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| **MATH** **Grade 5****CURRIC-ULAR****COMP-ETENCES** **(DO)** | **BIG IDEAS (UNDERSTAND)** |
| **Number**Numbers describe quantities that can be represented by equivalent fractions. | **Developing Computational Fluency**Computational fluency and flexibility with numbers extend to operations with larger (multi-digit) numbers. | **Patterns and Relations**Identified regularities in number patterns can be expressed in tables. | **Spatial Sense**Closed shapes have area and perimeter that can be described, measured, and compared. | **Statistics and****Probability** Data represented in graphs can be used to show many-to-one correspondence. |
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| number concepts to1 000 000  | Equiv-alent frac-tions | decimals to thousandths | whole-numbers, fractions, and decimals benchmarks | addition and subtraction of decimals to thousandths | addition and Subtraction facts to20 (extending computational fluency)  | addition and subtraction of whole numbers to1 000 000  | multiplication and division to 3 digits including division with remainders | multiplication and division facts to 100 (emerging computational fluency). | financial literacy: monetary calculations, including making change with amounts to 1000 dollarsand developing simple financial plans. | rules for increasing and decreasing patterns with words, numbers, symbols, and variables. | one step equations with variables | area measure-ment of squares and rectangles | relationship between area and perimeter | classification of prisms and pyramids | Single transfor-mations. | duration, using measurement of time | one-to-one correspondence and many-to- one correspondence using double bar graphs. | probability experiments focusing on independence. |
|  | -count-ing multiples-flexible count-ing strategies-whole number bench-marks comparing and ordering numbersestimate large quantities- place value 100 000s, 10 000s, 1 00s, 100s, 10s, 1s- understanding the relationship between digit places and their place value to 1 000 000 |  |  | -two equivalent fractions are two ways to represent the same amount (having the same whole)-comparing and ordering of fractions and decimals -additional and subtraction of decimals to thousandths -estimating decimal sums and differences -estimating fractions with benchmarks (e.g. zero, half, whole) | -estimating sums and differences -using visual models such as base 10 blocks, place value mats, grid paper, and number lines -using additional and subtraction in real-life contexts and problem-based situations -whole-class number talks  | -e.g. for 800 + 700, you can annex the zeros and use the knowledge of 8 + 7 to find the total | -using flexible computational strategies involving taking apart (e.g. decomposing using friendly numbers and compensating and combining numbers in a variety of ways) -estimating sums and differences to 10 000-using addition and subtraction in real-life contexts and problem-based situations-whole-class number talks | -understanding the relationships between multiplication and division, multiplication and addition, division and subtraction-decomposing, distributive principle, commutative principle, repeated addition, repeated subtraction -using addition and subtraction in real-life contexts and problem-based situations-whole-class number talks  | -provide opportunities for concrete and pictorial representations-use games-look for patterns such as a hundred chart-skip counting-repeated addition-should be able to recall multiplication facts of 2s, 3s, 4s, 5s, 10s-doubling and halving, annexing and disruptive property -developing computational fluency with facts to 100  | -making money calculations, including making change and decimal notation to $1000 in real-life contexts and problem-based situations -counting up, counting back, decomposing to calculate totals and make change -making simple financial plans to meet a financial goal-developing a budget that takes into account income and expenses  |  | -solving one-step equations with a variableexpressing a given problem as an equation using symbols -e.g. 4+x=15  |  | -measuring area of squares and rectangles using tiles, geoboards, grid paper -invest-igating perimeter and area and how they are related to but not dependent on each other  | -invest-igating 3D objects and 2D shapes, based on multiple attributes-describing and sorting quadrilateral-describing and constructing rectangular and triangular prisms -identifying prisms in the environment  | slide/translation, flip/reflection, turn/rotation -using concrete materials with a focus on the motion of transformations  | understanding elapsed time and duration-applying concepts of time in real-life contexts and problem-based situations  | -on a bar graph, one square may represent five cookies or one symbol can represent a group or value  | -predicting outcomes of independent events (e.g. when you spin using one spinner and it lands on a single colour)-predicting single outcomes -using spinners, rolling dice, pulling objects out of a bag  |
| 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 mathematical thinking in many ways |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |