

Mathematics grade 6

Curriculum Writers: Mark Aubin, Julie Abbruzzi, and Gregory Simkins

STANDARDS GLEs	Applied Learning Stand. SIP	OUTCOMES/BENCHMARKS Barrington Public Schools (NECAP GLE/GLE)	RESEARCH-BASED INSTRUCTIONAL STRATEGIES	RESOURCES	RESEARCH-BASED ASSESSMENT EVIDENCE
<p>CONTENT STRANDS</p> <ul style="list-style-type: none"> • Number and Operations • Geometry and Measurement • Functions and Algebra • Data, Statistics, and Probability <p>PROCESS STRANDS</p> <ul style="list-style-type: none"> • Problem-solving, Reasoning, and Proof • Communication, Connections, Representa- 		<p>NECAP GRADE LEVEL EXPECTATIONS</p> <p>All of the concepts and skills identified at a given grade level are "fair game" for large scale assessment purposes if indicated by (state assessment, grade...).</p> <p>Each GLE includes three parts:</p> <ul style="list-style-type: none"> • A statement in bold, called the "stem" is at the beginning of each GLE. Each "stem" is the same or similar across the grades for a given GLE, and is meant to communicate the main curriculum and instructional focus of the GLE across the grades. • The unbolded text within a GLE indicates how the GLE is specified at a given grade level. There are often several indicators for each GLE stem. Each indicator is coded and indicated fair game for "state" or "local" assessment • Differences between adjacent grades are <u>underlined</u>. Sometimes nothing is underlined within a GLE. In these situations, differences in adjacent grades "assumes increasing text complexity" and is noted for those GLE. • Each GLE is coded for the content area, the grade level, the GLE "stem" number, and specific indicator for that GLE stem, (e.g. N&O - 5-6.2) means N & O (numbers 	<p>DISTRICT INITIATIVES & RESEARCH</p> <p>The teacher Employs strategies of "best practice" (student-centered, experiential, holistic, authentic, expressive, reflective, social, collaborative, democratic, cognitive, developmental, constructivist/heuristic, and challenging)</p> <p>Facilitates the integration of Applied Learning Standards (SCANS)</p> <ul style="list-style-type: none"> • critical thinking • problem solving • research • communication • reflection and evaluation <p>Applies Principles of Learning (POL) ©</p> <ul style="list-style-type: none"> • organizing for effort • clear expectations • fair and credible evaluations • recognition of accomplishment • academic rigor • accountable talk • socializing intelligence' • self-management of learning • learning as apprenticeship <p>Applies Principles of Disciplinary Literacy</p> <p>Differentiates instruction by varying the content, process, and product and implementing</p> <ul style="list-style-type: none"> ▪ tiered assignments ▪ jigsawing ▪ pre/post assessments ▪ anchoring ▪ think/pair/share ▪ cubing, etc. <p>Analyzes pre-assessment to direct instruction</p> <p>Provides exemplars and rubrics</p> <p>Addresses multiple intelligences and brain</p>	<p>Textbook <i>Everyday Mathematics: Course 6</i></p> <p>Supplementary books</p> <p>Technology</p> <ul style="list-style-type: none"> • Scientific calculator • Overhead scientific calculator • Computer lab • www.glencoe.com • www.ridoe.net • www.ridoe.net/instruction/curriculum • NECAP Release tasks • NECompact.org • BMS website (Share Point) <p>Materials</p> <ul style="list-style-type: none"> • Unifix cubes • Rulers (metric), protractors • Scissors, glue • EVERYDAY Mathematics geometry template • EDM games • grid paper <p>School library resources</p> <ul style="list-style-type: none"> • <i>Classroom Instruction That Works</i>, Marzano <p>Community</p>	<p>REQUIRED</p> <p>REQUIRED PROBLEMS</p> <p>COMMON LOCAL ASSESSMENTS</p> <ul style="list-style-type: none"> • MID-TERM EXAM • FINAL EXAM • QUARTERLY <p>CHAPTER TESTS BASED ON EVERYDAY MATHEMATICS COURSE 6</p> <p>SUGGESTED Anecdotal records (e.g. defends student generated conjectures in class)</p> <p>Conferencing</p> <p>Exhibits</p> <p>Interviews</p> <p>Journals/notebooks</p> <p>Graphic organizers and/or visual imagery</p> <p>Journals</p> <p>Multiple Intelligences assessments e.g.</p> <ul style="list-style-type: none"> • role playing, short plays (bodily kinesthetic) • graphic organizing, sketch journals/ cartooning (visual) • collaboration/ conferencing interpersonal • songs, lyrics (musical) <p>Oral presentations</p> <p>Portfolio (samples of process and products)</p> <p>Performance/problem-based tasks</p>

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<p>tions</p>		<p>and operations), 5 (grade 5), 6 (6th GLE stem), 2 (the second specific indicator for the 6th GLE stem).</p> <p>If an outcome does not have a GLE number, it indicates this is an additional expectation for Barrington Public Schools.</p> <p>Outcomes and Benchmarks are indicated for all MATHEMATICS GLEs/standards and are secured for this grade level unless indicated with a B for beginning or a D for developing.</p> <p>The instructional strategies, resources, and assessments to the right are a reference list of possible ways to teach and measure the outcomes/benchmarks. One, some, or all of these may be used for specific outcomes/benchmarks. The lists reflect research-based instructional strategies and assessments, and all of the district initiatives. Required district-wide assessments that includes common local assessments (REQUIRED PROBLEMS, mid-term/final exams, quarterly tests), are indicated and it is the expectation they will be used for all outcomes/benchmarks</p> <p>When an instructional strategy, resource, or assessment is specific to an outcome/benchmark, it may be listed next to the benchmark.</p>	<p>dominance (spatial, bodily kinesthetic, musical, linguistic, intrapersonal, interpersonal, mathematical/logical, and naturalist)</p> <p>Organizes exhibition of student work with rubrics</p> <p>Collaborates with specialist to differentiate instruction for ALL The student</p> <p>MATHEMATICS STRATEGIES</p> <p>Employs Mathematics best practice strategies e.g.</p> <ul style="list-style-type: none"> • using manipulatives • facilitating cooperative group work • discussing mathematics • questioning and making conjectures • justifying of thinking • constructing written responses defending the student's mathematics • facilitating problem solving approach to instruction • integrating content with other core subjects • using appropriate technology • using frequent assessment to modify instruction • modeling functions of the scientific calculator 		<p>Rubrics</p> <p>Tests and quizzes</p>

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<p>1. NUMBER and OPERATIONS</p> <p>1.1 Rational numbers</p>		<p>The student</p> <p>1.1.1 Demonstrates conceptual understanding of rational numbers with respect to</p> <ul style="list-style-type: none"> ratios (comparison of two whole numbers by division a/b, $a:b$, and $a \div b$, where $b \neq 0$) <ul style="list-style-type: none"> rational numbers proportions and rates (e.g., a out of b, 25%) using modeling, explanations, or other representations. M(N&O)-6-1 (state assessment) <p>1.1.2 Applies the conventions of order of operations</p> <p>1.1.3 Understands, uses, applies appropriate technology to solve problems</p> <p>1.1.4 REQUIRED PROBLEMS</p> <ul style="list-style-type: none"> Ratios #1 Ratios (part to part) #2 Part to Whole #3 	<p>Teacher may model and/or facilitate the following strategies (also see pages 1-2)</p> <p>Mathematics best practice e.g.</p> <ul style="list-style-type: none"> using manipulatives facilitating cooperative group work discussing mathematics questioning and making conjectures justifying of thinking constructing written responses defending the student's mathematics facilitating problem solving approach to instruction integrating content with other core subjects using appropriate technology using frequent assessment to modify instruction modeling functions of the scientific calculator <ul style="list-style-type: none"> Differentiated instruction by varying the content, process, and product and implementing <ul style="list-style-type: none"> tiered assignments jigsawing pre/post assessments anchoring think/pair/share 	<p>Resources, also see pages 1-2</p> <p><u>Textbook</u> <i>Everyday Mathematics: Course 6</i></p> <p><u>Supplementary books</u></p> <p><u>Technology</u></p> <ul style="list-style-type: none"> Scientific calculator Overhead scientific calculator Computer lab www.glencoe.com www.ridoe.net www.ridoe.net/instruction/curriculum NECAP Release tasks NECompact.org BMS website (Share Point) <p><u>Materials</u></p> <ul style="list-style-type: none"> Unifix cubes Rulers (metric), protractors Scissors, glue EVERYDAY Mathematics geometry template EDM games grid paper <p><u>School library resources</u></p> <ul style="list-style-type: none"> <i>Classroom Instruction That Works</i>, Marzano <p><u>Community</u></p>	<p>Assessments/evidence, also see pages 1-2</p> <p>REQUIRED ASSESSMENTS REQUIRED PROBLEMS COMMON ASSESSMENTS</p> <ul style="list-style-type: none"> MID-TERM EXAM FINAL EXAM QUARTERLY <p>CHAPTER TESTS BASED ON EVERYDAY MATHEMATICS COURSE 6</p> <p>SUGGESTED ASSESSMENTS Anecdotal record (e.g. defends student generated conjectures in class)</p> <p>Conferencing</p> <p>Journals/notebooks</p> <p>Oral presentation</p> <p>Portfolio (samples of process and products)</p> <p>Rubrics</p> <p>Tests/ quizzes</p> <p>Visual representation (e.g.</p>

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			<ul style="list-style-type: none"> cubing, etc. 		Power Point™)
1. NUMBER and OPERATIONS 1.2 Relative magnitude		<p>The student</p> <p>1.2.1 Demonstrates understanding of the relative magnitude of numbers by</p> <ul style="list-style-type: none"> ordering or comparing numbers with whole number bases and whole number exponents (e.g., 3^3, 4^3) <ul style="list-style-type: none"> scientific notations <ul style="list-style-type: none"> negative exponents (B) (N&O)-9-2 exponential notation integers rational numbers within and across number formats <ul style="list-style-type: none"> fractions decimals whole number percents from 1-100 <p>using number lines or equality and inequality symbols M(N&O)-6-2 (state assessment)</p> <ul style="list-style-type: none"> less than < greater than > less than or equal to ≤ greater than or equal to ≥ equal = not equal ≠ <p>1.2.2 Applies the conventions of order of operations</p> <p>1.2.3 Understands, uses, applies appropriate technology</p>	<p>Teacher may model and/or facilitate the following strategies (also see pages 1-2)</p> <p>Mathematics best practice e.g.</p> <ul style="list-style-type: none"> using manipulatives facilitating cooperative group work discussing mathematics questioning and making conjectures justifying of thinking constructing written responses defending the student's mathematics facilitating problem solving approach to instruction integrating content with other core subjects using appropriate technology using frequent assessment to modify instruction modeling functions of the scientific calculator <ul style="list-style-type: none"> Differentiated instruction by varying the content, process, and product and 	<p>Resources, also see pages 1-2</p> <p><u>Textbook</u> <i>Everyday Mathematics: Course 6</i></p> <p><u>Supplementary books</u></p> <p><u>Technology</u></p> <ul style="list-style-type: none"> Scientific calculator Overhead scientific calculator Computer lab www.glencoe.com www.ridoe.net www.ridoe.net/instruction/curriculum NECAP Release tasks NECompact.org BMS website (Share Point) <p><u>Materials</u></p> <ul style="list-style-type: none"> Unifix cubes Rulers (metric), protractors Scissors, glue EVERYDAY Mathematics geometry template EDM games grid paper <p><u>School library resources</u></p> <ul style="list-style-type: none"> Classroom Instruction 	<p>Assessments/evidence, also see pages 1-2</p> <p>REQUIRED ASSESSMENTS REQUIRED PROBLEMS COMMON ASSESSMENTS</p> <ul style="list-style-type: none"> MID-TERM EXAM FINAL EXAM QUARTERLY <p>CHAPTER TESTS BASED ON EVERYDAY MATHEMATICS COURSE 6</p> <p>SUGGESTED ASSESSMENTS Anecdotal record (e.g. defends student generated conjectures in class)</p> <p>Conferencing</p> <p>Journals/notebooks</p> <p>Oral presentation</p> <p>Portfolio (samples of process and products)</p>

