

Sixth Grade Everyday Mathematics

Ventnor Schools

Time Line	Essential Questions and Unit Content	NJCCC Standards	Instructional Objectives	Assessment	Instructional Domain	Instructional Activities
UNIT 1 Begins September	1. How is my SRB like an encyclopedia?	4.1: A7, B1,4,6 4.5: B1, C2,3, 4,5,6, D1	1.1 Become acquainted with the content and organization of the Math Journal and SRB	MM Journal SL	Whole class discussion, partner/group activity, independent activity; individualized activities	Discuss in groups the features of the journal & SRB; solve problems together; literature link
	2. Why is it necessary to develop judgment, common sense, and a healthy skepticism in order to thrive in a data-filled world?	4.1: B3 4.2: D1,3, E2,4 4.3: C1 4.4: A1,2,3, C1,2,3 4.5: C1,3, D2,3	1.2 Draw and describe line plots; use landmarks of data	MM Journal SL	Whole class & group activity, independent activity; individualized activities	Class survey; graph data surveys into mystery plots; identify landmarks; journal; enrichment worksheet; computers
	3. When is using mean or median more typical?	4.1: A2,3,6,8, B2 4.3: C1, D2 4.4: A1,2,3 4.5: C1, D2,3, F2	1.3 Calculate and compare the median and the mean; review naming numbers in different ways	MM Journal SL	Whole-class activity, Independent activity, partner activity, individualized activities	Analyze a set of data; find landmarks for data organized in line plots; compare mean & median with a spreadsheet program; games; complete name collection boxes
	4. What real-world situation would require knowing the largest possible area from a given length?	4.2: D1,2 4.3: A1, C2,3, D2 4.4: A2,3, D1,2 4.3: A1, C1,25 4.4: A1,2,3, D2 4.5: A3,4, C1,2,4, D1, E1, E2, F1,4,5	1.4 Find the range, median, mode, and mean of a set of numbers	MM Journal SL	Whole-class activities, partner & group activities; independent activity; Individualized activities	Play Landmark Shark after teacher demonstration; journal work; play a modified version for enrichment; computers
		4.1: C3 4.3: C2 4.4: A1,2,3 4.5: A1, C1,2,3,4, D1,3, F1	1.5 Draw, read, and interpret broken-line graphs	MM Journal SL	Whole-class discussion & activity, independent activity, partner & group activities, individualized activities	Read an essay on line graphs then construct one; analyze a broken line graph; journal work; Landmark Shark; make a yarn broken-line graph
	4.1: B1 4.2: D3,4 4.4: A1,2,3, B3 4.5: A2,3,4, B1,2,4, C2, D1,2, E1,2,3	1.6 Draw, read, and interpret bar graphs	MM Journal SL	Whole-class discussion & independent activity, partner activities, individualized activities	Read side-by-side and stacked bar graphs; draw & interpret broken-line graphs; journal work; enrichment worksheet; computers	
		1.7 Draw, read, and interpret step graphs	MM Journal SL	Whole-class discussion & activity, independent activity, individualized activities	Read a step graph; draw a step graph for cab fares; interpret a step graph for plumber's rates; journal work; extra practice worksheet; computers	

