Grade 5 Math

Big Ideas

*Number represents and describes quantity: Parts of wholes can be represented by equivalent fractions.

*Developing computational fluency comes from a strong sense of number: Flexibility in working with numbers extends to operations with larger (multi-digit) numbers.

*We use patterns to represent identified regularities and to form generalizations: Number patterns can be expressed using variables in tables.

*We can describe, measure, and compare spatial relationships: Closed shapes have area and perimeter.

*Analyzing data and chance help us to compare and interpret: Graphs can be used to show many-to-one correspondence.

Curricular Competencies

Content	Reasoning and Analyzing			Understanding and Solving			Communicating & Representing			Connecting and Reflecting			
	Estimate reasonably	Develop mental math strategies and abilities to make sense of quantities	Use reasoning and logic to explore and make connections	Use multiple strategies to engage in problem solving (e.g., visual, oral, role-play, experimental, written, symbolic)	Develop, construct, and apply mathematical understanding through role-play, inquiry, and problem solving	Engage in problem-solving experiences that are connected to place, story, and cultural practices relevant to the local community	Communicate in many ways (concretely, pictorially, symbolically, and by using spoken or written language to express, describe, explain, and apply mathematical ideas)	Describe, create, and interpret relationships through concrete, pictorial, and symbolic representations	Use technology appropriately to explore mathematics, solve problems, record, communicate, and represent thinking	Visualize and describe mathematical concepts	Connect mathematical concepts to each other and make mathematical connections to the real world (e.g., in daily activities, local and traditional practices, the environment, popular media and news events, cross-curricular integration)	Share and reflect upon mathematical thinking	Draw upon local First Peoples knowledge and/or expertise of local Elders to make connections to mathematical topics and concepts
number concepts to 1 000 000													
decimals to thousandths													
equivalent fractions													
whole-number, fraction, and decimal benchmarks													
addition and subtraction to 1 000 000													
multiplication and division to three digits, including division with remainders													
addition and subtraction of decimals to thousandths													
addition and subtraction facts to 20 (extending computational fluency)													
multiplication and division facts to 100 (emerging computational fluency)													
rules for increasing and decreasing patterns with words, numbers, symbols, and variables													
one-step equations with variables													
area measurement of squares and rectangles													
relationships between area and perimeter													
duration, using measurement of time													
classification of prisms and pyramids													
single transformations													
one-to-one correspondence and many-to-one correspondence using double bar graphs													
probability experiments, focusing on independence													
financial literacy – monetary calculations, making change up to 1000 dollars and financial plans													