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| **MATH** **Grade 1** | |  | | | | | | | | | | | | |
| **CURRICULAR COMPETENCES**  **(DO)** | | **BIG IDEAS (UNDERSTAND)** | | | | | | | | | | | | |
| **Number**  Number represents and describes quantity: Numbers to 20 can be decomposed into 10s and 1s. | **Developing Computational Fluency**  Addition and subtraction with numbers to 10 can be modelled concretely, pictorially, and symbolically to develop computational fluency. | | | | | | **Patterns and Relations**  Repeating elements in patterns can be identified. | **Spatial Sense**  Objects and shapes have attributes that can be described, measured, and compared. | | **Statistics and Probability**  Concrete graphs help us to compare and interpret data and show one-to-one correspondence. | | |
| **CONTENT (KNOW)** | | | | | | | | | | | | |
| number concepts to 20 | ways to make 10 | addition and subtraction to 20 | change in quantity to 20 concretely and verbally | financial literacy: values of coins and monetary exchanges | | meaning of equality and inequality | repeating patterns with multiple elements and attributes  . | comparison of  2D shapes and  3D objects | direct measurem-ent with non-standard units | concrete graphs using one-to-one correspo-ndence | likelihood of familiar life events using comparative language | |
|  | | -counting on and counting back  -skip by 2 and 5  -sequencing numbers to 20  -comparing and ordering numbers to 20  -numbers to 20 can be arranged and recognized  -subtilizing  -base 10  -10 and some more |  | -decomposing 20 into parts  -mental math strategies:  -counting on  -making 10  -doubles  -addition and subtraction are related |  | -identifying values of Canadian coins  -counting multiplies of the same coin  -role-play financial transactions, integrating the concept of wants and needs | |  | -repeating patterns  -translating patterns  -letter-coding a pattern  -predict next element(s)  -patterns using 10-frames, 100 charts  -numerical patterns  (skip counting) | -sorting 3D objects and 2D shapes using 1 attribute  -explain the sorting rule  -comparing 2D shapes and 3D objects in the environment  -describing relative position (up and down, in and out)  -replicate composite 2D shapes (use 2 or more of 1 shape to create a new shape)  -replicate composite 3D objects (use plasticine, etc.) | -tiling an area  -non-uniform units (pencils) vs uniform units (cubes)  -using multiple cubes to measure a string and only one cube to measure the string |  | using the language: never, sometimes, always, more likely, less 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 | Use multiple strategies to engage in problem solving (e.g., visual, oral, role-play, experimental, written, symbolic). |  |  |  |  |  |  | |  |  |  |  |  | |
| Develop, construct, and apply mathematical understand-ing through role-play, inquiry, and problem solving. |  |  |  |  |  |  | |  |  |  |  |  | |
| Visualize to explore mathematical concepts |  |  |  |  |  |  | |  |  |  |  |  | |
| 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). |  |  |  |  |  |  | |  |  |  |  |  |
| 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 |  |  |  |  |  |  | |  |  |  |  |  |
| Connecting and Reflecting | 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 |  |  |  |  |  |  | |  |  |  |  |  |