MATH YEAR AT A GLANCE – grade 2 & 3 (*see curriculum for Elaborations)*

*This is a suggested sequence for teaching concepts and content in a grade 2/3 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’.* ***66% of the Content is Number and Algebra, so your math time should be, too.***

**Sept. Grade 2: Grade 3:**

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| Number Sense Routine (5-10 min/day) | * Introduce Number talks/routines using Shumway. Fosnot, Lempp *Choral Counting, counting around the circle*
 | * Introduce Number talks/routines using Shumway. Fosnot, Lempp
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| Full Lessons (45 – 60 min/day) | * Build Math community & Growth Mindset (see Van de Walle, Boaler)
* Number concepts to 100 – *counting forward and backward, comparing and ordering, benchmarks of 25, 50 & 100*
* Begin pictographs, one-to-one correspondence, such as a weather graph. (*can revisit during year at Calendar time)*
 | * Build Math community & Growth Mindset (see Van de Walle, Boaler)
* Number Concepts to 1000 -  *counting forward and backward, comparing and ordering, benchmarks of 25, 50 & 100*
* One-to-one correspondence with bar graphs, pictographs, charts and tables *–often best done through Socials and Science inquiries*
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**Oct-Nov.**

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| Number Sense Routine (5-10 min/day) | Number concepts to 100 – *counting forward and backward, comparing and ordering, benchmarks of 25, 50 & 100* | Number concepts to 1000 (count arounds, daily number) |
| Full Lessons (45 – 60 min/day) | * Facts to 20 *(introduction of computational strategies)*
* Change in quantity, using pictorial and symbolic representation
* Repeating and increasing patterns
 | * Addition and subtraction facts to 20 (emerging computational fluency)
* Pattern rules using words, pictures and numbers, based on concrete experiences
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**Dec-Jan.**

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| Number Sense Routine (5-10 min/day) | Skip counting, basic fact strategies | Basic Facts strategies |
| Full Lessons (45 – 60 min/day) | * Addition and subtraction to 100
* Financial literacy – coin combos to 100 cents
* Multiple attributes of 2D shapes and 3D objects
 | * Addition and subtraction to 1000
* Financial literacy – fluency with coins and bills to 100 dollars, and earning and payment
* Construction of 3D shapes
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**Feb-Mar**

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| Number Sense Routine (5-10 min/day) | Basic fact strategies – *making or bridging 10, decomposing, identifying related doubles and 2-digit strategies* | Basic facts & 2-digit & 3-digit mental math strategies addition and subtraction  |
| Full Lessons (45 – 60 min/day) | * Number concepts to 100 – *skip-counting by 2, 5, & 10, place value 10’s and 1’s (or ten-sticks and left-overs)*
* Explore multiplication *(no assessment intended)*
* Repeating and increasing patterns
 | * Review of numbers to 1000
* Multiplication and division concepts
* Increasing and decreasing patterns *- connect to the bullet above*
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**April-May**

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| Number Sense Routine (5-10 min/day) | Adding and Subtracting to 100 – *estimating sums and differences, friendly numbers, using an open number line, hundred chart, ten-frames* | Multiplication and division mental math strategies |
| Full Lessons (45 – 60 min/day) | * (Explore fractions – no assessment)
* Direct linear measurement
* Explore time *(no assessment)*
 | * Fraction concepts
* Measurement, using standard units (linear, mass, and capacity)
* Time concepts
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**June**

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| Number Sense Routine (5-10 min/day) | Basic fact & 2-digit adding and subtracting strategies - r*eview* | Fraction organic number line, review of previous routines (see above) |
| Full Lessons (45 – 60 min/day) | * Review addition and subtraction to 100, basic facts if needed
* Symbolic representation of equality and inequality
* Likelihood of familiar life events, using comparative language
 | * *Review number concepts – solidify*
* One-step addition and subtraction equations with an unknown number
* Likelihood of simulated events, using comparative language
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