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September	1. How is my SRB like an encyclopedia?	4.1 B1 4.2: D2 4.3: C1 4.4: A1,2,3,4 4.5: A1,3,4,5, C1,2,3,4, D1,3, E1, F1,4,5	1.8 Review the percent circle; interpret circle graphs; estimate percents on circle graphs	MM Journal SL	Whole-class discussion, independent activity, individualized activities; whole class activity	SRB reading and modeling; interpret circle graphs from surveys; make estimations; journal work; extra practice worksheet; form a human circle graph with class; computers
	2. Why is it necessary to develop judgment, common sense, and a healthy skepticism in order to thrive in a data-filled world?	4.1: B1 4.2: D5, E4 4.4: A1,2,3, D3 4.5: A1,2,3	1.9 Find the perimeter and area of a rectangle; use a graph to investigate the relationship between perimeter and area	MM Journal SL	Whole-class discussion, independent activity, partner & group activities, individualized activities	Discussion led by student discovery; journal work; play Landmark Shark; solve a paint problem for enrichment; reteaching worksheet
	3. When is using mean or median more typical?	4.3: C1,2 4.4: A1 4.5: A1,3,4, C1,3,6, D2,3,4,6, E1,2	1.10 Explore potentially misleading ways of presenting data; examine whether data are presented fairly and accurately	MM Journal SL	Whole-class activity, partner activity, independent activities; individualized activities	Identify statistics presented in colorful ways; analyze a pictograph displaying incorrect information; compare line graphs of persuasion; journal work; create persuasive graphs; correct a misleading pictograph
	4. What real-world situation would require knowing the largest possible area from a given length?	4.2: D3,5, E4 4.4: D1 4.1: A2 4.5: A2,5, D1,2	1.11 Convert between customary units of capacity; compare & interpret bar graphs 1.12 Review and assess students' progress on the material covered in Unit 1	MM Journal SL Unit Test Oral/Slate Portfolio	Whole-class discussion, independent activity, partner & group activities, individualized activities Whole-class discussion & activity, independent activities	Practice conversions between kitchen units; analyze a newspaper article with numerical information; journal work; devise a plan to collect & analyze data from class; build background for math words Slate board and written test activity; games and computers
UNIT 2		4.1: A1,2,6, B1,2,4,6,8, C1,2,3,4 4.3: D2 4.4: A1,2 4.5: D4,6	2.1 Review addition and subtraction of decimals; round decimals to the same precision	MM Journal SL	Whole-class discussion & activity, independent activity, partner activities, individualized activities	Strategy sharing; journal work; write decimal number stories; model addition & subtraction with base-ten blocks; reteaching worksheet; computers
		4.1: A3,6, B1,2,4,6, C1,2 4.5: A1,2,3,4,5, D1,2,3,4,6, E1	2.2 Develop an estimation strategy for multiplying decimals	MM Journal SL	Whole-class discussion & activity, independent activity, partner activities, individualized activities	Teacher-led problem solving & strategy sharing for estimation; journal work; reteaching worksheet; computers

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UNIT 2 Continues	1. In the real world outside of school, how much need is there to do calculations with measurements of varied precision?	4.1 A6, B1,2,4,6 4.4: A1,2,3 4.5: A1,2, D2,6	2.3 Develop strategies for multiplying decimals	MM Journal SL	Whole-class discussion, independent activity, partner activities, individualized activities	Teacher demonstration of lattice; journal work; draw and interpret a step graph; reteaching worksheet; games & computers
	October 2. With a world so dependent on calculators and computers, why is it important to also know the paper/pencil computation method? 3. How big is a million, billion, and trillion?	4.1: B1,5, C3 4.4: A1 4.5: A3,4, E2 4.1: A2,3, B5, C3 4.2: A8 4.3: C1 4.5: B1,4, C1,3, D2,4,6 4.1: A2,6,8 4.5: B4 4.1: A2, B1,3 4.5: A1,2, B4, C5, F1,4,5 4.1: A2, B2,5 4.2: D3, E4 4.5: A1, B4, C5, E1, F1 4.5: A1, C3, E3, F1,4,5	2.4 Develop and practice strategies for multiplying by powers of 10 2.5 Read and write numbers to trillions in number-and-word notation and standard notation; convert between two notations 2.6 Read and write small numbers in standard notation 2.7 Review and extend knowledge of exponential notation; use the powers key on the calculator 2.8 Use scientific notation; convert between scientific notation and standard notation 2.9 Use and interpret scientific notation on a calculator	MM Journal SL MM Journal SL MM Journal SL MM Journal SL MM Journal SL	Whole-class discussion & activity, independent activity, group activity, individualized activities Whole-class discussion & activity, independent activity, partner activities, individualized activities Whole-class discussion, independent activity, partner activities, individualized activities Whole-class discussion & activity, independent activity, partner activities, individualized activities Whole-class discussion & activity, independent activity, partner activities, individualized activities	Practice powers of 10 in journal; play Doggone Decimal; build background for math words; computers SRB reading & teacher modeling & problem solving; journal work; display & read large numbers on a calculator for reteaching; Literature Link for enrichment; computers SRB reading & practice with a place-value chart; write numbers in words; journal work; games & computers SRB reading & calculator practice; journal page together; play Exponent Ball; journal work; translate scientific notation in a Science Link; explore prefixes that express large numbers SRB reading; journal practice; find ground areas of buildings for enrichment; play games for extra practice Experience scientific notation first hand on a calculator; Teacher-guided practice in SRB; journal work; games for review; partners create numbers to display in scientific notation on a calculator

