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| **MATH** **Kindergarten** | |  | | | | | | | | | | | | |
| **CURRICULAR COMPETENCES**  **(DO)** | | **BIG IDEAS (UNDERSTAND)** | | | | | | | | | | | | |
| **Number**  Numbers represent quantities that can be decomposed into smaller parts. | **Developing Computational Fluency**  One-to-one correspondence and a sense of 5 and 10 are essential for fluency with numbers. | | | **Patterns and Relations**  Repeating elements in patterns can be identified. | | | | **Spatial Sense**  Objects have attributes that can be described, measured, and compared. | | **Statistics and Probability**  Familiar events can be described as likely or unlikely and compared. | | |
| **CONTENT (KNOW)** | | | | | | | | | | | | |
| number concepts to 10 | ways to make 5 | decomposition of numbers to 10 | change in quantity to 10 using concrete materials | financial literacy:  attributes of coins and financial role play | repeating patterns with two or three elements | equality as a balance and inequality as an imbalance | | single attributes of 2D shapes and 3D objects | direct comparative measurement (e.g. linear, mass, and capacity) | concrete or pictorial graphs as a visual tool | likelihood of familiar life events |
|  | | Counting  -one-to-one correspondence  -conservation  -cardinality  -stable order counting  -sequencing 1-10  -linking sets to numerals  -subitizing | -comparing quantities, 1-10  -using concrete materials to show ways to make 5 | -decomposing and recomposing quantities to 10  -numbers can be arranged and recognized  -part-part-whole thinking  -using concrete materials to show ways to make 10 | -generalizing change by adding 1 or 2  -modeling and describing number relationship through change (eg., build and change tasks – begin with four cubes, what do you need to do to change it to six? to change it to 3?) | - noticing attributes of the Canadian coins (colour, size, pictures)  -naming coins  -role playing financial transactions, such as in a restaurant, or store, using whole numbers to combine purchases (e.g., $2.00 and $1.00 and integrating the concept of wants and needs | -sorting and classifying using a single attribute  -identifying patterns in the world  -identifying the core  -representing repeating patterns in various ways |  | | -sorting 2D shapes and 3D objects using a single attribute  -building and describing 3D objects (e.g., shaped like a can)  -exploring, creating, and describing 2D shapes  -using positional language such as beside, on top of, under, and in front of | -longer than, shorter than, taller than, wider than  -heavier than, lighter than, same as  -holds more, holds less |  | -using the language of probability, such as unlikely and likely (e.g., Could it snow tomorrow?) |
| Reasoning and Analyzing | 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 |  |  |  |  |  |  | |  |  |  |  |  |
| Understanding and Solving | 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 in many ways (concretely, pictorially, symbolically, and by using spoken or written language to express, describe, explain, and apply mathematical ideas). |  |  |  |  |  |  | |  |  |  |  |  |
| Communicating and Representing | 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 |  |  |  |  |  |  | |  |  |  |  |  |
| Connecting and Reflecting | Incorporate First Peoples worldviews and perspectives to make connections to mathematical concepts |  |  |  |  |  |  | |  |  |  |  |  |