MATH YEAR AT A GLANCE – grade 3/4 (*see curriculum for Elaborations)*

*This is a suggested sequence for teaching concepts and content in a grade 3/4 combined class. It is not meant to be prescriptive, but supportive, to newer teachers who want a sense of how a year might roll out.*

*Concepts are first taught in the ‘full’ 45 – 60 min. lesson (that is, ‘Before-Explore-Connect-practice’). Once they are established, they are ‘rolled over’ into the daily 5-10 min. ‘Number Sense Routine’ which can happen before the full lesson, or at a different time of the day. This allows for deeper mastery, for sharing of strategies and for concepts to get ‘into their bones’.*

NOTE: Concepts in grades 3 & 4 have been aligned as many concepts overlap and often grade 4 is just a continuation of a grade 3 concept. Where grade 4 concepts go beyond the scope of grade 3, use formative assessment to make decisions about exposing grade 3’s to those higher-level concepts (without assessing them on it) OR to review concepts not yet mastered.

**Sept. Grade 3: Grade 4:**

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| Number Sense Routine (5-10 min/day) | * Introduce Number talks/routines on counting larger number sequences & Addition and subtraction facts to 20 using Shumway. Fosnot, Lempp strategies * Build Math community & Growth Mindset (see Van de Walle, Boaler) | |
| Full Lessons (45 – 60 min/day) | * Number Concepts to 1000 * Addition & Subtraction facts to 20 *emerging computational fluency* | * Number Concepts to 10 000 * Addition & Subtraction facts to 20 *developing computational fluency* |

**Oct-Nov.**

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| Number Sense Routine (5-10 min/day) | Basic Fact strategies to 20 AND Number concepts to 1000 (count arounds, daily number) | Basic fact strategies to 20 AND Number Concepts to 10 000 |
| Full Lessons (45 – 60 min/day) | * Pattern rules using words, pictures and numbers, based on concrete experiences; Increasing and decreasing patterns * Measurement, using standard units (linear, mass, and capacity) * Construction of 3D shapes | * Increasing and decreasing patterns using tables and charts * Regular and irregular polygons, and their perimeter * Line symmetry |

**Dec-Jan.**

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| Number Sense Routine (5-10 min/day) | Basic Fact strategies to 20 AND Number concepts to 1000 (count arounds, daily number) | Basic fact strategies to 20 AND Number Concepts to 10 000 |
| Full Lessons (45 – 60 min/day) | * Addition and subtraction to 1000   *- using flexible computation strategies, involving taking apart and combining numbers*   * Financial literacy – fluency with coins and bills to 100 dollars, and earning and payment * One-to-one correspondence with bar graphs, pictographs, charts and tables *–often best done through socials and Science inquiries* * Time concepts | * Addition and subtraction to 10 000 - *using flexible computation strategies, involving taking apart and combining numbers* * Monetary calculations, making change for amounts to $100 * 1 to 1/many to 1 correspondence using bar and pictographs * Telling time 12- and 24-hour clocks |

**Feb-Mar**

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| Number Sense Routine (5-10 min/day) | 2-digit & 3-digit mental math addition and subtraction to 1000 | 2-digit & 3-digit mental math addition and subtraction to 10 000 |
| Full Lessons (45 – 60 min/day) | * Multiplication and division concepts *-concrete, pictoral, games, connect to skip counting* * Review addition/subtraction to 1000 OR expose to larger mult & div if appropriate (*no assessment)* | * Multiplication and division facts to 100 - *memorization not intended at this level, but recall of 2s, 5’s and 10’s by end of grade 4* * Multiplication and division of two- or three-digit numbers by one-digit numbers |

**April-May**

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| Number Sense Routine (5-10 min/day) | Multiplication and division mental math strategies | Multiplication and division fact strategies |
| Full Lessons (45 – 60 min/day) | * Fraction concepts * *Decimals can also be introduced, but NOT assessed* * Likelihood of simulated events, using comparative language | * Ordering and comparing fractions * Decimals to hundredths * Probability experiments |

**June**

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| Number Sense Routine (5-10 min/day) | Fraction organic number line, multiplication and division mental math strategies | |
| Full Lessons (45 – 60 min/day) | * *Review number concepts – solidify basic facts, addition & subtraction to 1000,* * One-step addition and subtraction equations with an unknown number | * Addition and subtraction of decimals to hundredths * Algebraic relationships among quantities & one-step equations with an unknown number using all operations |