Mathematics Strands Overview; Grade 3-6

Strands	Grade 3	Grade 4	Grade 5	Grade 6
STRAND A Social-Emotional Learning	Students will learn to identify and manage emotions. They will build positive motivation, as well as develop positive relationships.	Students will learn to identify and manage emotions. They will build positive motivation, as well as develop positive relationships.	Students will learn to identify and manage emotions. They will build positive motivation, as well as develop positive relationships and learn to communicate effectively.	Students will learn to identify and manage emotions. They will build positive motivation, as well as develop positive relationships. Practice thinking critically as well as creatively, while developing a sense of identity.
STRAND B Numbers	B1.1 read, represent, compose, and decompose whole numbers up to and including 1000. Fractions Rounding whole numbers to the nearest ten or hundred. Addition, subtraction, multiplication, division.	B1.1 read, represent, compose, and decompose whole numbers up to and including 10,000. Fractions and introduction to decimals Rounding whole numbers to the nearest ten, hundred, or thousand.	B1.1 read, represent, compose, and decompose whole numbers up to and including 100,000. Fractions, decimals, percentages Addition, subtraction, multiplication, division.	B1.1 read, represent, compose, and decompose whole numbers up to and including 1,000,000. Fractions, decimals, percentages Addition, subtraction, multiplication, division. Reading and representing integers using a variety of tools

		Addition, subtraction, multiplication, division.		and strategies, including horizontal and vertical number lines
STRAND C Algebra	Identify and describe repeating elements and operations in a variety of patterns Equalities and inequalities Coding skills C2.1 Describe how variables are used and use them in various contexts	Identify and describe repeating elements and operations in a variety of repeating and growing patterns Equalities and inequalities Coding skills C2.1 ID and use symbols as variables in expressions and equations	Identify and describe repeating elements and operations in a variety of repeating, growing, and shrinking patterns Using algebraic expressions and visuals with whole numbers Equalities and inequalities Coding skills C2.1 ID and use symbols as variables in expressions and equations	Identify and describe linear growing patterns and algebraic expressions Intro to monomials Equalities and inequalities Coding skills with efficiency
STRAND D Data	Collection and organization: Sorting data through the use of 2-3 attributes Visualization: Display data using pictographs, bar graphs, and labeling	Collection and organization: Describe the difference between qualitative and quantitative data Visualization: Display data using the multiple bar graph	Collection and organization: Understand and explain the importance of various sampling and collecting data techniques Visualization:	Collection and organization: Understand and explain the difference between discrete and continuous data Visualization:

	Analysis: Understanding mean with whole numbers Probability: Using terminology such as “impossible”, “unlikely”, “Equally likely”, “likely” and “certain” to describe the likeliness of events, and to make predictions/informed decisions	form, and justifying their choice for most appropriate graph Analysis: Understanding median Probability: Using terminology such as “impossible”, “unlikely”, “Equally likely”, “likely” and “certain” to describe the likeliness of events, and to make predictions/informed decisions, and representing this on a probability line	Stacked bar graphs Analysis: Understanding mean and median for data sets with whole and decimal numbers Probability: Using fractions to express probability	Use of histograms and broken-line graphs Analysis: Comparing two or more data sets, and determining the measure f spread and measures of central tendency for data sets Probability: Use of fractions and decimals to express probability
STRAND E Spatial Sense	Geometric Reasoning Location and Movement Length, mass, and capacity Time Telling time in hours, minutes, and seconds using analog and digital clocks, along with timers	Geometric Reasoning Understanding the properties of rectangles Location and Movement Using the metric system Time Applying relationships between different units of time	Geometric Reasoning Understanding the properties of triangles Location and Movement The metric system Angles Comparing angles and determining their relative size through	Geometric Reasoning Understanding the properties of quadrilaterals Location and Movement The metric system Angles Effectively using a protractor to measure

	Area	Angles Identifying and classifying right, straight, acute, obtuse angles. Area	matching and measuring them Area	and construct angles up to 360 degrees Area and surface area through four-sided shapes and building 3D shapes using nets
STRAND F Financial Literacy	Money Concepts F1.1 estimate and calculate the change required for various simple cash transactions involving whole dollar amounts and amounts of less than one dollar	Money concepts ID methods of payment used to make purchases Financial Management Calculate transaction costs not including sales tax, use mental math skills and calculate change Consumer and Civic Awareness Determining if a purchase is reasonably priced	Money concepts Understanding the transfer of money between people and businesses. Financial Management Calculating costs of transactions including sales tax. Learning basic budgeting skills, and credit and debit Consumer and Civic Awareness Determining unit rates for goods and services, and identifying the rates that offer the best value	Money concepts F1.1 describe the advantages and disadvantages of various methods of payment that can be used to purchase goods and services Financial Management Understanding how to achieve financial goals and what may interfere with said goals Consumer and Civic Awareness Explain interest rates, loan fees from banks/financial institutions