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		<p>to solve problems</p> <p>1.2.4 REQUIRED PROBLEMS</p> <ul style="list-style-type: none"> Number Line 	<p>implementing</p> <ul style="list-style-type: none"> tiered assignments jigsawing pre/post assessments anchoring think/pair/share cubing, etc. 	<p><i>That Works, Marzano</i></p> <p><u>Community</u></p>	<p>Rubrics</p> <p>Tests/ quizzes</p> <p>Visual representation (e.g. Power Point™)</p>
<p>1. NUMBER and OPERATIONS</p> <p>1.3 Operations</p>		<p>The student</p> <p>1.3.1 Demonstrates conceptual understanding of mathematical operations by</p> <ul style="list-style-type: none"> adding and subtracting <u>positive fractions and integers</u> <u>multiplying and dividing fractions and decimals</u>. M(N&O)-6-3 <p>1.3.2 Applies the conventions of order of operations.</p> <p>1.3.3 Understands, uses, applies appropriate technology to solve problems.</p>	<p>Teacher may model and/or facilitate the following strategies (also see pages 1-2)</p> <p>Mathematics best practice e.g.</p> <ul style="list-style-type: none"> using manipulatives facilitating cooperative group work discussing mathematics questioning and making conjectures justifying of thinking constructing written responses defending the student's mathematics facilitating problem solving approach to instruction integrating content with other core subjects using appropriate technology using frequent assessment to modify instruction modeling functions of the scientific calculator <ul style="list-style-type: none"> Differentiated instruction 	<p>Resources, also see pages 1-2</p> <p><u>Textbook</u> <i>Everyday Mathematics: Course 6</i></p> <p><u>Supplementary books</u></p> <p><u>Technology</u></p> <ul style="list-style-type: none"> Scientific calculator Overhead scientific calculator Computer lab www.glencoe.com www.ridoe.net www.ride.ri.gov/instruction/curriculum NECAP Release tasks NECompact.org BMS website (Share Point) <p><u>Materials</u></p> <ul style="list-style-type: none"> Unifix cubes Rulers (metric), protractors Scissors, glue EVERYDAY Mathematics geometry template EDM games grid paper 	<p>Assessments/evidence, also see pages 1-2</p> <p>REQUIRED ASSESSMENTS</p> <p>REQUIRED PROBLEMS</p> <p>COMMON ASSESSMENTS</p> <ul style="list-style-type: none"> MID-TERM EXAM FINAL EXAM QUARTERLY <p>CHAPTER TESTS BASED ON EVERYDAY MATHEMATICS COURSE 6</p> <p>SUGGESTED ASSESSMENTS</p> <p>Anecdotal record (e.g. defends student generated conjectures in class)</p> <p>Conferencing</p> <p>Journals/notebooks</p> <p>Oral presentation</p>

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			by varying the content, process, and product and implementing <ul style="list-style-type: none"> ▪ tiered assignments ▪ jigsawing ▪ pre/post assessments ▪ anchoring ▪ think/pair/share ▪ cubing, etc. 	<u>School library resources</u> <ul style="list-style-type: none"> • <i>Classroom Instruction That Works</i>, Marzano <u>Community</u>	Portfolio (samples of process and products) Rubrics Tests/ quizzes Visual representation (e.g. Power Point™)
1. NUMBER and OPERATIONS 1.4 Mathematical operations		<p>The student</p> <p>1.4.1 Demonstrates conceptual understanding of mathematical operations by</p> <ul style="list-style-type: none"> • <u>describing or illustrating the meaning of a power</u> • <u>representing the relationship between the base (whole number) and the exponent (whole number) (e.g., 33, 43);</u> • <u>and the effect on the magnitude of a whole number when multiplying or dividing it by</u> <ul style="list-style-type: none"> ○ <u>a whole number</u> ○ <u>decimal</u> ○ <u>fractions</u> ○ <u>whole number percents from 1-100</u> <p>M(N&O)-6-3 (state assessment)</p> <p>1.4.2 Applies the conventions of order of operations</p> <p>1.4.3 Understands, uses, applies appropriate technology to solve problems</p>	<p>Teacher may model and/or facilitate the following strategies (also see pages 1-2)</p> <p>Mathematics best practice e.g.</p> <ul style="list-style-type: none"> • using manipulatives • facilitating cooperative group work • discussing mathematics • questioning and making conjectures • justifying of thinking • constructing written responses defending the student's mathematics • facilitating problem solving approach to instruction • integrating content with other core subjects • using appropriate technology • using frequent assessment to modify instruction • modeling functions of the scientific calculator 	<p>Resources, also see pages 1-2</p> <p><u>Textbook</u> <i>Everyday Mathematics: Course 6</i></p> <p><u>Supplementary books</u></p> <p><u>Technology</u></p> <ul style="list-style-type: none"> • Scientific calculator • Overhead scientific calculator • Computer lab • www.glencoe.com • www.ridoe.net • www.ridoe.ri.gov/instruction/curriculum • NECAP Release tasks • NECompact.org • BMS website (Share Point) <p><u>Materials</u></p> <ul style="list-style-type: none"> • Unifix cubes • Rulers (metric), protractors • Scissors, glue • EVERYDAY Mathematics 	<p>Assessments/evidence, also see pages 1-2</p> <p>REQUIRED ASSESSMENTS REQUIRED PROBLEMS COMMON ASSESSMENTS</p> <ul style="list-style-type: none"> • MID-TERM EXAM • FINAL EXAM • QUARTERLY <p>CHAPTER TESTS BASED ON EVERYDAY MATHEMATICS COURSE 6</p> <p>SUGGESTED ASSESSMENTS Anecdotal record (e.g. defends student generated conjectures in class)</p> <p>Conferencing</p> <p>Journals/notebooks Oral presentation</p>

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		<p>1.4.4 REQUIRED PROBLEMS</p> <ul style="list-style-type: none"> Start to End #5 	<ul style="list-style-type: none"> Differentiated instruction by varying the content, process, and product and implementing <ul style="list-style-type: none"> tiered assignments jigsawing pre/post assessments anchoring think/pair/share cubing, etc. 	<ul style="list-style-type: none"> geometry template EDM games grid paper <p><u>School library resources</u></p> <ul style="list-style-type: none"> <i>Classroom Instruction That Works</i>, Marzano <p><u>Community</u></p>	<p>Portfolio (samples of process and products)</p> <p>Rubrics</p> <p>Tests/ quizzes</p> <p>Visual representation (e.g. Power Point™)</p>
<p>1. NUMBER and OPERATIONS</p> <p>1.5 Solve problems</p>		<p>The student</p> <p>1.5.1 Accurately solves problems involving</p> <ul style="list-style-type: none"> single or multiple operations on <ul style="list-style-type: none"> fractions (proper, improper, and mixed) decimals addition or subtraction of integers percent of a whole or problems involving greatest common factor or least common multiple. M(N&O)-6-4 <p>1.5.2 Applies the conventions of order of operations</p> <p>1.5.2 Understands, uses, applies appropriate technology to solve problem</p> <p>1.5.4 REQUIRED PROBLEMS</p> <ul style="list-style-type: none"> Lemonade #6 	<p>Teacher may model and/or facilitate the following strategies (also see pages 1-2)</p> <p>Mathematics best practice e.g.</p> <ul style="list-style-type: none"> using manipulatives facilitating cooperative group work discussing mathematics questioning and making conjectures justifying of thinking constructing written responses defending the student's mathematics facilitating problem solving approach to instruction integrating content with other core subjects using appropriate technology using frequent assessment to modify instruction 	<p>Resources, also see pages 1-2</p> <p><u>Textbook</u></p> <p><i>Everyday Mathematics: Course 6</i></p> <p><u>Supplementary books</u></p> <p><u>Technology</u></p> <ul style="list-style-type: none"> Scientific calculator Overhead scientific calculator Computer lab www.glencoe.com www.ridoe.net www.ridoe.net/instruction/curriculum NECAP Release tasks NECompact.org BMS website (Share Point) <p><u>Materials</u></p> <ul style="list-style-type: none"> Unifix cubes Rulers (metric), protractors Scissors, glue 	<p>Assessments/evidence, also see pages 1-2</p> <p>REQUIRED ASSESSMENTS</p> <p>REQUIRED PROBLEMS</p> <p>COMMON ASSESSMENTS</p> <ul style="list-style-type: none"> MID-TERM EXAM FINAL EXAM QUARTERLY <p>CHAPTER TESTS BASED ON EVERYDAY MATHEMATICS COURSE 6</p> <p>SUGGESTED ASSESSMENTS</p> <p>Anecdotal record (e.g. defends student generated conjectures in class)</p> <p>Conferencing</p>

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			<ul style="list-style-type: none"> modeling functions of the scientific calculator Differentiated instruction by varying the content, process, and product and implementing <ul style="list-style-type: none"> tiered assignments jigsawing pre/post assessments anchoring think/pair/share cubing, etc. 	<ul style="list-style-type: none"> EVERYDAY Mathematics geometry template EDM games grid paper <p><u>School library resources</u></p> <ul style="list-style-type: none"> Classroom Instruction That Works, Marzano <p><u>Community</u></p>	<p>Journals/notebooks</p> <p>Oral presentation</p> <p>Portfolio (samples of process and products)</p> <p>Rubrics</p> <p>Tests/ quizzes</p> <p>Visual representation (e.g. Power Point™)</p>
<p>1. NUMBER and OPERATIONS</p> <p>1.6 Estimates</p>		<p>The student</p> <p>1.6.1 Makes estimates in a given situation by</p> <ul style="list-style-type: none"> identifying when estimation is appropriate, selecting the appropriate method of estimation determining the level of accuracy needed given the situation analyzing the effect of the estimation method on the accuracy of results, and evaluating the reasonableness of solutions appropriate to <u>grade level GLEs</u> across content strands M(N&O)-6-7 (state assessment) <p>(IMPORTANT: <i>The intent of this GLE is to embed estimation throughout the instructional program, not to teach it as a separate unit.</i>)</p>	<p>Teacher may model and/or facilitate the following strategies (also see pages 1-2)</p> <p>Mathematics best practice e.g.</p> <ul style="list-style-type: none"> using manipulatives facilitating cooperative group work discussing mathematics questioning and making conjectures justifying of thinking constructing written responses defending the student's mathematics facilitating problem solving approach to instruction integrating content with other core subjects using appropriate technology 	<p>Resources, also see pages 1-2</p> <p><u>Textbook</u></p> <p>Everyday Mathematics: Course 6</p> <p><u>Supplementary books</u></p> <p><u>Technology</u></p> <ul style="list-style-type: none"> Scientific calculator Overhead scientific calculator Computer lab www.glencoe.com www.ridoe.net www.ridoe.ri.gov/instruction/curriculum NECAP Release tasks NECompact.org BMS website (Share Point) EDM games grid paper 	<p>Assessments/evidence, also see pages 1-2</p> <p>REQUIRED ASSESSMENTS</p> <p>REQUIRED PROBLEMS</p> <p>COMMON ASSESSMENTS</p> <ul style="list-style-type: none"> MID-TERM EXAM FINAL EXAM QUARTERLY <p>CHAPTER TESTS BASED ON EVERYDAY MATHEMATICS COURSE 6</p> <p>SUGGESTED ASSESSMENTS</p> <p>Anecdotal record (e.g. defends student generated conjectures in class)</p>

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		<p>1.6.2 Applies the conventions of order of operations</p> <p>1.6.3 Understands, uses, applies appropriate technology to solve problems</p> <p>1.6.4 REQUIRED PROBLEMS</p> <ul style="list-style-type: none"> Start to End #5 	<ul style="list-style-type: none"> using frequent assessment to modify instruction modeling functions of the scientific calculator Differentiated instruction by varying the content, process, and product and implementing <ul style="list-style-type: none"> tiered assignments jigsawing pre/post assessments anchoring think/pair/share cubing, etc. 	<p><u>Materials</u></p> <ul style="list-style-type: none"> Unifix cubes Rulers (metric), protractors Scissors, glue EVERYDAY Mathematics geometry template EDM games <p><u>School library resources</u></p> <ul style="list-style-type: none"> Classroom Instruction That Works, Marzano <p><u>Community</u></p>	<p>Conferencing</p> <p>Journals/notebooks</p> <p>Oral presentation</p> <p>Portfolio (samples of process and products)</p> <p>Tests/ quizzes</p> <p>Visual representation (e.g. Power Point™)</p>
<p>1. NUMBER and OPERATIONS</p> <p>1.7 Properties of numbers</p>		<p>The student</p> <p>1.7.1 Applies properties of numbers</p> <ul style="list-style-type: none"> odd/even remainders divisibility prime factorization field properties <ul style="list-style-type: none"> commutative associative identity <ul style="list-style-type: none"> additive identity multiplicative identity e.g., $1 = 2/2$ and $2/2 \times \frac{3}{4} = 6/8$, so $\frac{3}{4} = 6/8$ distributive additive inverse 	<p>Teacher may model and/or facilitate the following strategies (also see pages 1-2)</p> <p>Mathematics best practice e.g.</p> <ul style="list-style-type: none"> using manipulatives facilitating cooperative group work discussing mathematics questioning and making conjectures justifying of thinking constructing written responses defending the student's mathematics facilitating problem solving approach to instruction integrating content with 	<p>Resources, also see pages 1-2</p> <p><u>Textbook</u></p> <p>Everyday Mathematics: Course 6</p> <p><u>Supplementary books</u></p> <p><u>Technology</u></p> <ul style="list-style-type: none"> Scientific calculator Overhead scientific calculator Computer lab www.glencoe.com www.ridoe.net www.ridoe.net/instruction/curriculum NECAP Release tasks NECompact.org BMS website (Share Point) 	<p>Assessments/evidence, also see pages 1-2</p> <p>REQUIRED ASSESSMENTS</p> <p>REQUIRED PROBLEMS</p> <p>COMMON ASSESSMENTS</p> <ul style="list-style-type: none"> MID-TERM EXAM FINAL EXAM QUARTERLY <p>CHAPTER TESTS BASED ON EVERYDAY MATHEMATICS COURSE 6</p> <p>SUGGESTED ASSESSMENTS</p> <p>Anecdotal record (e.g. defends student generated conjectures)</p>

