Curriculum Pacing Guide

Grade 7 Mathematics

The purpose of this pacing guide is to assist in mapping out the assessment of curricular objectives in Mathematics. It should be noted that there is no required order in which to teach and assess as long as the outcomes are appropriately taught, evaluated and assessed by the end of each Semester. This document should not be seen as a checklist of outcomes to 'cover' from top down.

For the 2022-2023 school year, there is flexibility between quarters within each Semester. All specific outcomes in Q1 and Q2 must be taught and assessed by the end of January (Semester 1). All specific outcomes in Q3 and Q4 must be taught and assessed by the end of June (Semester 2). Keep in mind that each CFA is designed following the order of outcomes in the pacing guide.

Teachers can use the content aspects of the program to measure pacing, but are still required to address the Mathematical processes which are equally important in the delivery of outcomes. The observations/notes (on the right) are merely suggestions and approximate days to support the delivery of content.

NOTE: The mathematical processes (Connection, Communication, Mental Math and Estimation, Visualization, Technology, Reasoning, Problem Solving) are embedded in the outcomes. It is important that you look for these when teaching a specific outcome. The Math Processes will provide scaffold options by which you can leverage to support the understanding of the intended outcome.

Quarter 1	Report Standards (PTP Outcome)	Specific Outcomes from Program of Studies	(Observations / Notes)
MMS Text **Chapter #2** 2.1 to 2.5	7.MAT.N.1.6	**NUMBER STRAND** ▲ **[EAP Enhancement]** **N6.** Demonstrate an understanding of addition and subtraction of integers, concretely, pictorially and symbolically. [C, CN, PS, R, V]	Approx - 14 Days Every number has both size and a positive or negative relationship to other numbers.
MMS Text **Chapter #1** 1.1 , 1.2	7.MAT.N.1.1	**NUMBER STRAND** **N1.** Determine and explain why a number is divisible by 2, 3, 4, 5, 6, 8, 9 or 10, and why a number cannot be divided by 0. [C, R]	Approx - 6 Days These skills depend on when you feel they apply to what you are teaching.
MMS Text **Chapter #3** 3.1	7.MAT.N.1.4	**NUMBER STRAND** **N4.** Demonstrate an understanding of the relationship between positive terminating decimals and positive fractions and between positive repeating decimals and positive fractions. [C, CN, R, T] [ICT: P2–3.4]	Approx - 21 Days Decimals and fractions are both ways to show partial quantities. We can use benchmarks, place value and equivalent fractions to compare and order decimals and fractions. The comparison of fractions and decimals can be a good transition into the connections of percentage.
MMS Text **Chapter #3** 3.2	7.MAT.N.1.7	**NUMBER STRAND** **N7.** Compare and order positive fractions, positive decimals (to thousandths) and whole numbers by using: benchmarks place value, equivalent fractions and/or decimals. [CN, R, V]	
MMS Text **Chapter #3** 3.3 to 3.6	7.MAT.N.1.2	**NUMBER STRAND** ▲ **[EAP Enhancement]** **N2.** Demonstrate an understanding of the addition, subtraction, multiplication and division of decimals to solve problems (for more than 1-digit divisors or 2-digit multipliers, the use of technology is expected). [ME, PS, T] [ICT: P2–3.4]	
MMS Text **Chapter #3** 3.7 , 3.8	7.MAT.N.1.3 7.MAT.SP.1.3	**NUMBER STRAND** **N3.** Solve problems involving percentage from 1% to 100%. [C, CN, PS, R, T] [ICT: P2–3.4] **SP3.** Connection to **STATS & PROBABILITY**	Percents are hundredths and provide a third way we can write fractions and decimals.

Calculator Free Assessment 1 (Third week of November)

Quarter 2	Report Standards (PTP Outcome)	Specific Outcomes from Program of Studies	(Observations / Notes)
MMS Text **Chapter #5** 5.1 to 5.7	7.MAT.N.1.5	**NUMBER STRAND** **N5.** Demonstrate an understanding of adding and subtracting positive fractions and mixed numbers, with like and unlike denominators, concretely, pictorially and symbolically (limited to positive sums and differences). [C, CN, ME, PS, R, V]	Approx - 19 Days
MMS Text **Chapter #7** 7.1, 7.2, 7.4	7.MAT.SP.1.1	**STATS & PROBABILITY (Data Analysis)** **SP1.** Demonstrate an understanding of central tendency and range: [C, PS, R, T] [ICT: P2–3.4]	Approx - 15 Days Teachers have found success placing statistics after the fractions and decimals work. This is a good opportunity to connect the theoretical Math they have been learning to this point.
MMS Text **Chapter #7** 7.3	7.MAT.SP.1.2	**STATS & PROBABILITY (Data Analysis)** **SP2.** Determine the effect on the mean, median and mode when an outlier is included in a data set. [C, CN, PS, R]	
MMS Text **Chapter #7** 7.5	7.MAT.SP.2.1 7.MAT.SP.1.3	**STATS & PROBABILITY (Chance and Uncertainty)** **SP4.** Express probabilities as ratios, fractions and percents. [C, CN, R, T, V] [ICT: P2–3.4] **SP3.** Construct, label and interpret circle graphs to solve problems.[C, CN, PS, R, T, V][ICT: P2–3.3]	Connection to Section 4.6 / 4.7 Construct and label Circle graphs
MMS Text **Chapter #7** 7.6	7.MAT.SP.2.2 7.MAT.SP.2.3	**STATS & PROBABILITY (Chance and Uncertainty)** ▲ **[EAP Enhancement]** **SP5.** Identify the sample space (where the combined sample space has 36 or fewer elements) for a probability experiment involving two independent events. [C, ME, PS] **SP6.** Conduct a probability experiment to compare the theoretical probability. [C, PS, R, T] [ICT: C7–3.2, P2–3.4]	Connection to Sections 3.7 / 3.8 of the textbook (problem solving with percentage) As the number of trials increase, experimental probabilities usually get closer to theoretical probabilities.

