

**Easthampton Public Schools**  
**Math Pacing Guide 2013-2014**  
**Kindergarten**

Enduring Understandings	Essential Questions	Content Standards	Time Frame	Math Practices, Notes and Resources
<b>Unit 1 Understanding Numbers 1-10</b> (Primary Resource: Unit 1 Math Expressions)				
<ul style="list-style-type: none"> <li>• Numbers represent quantities</li> <li>• We count to find the numbers of objects.</li> <li>• A number is greater if it is further along in the counting sequence.</li> <li>• Matching can help us compare groups of items.</li> </ul>	<ol style="list-style-type: none"> <li>1. What are numbers?</li> <li>2. Why do we count?</li> <li>3. How can we compare groups of objects to find how which has more, less or the same amount?</li> </ol>	<p><b>K.CC.1, 2, 3</b> – Know number names and count sequence. Write numbers 1-5.</p> <p><b>K.CC.4a, 4b, 4c, 5</b> – Count to tell the number of objects.</p> <p><b>K.CC.6</b> – Identify whether the number of objects in one group is greater than, less than or equal to the number of objects in another group using matching and counting strategies.</p> <p><b>K.MD.3</b> Classify objects and count the number of objects in each category.</p> <p><b>K.G.1</b> Identify and describe shapes (Circles, squares, rectangles).</p> <p><b>K.G.4, 5</b>- Analyze, compare and compose shapes.</p>	<p>26 days</p> <p>Beg. Sept. through Mid to late October</p> <p>2 Day Lessons: 1, 8, 10, 14</p>	<p><b>MP 2</b> Draw groups with a specific number.</p> <p><b>MP 3</b> Construct defense of a count or comparison. (<i>How do you know there re 3?")</i></p> <p><b>MP 4,5</b> Use models and tools (counting mats, fingers) to count and compare numbers</p> <p><b>MP 6</b> Use precise language to describe arrangements of objects.</p>
<b>Unit 2 Five Groups in Numbers 5-10</b> (Primary Resource: Unit 2 Math Expressions)				
<ul style="list-style-type: none"> <li>• Groups can be combined to make larger groups</li> <li>• Groups can be separated into smaller groups.</li> <li>• We can use our knowledge about the number sequence and counting to compare groups.</li> </ul>	<ol style="list-style-type: none"> <li>1. What happens when we put groups together?</li> <li>2. What happens when we take groups apart?</li> <li>3. How can we compare numbers?</li> </ol>	<p><b>K.CC.1, 2, 3</b> – Know number names and count sequence.</p> <p><b>K.CC.4a, 4b, 5</b> – Count to tell the number of objects.</p> <p><b>K.CC.6, 7</b> – Compare numbers</p> <p><b>K.OA.1, 2, 3 5</b> Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.</p> <p><b>K.G.1, 2</b> Identify and describe shapes (hexagons)</p> <p><b>K.G.4</b> - Analyze, compare and create compose shapes.</p>	<p>27 days</p> <p>late October through Dec.</p> <p>2 Day lessons: 1, 3, 9, 13, 17</p>	<p><b>MP 1</b> Construct and act out story problems.</p> <p><b>MP 2</b> Connect symbols to models</p> <p><b>MP 5 and 6</b> Use Counting mat and order number tiles with precision.</p> <p><b>MP 7</b> Represent numbers 6-10 as 5 groups and ones.</p> <p><b>MP 8</b> Relate +1 and -1 to the counting sequence.</p> <p>Note: Eliminate Puzzled Penguin</p>

**Easthampton Public Schools  
Math Pacing Guide 2013-2014  
Kindergarten**

Enduring Understandings	Essential Questions	Content Standards	Time Frame	Math Practices, Notes and Resources
<b>Unit 3 Teen Numbers as Tens and Ones (Primary Resource: Unit 3 Math Expressions)</b>				
<ul style="list-style-type: none"> <li>• Adding is putting groups together and making more. Subtracting is taking groups apart and making less.</li> <li>• Teen numbers can be grouped as one ten and some ones.</li> <li>• We can sort objects by their attributes.</li> </ul>	<ol style="list-style-type: none"> <li>1. What is addition?</li> <li>2. What is subtraction?</li> <li>3. Why do all teen numbers start with a 1?</li> <li>4. How do we sort objects?</li> </ol>	<p><b>K.CC.1, 2, 3</b> – Know number names and count sequence.</p> <p><b>K.CC.4a, 4b, 5</b> – Count to tell the number of objects.</p> <p><b>K.CC.6, 7</b> – Compare numbers</p> <p><b>K.OA.1, 2, 3 5</b> Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.</p> <p><b>K.NBT.1</b> – work with number 11-19 to gain a foundation for place value.</p> <p><b>K.MD.3</b> – Classify objects and count the number of objects in each category.</p> <p><b>K.G.1, 2</b> –identify and describe shapes (triangles)</p>	<p>31 days</p> <p>Beg. January through late Feb.</p> <p>2 Day Lessons 3, 4, 5, 9, 10, 12, 21</p>	<p><b>MP 1</b> Retell story problems.</p> <p><b>MP 2</b> Connect symbols (3+1) to models (tiles or drawings) to show the operation used in story problems.</p> <p><b>MP 3, 6</b> Use precise language to share story problems and solutions.</p> <p><b>MP 7</b> Use break apart stick to decompose numbers</p> <p><b>Notes:</b></p> <p>-Separate addition and subtraction practice</p> <p>-Eliminate 5 and 10 counters strips</p>