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STANDARDS GLEs	Applied Learning Stand. SIP	OUTCOMES/BENCHMARKS Barrington Public Schools (NECAP GLE/GLE)	RESEARCH-BASED INSTRUCTIONAL STRATEGIES	RESOURCES	RESEARCH-BASED ASSESSMENT EVIDENCE
		<p>to solve problems and to simplify computations. M(N&O)-6-8</p> <p>1.7.2 Applies the conventions of order of operations</p> <p>1.7.3 Understands, uses, applies appropriate technology to solve problems</p> <p>1.7.4 REQUIRED PROBLEMS</p> <ul style="list-style-type: none"> Start to End #5 	<p>other core subjects</p> <ul style="list-style-type: none"> using appropriate technology using frequent assessment to modify instruction modeling functions of the scientific calculator <p>Differentiated instruction by varying the content, process, and product and implementing</p> <ul style="list-style-type: none"> tiered assignments jigsawing pre/post assessments anchoring think/pair/share cubing, etc. 	<p><u>Materials</u></p> <ul style="list-style-type: none"> Unifix cubes Rulers (metric), protractors Scissors, glue EVERYDAY Mathematics geometry template EDM games grid paper <p><u>School library resources</u></p> <ul style="list-style-type: none"> Classroom Instruction That Works, Marzano <p><u>Community</u></p>	<p>in class)</p> <p>Conferencing</p> <p>Journals/notebooks</p> <p>Oral presentation</p> <p>Portfolio (samples of process and products)</p> <p>Tests/ quizzes</p> <p>Visual representation (e.g. Power Point™)</p>
<p>2. GEOMETRY AND MEASUREMENT</p> <p>2.1 Angle relationships</p>		<p>The student</p> <p>2.1.1 Uses properties or attributes of</p> <ul style="list-style-type: none"> angles <ul style="list-style-type: none"> right acute obtuse sides <ul style="list-style-type: none"> number of congruent sides (\cong) parallelism (\parallel) perpendicularity (\perp) <p>to identify, describe, classify, or distinguish among different types of</p> <ul style="list-style-type: none"> triangles <ul style="list-style-type: none"> right 	<p>Teacher may model and/or facilitate the following strategies (also see pages 1-2)</p> <p>Mathematics best practice e.g.</p> <ul style="list-style-type: none"> using manipulatives facilitating cooperative group work discussing mathematics questioning and making conjectures justifying of thinking constructing written responses defending the student's mathematics facilitating problem solving 	<p>Resources, also see pages 1-2</p> <p><u>Textbook</u></p> <p>Everyday Mathematics: Course 6</p> <p><u>Supplementary books</u></p> <p><u>Technology</u></p> <ul style="list-style-type: none"> Scientific calculator Overhead scientific calculator Computer lab www.glencoe.com www.ridoe.net www.ridoe.net/instruction/curriculum NECAP Release tasks NECompact.org 	<p>Assessments/evidence, also see pages 1-2</p> <p>REQUIRED ASSESSMENTS</p> <p>REQUIRED PROBLEMS</p> <p>COMMON ASSESSMENTS</p> <ul style="list-style-type: none"> MID-TERM EXAM FINAL EXAM QUARTERLY <p>CHAPTER TESTS BASED ON EVERYDAY MATHEMATICS COURSE 6</p>

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		<ul style="list-style-type: none"> ○ acute ○ obtuse ○ equiangular ○ <u>scalene</u> ○ <u>isosceles</u> ○ equilateral • quadrilaterals <ul style="list-style-type: none"> ○ rectangles ○ squares ○ rhombi ○ trapezoids ○ parallelograms. M(G&M)-6-1 (state assessment) <p>2.1.2 Applies the conventions of order of operations</p> <p>2.1.3 Understands, uses, applies appropriate technology to solve problems</p> <p>2.1.4 REQUIRED PROBLEMS</p> <ul style="list-style-type: none"> • Investigating Quadrilaterals #7 	<p>approach to instruction</p> <ul style="list-style-type: none"> • integrating content with other core subjects • using appropriate technology • using frequent assessment to modify instruction • modeling functions of the scientific calculator • Differentiated instruction by varying the content, process, and product and implementing <ul style="list-style-type: none"> ▪ tiered assignments ▪ jigsawing ▪ pre/post assessments ▪ anchoring ▪ think/pair/share ▪ cubing, etc. 	<ul style="list-style-type: none"> • BMS website (Share Point) <p><u>Materials</u></p> <ul style="list-style-type: none"> • Unifix cubes • 3D-solids • Rulers (metric), protractors, compass • Scissors, glue • EDM geometry template • EDM games • grid paper <p><u>School library resources</u></p> <ul style="list-style-type: none"> • Classroom Instruction That Works, Marzano <p><u>Community</u></p>	<p>SUGGESTED ASSESSMENTS</p> <p>Anecdotal record (e.g. defends student generated conjectures in class)</p> <p>Conferencing</p> <p>Journals/notebooks</p> <p>Oral presentation</p> <p>Portfolio (samples of process and products)</p> <p>Tests/ quizzes</p> <p>Visual representation (e.g. Power Point™)</p>
<p>2. GEOMETRY AND MEASUREMENT</p> <p>2.2 Properties of attributes</p>		<p>The student</p> <p>2.2.1 Uses properties or attributes</p> <ul style="list-style-type: none"> • shape of bases, • number of lateral faces, • number of bases, • <u>number of edges</u> • <u>number of vertices</u> <p>to identify, compare, or describe three-dimensional shapes</p>	<p>Teacher may model and/or facilitate the following strategies (also see pages 1-2)</p> <p>Mathematics best practice e.g.</p> <ul style="list-style-type: none"> • using manipulatives • facilitating cooperative group work • discussing mathematics • questioning and making conjectures 	<p>Resources, also see pages 1-2</p> <p><u>Textbook</u></p> <p>Everyday Mathematics: Course 6</p> <p><u>Supplementary books</u></p> <p><u>Technology</u></p> <ul style="list-style-type: none"> • Scientific calculator • Overhead scientific calculator 	<p>Assessments/evidence, also see pages 1-2</p> <p>REQUIRED ASSESSMENTS</p> <p>REQUIRED PROBLEMS</p> <p>COMMON ASSESSMENTS</p> <ul style="list-style-type: none"> • MID-TERM EXAM • FINAL EXAM • QUARTERLY

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		<ul style="list-style-type: none"> • rectangular prisms • triangular prisms • cylinders • spheres • pyramids • cones. M(G&M)-6-3 (state assessment) <p>2.2.2 Applies the conventions of order of operations</p> <p>2.2.3 Understands, uses, applies appropriate technology to solve problems</p> <p>2.2.4 REQUIRED PROBLEMS</p> <ul style="list-style-type: none"> • Three-dimensional Shapes #8 	<ul style="list-style-type: none"> • justifying of thinking • constructing written responses defending the student's mathematics • facilitating problem solving approach to instruction • integrating content with other core subjects • using appropriate technology • using frequent assessment to modify instruction • modeling functions of the scientific calculator • Differentiated instruction by varying the content, process, and product and implementing <ul style="list-style-type: none"> ▪ tiered assignments ▪ jigsawing ▪ pre/post assessments ▪ anchoring ▪ think/pair/share ▪ cubing, etc. 	<ul style="list-style-type: none"> • Computer lab • www.glencoe.com • www.ridoe.net • www.ride.ri.gov/instruction/curriculum • NECAP Release tasks • NECompact.org • BMS website (Share Point) <p>Materials</p> <ul style="list-style-type: none"> • Unifix cubes • 3D-solids • Rulers (metric), protractors, compass • Scissors, glue • EDM geometry template • EDM games • grid paper <p>School library resources</p> <ul style="list-style-type: none"> • <i>Classroom Instruction That Works</i>, Marzano <p>Community</p>	<p>CHAPTER TESTS BASED ON EVERYDAY MATHEMATICS COURSE 6</p> <p>SUGGESTED ASSESSMENTS</p> <p>Anecdotal record (e.g. defends student generated conjectures in class)</p> <p>Conferencing</p> <p>Journals/notebooks</p> <p>Oral presentation</p> <p>Portfolio (samples of process and products)</p> <p>Tests/ quizzes</p> <p>Visual representation (e.g. Power Point™)</p>
<p>2 GEOMETRY AND MEASUREMENT</p> <p>2.3 Congruency</p>		<p>The student</p> <p>2.3.1 Demonstrates conceptual understanding of congruency by</p> <ul style="list-style-type: none"> • <u>predicting and describing the transformational steps</u> <ul style="list-style-type: none"> ○ <u>reflections</u> ○ <u>translations</u> 	<p>Teacher may model and/or facilitate the following strategies (also see pages 1-2)</p> <p>Mathematics best practice e.g.</p> <ul style="list-style-type: none"> • using manipulatives • facilitating cooperative group work • discussing mathematics 	<p>Resources, also see pages 1-2</p> <p>Textbook</p> <p><i>Everyday Mathematics: Course 6</i></p> <p>Supplementary books</p>	<p>Assessments/evidence, also see pages 1-2</p> <p>REQUIRED ASSESSMENTS</p> <p>REQUIRED PROBLEMS</p> <p>COMMON ASSESSMENTS</p> <ul style="list-style-type: none"> • MID-TERM EXAM • FINAL EXAM

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		<ul style="list-style-type: none"> ○ <u>rotations (including the degree of rotation) needed to show congruence</u> • <u>and as the result of composing and decomposing two- and three-dimensional objects using modeling or explanations</u> • and using line and rotational symmetry to demonstrate congruent parts within a shape M(G&M)-6-4 <p>2.3.2 Applies the conventions of order of operations</p> <p>2.3.3 Understands, uses, applies appropriate technology to solve problems</p> <p>2.3.4 REQUIRED PROBLEMS</p> <ul style="list-style-type: none"> • Composing and Decomposing Shapes #9 • Translate Figure #10 • The Translation Game #11 	<ul style="list-style-type: none"> • questioning and making conjectures • justifying of thinking • constructing written responses defending the student's mathematics • facilitating problem solving approach to instruction • integrating content with other core subjects • using appropriate technology • using frequent assessment to modify instruction • modeling functions of the scientific calculator • Differentiated instruction by varying the content, process, and product and implementing <ul style="list-style-type: none"> ▪ tiered assignments ▪ jigsawing ▪ pre/post assessments ▪ anchoring ▪ think/pair/share ▪ cubing, etc. 	<p>Technology</p> <ul style="list-style-type: none"> • Scientific calculator • Overhead scientific calculator • Computer lab • www.glencoe.com • www.ridoe.net • www.ridoe.net/instruction/curriculum • NECAP Release tasks • NECompact.org • BMS website (Share Point) <p>Materials</p> <ul style="list-style-type: none"> • Unifix cubes • 3D-solids • Rulers (metric), protractors, compass • Scissors, glue • EDM geometry template • EDM games • MIRA • Tangrams • grid paper <p>School library resources</p> <ul style="list-style-type: none"> • <i>Classroom Instruction That Works</i>, Marzano <p>Community</p>	<ul style="list-style-type: none"> • QUARTERLY <p>CHAPTER TESTS BASED ON EVERYDAY MATHEMATICS COURSE 6</p> <p>SUGGESTED ASSESSMENTS</p> <p>Anecdotal record (e.g. defends student generated conjectures in class)</p> <p>Conferencing</p> <p>Journals/notebooks</p> <p>Oral presentation</p> <p>Portfolio (samples of process and products)</p> <p>Tests/ quizzes</p> <p>Visual representation (e.g. Power Point™)</p>
<p>2. GEOMETRY AND MEASUREMENT</p> <p>2.4 Similarity</p>		<p>The student</p> <p>2.4.1 Demonstrates conceptual understanding of similarity (~) by</p> <ul style="list-style-type: none"> • describing the proportional effect on the linear dimensions of <u>polygons or circles</u> 	<p>Teacher may model and/or facilitate the following strategies (also see pages 1-2)</p> <p>Mathematics best practice e.g.</p> <ul style="list-style-type: none"> • using manipulatives • facilitating cooperative 	<p>Resources, also see pages 1-2</p> <p>Textbook</p> <p><i>Everyday Mathematics: Course 6</i></p>	<p>Assessments/evidence, also see pages 1-2</p> <p>REQUIRED ASSESSMENTS</p> <p>REQUIRED PROBLEMS</p>

