

Schoolwide Benchmark Assessment Plan

Math Standards

Test 1 September
Test 2 November

Test 3 January
Test 4 March

		SIXTH GRADE		SIXTH GRADE	
Test	Standard	Category	Essential Math Standards		Kid Friendly Standards
1	1.1	Number Sense	Compare and order positive and negative fractions, decimals, and mixed numbers and place them on a number line.	1.1	I can compare and put decimals, mixed numbers, and positive/negative fractions in order from least to greatest and greatest to least, and place them on a number line.
1	2.3	Number Sense	Solve addition, subtraction, multiplication, and division problems, including those arising in concrete situations, which use positive and negative integers and combinations of these operations.	2.3	I can add, subtract, multiply, and divide positive and negative numbers I can use one operation (addition) or a combination of operatives in word problems that use real life situations.
1	2.4	Number Sense	Determine the least common multiple and the greatest common divisor of whole numbers; use them to solve problems with fractions (e.g., to find a common denominator to add two fractions or to find the reduced form for a fraction).	2.4	I can find the least common multiple and the greatest common factor of whole numbers. I can use the least common multiple and the greatest common factor to solve problems with fractions (example: to find a common denominator to add fractions or to simplify fractions)
1	1.1	Algebra and Functions	Write and solve one-step linear equations in one variable.	1.1	I can write and solve one-step linear equations that contain on variable.
1	1.3	Algebra and Functions	Apply algebraic order of operations and the commutative, associative, and distributive properties to evaluate expressions; and justify each step in the process.	1.3	I know how to use the order of operations to solve algebraic problems, and explain what steps I followed to find my answer. I can use the cumulative, associative, and distributive properties to solve expressions, and be able to explain the process.
2	1.2	Number Sense	Interpret and use ratios in different contexts (e.g., batting averages, miles per hour) to show the relative sizes of two quantities, using appropriate notations (a/b, a to b, a:b).	1.2	I can use and understand ratios in different ways (batting averages, miles per hour) to compare two different amounts. I can write ratios in three different ways (a/b, a to b, a:b).
2	1.3	Number Sense	Use proportions to solve problems (e.g., determine the value of N if $\frac{4}{7} = \frac{N}{21}$, find the length of a side of a polygon similar to a known polygon). Use cross-multiplication as a method for solving such problems, understanding it as the multiplication of both sides of an equation by a multiplicative inverse.	1.3	I can use proportions to solve problems such as: if $\frac{4}{7} = \frac{n}{21}$. To solve this type of equation, I know to cross-multiply on both sides of the equal sign and take the opposite of multiplication to get the answer.
2	1.4	Number Sense	Calculate given percentages of quantities and solve problems	1.4	I can use percentages to figure out a discount amount on a

			involving discounts at sales, interest earned, and tips.		sale, to find how much interest has been earned, and to figure out how much to tip (at restaurants, taxi drivers, etc.)
2	2.2	Algebra and Functions	Demonstrate an understanding that rate is a measure of one quantity per unit value of another quantity.	2.2	I can show and understand that rate is a measure of an amount of something compared to one unit (bananas cost \$.50/1 lb.)
2	1.1	Measurement and Geometry	Understand the concept of a constant such as π ; know the formulas for the circumference and area of a circle.	1.1	I understand π I understand how to use π in formulas to solve for the circumference and area of a circle
2	2.2	Measurement and Geometry	Use the properties of complementary and supplementary angles and the sum of the angles of a triangle to solve problems involving an unknown angle.	2.2	I can use complimentary and supplementary angles to solve problems with an unknown angle. I can use the sum of angles in a triangle to solve problems with an unknown angle.
3	2.2	Statistics, Data Analysis, and Probability	Identify different ways of selecting a sample (e.g., convenience sampling, responses to a survey, random sampling) and which method makes a sample more representative for a population.	2.2	I can show different ways of choosing a sample (convenience sampling, response to survey, random sampling) and tell which sample represents a population (a group of people).
3	2.3	Statistics, Data Analysis, and Probability	Analyze data displays and explain why the way in which the question was asked might have influenced the results obtained and why the way in which the results were displayed might have influenced the conclusions reached. (not assessable on multiple-choice test)	2.3	I can look at pictures (graphs, tables) that have information and tell if the way it is shown, might cause a person to think one way or another. I can look at pictures that have information and understand the way the question is asked may cause a person to give the answers one wants.
3	2.4	Statistics, Data Analysis, and Probability	Identify data that represent sampling errors and explain why the sample (and the display) might be biased. (not assessable on multiple-choice test)	2.4	I can understand whether data (information) in pictures is incorrect based on opinion.
3	2.5	Statistics, Data Analysis, and Probability	Identify claims based on statistical data and, in simple cases, evaluate the validity of the claims.	2.5	I can understand number data and decide if the information is correct, and prove if it is valid.
3	1.1	Mathematical Reasoning	Analyze problems by identifying relationships, distinguishing relevant information from irrelevant information, identifying missing information, sequencing and prioritizing information, and observing patterns.	1.1	I can: <ul style="list-style-type: none"> • See relationships between various numbers. • Identify important information, missing information and unneeded information. • Identify patters, sequence, put information in order of importance.
4	3.1	Statistics, Data Analysis, and Probability	Represent all possible outcomes for compound events in an organized way (e.g., tables, grids, tree diagrams) and express the theoretical probability of each outcome.	3.1	I can use tables, grids, and tree diagrams to predict and show all possible results.
4	3.3	Statistics, Data Analysis, and	Represent probabilities as ratios, proportions, decimals between 0 and 1, and percentages between 0 and 100 and	3.3	I can show probabilities as ratios, proportions, and decimals between 0 and 1. I can show probability as percentages between 0 and

		Probability	verify that the probabilities computed are reasonable; know that if P is the probability of an event, 1-P is the probability of an event not occurring.		100 and tell that they are fair. I know that the letter "P" stands for probability. I understand 1-P is the probability that an event will not happen.
4	3.5	Statistics, Data Analysis, and Probability	Understand the difference between independent and dependent events.	3.5	I understand how an independent event and a dependent event are different.
4	1.2	Mathematical Reasoning	Formulate and justify mathematical conjectures based on a general description of the mathematical question or problem posed.	1.2	I can make intelligent guesses based on the information given me by a mathematical problem.
4	2.5	Mathematical Reasoning	Express the solution clearly and logically by using the appropriate mathematical notation and terms and clear language; support solutions with evidence in both verbal and symbolic work.	2.5	I can give my answers using correct mathematical notation, terms, and language. I can support my answers with evidence using numbers, operation symbols, and words.

