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 <u>here</u>.
- 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.

Course Title: Kindergarten Mathematics				
School: Black Rock School	Grade: K	Curriculum Pacing: 36 weeks		
Unit One: Counting and Cardinality, Operations and Algebraic Thinking Numbers 0-5: Counting, Writing, and Comparing	Unit Two : Counting and Cardinality Operations and Algebraic thinking Number 6-10: Counting, Writing, Comparing, and Sorting	Unit Three: Geometry Naming, Comparing, and Building Shapes		
Unit Pacing: 6 weeks	Unit Pacing: 6 weeks	Unit Pacing: 4 weeks		
 Unit Overview: This unit introduces students to counting, writing, and comparing the numbers 0-5. Students will learn that counting is an important mathematical skill. Knowing how to count lays the foundation for the concept of grouping objects. As the students explore number combinations and strategies to find totals to 5, they are building a foundation to support future fluency. In Part 1 of this unit, students will count with one-to-one correspondence, recognize and read numbers 0-5 and write numbers 0-5. In Part 2 of this unit, students will understand 0 as representing no objects and will compare two numbers. In Part 3 of this unit, students will identify and make number pairs for 3, 4 and 5. 	 Unit Overview: This unit introduces students to counting, writing and comparing the numbers 6-10. They will understand that knowing the counting sequence will help determine how much one more is when you add it to a given number. Students will also learn to compare the number of objects in groups by counting them to see whether one number is greater than, less than, or equal to another. In addition to this, they will also learn that you can combine two numbers to make another number. In Part 1 of this unit, students will count, recognize and write numbers to 10. In Part 2 of this unit, students will compare two written numbers with and without objects and sort objects into categories. In Part 3 of this unit, students will show number pairs for 10 and identify and make number pairs for 6,7,8 and 9. 	 Unit Overview: This unit introduces students to naming, comparing and building shapes. They will be able to identify shapes as flat or solid and will learn their names. They will learn and use words to describe the position of a shape. Students will also use simple shapes to build other shapes. In Part 1 of this unit, students will identify and correctly name shapes. In Part 2 of this unit, students will use position words to describe shapes and compare flat and solid shapes. In Part 3 of this unit, students will draw shapes and build shapes from smaller shapes. 		

Compelling Questions:	Compelling Questions:	Compelling Questions:
 What are numbers and how are they different from letters? How are numbers used in the world around us? 	 What is counting? How is counting used everyday in the world around us? 	 What are some shapes you see around your classroom, at home and outside? Can you make a new shape if you put two shapes together?
Priority Loorning Torgeto	Priority Loorning Torgets	Brierity Learning Targete
 I can write numbers from 0 to 20 and represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects) (Math.K.CC.3) I can understand the relationship between numbers and quantities. (Math.K.CC.4) I can count to answer "how many? " questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given number 1-20, count out that many objects. (Math.K.CC.5) I can fluently add and subtract within 5. (Math.K.OA.5) 	 I can write numbers from 0 to 20 and represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects) (Math.K.CC.3) I can understand the relationship between numbers and quantities. (Math.K.CC.4) I can count to answer "how many" about objects in different arrangements. (Math.K.CC.5) I can represent addition and subtraction with objects and fingers, mental images, drawings, sounds, acting out situations, verbal explanations, expressions or equations. (Math.K.OA.1) 	 I can describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind and next to. (Math.K.G.1) I can correctly name shape regardless of their orientations or overall size. (Math.K.G.2) I can identify shapes as two-dimensional(flat) or three-dimensional (solid). (Math.K.G.3) I can compose simple shapes to form larger shapes. (Math.K.G.6)
Unit Four: Operations and Algebraic Thinking Numbers within 10: Addition and Subtraction	Unit Five: Numbers and Operations in Base 10, Counting and Cardinality Numbers 11-100: Teen Numbers and Counting by 1s and 10s	Unit Six: Measurement Comparing Length, Height, and Weight

Unit Pacing: 8 weeks	Unit Pacing: 8 weeks	Unit Pacing: 4 weeks
 Unit Overview: This unit introduces students to adding and subtracting within 10. They will learn that when you join or put together groups, you are adding and when you are separating or taking away groups, you are subtracting. Students will learn multiple strategies to add and subtract. They will represent addition and subtraction with objects, fingers, mental images, drawings, sounds, acting out situations, verbal explanations, expressions and equations. In Part 1 of this unit, students will add and subtract within 5. In Part 2 of this unit, students will add and subtract within 10. They will also find missing parts of 10. In Part 3 of this unit, students will solve addition and subtraction word problems and solve word problems with both addends unknown 	 Unit Overview: This unit introduces the students to the numbers 11-100 and to counting by ones and tens. They will learn that teen numbers are the numbers from 11-19 and that teen numbers are made up of ten ones and some more ones. Students will also learn that they can build on prior knowledge to use what they have learned about counting by tens to help them learn the counting sequence all the way to 100. In Part 1 of this unit, students will understand teen numbers as tens and some more ones. In Part 2 of this unit, students will recognize, read and write numbers 11-20 and learn how many to add to make a teen number. In Part 3 of this unit, students will learn to count to 100 by tens and count to 100 by ones. 	 Unit Overview: This unit introduces students to comparing length, height and weight. Students will compare objects by telling which is longer, taller or shorter and by telling which is heavier or lighter. In Part 1 of this unit, students will compare two objects to tell which is longer or shorter. In Part 2 of this unit, students will compare two objects to tell which is taller or shorter. In Part 3 of this unit, students will compare two objects to tell which is heavier or lighter.
Compelling Questions:	Compelling Questions:	Compelling Questions:
 What is addition? What is subtraction? 	 What are some objects that you can find around us there are more than 10 of ? Can you recognize any patterns when counting to 100? 	 Why is it important to measure objects? What tools do you use to measure objects?
Priority Learning Targets	Priority Learning Targets	Priority Learning Targets
1. I can represent addition and subtraction with objects, fingers, mental images, drawings,	1. I can count to 100 by ones and tens. (Math.K.CC.1)	1. I can order three objects by length: compare lengths of two objects. Indirectly by using a third

 sounds, acting out, verbal explanations, expressions or equations. (Math.K.OA.1) 2. I can solve addition and subtraction word problems, and add and subtract within 10 by using objects or drawings to represent the problem. (Math.K.OA.2) 3. I can decompose numbers less than or equal to 10 in pairs in more than one way by using objects or drawings, and record each by a drawing or equation. (Math.K.OA.3) 4. I can find the number that makes 10, for any number from 1-9 by using objects or drawings, and record the answer with a drawing or 	 2. I can write numbers from 0-20 and represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects) (Math.K.CC.3) 3. I can count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given number 1-20, count out that many objects. (Math.K.CC.5) 4. I can compose and decompose numbers from 11 to 19 into tens, ones and some further ones by using objects or drawing, and record 	object. (Math.1.MD) 2. I can express the length of an object as a whole number of lengths 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 same-size length units that span it with no gaps or overlaps. (Math.1.MD.2)
equation. (Math.K.OA.4)	each composition or decomposition by a drawing or equation and understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones. (Math.K.NBT.1)	