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October		<p>4.1 A3, B1,2, 3,4, 6 C1,2,3,4 4.5: A2, D3,5</p> <p>4.1: A3,6, B1,2,4,6 4.3: D2 4.5: A2,3,4</p> <p>4.2: C1 4.5: A5, B4, D1,2</p>	<p>2.10 Estimate quotients; review and practice the partial-quotients division algorithm for whole numbers</p> <p>2.11 Estimate and calculate quotients for division of decimals by whole numbers using the partial-quotients division algorithm; obtain quotients to a specified number of decimal places</p> <p>2.12 Review and assess students' progress on the material covered in Unit 2</p>	<p>MM Journal SL</p> <p>MM Journal SL</p> <p>Unit Test Oral/Slate Portfolio</p>	<p>Whole-class discussion & activity, independent activity, partner activities, group activity; individualized activities</p> <p>Whole-class discussion & activity, independent activity, individualized activities</p> <p>Whole-class discussion & activity, independent activities</p>	<p>Teacher modeling & problem solving ; more practice & review in SRB; journal work; play games for extra practice; make a poster displaying ways to represent division</p> <p>Guided practice; journal work; reteaching worksheet; games & computers</p> <p>Slate board and written test activity; games and computers</p>
UNIT 3 Begins	<p>1. How are spreadsheets dependent on formulas?</p> <p>2. How can the use of a variable allow for an algebraic equation to have multiple answers?</p>	<p>4.2: D1 4.3: A1, C1, D1 4.5: A1, C5</p> <p>4.1: B7 4.3: A1, C1, D1 4.5: A3, A4, E2</p> <p>4.3: A1, C1 4.5: A3,4, E2</p>	<p>3.1 Describe general number patterns in words and with number sentences having one variable; write special cases for general patterns</p> <p>3.2 Write special cases for general patterns having two variables; describe such general patterns using two variables</p> <p>3.3 Write and evaluate algebraic expressions</p>	<p>MM Journal SL</p> <p>MM Journal SL</p> <p>MM Journal SL</p>	<p>Whole-class discussion, independent activity, partner activities, individualized activities</p> <p>Whole-class discussion, independent activity, partner activities, individualized activities</p> <p>Whole-class discussion, independent activity, partner activities, individualized activities</p>	<p>Directed lesson & journal practice; strategy sharing; make patterns by coloring grids for reteaching; build background for math words</p> <p>Student brainstorming with teacher direction; journal work with calculators; Enrichment worksheet & Literature Link; computers</p> <p>Teacher-led discussion & problem solving; journal work; practice division with decimals; What's My Rule worksheet with geometric patterns; computers</p>
November		<p>4.3: A1, C1,2 4.5: A3,4, C5</p>	<p>3.4 Study how formulas are constructed; practice evaluating formulas by substitution</p>	<p>MM Journal SL</p>	<p>Whole-class discussion & activity, independent activity, partner activities, individualized activities</p>	<p>Essay reading in SRB; evaluate formulas in journal; What's My Rule practice; Extra Practice worksheet; Derive a brick wall formula for Enrichment; computers</p>