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		<p>when scaling up or down while preserving the angles of polygons</p> <ul style="list-style-type: none"> solving related problems including applying scales on maps). Describes effects using modeling or^{sc} explanations. M(G&M)-6-5 (state assessment) <p>2.4.2 Express all measures using appropriate units. e.g. centimeters, degrees M(G&M)-6-6 (state assessment)</p> <p>2.4.3 Applies the conventions of order of operations</p> <p>2.4.4 Understands, uses, applies appropriate technology to solve problems</p> <p>2.4.5 REQUIRED PROBLEMS</p> <ul style="list-style-type: none"> Perimeter #12 Impact of Scaling on Circumference #13 	<p>group work</p> <ul style="list-style-type: none"> discussing mathematics questioning and making conjectures justifying of thinking constructing written responses defending the student's mathematics facilitating problem solving approach to instruction integrating content with other core subjects using appropriate technology using frequent assessment to modify instruction modeling functions of the scientific calculator <ul style="list-style-type: none"> Differentiated instruction by varying the content, process, and product and implementing <ul style="list-style-type: none"> tiered assignments jigsawing pre/post assessments anchoring think/pair/share cubing, etc. 	<p><u>Supplementary books</u></p> <ul style="list-style-type: none"> Technology <ul style="list-style-type: none"> Scientific calculator Overhead scientific calculator Computer lab www.glencoe.com www.ridoe.net www.ridoe.net/instruction/curriculum NECAP Release tasks NECompact.org BMS website (Share Point) Materials <ul style="list-style-type: none"> Unifix cubes 3D-solids Rulers (metric), protractors, compass Scissors, glue EDM geometry template EDM games grid paper <u>School library resources</u> <ul style="list-style-type: none"> <i>Classroom Instruction That Works</i>, Marzano <u>Community</u> 	<p>COMMON ASSESSMENTS</p> <ul style="list-style-type: none"> MID-TERM EXAM FINAL EXAM QUARTERLY <p>CHAPTER TESTS BASED ON EVERYDAY MATHEMATICS COURSE 6</p> <p>SUGGESTED ASSESSMENTS</p> <p>Anecdotal record (e.g. defends student generated conjectures in class)</p> <p>Conferencing</p> <p>Journals/notebooks</p> <p>Oral presentation</p> <p>Portfolio (samples of process and products)</p> <p>Tests/ quizzes</p> <p>Visual representation (e.g. Power Point™)</p>
<p>2. GEOMETRY AND MEASUREMENT</p> <p>2.5 Area of circles,</p>		<p>The student</p> <p>2.5.1 Demonstrate conceptual understanding of</p> <ul style="list-style-type: none"> perimeter of polygons, 	<p>Teacher may model and/or facilitate the following strategies (also see pages 1-2)</p> <p>Mathematics best practice e.g.</p>	<p>Resources, also see pages 1-2</p> <p><u>Textbook</u> <i>Everyday Mathematics:</i></p>	<p>Assessments/evidence, also see pages 1-2</p>

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perimeter of composite figures		<ul style="list-style-type: none"> • the area of <ul style="list-style-type: none"> ◦ <u>quadrilaterals</u> ◦ <u>triangles</u> • <u>and the volume of rectangular prisms</u> by using modeling, formulas, or <u>by solving problems</u> M(G&M)-6-6 (state assessment) <p>2.5.2 <u>Demonstrate understanding of the relationships of circle measures</u></p> <ul style="list-style-type: none"> • radius to diameter • diameter to circumference <p>by solving related problems. M(G&M)-6-6 (state assessment)</p> <p>2.5.3 Express all measures using appropriate units. <u>e.g. centimeters, degrees</u> M(G&M)-6-6 (state assessment)</p> <p>2.5.4 <u>Applies the conventions of order of operations</u></p> <p>2.5.5 <u>Understands, uses, applies appropriate technology to solve problems</u></p> <p>2.5.6 REQUIRED PROBLEMS</p> <ul style="list-style-type: none"> • Perimeter and Area • Perimeter 	<ul style="list-style-type: none"> • using manipulatives • facilitating cooperative group work • discussing mathematics • questioning and making conjectures • justifying of thinking • constructing written responses defending the student's mathematics • facilitating problem solving approach to instruction • integrating content with other core subjects • using appropriate technology • using frequent assessment to modify instruction • modeling functions of the scientific calculator • Differentiated instruction by varying the content, process, and product and implementing <ul style="list-style-type: none"> ▪ tiered assignments ▪ jigsawing ▪ pre/post assessments ▪ anchoring ▪ think/pair/share ▪ cubing, etc. 	<p><i>Course 6</i></p> <p><u>Supplementary books</u></p> <p><u>Technology</u></p> <ul style="list-style-type: none"> • Scientific calculator • Overhead scientific calculator • Computer lab • www.glencoe.com • www.ridoe.net • www.ridoe.net/instruction/curriculum • NECAP Release tasks • NECompact.org • BMS website (Share Point) <p><u>Materials</u></p> <ul style="list-style-type: none"> • Unifix cubes • 3D-solids • Rulers (metric), protractors, compass • Scissors, glue • EDM geometry template • EDM games • grid paper <p><u>School library resources</u></p> <ul style="list-style-type: none"> • <i>Classroom Instruction That Works</i>, Marzano <p><u>Community</u></p>	<p>REQUIRED ASSESSMENTS</p> <p>REQUIRED PROBLEMS</p> <p>COMMON ASSESSMENTS</p> <ul style="list-style-type: none"> • MID-TERM EXAM • FINAL EXAM • QUARTERLY <p>CHAPTER TESTS BASED ON EVERYDAY MATHEMATICS COURSE 6</p> <p>SUGGESTED ASSESSMENTS</p> <p>Anecdotal record (e.g. defends student generated conjectures in class)</p> <p>Conferencing</p> <p>Journals/notebooks</p> <p>Oral presentation</p> <p>Portfolio (samples of process and products)</p> <p>Tests/ quizzes</p> <p>Visual representation (e.g. Power Point™)</p>
2. GEOMETRY AND MEASUREMENT		The student	Teacher may model and/or facilitate the following	Resources, also see pages 1-2	Assessments/evidence, also see pages 1-2

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2.6 Measurement and conversions		<p>2.6.1 Measure and use units of measures appropriately and consistently. M(G&M)-6-7 (state assessment)</p> <ul style="list-style-type: none"> • Length <ul style="list-style-type: none"> ○ units (accuracy): inch (to 1/16); foot; centimeter (to 1/10 centimeter); meter (to 1/100 meter); yard; mile (use in scale and rate questions); kilometers (use in scale and rate questions) ○ equivalents: 12 inches in 1 foot; 100 centimeters in 1 meter; 3 feet in 1 yard; 36 inches in 1 yard; 10 millimeters in 1 centimeter; 1000 millimeters in 1 meter • Time <ul style="list-style-type: none"> ○ units (accuracy): hour (to 1 minute); day; year ○ equivalencies: 24 hours in 1 day; 7 days in 1 week; 365 days in 1 year; 60 seconds in 1 hour • Temperature <ul style="list-style-type: none"> ○ unit (accuracy): C° and F° (to 1 degree) • Capacity <ul style="list-style-type: none"> ○ unit (accuracy): quarts (to 1 ounce); gallon; pint; liter ○ equivalencies: 32 ounces in 1 quart; 4 quarts in a 1 gallon; 2 pints in 1 quart; 1000 millimeters in 1 liter • Mass <ul style="list-style-type: none"> ○ unit (accuracy): kilogram; gram (to 1/10 gram) 	<p>strategies (also see pages 1-2)</p> <p>Mathematics best practice e.g.</p> <ul style="list-style-type: none"> • using manipulatives • facilitating cooperative group work • discussing mathematics • questioning and making conjectures • justifying of thinking • constructing written responses defending the student's mathematics • facilitating problem solving approach to instruction • integrating content with other core subjects • using appropriate technology • using frequent assessment to modify instruction • modeling functions of the scientific calculator • Differentiated instruction by varying the content, process, and product and implementing <ul style="list-style-type: none"> ▪ tiered assignments ▪ jigsawing ▪ pre/post assessments ▪ anchoring ▪ think/pair/share ▪ cubing, etc. 	<p><u>Textbook</u> <i>Everyday Mathematics: Course 6</i></p> <p><u>Supplementary books</u></p> <p><u>Technology</u></p> <ul style="list-style-type: none"> • Scientific calculator • Overhead scientific calculator • Computer lab • www.glencoe.com • www.ridoe.net • www.ridoe.net/instruction/curriculum • NECAP Release tasks • NECompact.org • BMS website (Share Point) • grid paper <p><u>Materials</u></p> <ul style="list-style-type: none"> • Unifix cubes • 3D-solids • Rulers (metric), protractors, compass • Scissors, glue • EDM geometry template • EDM games <p><u>School library resources</u></p> <ul style="list-style-type: none"> • <i>Classroom Instruction That Works</i>, Marzano <p><u>Community</u></p>	<p>REQUIRED ASSESSMENTS REQUIRED PROBLEMS COMMON ASSESSMENTS</p> <ul style="list-style-type: none"> • MID-TERM EXAM • FINAL EXAM • QUARTERLY <p>CHAPTER TESTS BASED ON EVERYDAY MATHEMATICS COURSE 6</p> <p>SUGGESTED ASSESSMENTS Anecdotal record (e.g. defends student generated conjectures in class)</p> <p>Conferencing</p> <p>Journals/notebooks</p> <p>Oral presentation</p> <p>Portfolio (samples of process and products)</p> <p>Tests/ quizzes</p> <p>Visual representation (e.g. Power Point™)</p>

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		<ul style="list-style-type: none"> • Weight <ul style="list-style-type: none"> ○ unit (accuracy): pound (to 1 ounce) ○ equivalencies: 16 ounces in 1 pound • Angles and rotation <ul style="list-style-type: none"> ○ unit (accuracy): degree (to 2 degrees) ○ equivalencies: 360° in 1 circle; 90° in 1 right angle <p>2.6.2 Make conversions within systems when solving problems across the content strands. M(G&M)-6-7 (state assessment)</p> <p>2.6.3 Applies the conventions of order of operations</p> <p>2.6.4 Understands, uses, applies appropriate technology to solve problems</p> <p>2.6.5 REQUIRED PROBLEMS</p>			
<p>3. FUNCTIONS AND ALGEBRA</p> <p>3.1 Variety of patterns</p>		<p>The student</p> <p>3.1.1 Identifies and extends to specific cases a variety of patterns (linear and nonlinear) represented in modeling, tables, sequences, <u>graphs</u>, or in problem situations;</p> <ul style="list-style-type: none"> ▪ or writes a rule in words or symbols for finding specific cases of a linear relationship ▪ or writes a rule in words or^{sc} symbols for finding specific cases of a 	<p>Teacher may model and/or facilitate the following strategies (also see pages 1-2)</p> <p>Mathematics best practice e.g.</p> <ul style="list-style-type: none"> • using manipulatives • facilitating cooperative group work • discussing mathematics • questioning and making conjectures • justifying of thinking 	<p>Resources, also see pages 1-2</p> <p><u>Textbook</u> Everyday Mathematics: Course 6</p> <p><u>Supplementary books</u></p> <p><u>Technology</u></p> <ul style="list-style-type: none"> • Scientific calculator • Overhead scientific calculator • Computer lab 	<p>Assessments/evidence, also see pages 1-2</p> <p>REQUIRED ASSESSMENTS</p> <p>REQUIRED PROBLEMS</p> <p>COMMON ASSESSMENTS</p> <ul style="list-style-type: none"> • MID-TERM EXAM • FINAL EXAM • QUARTERLY <p>CHAPTER TESTS BASED ON</p>

