

## Thomaston Public Schools - Curriculum Overview and Pacing Guide

Directions - Each colored box below represents one curricular unit. In each box, complete as much of the required information as possible (unit title, unit pacing, unit overview, priority learning targets). On its own, this document will eventually become a public-facing and quick-reference curriculum guide. As suits our curriculum goals, we will eventually use the information you lay out here as the basis for building a fully-expanded curriculum.

A few important points:

1. Unit Title - Your unit title can be thematic (i.e. “The Power and Pain of Love”) or Skill-Based (i.e. Research and Argumentation) or Content-Driven (“Quadratic Functions and Operations”).
2. Unit Pacing - There are approximately forty instructional weeks in a school year, but due to testing, school events, etc., we build a curriculum to cover thirty-six weeks. A full curriculum should contain six units each a minimum of four weeks and maximum of eight weeks long. In total, the units should add up to thirty-six weeks of coverage. The only exception is ELA, which uses quarterly units each 9 weeks long.
3. Unit Overview - The unit overview is a “meaty” paragraph that provides a narrative description of the unit, including major themes, skills, and (possibly) content. Think: In this unit students will (read / do / experience / learn / understand / develop / consider /etc.)...
4. Compelling Questions - Compelling questions are essential. They reflect critical and important inquiries that help students make sense of the world around them through the lenses of specific themes, issues, and topics that connect to specific disciplines. Compelling questions are relevant. They engage students in inquiries that are of personal importance and that ask students to consider themes, issues, and topics that help them connect the content of specific disciplines to their own lives and to their world. For more information, click [here](#).
5. Priority Learning Targets - Each unit should contain three priority learning targets. These are effectively end-of-unit guarantees of what students will be able to do and demonstrate as a result of their learning. As priority learning targets, they are those “level three” learning targets on our eventual proficiency scales that we’ve been developing for a while now. The only exception to three targets per unit are for ELA (5-6 per unit) and history (six per unit, incl. three inquiry targets). These content areas have separate curriculum guide templates.

<b>Course Title: First Grade Mathematics Curriculum</b>		
<b>School: Black Rock School</b>	<b>Grade: 1</b>	<b>Curriculum Pacing: 36 weeks</b>
<b>Unit One: Operations and Algebraic Thinking Numbers Within 10: Addition and Subtraction</b>	<b>Unit Two: Operations and Algebraic Thinking Adding and Subtracting in Word Problems</b>	<b>Unit Three: Operations and Algebraic Thinking Numbers Within 20: Addition and Subtraction</b>
<b>Unit Pacing: 6 weeks</b>	<b>Unit Pacing: 6 weeks</b>	<b>Unit Pacing: 6 weeks</b>
<p><b>Unit Overview:</b> This unit will prepare students to develop strategies for adding and subtracting whole numbers based on their work with small numbers. They will use a variety of models to demonstrate add-to, take from, put-together, take apart and compare situations to develop meaning for the operations of addition and subtraction. The students will use fingers, counters and connecting cubes to model the counting on strategy.</p> <p><b>In Part 1</b> of this unit, students will count on to add and use doubles and doubles plus one as a strategy.</p> <p><b>In Part 2</b> of this unit, students will add numbers in any order.</p> <p><b>In Part 3</b> of this unit, students will understand missing addends and use number partners for 10.</p>	<p><b>Unit Overview:</b> This unit focuses on applying the counting on strategy to subtract within 10, adding and subtracting within word problems, subtracting to compare in word problems and understanding true and false equations.</p> <p><b>In Part 1</b> of this unit, students will apply the counting on strategy to ten and model the counting on strategy with physical and visual models.</p> <p><b>In Part 2</b> of this unit, students will add and subtract in word problems and subtract to compare in word problems.</p> <p><b>In Part 3</b> of this unit, students will demonstrate an understanding of true and false equations and will apply strategy to solve addition and subtraction facts.</p>	<p><b>Unit Overview:</b> This unit introduces students to adding and subtracting within 20. They will learn the importance of the number 10 and understand that teens are made up of ten and some ones. They will also learn that numbers can be put together and broken apart in different ways. <b>Students will apply what they know about adding and subtracting up to 10 to adding and subtracting up to 20.</b></p> <p><b>In Part 1</b> of this unit, students will understand the concept of ten numbers, making a ten to add, finding totals greater than ten and adding three numbers.</p> <p><b>In Part 2</b> of this unit, students will make a ten to subtract and find unknown numbers.</p> <p><b>In Part 3</b> of this unit, students will solve addition and subtraction word problems to 20 and collect and compare data.</p>

**Compelling Questions:**

1. What are the different strategies that I can use to add?
2. How can you use double facts to problem solve?

**Compelling Questions:**

1. What strategies can I use to determine if an equation is true or false?
2. What is the purpose of the equal sign?

**Compelling Questions:**

1. Why is it important to know multiple strategies to solve addition and subtraction problems?
2. How can I make sense of a word problem and persevere to solve it?