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November UNIT 3	1. How are spreadsheets dependent on formulas?	4.2: D1 4.3: A1, B1, C2, D1 4.4: C1 4.5: A3,4, C1,2,3,4,6, D1, E1,2, F1,3	3.5 Represent rates with data tables, rules expressed in words, formulas, and line graphs	MM Journal SL	Whole class discussion & activity; independent activity, partner activities, individualized activities	Strategy sharing & journal work; develop a line graph to represents calculated rates; compare ways of representing rates; write number stories involving rates; Extra Practice worksheet
	2. How can the use of a variable allow for an algebraic equation to have multiple answers?	4.3 A1, C1,2 4.5: A3,4, C1,3, D2,3, E2	3.6 Use diagrams, formulas, and graphs for making predictions and drawing conclusions	MM Journal SL	Whole class discussion & activity; independent activity, partner activities, individualized activities	Science Link: examine formulas for the distance traveled by a falling object; make tables & draw graphs; journal work; conduct a ball throwing experiment; research Galileo
		4.1: B1 4.4: A1 4.5: F2	3.7 Introduce spreadsheets; use variables and formulas in spreadsheets; mentally add positive and negative numbers	MM Journal SL	Class discussion, independent activity, partner activities, individualized activities	Essay reading in SRB; teacher-directed lesson; journal practice; play Spreadsheet Scramble after teacher demonstration; work with computer spreadsheets
		4.5: F2	3.8 Practice spreadsheet computation; practice addition of positive and negative numbers	MM Journal SL	Whole-class discussion, partner activities, independent activities; individualized activities	Play Spreadsheet Scramble; SRB review and journal work; solve a Spreadsheet Scramble problem; games & computers
		4.5: A1,2, B1,3, C1,2,3,5, D1,2,3, E1,3, F1	3.9 Interpret graphs; draw graphs that correspond to given situations	MM Journal SL	Class discussion & activity, independent activity, partner activities, individualized activities	Read graphs & answer questions; draw graphs to illustrate stories; match mystery graphs with data representation; journal work; construct mystery graphs
		4.2: D5 4.3: A1, C2 4.4: C1 4.5: C1,2,3,4,6, D1, E3	3.10 Analyze a real-world situation by making and using a table of data and related graph	MM Journal SL	Whole-class discussion, partner activities, independent activities	Compare jobs by analyzing potential profits; graphing & problem solving; games & computers
		4.2: C1 4.5: A5, B4, D1,2	3.11 Review and assess students' progress on the material covered in Unit 3	Unit Test Oral/Slate Portfolio	Whole-class discussion & activity, independent activities	Slate board and written test activity; games and computers

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		<p>4.1 B1,2,4,6 4.3: D2</p> <p>4.1: B1 4.3: A1, C1 4.5: A2,3,4, B1,2,4, C1,2,3,4, D1,2, E1, F1</p> <p>4.1: A4,6 4.5: D2</p> <p>4.1: A1 4.5: A1,2</p>	<p>4.9 Develop a rule for converting between decimals and percents' to convert fractions to decimals and percents by division</p> <p>4.10 Represent data with circle graphs</p> <p>4.11 Review finding a percent of a number</p> <p>4.12 Review and assess students' progress on the material covered in Unit 4</p>	<p>MM Journal SL</p> <p>MM Journal SL</p> <p>MM Journal SL</p> <p>Unit Test Oral/Slate Portfolio</p>	<p>Class discussion & activity, independent activity, individualized activities</p> <p>Class discussion, independent activity, partner activities, individualized activities</p> <p>Class discussion, independent activity, partner activities, individualized activities</p> <p>Whole-class discussion & activity, independent activities</p>	<p>Strategizing and teacher-modeling; oral practice; use a calculator in journal work; find close equivalents from teacher dictation; computers</p> <p>Convert data; draw circle graphs using geometry template; Science Link activity in journal; formulate a survey question, collect data, and graph it; research recycling</p> <p>Teacher-directed lesson; journal work; take a survey & graph the results; build background for math words; computers</p> <p>Slate board and written test activity; games and computers</p>
UNIT 5 January	<p>1. What is the importance of drawing tools such as the protractor and compass?</p> <p>2. What is the proper construction of a circle graph without the classroom tool of the percent circle?</p>	<p>4.1: C1 4.2: A1, C1, D1,2,5, E1,2,4 4.5: F1</p> <p>4.1: A3, C1,2,3,4 4.2: D1, E2 4.3: C2 4.5: A1,3,4, D6</p> <p>4.3: A1 4.4: A1,2,3 4.5: F1,4</p>	<p>5.1 Measure and draw angles with a protractor; classify angles by size</p> <p>5.2 Find angle measures by reasoning with supplementary and vertical angle definitions and with sums of angle measures in triangles and quadrangles</p> <p>5.3 Calculate the degree measures of sectors of circle graphs; use a protractor to draw circles</p>	<p>MM Journal SL</p> <p>MM Journal SL</p> <p>MM Journal SL</p>	<p>Class discussion, independent activity, partner activities, individualized activities</p> <p>Class discussion, independent activity, partner activities, individualized activities</p> <p>Class discussion & activity, independent activity, partner activities, individualized activities</p>	<p>Teacher-directed lesson & journal practice; play Angle Tangle; form different angles using rope and straws; build math vocabulary; construct a hexagon</p> <p>SRB reading & vocabulary discussion; journal practice; cutting & pasting to find angle sums; Literature Link; computers & games</p> <p>Make circle graphs with a protractor; strategy sharing; journal work; collect & display survey data; computers</p>