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STANDARDS GLEs	Applied Learning Stand. SIP	OUTCOMES/BENCHMARKS Barrington Public Schools (NECAP GLE/GLE)	RESEARCH-BASED INSTRUCTIONAL STRATEGIES	RESOURCES	RESEARCH-BASED ASSESSMENT EVIDENCE
		<p>nonlinear relationship</p> <ul style="list-style-type: none"> ▪ and <u>writes an expression or^{sc}</u> ▪ <u>equation using words or^{sc}</u> ▪ <u>symbols</u> <p>to express the generalization of a linear relationship (e.g., twice the term number plus 1 or^{sc} $2n + 1$). M(F&A)-6-1 (state assessment)</p> <p>3.1.2 Applies the conventions of order of operations</p> <p>3.1.3 Understands, uses, applies appropriate technology to solve problems</p> <p>3.1.4 REQUIRED PROBLEMS</p> <ul style="list-style-type: none"> • Patterns #16 	<ul style="list-style-type: none"> • constructing written responses defending the student's mathematics • facilitating problem solving approach to instruction • integrating content with other core subjects • using appropriate technology • using frequent assessment to modify instruction • modeling functions of the scientific calculator • Differentiated instruction by varying the content, process, and product and implementing <ul style="list-style-type: none"> ▪ tiered assignments ▪ jigsawing ▪ pre/post assessments ▪ anchoring ▪ think/pair/share ▪ cubing, etc. 	<ul style="list-style-type: none"> • www.glencoe.com • www.ride.net • www.ride.ri.gov/instruction/curriculum • NECAP Release tasks • NECompact.org • BMS website (Share Point) <p>Materials</p> <ul style="list-style-type: none"> • Pattern tiles • Unifix cubes • Rulers (metric) • Scissors, glue • grid paper • algebra tiles/blocks • grid paper <p>School library resources</p> <ul style="list-style-type: none"> • <i>Classroom Instruction That Works</i>, Marzano <p>Community</p>	<p>EVERYDAY MATHEMATICS COURSE 6</p> <p>SUGGESTED ASSESSMENTS</p> <p>Anecdotal record (e.g. defends student generated conjectures in class)</p> <p>Conferencing</p> <p>Journals/notebooks</p> <p>Oral presentation</p> <p>Portfolio (samples of process and products)</p> <p>Tests/ quizzes</p> <p>Visual representation (e.g. Power Point™)</p>
<p>3. FUNCTIONS AND ALGEBRA</p> <p>3.2 Linear relationships</p>		<p>The student</p> <p>3.2.1 Accurately works with coordinate (Cartesian) Plane</p> <ul style="list-style-type: none"> • plot points • identify origin and four quadrants • read coordinates from graph <p>3.2.2 Describe the meaning of slope and intercept in</p>	<p>Teacher may model and/or facilitate the following strategies (also see pages 1-2)</p> <p>Mathematics best practice e.g.</p> <ul style="list-style-type: none"> • using manipulatives • facilitating cooperative group work • discussing mathematics • questioning and making 	<p>Resources, also see pages 1-2</p> <p>Textbook</p> <p><i>Everyday Mathematics: Course 6</i></p> <p>Supplementary books</p> <p>Technology</p> <ul style="list-style-type: none"> • Scientific calculator • Overhead scientific 	<p>Assessments/evidence, also see pages 1-2</p> <p>REQUIRED ASSESSMENTS</p> <p>REQUIRED PROBLEMS</p> <p>COMMON ASSESSMENTS</p> <ul style="list-style-type: none"> • MID-TERM EXAM • FINAL EXAM • QUARTERLY

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		<p>concrete situations</p> <p>3.2.3 Demonstrate conceptual understanding of linear relationships ($y = kx$, $y = mx + b$) as a constant rate of change by</p> <ul style="list-style-type: none"> • <u>constructing or interpreting graphs of real occurrences</u> • <u>describing the slope of linear relationships</u> <ul style="list-style-type: none"> ○ <u>faster</u> ○ <u>slower</u> ○ <u>greater</u> ○ <u>smaller</u> <p>in a variety of problem situations. M(F&A)-6-2 (state assessment)</p> <p>3.2.4 Describe how change in the value of one variable relates to change in the value of a second variable in problem situations with constant rates of change. M(F&A)-6-2 (state assessment)</p> <p>3.2.5 Applies the conventions of order of operations</p> <p>3.2.6 Understands, uses, applies appropriate technology to solve problems</p> <p>3.2.7 REQUIRED PROBLEMS</p> <ul style="list-style-type: none"> • Hiking #17 	<p>conjectures</p> <ul style="list-style-type: none"> • justifying of thinking • constructing written responses defending the student's mathematics • facilitating problem solving approach to instruction • integrating content with other core subjects • using appropriate technology • using frequent assessment to modify instruction • Modeling functions of the scientific calculator <p>• Differentiated instruction by varying the content, process, and product and implementing</p> <ul style="list-style-type: none"> ▪ tiered assignments ▪ jigsawing ▪ pre/post assessments ▪ anchoring ▪ think/pair/share ▪ cubing, etc. 	<p>calculator</p> <ul style="list-style-type: none"> • Computer lab • www.glencoe.com • www.ridoe.net • www.ridoe.net/instruction/curriculum • NECAP Release tasks • NECompact.org • BMS website (Share Point) <p>Materials</p> <ul style="list-style-type: none"> • Pattern tiles • Unifix cubes • Rulers (metric) • Scissors, glue • grid paper • algebra tiles/blocks • grid paper <p>School library resources</p> <ul style="list-style-type: none"> • <i>Classroom Instruction That Works</i>, Marzano <p>Community</p>	<p>CHAPTER TESTS BASED ON EVERYDAY MATHEMATICS COURSE 6</p> <p>SUGGESTED ASSESSMENTS</p> <p>Anecdotal record (e.g. defends student generated conjectures in class)</p> <p>Conferencing</p> <p>Journals/notebooks</p> <p>Oral presentation</p> <p>Portfolio (samples of process and products)</p> <p>Tests/ quizzes</p> <p>Visual representation (e.g. Power Point™)</p>
3. FUNCTIONS AND ALGEBRA		<p>The student</p> <p>3.3.1 Demonstrate conceptual understanding of algebraic expressions by</p>	<p>Teacher may model and/or facilitate the following strategies (also see pages 1-2)</p>	<p>Resources, also see pages 1-2</p>	<p>Assessments/evidence, also see pages 1-2</p>

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3.3 Algebraic expressions		<ul style="list-style-type: none"> using letters to represent unknown quantities to write linear algebraic expressions involving <u>any of the four operations and consistent with order of operations expected at this grade level</u>; or evaluating linear algebraic expressions (including those with more than one variable); or by <u>evaluating an expression within an equation (e.g., determine the value of y when $x = 4$ given $y = 3x - 2$)</u>. M(F&A)-6-3 (state assessment) <p>3.3.2 Applies the conventions of order of operations</p> <p>3.3.3 Understands, uses, applies appropriate technology to solve problems</p> <p>3.3.4 REQUIRED PROBLEMS</p> <ul style="list-style-type: none"> Patterns #16 Burning Candle #18 	<p>Mathematics best practice e.g.</p> <ul style="list-style-type: none"> using manipulatives facilitating cooperative group work discussing mathematics questioning and making conjectures justifying of thinking constructing written responses defending the student's mathematics facilitating problem solving approach to instruction integrating content with other core subjects using appropriate technology using frequent assessment to modify instruction modeling functions of the scientific calculator <ul style="list-style-type: none"> Differentiated instruction by varying the content, process, and product and implementing <ul style="list-style-type: none"> tiered assignments jigsawing pre/post assessments anchoring think/pair/share cubing, etc. 	<p><u>Textbook</u> <i>Everyday Mathematics: Course 6</i></p> <p><u>Supplementary books</u></p> <p><u>Technology</u></p> <ul style="list-style-type: none"> Scientific calculator Overhead scientific calculator Computer lab www.glencoe.com www.ri.doe.net www.ride.ri.gov/instruction/curriculum NECAP Release tasks NECompact.org BMS website (Share Point) <p><u>Materials</u></p> <ul style="list-style-type: none"> Pattern tiles Unifix cubes Rulers (metric) Scissors, glue grid paper algebra tiles/blocks grid paper <p><u>School library resources</u></p> <ul style="list-style-type: none"> <i>Classroom Instruction That Works</i>, Marzano <p><u>Community</u></p>	<p>REQUIRED ASSESSMENTS REQUIRED PROBLEMS COMMON ASSESSMENTS</p> <ul style="list-style-type: none"> MID-TERM EXAM FINAL EXAM QUARTERLY <p>CHAPTER TESTS BASED ON EVERYDAY MATHEMATICS COURSE 6</p> <p>SUGGESTED ASSESSMENTS</p> <p>Anecdotal record (e.g. defends student generated conjectures in class)</p> <p>Conferencing</p> <p>Journals/notebooks</p> <p>Oral presentation</p> <p>Portfolio (samples of process and products)</p> <p>Tests/ quizzes</p> <p>Visual representation (e.g. Power Point™)</p>

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<p>3. FUNCTIONS AND ALGEBRA</p> <p>3.4 Equality</p>		<p>The student</p> <p>3.4.1 Demonstrates conceptual understanding of equality by</p> <ul style="list-style-type: none"> showing equivalence between two expressions using modeling or different representations of the expressions (expressions consistent with the parameters of M(F&A)-6-3), solving multi-step linear equations of the form $ax \pm b = c$, where a, b, and c are whole numbers with $a \neq 0$. M(F&A)-6-4 (state assessment) <p>3.4.2 Applies the conventions of order of operations</p> <p>3.4.3 Understands, uses, applies appropriate technology to solve problems</p> <p>3.4.4 REQUIRED PROBLEMS</p> <ul style="list-style-type: none"> Patterns 	<p>Teacher may model and/or facilitate the following strategies (also see pages 1-2)</p> <p>Mathematics best practice e.g.</p> <ul style="list-style-type: none"> using manipulatives facilitating cooperative group work discussing mathematics questioning and making conjectures justifying of thinking constructing written responses defending the student's mathematics facilitating problem solving approach to instruction integrating content with other core subjects using appropriate technology using frequent assessment to modify instruction modeling functions of the scientific calculator <ul style="list-style-type: none"> Differentiated instruction by varying the content, process, and product and implementing <ul style="list-style-type: none"> tiered assignments jigsawing pre/post assessments anchoring think/pair/share 	<p>Resources, also see pages 1-2</p> <p><u>Textbook</u> <i>Everyday Mathematics: Course 6</i></p> <p><u>Supplementary books</u></p> <p><u>Technology</u></p> <ul style="list-style-type: none"> Scientific calculator Overhead scientific calculator Computer lab www.glencoe.com www.ridoe.net www.ridoe.net/instruction/curriculum NECAP Release tasks NECompact.org BMS website (Share Point) <p><u>Materials</u></p> <ul style="list-style-type: none"> Pattern tiles Unifix cubes Rulers (metric) Scissors, glue grid paper algebra tiles/blocks grid paper <p><u>School library resources</u></p> <ul style="list-style-type: none"> <i>Classroom Instruction That Works</i>, Marzano <p><u>Community</u></p>	<p>Assessments/evidence, also see pages 1-2</p> <p>REQUIRED ASSESSMENTS</p> <p>REQUIRED PROBLEMS</p> <p>COMMON ASSESSMENTS</p> <ul style="list-style-type: none"> MID-TERM EXAM FINAL EXAM QUARTERLY <p>CHAPTER TESTS BASED ON EVERYDAY MATHEMATICS COURSE 6</p> <p>SUGGESTED ASSESSMENTS</p> <p>Anecdotal record (e.g. defends student generated conjectures in class)</p> <p>Conferencing</p> <p>Journals/notebooks</p> <p>Oral presentation</p> <p>Portfolio (samples of process and products)</p> <p>Tests/ quizzes</p> <p>Visual representation (e.g. Power Point™)</p>

