|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **MATH** **Grade 2** | |  | | | | | | | | | | | |
| **CURRICULAR COMPETENCES**  **(DO)** | | **BIG IDEAS (UNDERSTAND)** | | | | | | | | | | | |
| **Number**  Numbers to 100 represent quantities that can be decomposed into 10s and 1s.. | | **Developing Computational Fluency**  Development of computational fluency in addition and subtraction with numbers to 100 requires an understanding of place value. | | | | | **Patterns and Relations**  The regular change in increasing patterns can be identified and used to make generalizations. | **Spatial Sense**  Objects and shapes have attributes that can be described, measured, and compared. | | **Statistics and Probability**  Concrete items can be represented, compared, and interpreted pictorially in graphs. | |
| **CONTENT (KNOW)** | | | | | | | | | | | |
| number concepts to 100 | benchmarks of 25,  50, and 100 and personal referents | addition and subtraction facts to 20 | addition and subtraction to 100 | change in quantity using pictorial and symbolic representation | financial literacy: coin comb-inations to 100 cents, spending and saving | symbolic representation of equality and inequality | repeating and increasing patterns | multiple attributes of 2D shapes and 3D objects | direct linear measurement introducing standard metric units | pictorial representation of concrete graphs using one-to-one correspondence | likelihood of familiar life events using comparative language |
|  | | -skip counting by 2, 5 and 10  -using different starting points  -count forward and backwards  -arrange and recognize quantities of 100  Place Value:  -under-standing 10s and 1s  -understanding the relationship between digit places and their value (expanded natation) |  | *Math Strategies* -making or bridging 10  -decomposing  -doubles  -adding on to subtract | -estimating sums and difference to 10  *Math Strategies* -multiplies of 10 -friendly numbers -decomposing into 10s and 1s and recomposing -compensating -adding up to find the difference -number line, 100 chart, 10 frames -using addition to subtract | -numerically describing a change in quantity (visual the change in quantity using 10 frames) | -counting mixed combinations of coins to 100 cents  -introductions to the concepts of spending and saving, integrating the concepts of wants and needs  -role-playing financial transactions |  | -exploring more complex repeating patterns (positional patterns and circular patterns)  -identifying the core of repeating patterns  -increasing patterns using manipulatives, sounds, actions, and number (0-100) | -sorting 3D objects and 2D shapes using 2 attributes  -describing, comparing, and constructing 2D shapes including triangles, squares, rectangles and circles  -identifying 2D shapes as part of 3D objects | -centimetres and metres  -estimating length  -measuring and recording length, height and width using standard units | -collecting date, creating a concrete graph, and representing the graph using a pictorial representation through grids, stamps, drawings  -one to one correspondence | -using comparative language (certain, uncertain, more likely, less likely, or equally likely) |
| Reasoning and Analyzing | Estimate reasonably. |  |  |  |  |  |  |  |  |  |  |  |  |
| Use technology to explore mathematics |  |  |  |  |  |  |  |  |  |  |  |  |
| Model mathematics in contextualized experiences |  |  |  |  |  |  |  |  |  |  |  |  |
| Develop mental math strategies and abilities to make sense of quantities. |  |  |  |  |  |  |  |  |  |  |  |  |
| Use reasoning and logic to explore and make connections. |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 |  |  |  |  |  |  |  |  |  |  |  |  |
| Communicating and Representing | Communicate mathematical thinking in many ways (concretely, pictorially, symbolically, and by using spoken or written language to express, describe, explain, and apply mathematical ideas). |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 |  |  |  |  |  |  |  |  |  |  |  |  |
| Connecting and Reflecting | Connect mathematical concepts to each other and to other areas and personal interests (e.g., in daily activities, local and traditional practices, the environment, popular media and news events, cross-curricular integration). |  |  |  |  |  |  |  |  |  |  |  |  |
| reflect upon mathematical thinking. |  |  |  |  |  |  |  |  |  |  |  |  |
| Incorporate First Peoples worldviews and perspectives to make connections to mathematical concepts |  |  |  |  |  |  |  |  |  |  |  |  |