

Grade 6 Math

Curricular Competencies

Big Ideas

- *Numbers can be represented in many forms and reflect different relationships.
- *Numeracy helps us to see patterns, communicate ideas, and solve problems.
- *Patterns allow us to see relationships and develop generalizations.
- *Geometry and measurement empower us to make meaning of the world.
- *We can apply mathematics to inquiry questions and use it to communicate information and data.
- *Data enable us to draw conclusions and make predictions in an unstable world.

Reasoning and Analyzing

Inductively and deductively reason and use logic to explore, make connections, predict, analyze, generalize, and make conclusions

Develop and apply mental math strategies and estimate amounts and outcomes

Use tools or technology to explore and create patterns and relationships, and test conjectures

Understanding and Solving

Implement multiple strategies to solve problems in both abstract and real-life situations using different cultural perspectives

Develop, construct, and apply mathematical understanding through play, inquiry, and problem solving

Engage in problem-solving experiences that are connected to place, story, and cultural practices relevant to the local community

Communicating & Representing

Use mathematical vocabulary and language to contribute to mathematical discussions

Communicate in a variety of ways to explain, clarify, and justify mathematical ideas

Develop mathematical understanding through concrete, pictorial, and symbolic representations

Use technology appropriately to record, communicate, and represent thinking

Connecting and Reflecting

Visualize and describe mathematical concepts

Explore, apply, and connect concepts to each other, to other disciplines, and to the real world

Use mathematical arguments to support personal choices and anticipate consequences

Apply cultural perspectives of First Peoples to the concepts of locating, measuring, and numbering

Content

- whole number percents and percentage discounts
- improper fractions & mixed numbers (ordering whole & fractional numbers, proper & improper fractions)
- small to large numbers (thousandths to billions)
- factors and multiples, greatest common factor and least common multiple
- order of operations with whole numbers
- multiplication and division of decimals
- multiplication and division facts to 100 (developing computational fluency)
- increasing and decreasing patterns, using expressions, tables, and graphs
- functional relationships
- one-step equations with whole-number coefficients and solutions
- perimeter of complex shapes
- area of triangles, parallelograms, and trapezoids
- angle measurement and classification
- measurement units and referents for volume and capacity
- volume of rectangular prisms
- relation of capacity to volume
- triangles and pyramids
- combinations of transformations, including points in the first quadrant
- line graphs
- single-outcome probability, both theoretical and experimental
- financial literacy - simple budgeting and consumer math