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			<ul style="list-style-type: none"> cubing, etc. 		
<p>4. DATA, STATISTICS, AND PROBABILITY</p> <p>4.1 Given representation</p>		<p>The student</p> <p>4.1.1 Interprets a given representation (circle graphs, line graphs, or <u>stem-and-leaf plots</u>) to answer questions related to the data,</p> <ul style="list-style-type: none"> analyze the data to <ul style="list-style-type: none"> formulate justify conclusions make predictions or to solve problems. M(DSP)-6-1 (state assessment) <p>(IMPORTANT: <i>Analyzes data consistent with concepts and skills in M(DSP)-6-2.</i>)</p> <p>4.1.2 Applies the conventions of order of operations</p> <p>4.1.3 Understands, uses, applies appropriate technology to solve problems</p> <p>4.1.4 REQUIRED PROBLEMS</p> <ul style="list-style-type: none"> Mathematics Test Scores - Mrs. Plum and Mr. Scarlet #19 	<p>Teacher may model and/or facilitate the following strategies (also see pages 1-2)</p> <p>Mathematics best practice e.g.</p> <ul style="list-style-type: none"> using manipulatives facilitating cooperative group work discussing mathematics questioning and making conjectures justifying of thinking constructing written responses defending the student's mathematics facilitating problem solving approach to instruction integrating content with other core subjects using appropriate technology using frequent assessment to modify instruction modeling functions of the scientific calculator <ul style="list-style-type: none"> Differentiated instruction by varying the content, process, and product and 	<p>Resources, also see pages 1-2</p> <p><u>Textbook</u> <i>Everyday Mathematics: Course 6</i></p> <p><u>Supplementary books</u></p> <p><u>Technology</u></p> <ul style="list-style-type: none"> Scientific calculator Overhead scientific calculator Computer lab www.glencoe.com www.ridoe.net www.ridoe.net/instruction/curriculum NECAP Release tasks NECompact.org BMS website (Share Point) <p><u>Materials</u></p> <ul style="list-style-type: none"> Rulers (metric) Scissors, glue Dice Spinners Two-colored Chips grid paper <p><u>School library resources</u></p> <ul style="list-style-type: none"> <i>Classroom Instruction That Works</i>, Marzano 	<p>Assessments/evidence, also see pages 1-2</p> <p>REQUIRED ASSESSMENTS</p> <p>REQUIRED PROBLEMS</p> <p>COMMON ASSESSMENTS</p> <ul style="list-style-type: none"> MID-TERM EXAM FINAL EXAM QUARTERLY <p>CHAPTER TESTS BASED ON EVERYDAY MATHEMATICS COURSE 6</p> <p>SUGGESTED ASSESSMENTS</p> <p>Anecdotal record (e.g. defends student generated conjectures in class)</p> <p>Conferencing</p> <p>Journals/notebooks</p> <p>Oral presentation</p> <p>Portfolio (samples of process and products)</p>

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			implementing <ul style="list-style-type: none"> ▪ tiered assignments ▪ jigsawing ▪ pre/post assessments ▪ anchoring ▪ think/pair/share ▪ cubing, etc. 	<u>Community</u>	Tests/ quizzes Visual representation (e.g. Power Point™)
4. DATA, STATISTICS, AND PROBABILITY 4.2 Patterns, trends, distributions		<p>The student</p> <p>4.2.1 Analyzes patterns, trends or distributions in data in a variety of contexts by determining or using</p> <ul style="list-style-type: none"> • measures of central tendency <ul style="list-style-type: none"> ○ mean ○ median ○ mode • <u>dispersion (range)</u> • outliers to analyze situations to determine their effect on mean, median, or mode (B) (DSP)-7-2 to analyze situations, or to solve problems. M(DSP)-6-2 (state assessment) <p>4.2.2 Applies the conventions of order of operations</p> <p>4.2.3 Understands, uses, applies appropriate technology to solve problems</p> <p>4.2.4 REQUIRED PROBLEMS</p> <ul style="list-style-type: none"> • Mathematics Test Scores - Mrs. Plum and Mr. Scarlet #19 	<p>Teacher may model and/or facilitate the following strategies (also see pages 1-2)</p> <p>Mathematics best practice e.g.</p> <ul style="list-style-type: none"> • using manipulatives • facilitating cooperative group work • discussing mathematics • questioning and making conjectures • justifying of thinking • constructing written responses defending the student's mathematics • facilitating problem solving approach to instruction • integrating content with other core subjects • using appropriate technology • using frequent assessment to modify instruction • modeling functions of the scientific calculator <p>• Differentiated instruction</p>	<p>Resources, also see pages 1-2</p> <p><u>Textbook</u> <i>Everyday Mathematics: Course 6</i></p> <p><u>Supplementary books</u></p> <p><u>Technology</u></p> <ul style="list-style-type: none"> • Scientific calculator • Overhead scientific calculator • Computer lab • www.glencoe.com • www.ridoe.net • www.ridoe.net/instruction/curriculum • NECAP Release tasks • NECompact.org • BMS website (Share Point) <p><u>Materials</u></p> <ul style="list-style-type: none"> • Rulers (metric) • Scissors, glue • Dice • Spinners • Two-colored Chips • grid paper 	<p>Assessments/evidence, also see pages 1-2</p> <p>REQUIRED ASSESSMENTS REQUIRED PROBLEMS COMMON ASSESSMENTS</p> <ul style="list-style-type: none"> • MID-TERM EXAM • FINAL EXAM • QUARTERLY <p>CHAPTER TESTS BASED ON EVERYDAY MATHEMATICS COURSE 6</p> <p>SUGGESTED ASSESSMENTS</p> <p>Anecdotal record (e.g. defends student generated conjectures in class)</p> <p>Conferencing</p> <p>Journals/notebooks</p> <p>Oral presentation</p>

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			by varying the content, process, and product and implementing <ul style="list-style-type: none"> ▪ tiered assignments ▪ jigsawing ▪ pre/post assessments ▪ anchoring ▪ think/pair/share ▪ cubing, etc. 	<u>School library resources</u> <ul style="list-style-type: none"> • Classroom Instruction That Works, Marzano <u>Community</u>	Portfolio (samples of process and products) Tests/ quizzes Visual representation (e.g. Power Point™)
4. DATA, STATISTICS, AND PROBABILITY 4.3 Organizes and displays data		<p>The student</p> <p>4.3.1 Organizes and displays data using tables, line graphs, or <u>stem-and-leaf plots (circle graphs (D) and scatter plots (B) to histograms (B)</u></p> <ul style="list-style-type: none"> • to answer questions related to the data, • analyze the data to <ul style="list-style-type: none"> ○ formulate ○ justify conclusions ○ make predictions ○ solve problems. M(DSP)-6-3 <p>(IMPORTANT: <i>Analyzes data consistent with concepts and skills in M(DSP)-6-2.</i>)</p> <p>4.3.2 Applies the conventions of order of operations</p> <p>4.3.3 Understands, uses, applies appropriate technology to solve problems</p> <p>4.3.4 REQUIRED PROBLEMS</p> <ul style="list-style-type: none"> • Mathematics Test Scores - Mrs. Plum and Mr. Scarlet #19 	<p>Teacher may model and/or facilitate the following strategies (also see pages 1-2)</p> <p>Mathematics best practice e.g.</p> <ul style="list-style-type: none"> • using manipulatives • facilitating cooperative group work • discussing mathematics • questioning and making conjectures • justifying of thinking • constructing written responses defending the student's mathematics • facilitating problem solving approach to instruction • integrating content with other core subjects • using appropriate technology • using frequent assessment to modify instruction • modeling functions of the scientific calculator 	<p>Resources, also see pages 1-2</p> <p><u>Textbook</u> Everyday Mathematics: Course 6</p> <p><u>Supplementary books</u></p> <ul style="list-style-type: none"> • <u>Technology</u> <ul style="list-style-type: none"> • Scientific calculator • Overhead scientific calculator • Computer lab • www.glencoe.com • www.ri DOE.net • www.ride.ri.gov/instruction/curriculum • NECAP Release tasks • NECompact.org • BMS website (Share Point) <p><u>Materials</u></p> <ul style="list-style-type: none"> • Rulers (metric) • Scissors, glue • Dice • Spinners • Two-colored Chips • grid paper <p><u>School library resources</u></p>	<p>Assessments/evidence, also see pages 1-2</p> <p>REQUIRED ASSESSMENTS REQUIRED PROBLEMS COMMON ASSESSMENTS</p> <ul style="list-style-type: none"> • MID-TERM EXAM • FINAL EXAM • QUARTERLY <p>CHAPTER TESTS BASED ON EVERYDAY MATHEMATICS COURSE 6</p> <p>SUGGESTED ASSESSMENTS Anecdotal record (e.g. defends student generated conjectures in class)</p> <p>Conferencing</p> <p>Journals/notebooks</p>

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			<ul style="list-style-type: none"> Differentiated instruction by varying the content, process, and product and implementing <ul style="list-style-type: none"> tiered assignments jigsawing pre/post assessments anchoring think/pair/share cubing, etc. 	<ul style="list-style-type: none"> <i>Classroom Instruction That Works, Marzano</i> <p><u>Community</u></p>	<p>Oral presentation</p> <p>Portfolio (samples of process and products)</p> <p>Tests/ quizzes</p> <p>Visual representation (e.g. Power Point™)</p>
<p>4. DATA, STATISTICS, AND PROBABILITY</p> <p>4.4. Counting techniques</p>		<p>The student</p> <p>4.4.1 Uses counting techniques to solve problems in context involving combinations or simple permutations using a variety of strategies e.g.,</p> <ul style="list-style-type: none"> organized lists tables tree diagrams modeling <u>Fundamental Counting Principle</u>, or^{sc} others). M(DSP)-6-4 (state assessment) <p>4.4.2 Applies the conventions of order of operations</p> <p>4.4.3 Understands, uses, applies appropriate technology to solve problems</p> <p>4.4.4 REQUIRED PROBLEMS</p> <ul style="list-style-type: none"> Bean Bags #20 	<p>Teacher may model and/or facilitate the following strategies (also see pages 1-2)</p> <p>Mathematics best practice e.g.</p> <ul style="list-style-type: none"> using manipulatives facilitating cooperative group work discussing mathematics questioning and making conjectures justifying of thinking constructing written responses defending the student's mathematics facilitating problem solving approach to instruction integrating content with other core subjects using appropriate technology using frequent assessment to modify instruction 	<p>Resources, also see pages 1-2</p> <p><u>Textbook</u> <i>Everyday Mathematics: Course 6</i></p> <p><u>Supplementary books</u></p> <p><u>Technology</u></p> <ul style="list-style-type: none"> Scientific calculator Overhead scientific calculator Computer lab www.glencoe.com www.ridoe.net www.ride.ri.gov/instruction/curriculum NECAP Release tasks NECompact.org BMS website (Share Point) <p><u>Materials</u></p> <ul style="list-style-type: none"> Rulers (metric) Scissors, glue Dice 	<p>Assessments/evidence, also see pages 1-2</p> <p>REQUIRED ASSESSMENTS</p> <p>REQUIRED PROBLEMS</p> <p>COMMON ASSESSMENTS</p> <ul style="list-style-type: none"> MID-TERM EXAM FINAL EXAM QUARTERLY <p>CHAPTER TESTS BASED ON EVERYDAY MATHEMATICS COURSE 6</p> <p>SUGGESTED ASSESSMENTS</p> <p>Anecdotal record (e.g. defends student generated conjectures in class)</p> <p>Conferencing</p>

