas Flipbooks**
5.G.3	Understand that attributes belonging to a category of 2-dimensional figures also belong to all subcategories of that category. For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles. – *Kansas Flipbooks**

*Kansas Department of Education has created 'Flipbooks' for current standards that detail each standard, including examples and resources to support in understanding the depth of the standard.