MATH YEAR AT A GLANCE – grade 5 (*see curriculum for Elaborations)*

*This is a suggested sequence for teaching concepts and content in a grade 5 year. It is not meant to be prescriptive, but supportive, to newer teachers who want a sense of how a year might roll out. Authors cited are: J. Shumway, “Number Sense Routines”; C. Fosnot, “Young Mathematicians at Work”; J. Lempp, “Math Workshop” & J. Boaler, “Mathematical Mindsets”.*

*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: In grade 5, 9/19 content standards are Number Sense, and 2/19 are Patterns and Algebra. 8/19 are the other strands – time, geometry, measurement & Data).* ***About 60% of the Content is Number and Algebra, so 60% of your math time should be, too.***

**Sept.**

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| Number Sense Routine (5-10 min/day) | * Introduce Number talks/routines using Shumway & Fosnot, through addition and subtraction facts to 20 (extending computational fluency) - building on previous grade-level addition and subtraction facts applying strategies and knowledge of addition and subtraction facts making math-to-math connections
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| Full Lessons (45 – 60 min/day) | * Build Math community & Growth Mindset (see Van de Walle, Boaler & Lempp)
* Number concepts to 1 000 000
* Addition and subtraction of whole numbers to 1 000 000
* Duration, using measurement of time
* Monetary calculations, making change for amounts to $1000
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**Oct-Nov.**

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| Number Sense Routine (5-10 min/day) | Mental math Number concepts/add/subtract to 1 000 000 – *estimate sums and differences, use flexible computation strategies (decomposing using friendly numbers and compensating)* |
| Full Lessons (45 – 60 min/day) | * Multiplication and division facts to 100 (emerging computational fluency)
* Multiplication and division to **three digits** including division with remainders.
* Area measurement of squares and rectangles - *connect to multiplication concepts you are teaching*
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**Dec-Jan.**

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| Number Sense Routine (5-10 min/day) | Mental math multiplication and division strategies – *decomposing, distributive & commutative principles* |
| Full Lessons (45 – 60 min/day) | * Equivalent fractions
* Decimals to thousandths
* 1 to 1/many to 1 correspondence using double bar graphs
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**Feb-March**

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| Number Sense Routine (5-10 min/day) | Whole number, fraction, and decimal benchmarks on organic number line |
| Full Lessons (45 – 60 min/day) | * Rules for increasing and decreasing patterns with words, numbers, symbols and variables.
* One-step equations with variables
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**April-May**

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| Number Sense Routine (10 min) | Alternate between mult & div strategies and fraction & decimal benchmarks, equivalent fractions |
| Full Lessons (45 – 60 min/day) | * Addition and subtraction of decimals to thousandths
* Classification of prisms and pyramids
* Probability experiments, single events or outcomes
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**June**

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| Number Sense Routine (10 min) | Addition and subtraction of decimals |
| Full Lessons (45 – 60 min/day) | * Review/assess number concepts
* Relationships between area and perimeter *(connect to x and +concepts)*
* Single transformations
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