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			<ul style="list-style-type: none"> modeling functions of the scientific calculator Differentiated instruction by varying the content, process, and product and implementing <ul style="list-style-type: none"> tiered assignments jigsawing pre/post assessments anchoring think/pair/share cubing, etc. 	<ul style="list-style-type: none"> Spinners Two-colored Chips grid paper <p><u>School library resources</u></p> <ul style="list-style-type: none"> <i>Classroom Instruction That Works, Marzano</i> <p><u>Community</u></p>	<p>Journals/notebooks</p> <p>Oral presentation</p> <p>Portfolio (samples of process and products)</p> <p>Tests/ quizzes</p> <p>Visual representation (e.g. Power Point™)</p>
<p>4. DATA, STATISTICS, AND PROBABILITY</p> <p>4.5 Probability event</p>		<p>The student</p> <p>4.5.1 For a probability event in which the sample space may or may not contain equally likely outcomes</p> <ul style="list-style-type: none"> predicts the theoretical probability of an event and tests the prediction through <ul style="list-style-type: none"> experiments <u>simulations</u> designs <u>fair games</u>. M(DSP)-6-5 <p>4.5.2 Applies the conventions of order of operations</p> <p>4.5.3 Understands, uses, applies appropriate technology to solve problems</p> <p>4.5.4 REQUIRED PROBLEMS</p> <ul style="list-style-type: none"> Bean Bags #20 	<p>Teacher may model and/or facilitate the following strategies (also see pages 1-2)</p> <p>Mathematics best practice e.g.</p> <ul style="list-style-type: none"> using manipulatives facilitating cooperative group work discussing mathematics questioning and making conjectures justifying of thinking constructing written responses defending the student's mathematics facilitating problem solving approach to instruction integrating content with other core subjects using appropriate technology 	<p>Resources, also see pages 1-2</p> <p><u>Textbook</u></p> <p><i>Everyday Mathematics: Course 6</i></p> <p><u>Supplementary books</u></p> <p><u>Technology</u></p> <ul style="list-style-type: none"> Scientific calculator Overhead scientific calculator Computer lab www.glencoe.com www.ridoe.net www.ridoe.net/instruction/curriculum NECAP Release tasks NECompact.org BMS website (Share Point) 	<p>Assessments/evidence, also see pages 1-2</p> <p>REQUIRED ASSESSMENTS</p> <p>REQUIRED PROBLEMS</p> <p>COMMON ASSESSMENTS</p> <ul style="list-style-type: none"> MID-TERM EXAM FINAL EXAM QUARTERLY <p>CHAPTER TESTS BASED ON EVERYDAY MATHEMATICS COURSE 6</p> <p>SUGGESTED ASSESSMENTS</p> <p>Anecdotal record (e.g. defends student generated conjectures in class)</p>

Mathematics grade 6

Curriculum Writers: Mark Aubin, Julie Abbruzzi, and Gregory Simkins

STANDARDS GLEs	Applied Learning Stand. SIP	OUTCOMES/BENCHMARKS Barrington Public Schools (NECAP GLE/GLE)	RESEARCH-BASED INSTRUCTIONAL STRATEGIES	RESOURCES	RESEARCH-BASED ASSESSMENT EVIDENCE
			<ul style="list-style-type: none"> using frequent assessment to modify instruction modeling functions of the scientific calculator Differentiated instruction by varying the content, process, and product and implementing <ul style="list-style-type: none"> tiered assignments jigsawing pre/post assessments anchoring think/pair/share cubing, etc. 	<p>Materials</p> <ul style="list-style-type: none"> Rulers (metric) Scissors, glue Dice Spinners Two-colored Chips grid paper <p>School library resources</p> <ul style="list-style-type: none"> <i>Classroom Instruction That Works</i>, Marzano <p>Community</p>	<p>Conferencing</p> <p>Journals/notebooks</p> <p>Oral presentation</p> <p>Portfolio (samples of process and products)</p> <p>Tests/ quizzes</p> <p>Visual representation (e.g. Power Point™)</p>
<p>4. DATA, STATISTICS, AND PROBABILITY</p> <p>4.5 Experimental or theoretical probability</p>		<p>The student</p> <p>4.5.1 For a probability event in which the sample space may or may not contain equally likely outcomes, determines the experimental or theoretical probability of an <u>event in a problem-solving situation</u>. M(DSP)-6-5</p> <p>4.5.2 Applies the conventions of order of operations</p> <p>4.5.3 Understands, uses, applies appropriate technology to solve problems</p> <p>4.5.4 REQUIRED PROBLEMS</p> <ul style="list-style-type: none"> Bean Bags #20 	<p>Teacher may model and/or facilitate the following strategies (also see pages 1-2)</p> <p>Mathematics best practice e.g.</p> <ul style="list-style-type: none"> using manipulatives facilitating cooperative group work discussing mathematics questioning and making conjectures justifying of thinking constructing written responses defending the student's mathematics facilitating problem solving approach to instruction integrating content with 	<p>Resources, also see pages 1-2</p> <p>Textbook</p> <p><i>Everyday Mathematics: Course 6</i></p> <p>Supplementary books</p> <ul style="list-style-type: none"> <p>Technology</p> <ul style="list-style-type: none"> Scientific calculator Overhead scientific calculator Computer lab www.glencoe.com www.ri DOE.net www.ride.ri.gov/instruction/curriculum NECAP Release tasks NECompact.org BMS website (Share 	<p>Assessments/evidence, also see pages 1-2</p> <p>REQUIRED ASSESSMENTS</p> <p>REQUIRED PROBLEMS</p> <p>COMMON ASSESSMENTS</p> <ul style="list-style-type: none"> MID-TERM EXAM FINAL EXAM QUARTERLY <p>CHAPTER TESTS BASED ON EVERYDAY MATHEMATICS COURSE 6</p> <p>SUGGESTED ASSESSMENTS</p> <p>Anecdotal record (e.g. defends student generated conjectures</p>

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			<p>other core subjects</p> <ul style="list-style-type: none"> using appropriate technology using frequent assessment to modify instruction modeling functions of the scientific calculator <ul style="list-style-type: none"> Differentiated instruction by varying the content, process, and product and implementing <ul style="list-style-type: none"> tiered assignments jigsawing pre/post assessments anchoring think/pair/share cubing, etc. 	<p>Point)</p> <p><u>Materials</u></p> <ul style="list-style-type: none"> Rulers (metric) Scissors, glue Dice Spinners Two-colored Chips grid paper <p><u>School library resources</u></p> <ul style="list-style-type: none"> <i>Classroom Instruction That Works</i>, Marzano <p><u>Community</u></p>	<p>in class)</p> <p>Conferencing</p> <p>Journals/notebooks</p> <p>Oral presentation</p> <p>Portfolio (samples of process and products)</p> <p>Tests/ quizzes</p> <p>Visual representation (e.g. Power Point™)</p>
<p>4. DATA, STATISTICS, AND PROBABILITY</p> <p>4.6 Question or hypothesis</p>		<p>The student</p> <p>4.6.1 In response to a teacher or student generated question or hypothesis decides the most effective method , e.g., survey, observation, experimentation) to</p> <ul style="list-style-type: none"> collect the data numerical or categorical) necessary to answer the question collect, organize, and appropriately display the data analyzes the data to draw conclusions about the question or hypothesis being tested when appropriate makes predictions asks new questions 	<p>Teacher may model and/or facilitate the following strategies (also see pages 1-2)</p> <p>Mathematics best practice e.g.</p> <ul style="list-style-type: none"> using manipulatives facilitating cooperative group work discussing mathematics questioning and making conjectures justifying of thinking constructing written responses defending the student's mathematics 	<p>Resources, also see pages 1-2</p> <p><u>Textbook</u> <i>Everyday Mathematics: Course 6</i></p> <p><u>Supplementary books</u></p> <ul style="list-style-type: none"> <p><u>Technology</u></p> <ul style="list-style-type: none"> Scientific calculator Overhead scientific calculator Computer lab www.glencoe.com www.ridoe.net www.ridoe.net www.ridoe.net 	<p>Assessments/evidence, also see pages 1-2</p> <p>REQUIRED ASSESSMENTS</p> <p>REQUIRED PROBLEMS</p> <p>COMMON ASSESSMENTS</p> <ul style="list-style-type: none"> MID-TERM EXAM FINAL EXAM QUARTERLY <p>CHAPTER TESTS BASED ON EVERYDAY MATHEMATICS COURSE 6</p>

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STANDARDS GLEs	Applied Learning Stand. SIP	OUTCOMES/BENCHMARKS Barrington Public Schools (NECAP GLE/GLE)	RESEARCH-BASED INSTRUCTIONAL STRATEGIES	RESOURCES	RESEARCH-BASED ASSESSMENT EVIDENCE
		<ul style="list-style-type: none"> • makes connections to real world situations. M(DSP)-6-6 <p>4.6.2 Applies the conventions of order of operations</p> <p>4.6.3 Understands, uses, applies appropriate technology to solve problems</p> <p>4.6.4 REQUIRED PROBLEMS</p> <ul style="list-style-type: none"> • Bean Bags #20 <p>IMPORTANT: <i>Analyzes data consistent with concepts and skills in M(DSP)-6-2.)</i></p>	<ul style="list-style-type: none"> • facilitating problem solving approach to instruction • integrating content with other core subjects • using appropriate technology • using frequent assessment to modify instruction • modeling functions of the scientific calculator • Differentiated instruction by varying the content, process, and product and implementing <ul style="list-style-type: none"> ▪ tiered assignments ▪ jigsawing ▪ pre/post assessments ▪ anchoring ▪ think/pair/share • cubing, etc 	<p>tion/curriculum</p> <ul style="list-style-type: none"> • NECAP Release tasks • NECompact.org • BMS website (Share Point) <p>Materials</p> <ul style="list-style-type: none"> • Rulers (metric) • Scissors, glue • Dice • Spinners • Two-colored Chips • grid paper <p>School library resources</p> <ul style="list-style-type: none"> • <i>Classroom Instruction That Works, Marzano</i> <p>Community</p>	<p>SUGGESTED ASSESSMENTS</p> <p>Anecdotal record (e.g. defends student generated conjectures in class)</p> <p>Conferencing</p> <p>Journals/notebooks</p> <p>Oral presentation</p> <p>Portfolio (samples of process and products)</p> <p>Tests/ quizzes</p> <p>Visual representation (e.g. Power Point™)</p>
<p>5. PROBLEM SOLVING, REASONING, AND PROOF</p> <p>5.1 Problem Solving strategies</p>		<p>The student will use problem-solving strategies to investigate and understand increasingly complex mathematical content and be able to:</p> <p>5.1.1 Use problem-solving strategies appropriately and effectively for a given situation.</p> <ul style="list-style-type: none"> • identify the problem/question/task • make a list • create a diagram • organize data • determine a pattern 	<p>Teacher may model and/or facilitate the following strategies (also see pages 1-2)</p> <p>Mathematics best practice e.g.</p> <ul style="list-style-type: none"> • using manipulatives • facilitating cooperative group work • discussing mathematics • questioning and making conjectures • justifying of thinking • constructing written 	<p>Resources, also see pages 1-2</p> <p>Textbook</p> <p><i>Everyday Mathematics: Course 6</i></p> <p>Supplementary books</p> <ul style="list-style-type: none"> • <p>Technology</p> <ul style="list-style-type: none"> • Scientific calculator • Overhead scientific calculator • Computer lab • www.glencoe.com • www.ridoe.net 	<p>Assessments/evidence, also see pages 1-2</p> <p>REQUIRED ASSESSMENTS</p> <p>REQUIRED PROBLEMS</p> <p>COMMON ASSESSMENTS</p> <ul style="list-style-type: none"> • MID-TERM EXAM • FINAL EXAM • QUARTERLY <p>CHAPTER TESTS BASED ON EVERYDAY MATHEMATICS</p>

