

## CURRICULUM MAP FOR ALGEBRA I MIDDLE SCHOOL

(Suggested timeline for introducing content and process standards - some overlap all four quarters)

GLEs/GSEs NCTM Standards	1 <sup>st</sup> Quarter	2 <sup>nd</sup> Quarter	3 <sup>rd</sup> Quarter	4 <sup>th</sup> Quarter
<b>1. Numbers Sense and Operations (content)</b>	<ul style="list-style-type: none"> <li>Properties of Numbers 1.5</li> </ul> <p>Required problem</p> <ul style="list-style-type: none"> <li>Property Experience #7</li> </ul>	Relative Magnitude 1.1 Solve Problems 1.2 Appropriate Estimates 1.4 <p>Required problems</p> <ul style="list-style-type: none"> <li>Class Trip #8</li> <li>Dan's Discount Warehouse #9</li> <li>Number Line # 10</li> </ul>	Mental Computation 1.3 <p>Required problem</p> <ul style="list-style-type: none"> <li>Block Patterns #6</li> </ul>	Mental Computation 1.3 Properties of Numbers 1.5 <p>Required problem</p>
<b>2. Geometry and Measurement</b>	<ul style="list-style-type: none"> <li>Coordinate plane 2.6</li> </ul> <p>Required problem</p> <ul style="list-style-type: none"> <li>Ladder Problem p. 25 Set A Impact Course 3</li> </ul>	<ul style="list-style-type: none"> <li>Perimeter, circumference, and area 2.4</li> <li>Units of measure 2.5</li> </ul> <p>Required problem</p> <ul style="list-style-type: none"> <li>Circular Pond #2</li> </ul>		<ul style="list-style-type: none"> <li>Theorems of Formula 2.2</li> </ul> <p>Required problem</p> <ul style="list-style-type: none"> <li>Kid City Park #1</li> </ul>
<b>3. Functions and Algebra</b>	<ul style="list-style-type: none"> <li>Patterns 2.1</li> <li>Linear/non linear 3.2</li> </ul> <p>Required problems</p> <ul style="list-style-type: none"> <li>Photographer p 90-91 Pre set E</li> <li>T-shirt Fundraiser #5</li> </ul>	<ul style="list-style-type: none"> <li>Expressions 3.3</li> </ul> <p>Required problem</p>	<ul style="list-style-type: none"> <li>Expressions 3.3</li> <li>Equality 3.4</li> </ul> <p>Required problem</p> <ul style="list-style-type: none"> <li>Challenge p. 453 #43 Impact Course</li> </ul>	<ul style="list-style-type: none"> <li>Expressions 3.3</li> <li>Linear/non linear 3.2</li> </ul> <p>Required problem</p>

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<b>4. Data, Statistics, and Probability</b> (content)	<ul style="list-style-type: none"> <li>• Interpret representations 4.1</li> <li>• Patterns and trends 4.2</li> <li>• Representations 4.3</li> </ul> <p style="color: red; margin-top: 5px;">Required problem</p> <ul style="list-style-type: none"> <li>• Life Expectancy #4</li> </ul>		<ul style="list-style-type: none"> <li>• Representations 4.3</li> </ul> <p style="color: red; margin-top: 10px;">Required problem</p> <ul style="list-style-type: none"> <li>• Share and Summarize p. 604</li> </ul>	<ul style="list-style-type: none"> <li>• Counting Techniques 4.4</li> <li>• Probability 4.5</li> </ul> <p style="color: red; margin-top: 10px;">Required problem</p> <ul style="list-style-type: none"> <li>• Odd or Even #3</li> </ul>
<b>5. Problem Solving, Reasoning and Proof</b> (process)	<ul style="list-style-type: none"> <li>• Problem-solving strategies 5.1.1</li> <li>• Logical conclusions and generalizations 5.2.1</li> <li>• Mathematical conjectures and arguments 5.2.2</li> <li>• Validity of a mathematical solution 5.2.3</li> <li>• Mathematical reasoning in other disciplines. 5.2.4</li> </ul>	<ul style="list-style-type: none"> <li>• Problem-solving strategies 5.1.1</li> <li>• Logical conclusions and generalizations 5.2.1</li> <li>• Mathematical conjectures and arguments 5.2.2</li> <li>• Validity of a mathematical solution 5.2.3</li> <li>• Mathematical reasoning in other disciplines. 5.2.4</li> </ul>	<ul style="list-style-type: none"> <li>• Problem-solving strategies 5.1.1</li> <li>• Logical conclusions and generalizations 5.2.1</li> <li>• Mathematical conjectures and arguments 5.2.2</li> <li>• Validity of a mathematical solution 5.2.3</li> <li>• Mathematical reasoning in other disciplines. 5.2.4</li> </ul>	<ul style="list-style-type: none"> <li>• Problem-solving strategies 5.1.1</li> <li>• Logical conclusions and generalizations 5.2.1</li> <li>• Mathematical conjectures and arguments 5.2.2</li> <li>• Validity of a mathematical solution 5.2.3</li> <li>• Mathematical reasoning in other disciplines. 5.2.4</li> </ul>

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<b>6. Communication, Representation, and connections</b> (process)	<ul style="list-style-type: none"> <li>• Ideas clearly and logically in both written and oral form. 6.1.1</li> <li>• Mathematical terminology, labels, symbols, and notation 6.1.3</li> <li>• Questions, conjectures, definitions, and generalizations about data, information, and problem situations 6.1.4</li> <li>• Models and technology 6.2.1</li> <li>• Representations 6.2.2</li> <li>• Oral and written form 6.3.3</li> </ul>	<ul style="list-style-type: none"> <li>• Ideas clearly and logically in both written and oral form. 6.1.1</li> <li>• Mathematical terminology, labels, symbols, and notation 6.1.3</li> <li>• Questions, conjectures, definitions, and generalizations about data, information, and problem situations 6.1.4</li> <li>• Models and technology 6.2.1</li> <li>• Representations 6.2.2</li> <li>• Oral and written form 6.3.3</li> </ul>	<ul style="list-style-type: none"> <li>• Ideas clearly and logically in both written and oral form. 6.1.1</li> <li>• Mathematical terminology, labels, symbols, and notation 6.1.3</li> <li>• Questions, conjectures, definitions, and generalizations about data, information, and problem situations 6.1.4</li> <li>• Models and technology 6.2.1</li> <li>• Representations 6.2.2</li> <li>• Oral and written form 6.3.3</li> </ul>	<ul style="list-style-type: none"> <li>• Ideas clearly and logically in both written and oral form. 6.1.1</li> <li>• Mathematical terminology, labels, symbols, and notation 6.1.3</li> <li>• Questions, conjectures, definitions, and generalizations about data, information, and problem situations 6.1.4</li> <li>• Models and technology 6.2.1</li> <li>• Representations 6.2.2</li> <li>• Oral and written form 6.3.3</li> </ul>