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	1. What is the importance of drawing tools such as the protractor and compass?	4.2 C1 4.3: C2 4.5: A1	5.4 Plot ordered number pairs; solve problems about polygons on a coordinate grid; explore the relationship between endpoints and midpoints.	MM Journal SL	Class discussion, independent activities, individualized activities	SRB reading and practice problems; teacher modeling' solve polygon problems on a coordinate grid; student discovery; games & computers
	2. What is the proper construction of a circle graph without the classroom tool of the percent circle?	4.1: B1 4.2: B1,2, E1 4.3: A1 4.4: A1, B1 4.5: A3,4, C1,2,3,4,5,6, D1	5.5 Review isometry transformations and perform them on geometric figures	MM Journal SL	Class discussion & activity, independent activity, partner activities, individualized activities	Review and perform transformations: reflections, translations, rotations; SRB reading & journal practice; draw & measure angles; draw reflected images with a transparent mirror
		4.2: A3,4 4.4: B1 4.5: C2, D1	5.6 Explore the meaning of congruence and its connection to isometry transformations; use drawing tools to construct congruent figures	MM Journal SL	Class discussion, independent activity, partner activities, individualized activities	Brainstorming & SRB referencing; construct figures with rulers & protractors; strategy sharing; journal work; use geoboards to make shapes; use pentominoes to explore isometry; computers
		4.2: A2,3,4,6,7, B1,2 4.5: C6, F4,5	5.7 Construct figures with a compass and straightedge	MM Journal SL	Class discussion & activity, independent activity, individualized activities	Teacher-directed lesson and student manipulation of drawing tools; journal work; extra practice worksheet; Poetry reading on triangles
		4.2: A1, 3,4, B2, D1, E2	5.8 Copy angles and construct perpendicular bisectors; solve construction problems	MM Journal SL	Class discussion & activity, independent activity, individualized activities	SRB reading and exploration; student strategizing and teacher modeling; solve construction problems in journal; Extra practice worksheets; computers
		4.2: A1, D1, E2 4.3: C1,2 4.5: B1,2,4, C1,2,4, D1,2, E1,2, F1	5.9 Explore relationships between angles formed by parallel lines cut by a transversal; find missing measures of angles	MM Journal SL	Class discussion, independent activity, partner activities, individualized activities	Discovery-based lesson followed by teacher modeling; journal practice; find parallel line segments in newspapers or magazines; play Polygon Capture

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		4.2 A1,2,6,7, D1,2, E2 4.3: C1,2 4.5: B4, F4	5.10 Explore relationships between angles of parallelograms; to construct a parallelogram with a compass and straightedge	MM Journal SL	Class discussion & group activity, independent activity, partner activities, individualized activities	Teacher-directed lesson; journal practice; use geoboards to explore properties of parallelograms; computers and games
		4.1: A1 4.5: B4,5, D1,2	5.11 Review and assess students' progress on the material covered in Unit 5	Unit Test Oral/Slate Portfolio	Whole-class discussion & activity, independent activities	Slate board and written test activity; games and computers