**Easthampton Public Schools  
Math Pacing Guide 2013-2014  
Kindergarten**

Enduring Understandings	Essential Questions	Content Standards	Time Frame	Math Practices, Notes and Resources
<b>Unit 4 Partners, Problem Drawings, and Tens (Primary Resource: Unit 4 Math Expressions)</b>				
<ul style="list-style-type: none"> <li>• We can break numbers apart by groups of tens and ones to help us understand larger numbers.</li> <li>• Objects are made up of shapes that have names and properties.</li> </ul>	<ol style="list-style-type: none"> <li>1. Why do we break numbers apart into tens and ones?</li> <li>2. How are shapes the same and how are they different?</li> </ol>	<p><b>K.CC.1-3</b> - Know number names and the count sequence.</p> <p><b>K.CC.4a-c - K.CC.5</b> – Count to tell the number of objects.</p> <p><b>K.CC.6, 7</b> –Compare numbers</p> <p><b>K.OA.1-5</b> – Understand addition and subtraction</p> <p>K.NBT.1 – work with number 11-19 to gain a foundation for place value.</p> <p><b>K.G.1, 2</b> – identify and describe shapes (cones and cylinders)</p> <p><b>K.G.4</b> – Analyze, compare, create and compose shapes</p>	<p>31 days</p> <p style="text-align: center;">Beg. March through April</p> <p>2 day lessons 1, 6, 8, 16, 20</p>	<p><b>MP 1, 4</b> Create Story Problems from scenarios.</p> <p><b>MP 2</b> Find partners of numbers.</p> <p><b>MP 5, 8</b> Use mats and tiles or ten sticks and cubes to show teen numbers.</p> <p><b>MP 6</b> Describe attributes of shapes. Use precise language to identify shapes in the world.</p> <p>Notes:</p> <ul style="list-style-type: none"> <li>• Eliminate coloring and cutting of fruits and vegetables for sorting. Substitute other manipulatives or attribute blocks.</li> <li>• Game for unknown partners: Counters in a Cup</li> <li>• Substitute bug partners with unifix cubes</li> <li>• Use ten sticks and cubes (base ten blocks) or unifix cubes to represent teen numbers.</li> <li>• Will need 3D solid shapes.</li> <li>• Continue with Problems Solving (exemplars, etc.)</li> </ul>

**Easthampton Public Schools  
Math Pacing Guide 2013-2014  
Kindergarten**

Enduring Understandings	Essential Questions	Content Standards	Time Frame	Math Practices, Notes and Resources
<b>Unit 5 Consolidation of Concepts (Primary Resource: Unit 5 Math Expressions)</b>				
<ul style="list-style-type: none"> <li>• We measure objects to find out how long or tall or heavy they are.</li> <li>• There are many ways to measure objects using tools.</li> <li>• Shapes can be identified by common physical characteristics.</li> <li>• Shapes represent our two and three dimensional world.</li> </ul>	<ol style="list-style-type: none"> <li>1. Why do we measure objects?</li> <li>2. How do we measure and compare objects?</li> <li>3. What is a shape?</li> <li>4. How are solid and flat objects different from each other?</li> </ol>	<p><b>K.CC.1-3</b> - Know number names and the count sequence.</p> <p><b>K.CC.4a-c - K.CC.5</b> – Count to tell the number of objects.</p> <p><b>K.CC.6, 7</b> –Compare numbers</p> <p><b>K.OA.1-5</b> – Understand addition and subtraction</p> <p><b>K.NBT.1</b> – work with number 11-19 to gain a foundation for place value.</p> <p><b>K.MD.1, 2</b> – Describe and compare measureable attributes.</p>	<p>35 days</p> <p>May and June</p> <p>2, 6, 9, 13, 15, 19, 22,23</p>	<p><b>MP 3.</b> Construct viable arguments and critique the reasoning of others.</p> <p><b>MP 5.</b> Use appropriate tools strategically.</p> <p><b>MP 6.</b> Attend to precision.</p> <p><b>MP 7.</b> Look for and make use of structure.</p> <p>Notes: Can make a shape museum with 3D shapes. These can be matched to wooden solids. Geoblocks kits are available in each school. These can be used to match faces of 3d shapes with 2D shapes. Investigations Unit on Shapes has activities for comparing 2d and 3d shapes.</p>

**End of Year Evaluation:** This was our first time through this edition of Math Expressions. It is considered more challenging than the previous edition and there are more worksheets that we have used in the past. Some teachers have supplemented with lessons and activities from the 2011 edition of Math Expressions and some with additional hands on activities and games. Concern was mentioned about Unit 2 when both addition and subtraction are introduced in rapid succession. Several teachers provided opportunities for students to act out these operation with manipulatives. The need for more story problem solving was discussed at grade level meetings. Some teachers supplemented with a “problem of the day” and other have decided to use “Exemplar” problem packets we have used in previous years.

**Next steps:** It would be helpful for the Kindergarten team to expand the resources in this Scope and Sequence to include hands on activities they use to enhance student engagement and understanding. This would be a good opportunity to share ideas. It would also be good to discuss approaches and resources for including story problems.