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STANDARDS GLEs	Applied Learning Stand. SIP	OUTCOMES/BENCHMARKS Barrington Public Schools (NECAP GLE/GLE)	RESEARCH-BASED INSTRUCTIONAL STRATEGIES	RESOURCES	RESEARCH-BASED ASSESSMENT EVIDENCE
		<ul style="list-style-type: none"> identify and use formulas when appropriate begin to create algebraic representation use technology when appropriate to solve problems. M(PRP) 6 to 8 -1 <p>5.1.2 Determine, collect and organize the relevant information needed to solve real-world problems.</p> <p>5.1.3 Apply integrated problem-solving strategies to solve problems in the physical, natural and social sciences, and in pure mathematics.</p> <p>5.1.4 Reflect on solutions and the problem-solving process for a given situation and refine strategies as needed. M(PRP) 6 to 8 -1</p> <ul style="list-style-type: none"> contain accurate and appropriate data/responses apply conventions of mathematics, e.g. <ul style="list-style-type: none"> labeling, money two decimal places correct estimations accurate level of precision (rounding off) proper execution of selected strategies 	<p>responses defending the student's mathematics</p> <ul style="list-style-type: none"> facilitating problem solving approach to instruction integrating content with other core subjects using appropriate technology using frequent assessment to modify instruction modeling functions of the scientific calculator Differentiated instruction by varying the content, process, and product and implementing <ul style="list-style-type: none"> tiered assignments jigsawing pre/post assessments anchoring think/pair/share cubing, etc. 	<ul style="list-style-type: none"> www.ride.ri.gov/instruction/curriculum NECAP Release tasks NECompact.org BMS website (Share Point) <p><u>Materials</u></p> <ul style="list-style-type: none"> Unifix cubes 3D-solids Rulers (metric), protractors Scissors, glue <p><u>School library resources</u></p> <ul style="list-style-type: none"> <i>Classroom Instruction That Works, Marzano</i> <i>Math Who Needs It?</i> (video) <p><u>Community</u></p>	<p>COURSE 6</p> <p>SUGGESTED ASSESSMENTS</p> <p>Anecdotal record (e.g. defends student generated conjectures in class)</p> <p>Conferencing</p> <p>Journals/notebooks</p> <p>Oral presentation</p> <p>Portfolio (samples of process and products)</p> <p>Tests/ quizzes</p> <p>Visual representation (e.g. Power Point™)</p>
<p>5. PROBLEM SOLVING, REASONING, AND PROOF</p> <p>5.2 Mathematical reasoning and proof</p>		<p>The student will use mathematical reasoning and proof and be able to:</p> <p>5.2.1 Draw logical conclusions and make generalizations (inductively and/or deductively) from</p> <ul style="list-style-type: none"> patterns graphs tables 	<p>Teacher may model and/or facilitate the following strategies (also see pages 1-2)</p> <p>Mathematics best practice e.g.</p> <ul style="list-style-type: none"> using manipulatives facilitating cooperative group work discussing mathematics questioning and making 	<p>Resources, also see pages 1-2</p> <p><u>Textbook</u></p> <p><i>Everyday Mathematics: Course 6</i></p> <p><u>Supplementary books</u></p> <p><u>Technology</u></p> <ul style="list-style-type: none"> Scientific calculator Overhead scientific 	<p>Assessments/evidence, also see pages 1-2</p> <p>REQUIRED ASSESSMENTS</p> <p>REQUIRED PROBLEMS</p> <p>COMMON ASSESSMENTS</p> <ul style="list-style-type: none"> MID-TERM EXAM FINAL EXAM QUARTERLY

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		<ul style="list-style-type: none"> • equations (B) • geometric representation M(PRP) 6 to 8 -2 <p>5.2.2 Formulate, test, and justify mathematical conjectures and arguments. M(PRP) 6 to 8 -2</p> <p>5.2.3 Construct and determine the validity of a mathematical argument or a solution. M(PRP) 6 to 8 -2</p> <p>5.2.4 Apply mathematical reasoning in other disciplines. M(PRP) 6 to 8 -2</p>	<p>conjectures</p> <ul style="list-style-type: none"> • justifying of thinking • constructing written responses defending the student's mathematics • facilitating problem solving approach to instruction • integrating content with other core subjects • using appropriate technology • using frequent assessment to modify instruction • modeling functions of the scientific calculator <ul style="list-style-type: none"> • Differentiated instruction by varying the content, process, and product and implementing <ul style="list-style-type: none"> ▪ tiered assignments ▪ jigsawing ▪ pre/post assessments ▪ anchoring ▪ think/pair/share ▪ cubing, etc. 	<p>calculator</p> <ul style="list-style-type: none"> • Computer lab • www.glencoe.com • www.ridoe.net • www.ridoe.net/instruction/curriculum • NECAP Release tasks • NECompact.org • BMS website (Share Point) <p><u>Materials</u></p> <ul style="list-style-type: none"> • Unifix cubes • 3D-solids • Rulers (metric), protractors • Scissors, glue <p><u>School library resources</u></p> <ul style="list-style-type: none"> • Classroom Instruction That Works, Marzano • Math Who Needs It? (video) <p><u>Community</u></p>	<p>CHAPTER TESTS BASED ON EVERYDAY MATHEMATICS COURSE 6</p> <p>SUGGESTED ASSESSMENTS</p> <p>Anecdotal record (e.g. defends student generated conjectures in class)</p> <p>Conferencing</p> <p>Journals/notebooks</p> <p>Oral presentation</p> <p>Portfolio (samples of process and products)</p> <p>Tests/ quizzes</p> <p>Visual representation (e.g. Power Point™)</p>
<p>6 COMMUNICATION, CONNECTIONS AND REPRESENTATION</p>		<p>The student will communicate their understanding of mathematics and be able to:</p> <p>6.1.1 Articulate ideas clearly and logically in both written and oral form.</p> <p>6.1.2 Present, share, explain, and justify thinking with</p>	<p>Teacher may model and/or facilitate the following strategies (also see pages 1-2)</p> <p>Mathematics best practice e.g.</p> <ul style="list-style-type: none"> • using manipulatives • facilitating cooperative group work 	<p>Resources, also see pages 1-2</p> <p><u>Textbook</u></p> <p><i>Everyday Mathematics: Course 6</i></p> <p><u>Supplementary books</u></p> <ul style="list-style-type: none"> • <p><u>Technology</u></p>	<p>Assessments/evidence, also see pages 1-2</p> <p>REQUIRED ASSESSMENTS</p> <p>REQUIRED PROBLEMS</p> <p>COMMON ASSESSMENTS</p> <ul style="list-style-type: none"> • MID-TERM EXAM

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6.1 Communicate understanding		<p>others and build upon the ideas of others to solve problems.</p> <p>6.1.3 Correctly use mathematical terminology, labels, symbols, and notation. M(CCR)-8-1</p> <p>6.1.4 Formulate questions, conjectures, definitions, and generalizations about data, information, and problem situations. (CCR)-8-1</p>	<ul style="list-style-type: none"> discussing mathematics questioning and making conjectures justifying of thinking constructing written responses defending the student's mathematics facilitating problem solving approach to instruction integrating content with other core subjects using appropriate technology using frequent assessment to modify instruction modeling functions of the scientific calculator Differentiated instruction by varying the content, process, and product and implementing <ul style="list-style-type: none"> tiered assignments jigsawing pre/post assessments anchoring think/pair/share cubing, etc. 	<ul style="list-style-type: none"> Scientific calculator Overhead scientific calculator Computer lab www.glencoe.com www.ridoe.net www.ridoe.net/instruction/curriculum NECAP Release tasks NECompact.org BMS website (Share Point) <p>Materials</p> <ul style="list-style-type: none"> Unifix cubes 3D-solids Rulers (metric), protractors Scissors, glue <p>School library resources</p> <ul style="list-style-type: none"> <i>Classroom Instruction That Works</i>, Marzano <i>Math Who Needs It?</i> (video) <p>Community</p>	<ul style="list-style-type: none"> FINAL EXAM QUARTERLY <p>CHAPTER TESTS BASED ON EVERYDAY MATHEMATICS COURSE 6</p> <p>SUGGESTED ASSESSMENTS</p> <p>Anecdotal record (e.g. defends student generated conjectures in class)</p> <p>Conferencing</p> <p>Journals/notebooks</p> <p>Oral presentation</p> <p>Portfolio (samples of process and products)</p> <p>Tests/ quizzes</p> <p>Visual representation (e.g. Power Point™)</p>
6. COMMUNICATION, CONNECTIONS, AND REPRESENTATION		<p>The student will create and use representations to communicate mathematical ideas and to solve problems and be able to:</p> <p>6.2.1 Use modeling and technology (as needed) to</p>	<p>Teacher may model and/or facilitate the following strategies (also see pages 1-2)</p> <p>Mathematics best practice e.g.</p> <ul style="list-style-type: none"> using manipulatives 	<p>Resources, also see pages 1-2</p> <p>Textbook <i>Everyday Mathematics: Course 6</i></p> <p>Supplementary books</p> <ul style="list-style-type: none"> 	<p>Assessments/evidence, also see pages 1-2</p> <p>REQUIRED ASSESSMENTS</p> <p>REQUIRED PROBLEMS</p> <p>COMMON ASSESSMENTS</p>

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<p>TION</p> <p>6.2 Create and use representations</p>		<p>develop equivalent representations of the same mathematical concept.</p> <p>6.2.2 Create and use representations to solve problems and organize their thoughts and ideas.</p> <p>6.2.3 Convert between representations (e.g., a table of values, an equation, a graph, and words or symbols may all be representations of the same function). M(CCR)-8-2</p>	<ul style="list-style-type: none"> facilitating cooperative group work discussing mathematics questioning and making conjectures justifying of thinking constructing written responses defending the student's mathematics facilitating problem solving approach to instruction integrating content with other core subjects using appropriate technology using frequent assessment to modify instruction modeling functions of the scientific calculator Differentiated instruction by varying the content, process, and product and implementing <ul style="list-style-type: none"> tiered assignments jigsawing pre/post assessments anchoring think/pair/share cubing, etc. 	<p>Technology</p> <ul style="list-style-type: none"> Scientific calculator Overhead scientific calculator Computer lab www.glencoe.com www.ridoe.net www.ridoe.net/instruction/curriculum NECAP Release tasks NECompact.org BMS website (Share Point) <p>Materials</p> <ul style="list-style-type: none"> Unifix cubes 3D-solids Rulers (metric), protractors Scissors, glue <p>School library resources</p> <ul style="list-style-type: none"> <i>Classroom Instruction That Works</i>, Marzano <i>Math Who Needs It?</i> (video) <p>Community</p>	<ul style="list-style-type: none"> MID-TERM EXAM FINAL EXAM QUARTERLY <p>CHAPTER TESTS BASED ON EVERYDAY MATHEMATICS COURSE 6</p> <p>SUGGESTED ASSESSMENTS</p> <p>Anecdotal record (e.g. defends student generated conjectures in class)</p> <p>Conferencing</p> <p>Journals/notebooks</p> <p>Oral presentation</p> <p>Portfolio (samples of process and products)</p> <p>Tests/ quizzes</p> <p>Visual representation (e.g. Power Point™)</p>

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<p>6. COMMUNICATION, CONNECTIONS, AND REPRESENTATION</p> <p>6.3 Mathematical connections</p>		<p>The student will recognize, explore, and develop mathematical connections and be able to:</p> <p>6.3.1 Connect new mathematical ideas to those already studied and build upon them.</p> <p>6.3.2 Understand that many real-world applications require an understanding of mathematical concepts (e.g., personal finance, running a business, building a house, following a recipe, or sending a rocket to the moon).</p> <p>6.3.3 Explain in oral and written form the relationships between a real-world problem and an appropriate mathematical model.</p> <p>6.3.4 Explain in oral and written form the relationships among various mathematical concepts (e.g., the relationship between exponentiation and multiplication). (CCR)-8-3</p>	<p>Teacher may model and/or facilitate the following strategies (also see pages 1-2)</p> <p>Mathematics best practice e.g.</p> <ul style="list-style-type: none"> • using manipulatives • facilitating cooperative group work • discussing mathematics • questioning and making conjectures • justifying of thinking • constructing written responses defending the student's mathematics • facilitating problem solving approach to instruction • integrating content with other core subjects • using appropriate technology • using frequent assessment to modify instruction • modeling functions of the scientific calculator • Differentiated instruction by varying the content, process, and product and implementing <ul style="list-style-type: none"> ▪ tiered assignments ▪ jigsawing ▪ pre/post assessments ▪ anchoring ▪ think/pair/share 	<p>Resources, also see pages 1-2</p> <p><u>Textbook</u> <i>Everyday Mathematics: Course 6</i></p> <p><u>Supplementary books</u></p> <p><u>Technology</u></p> <ul style="list-style-type: none"> • Scientific calculator • Overhead scientific calculator • Computer lab • www.glencoe.com • www.ridoe.net • www.ridoe.net/instruction/curriculum • NECAP Release tasks • NECompact.org • BMS website (Share Point) <p><u>Materials</u></p> <ul style="list-style-type: none"> • Unifix cubes • 3D-solids • Rulers (metric), protractors • Scissors, glue <p><u>School library resources</u></p> <ul style="list-style-type: none"> • <i>Classroom Instruction That Works, Marzano</i> <p><u>Community</u></p>	<p>Assessments/evidence, also see pages 1-2</p> <p>REQUIRED ASSESSMENTS REQUIRED PROBLEMS COMMON ASSESSMENTS</p> <ul style="list-style-type: none"> • MID-TERM EXAM • FINAL EXAM • QUARTERLY <p>CHAPTER TESTS BASED ON EVERYDAY MATHEMATICS COURSE 6</p> <p>SUGGESTED ASSESSMENTS Anecdotal record (e.g. defends student generated conjectures in class)</p> <p>Conferencing</p> <p>Journals/notebooks</p> <p>Oral presentation</p> <p>Portfolio (samples of process and products)</p> <p>Tests/ quizzes</p> <p>Visual representation (e.g. Power Point™)</p>

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			<ul style="list-style-type: none"> ▪ cubing, etc. 		