Math K-9 – Curricular Competencies

Grade	Reasoning and analyzing	Understanding and solving	Communicating and representing	Connecting and reflecting
K-5	• Use reasoning to explore and make connections • Estimate reasonably • Develop mental math strategies and abilities to make sense of quantities • Use technology to explore mathematics • Model mathematics in contextualized experiences	• Develop, demonstrate, and apply mathematical understanding through play, inquiry, and problem solving • Visualize to explore mathematical concepts • Develop and use multiple strategies to engage in problem solving • Engage in problem-solving experiences that are connected to place, story, cultural practices, and perspectives relevant to local First Peoples communities, the local community, and other cultures	• Communicate mathematical thinking in many ways • Use mathematical vocabulary and language to contribute to mathematical discussions • Explain and justify mathematical ideas and decisions • Represent mathematical ideas in concrete, pictorial, and symbolic forms	• Reflect on mathematical thinking • Connect mathematical concepts to each other and to other areas and personal interests • Incorporate First Peoples worldviews and perspectives to make connections to mathematical concepts
6-9	• Use logic and patterns to solve puzzles and play games • Use reasoning and logic to explore, analyze, and apply mathematical ideas • Estimate reasonably • Demonstrate and apply mental math strategies • Use tools or technology to explore and create patterns and relationships, and test conjectures • Model mathematics in contextualized experiences	• Apply multiple strategies to solve problems in both abstract and contextualized situations • Develop, demonstrate, and apply mathematical understanding through play, inquiry, and problem solving • Visualize to explore mathematical concepts • Engage in problem-solving experiences that are connected to place, story, cultural practices, and perspectives relevant to local First Peoples communities, the local community, and other cultures	• Use mathematical vocabulary and language to contribute to mathematical discussions • Explain and justify mathematical ideas and decisions • Communicate mathematical thinking in many ways • Represent mathematical ideas in concrete, pictorial, and symbolic forms	• Reflect on mathematical thinking • Connect mathematical concepts to each other and to other areas and personal interests • Use mathematical arguments to support personal choices • Incorporate First Peoples worldviews and perspectives to make connections to mathematical concepts