<p><b>Priority Learning Targets</b></p> <p>1. I can apply properties of operations as strategies to add and subtract. (Math1.OA.3)</p> <p>2. I can understand subtraction as an unknown-addend problem. (Math.1.OA.4)</p> <p>3. I can relate counting as addition and subtraction. (Math.1.OA.5)</p> <p>4. I can and subtract within 20, demonstrating fluency for addition and subtraction within 10. I can use strategies such as counting on; making a ten; decomposing a number leading to a ten; using the relationship between addition and subtraction and creating equivalent sums. (Math.1.OA.6)</p>	<p><b>Priority Learning Targets</b></p> <p>1. I can use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions( Math 1.OA.1)</p> <p>2. I can relate counting as addition and subtraction. (Math.1.OA.5)</p> <p>3. I can and subtract within 20, demonstrating fluency for addition and subtraction within 10. I can use strategies such as counting on; making a ten; decomposing a number leading to a ten; using the relationship between addition and subtraction and creating equivalent sums. (Math.1.OA.6)</p> <p>4. I understand the meaning of the equal sign, and can determine if equations involving addition and subtraction are true or false. (Math.1.OA.7)</p>	<p><b>Priority Learning Targets</b></p> <p>1. I can use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions ( Math 1.OA.1)</p> <p>2. I can and subtract within 20, demonstrating fluency for addition and subtraction within 10. I can use strategies such as counting on; making a ten; decomposing a number leading to a ten; using the relationship between addition and subtraction and creating equivalent sums. (Math.1.OA.6)</p> <p>3. I understand that the numbers from 11-19 are composed of a ten and one, two, three, four, five, six, seven, eight or nine tens(and 0 ones) (Math.1.NBT.2b)</p> <p>4. I can organize, represent and interpret data with up to three categories: ask and answer questions, how many in each category and how many more or less. (Math.1.MD.4)</p>
<p><b>Unit Four: Number and Operations in Base Ten</b> Tens and Ones and Operations With Tens and Ones</p>	<p><b>Unit Five: Measurement and Data</b> Measuring and Comparing the Lengths of Objects</p>	<p><b>Unit Six: Geometry</b> Sorting, Composing and Dividing Shapes</p>
<p><b>Unit Pacing: 8 weeks</b></p>	<p><b>Unit Pacing: 6 weeks</b></p>	<p><b>Unit Pacing: 5 weeks</b></p>

**Unit Overview:** In this unit, students will learn about counting, place value and money. Students will develop an understanding of whole number relationships and place value, including groupings of tens and ones. Students will also learn how to tell time by the hour and half an hour. They will be able identify coins and identify the value of each coin.

**In Part 1** of this unit, students will understand the concept of tens, utilize the 120 chart, understand tens and ones and compare numbers.

**In Part 2** of this unit, students will learn to tell time by the hour and half hour and learn about money.

**In Part 3** of this unit, students will add and subtract tens, understand the concept of 10 more and ten less, add tens to any number, add two digit and one digit numbers and add two digit numbers.

**Unit Overview:** In this unit, students will develop an understanding of linear measurement and measuring lengths as iterating length units.

**In Part One:** Students will compare the lengths of objects and put them in length order by lining them up at one end.

**In Part Two:** Students will tell which of two objects is longer by comparing both of them to another object.

**In Part Three:** Students will measure an object with same-sized units to find its length.

**Unit Overview:** In this unit, students will learn about the attributes of shapes and how to compose and decompose geometric shapes.

**In Part One:** Students will describe and sort shapes by counting the number of sides and corners that they have.

**In Part Two:** Students will put together two or more shapes to make a new shape.

**In Part Three:** Students will divide shapes into equal parts(called halves) or four equal parts (called fourths).

<p><b>Compelling Questions:</b></p> <ol style="list-style-type: none"> <li>1. What are the ways I can add and subtract tens and ones?</li> <li>2. How can clocks and schedules be read and used in everyday life?</li> </ol>	<p><b>Compelling Questions:</b></p> <ol style="list-style-type: none"> <li>1. What tools do I use to measure objects?</li> <li>2. How do I organize, represent and interpret data?</li> </ol>	<p><b>Compelling Questions:</b></p> <ol style="list-style-type: none"> <li>1. What two and three dimensional shapes can we find around us?</li> <li>2. How do I use fractions in my everyday life?</li> </ol>
<p><b>Priority Learning Targets</b></p> <ol style="list-style-type: none"> <li>1. I can count to 120, starting at any number less than 120. I can read and write numerals and represent a number of objects with a written numeral. (Math.1.NBT.1)</li> <li>2. I understand that the two digits of a two digit number represent amounts of tens and ones. (Math.1.NBT.2)</li> <li>3. I can compare two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols <math>&gt;</math>, <math>=</math>, <math>&lt;</math>. (Math.1.NBT.3)</li> <li>4. I can add within 100, including adding a two-digit number and a one- digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between</li> </ol>	<p><b>Priority Learning Targets</b></p> <ol style="list-style-type: none"> <li>1. I can order three objects by length: compare lengths of two objects indirectly by using a third object. (Math.1.MD.1)</li> <li>2. I can express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end: understand that the length measurement of an object is the number of the same-size length units that span it with no gaps or overlaps. (Math.1.MD.2)</li> </ol>	<p><b>Priority Learning Targets</b></p> <ol style="list-style-type: none"> <li>1. I can distinguish between attributes versus non-defining attributes; and build and draw shapes to possess defining attributes. (Math.1.G.1)</li> <li>2. I can compose two- dimensional shapes(rectangles,squares, trapezoids, triangles, half circles, and or three dimensional shapes to create a composite shape, and compose new shapes from the composite shape. (Math.1.G.2)</li> <li>3. I can partition circles and rectangle into two and four equal shares, describe the shares using the words halves, fourths, quarters and use the phrases half of, fourth of and quarter of. I can describe the whole as two of, or four of the</li> </ol>

addition and subtraction; relate the strategy to a written method and explain the reasoning used. (Math.1.NBT.6)

5. I can tell and write time in hours and half-hours using analog and digital clocks. (Math.1.MD.3)

shares. I can understand for these examples that decomposing into more equal shares creates smaller shares. (Math.1.G.3)