END OF SEMESTER 1

Calculator Free Assessment 2 (Third week of February)

Quarter 3	Report Standards (PTP Outcome)	Specific Outcomes from Program of Studies	(Observations / Notes)
MMS Text **Chapter #1** 1.3 to 1.8	7.MAT.PR.1.1	**PATTERNS & RELATIONS (patterns)** ▲ **[EAP Enhancement]** **PR1.** Demonstrate an understanding of oral and written patterns and their equivalent linear relations. [C, CN, R]	Approx - 16 Days
MMS Text **Chapter #1** 1.5	7.MAT.PR.2.3	**PATTERNS & RELATIONS (variables & equations)** **PR5.** Evaluate an expression, given the value of the variable(s). [CN, R]	
MMS Text **Chapter #1** 1.6	7.MAT.PR.1.2	**PATTERNS & RELATIONS (patterns)** ▲ **[EAP Enhancement]** **PR2.** Create a table of values from a linear relation, graph the table of values, and analyze the graph to draw conclusions and solve problems. [C, CN, PS, R, V] [ICT: C7–3.1]	
MMS Text **Chapter #6** 6.1	7.MAT.PR.2.1 7.MAT.PR.2.2	**PATTERNS & RELATIONS (variables & equations)** **PR3.** Demonstrate an understanding of preservation of equality by: modeling preservation of equality, concretely, pictorially and symbolically; applying preservation of equality to solve equations. [C, CN, PS, R, V] **PR4.** Explain the difference between an expression and an equation. [C, CN]	Approx - 15 Days Preserving equality also applies to section 1.8 from the textbook.
MMS Text **Chapter #6** 6.2 , 6.3	7.MAT.PR.2.4	**PATTERNS & RELATIONS (variables & equations)** **PR6.** Model and solve, concretely, pictorially and symbolically, problems that can be represented by one-step linear equations of the form x + a = b, where a and b are integers. [CN, PS, R, V]	
MMS Text **Chapter #6** 6.4 , 6.5	7.MAT.PR.2.5	**PATTERNS & RELATIONS (variables & equations)** **PR7.** Model and solve, concretely, pictorially and symbolically, problems that can be represented by linear equations of the form: • ax + b = c , • ax = b , • x/a=b , a ≠ 0 where a, b and c are whole numbers. [CN, PS, R, V]	

Calculator Free Assessment 3 (Second week of May)

Quarter 4	Report Standards (PTP Outcome)	Specific Outcomes from Program of Studies	(Observations / Notes)
MMS Text **Chapter #4** 4.1 , 4.2	7.MAT.SS.1.1	**SHAPE & SPACE (Measurement)** **SS1.** Demonstrate an understanding of circles and their properties. [C, CN, PS, R, V]	Approx - 19 days Teachers have noted that supportive examples of pie graphs is a good connection opportunity back to sections 7.5, 3.7 and 3.8 from the textbook. Connections into the "area" of sectors of a circle will be a good enhancement opportunity.
MMS Text **Chapter #4** 4.3 to 4.5	7.MAT.SS.1.2	**SHAPE & SPACE (Measurement)** **SS2.** Develop and apply a formula for determining the area of: • triangles • parallelograms • circles [CN, PS, R, V]	
MMS Text **Chapter #8** 8.1 to 8.4	7.MAT.SS.2.1	**SHAPE & SPACE (3D Objects & Shapes)** ▲ **[EAP Enhancement]** **SS3.** Perform geometric constructions, including: • perpendicular line segments • parallel line segments • perpendicular bisectors • angle bisectors [CN, R, V]	Approx - 19 Days
MMS Text **Chapter #8** 8.5	7.MAT.SS.3.1	**SHAPE & SPACE (Transformations)** **SS4.** Identify and plot points in the four quadrants of a Cartesian plane, using integral ordered pairs. [C, CN, V]	
MMS Text **Chapter #8** 8.6 , 8.7	7.MAT.SS.3.2	**SHAPE & SPACE (Transformations)** ▲ **[EAP Enhancement]** **SS5.** Perform and describe transformations (translations, rotations or reflections) of a 2-D shape in all four quadrants of a Cartesian plane (limited to integral number vertices). [C, CN, PS, T, V] [ICT: C6–3.4]	

END OF SEMESTER 2