Milford Public Schools
Excellence ★ Honor ★ Tradition

Curriculum Map

Curriculum Vision Statement

Milford Public Schools believes curriculum is a sequence of high-quality learning experiences aligned to prioritized standards that support all learners. Our curriculum is grounded in Milford's Vision of the Learner: the belief that all learners in our community will engage in assured experiences that are rooted in scholarship, personal development, citizenship, creativity, and innovation.

Through our district's model of High Quality Instruction, all learners will develop a strong knowledge of content and skills while they challenge themselves, exhibit high levels of agency, work autonomously, take risks, live a healthy lifestyle, and develop a sense of community awareness and engagement - where everyone is able to think and act beyond themselves as individuals.

Curriculum Position Statement

Milford Public Schools believes curriculum encompasses instruction, assessment, and professional learning.

- **Curriculum establishes the knowledge economy of what learners will know and be able to do through assured experiences.**
- **The district's model for High-Quality Instruction involves intentionally engineering environments where agency is cultivated through actionable feedback, a growth mindset, and developmental relationships among all learners.**
- **Assessment is a co-created process in a learning environment that enables participants to understand how learners are thinking, what they know, and what skills need to be developed and refined.**

Because ongoing learning is at the center of everything we do, adult learners engage in a cycle of professional learning experiences that allow them to expand their understanding of their own needs and the developing needs of diverse learners so that through continuous reflection, evaluation, and revision they can improve learning experiences within all environments.

MPS High Quality Instruction (HQI)
MPS Vision of the Learner

Developmental Relationships Framework

Systemic Implementation *(Years 3-7):*

Anticipated Review Year (Year 1):

Draft Date: 5/13/21

MPS Academic Expectations
[MPS Curriculum Revision Cycle]

MPS Curriculum Revision Calendar

Course Overview

Concept	Big Ideas / Enduring Understandings
Counting and Cardinality	❖ Counting involves matching spoken numbers to one object at a time and the last number said tells the number of objects counted. ❖ The arrangement of a group of objects does not affect the quantity. ❖ Numerals represent a quantity and can be compared.
Geometry	❖ 2-D and 3-D shapes can be categorized according to their attributes ❖ Shapes can be composed and decomposed into other shapes.
Measurement and Data	❖ Some attributes can be measured, counted, and compared
Number and Operations in Base Ten	❖ In our number system patterns are utilized when counting and unitizing groups of ten with teen numbers and numbers beyond 20.
Operations and Algebraic Thinking	❖ Addition is putting together and adding to, and subtraction is taking apart and taking from. ❖ Numbers can be composed and decomposed in various ways.

Systemic Implementation *(Years 3-7):* **Anticipated Review Year (Year 1):**

At a Glance

Unit Titles	Length of Unit
Numbers 1-10	4-6 weeks
Counting, Sorting, and Comparing	4-6 weeks
Describing Shapes and Space	3-5 weeks
Early Addition & Subtraction	4-6 weeks
Working With Larger Numbers	4-5 weeks

Systemic Implementation *(Years 3-7):* **Anticipated Review Year (Year 1):**

Unit Title	**Numbers 1-10**	**Length of Unit**	4-6 weeks

Essential Questions	❖ What is the relationship between number and quantity?
Standards	K.CC.A.1; .K.CC.A.2; K.CC.A.3; K.CC.B.4; K.CC.B.5; K.CC.C.6; K.CC.C.7, K.OA.4
Key Vocabulary	Count, Match,, Forward, Backward, Group, More, Less, Ten Frame, Rekenrek

*Standards based on the Connecticut Core Standards and the Common Core Standards for Mathematics (CCSS-M) For more information visit: http://www.corestandards.org/Math/

Critical Content ***Students will KNOW…***	**Key Skills:** ***Students will be able to (DO)…***
• Cardinality is the relationship between numbers and quantities: the last number said tells the number of objects counted.	• Count to 100 by ones utilizing the 1-9 sequence, and count to 100 by by tens rotely. (Built up over the course of the year). • Accurately represent a quantity with a written numeral (from 0-20). • State the total number of objects in a set without recounting. • Count forward starting at a given number within the known sequence.
• Each spoken number is matched with a given object when counting a group of objects (one-to-one correspondence), and matched to a written numeral. • Counting objects involves pairing each number to one and only one object -synchrony (matching one word to each object).	• Count out a set of objects to match a given quantity. • Match each number said with a given object when counting a group of objects. (one to one correspondence) • When counting to find the total in a given set, keep track of/ organize which objects have been counted and which have not.

Systemic Implementation *(Years 3-7):* **Anticipated Review Year (Year 1):**

• The arrangement of a group of objects does not affect the quantity (Conservation of number).	• Identify the total of a given set, up to 20, regardless of the arrangement
• Numbers can be expressed as composite units (ie - subitizing 5 on a ten frame or 3 on a die).	• Recognize a small group of objects (five, ten and other numbers 0-10 when using a ten frame, Rekenrek, and dot cards) without counting them (subitizing).
• Amounts are hierarchically inclusive; five includes four plus one, etc. (all numbers preceding a number can be or are systematically included in the value of another selected number.)	• Create a model to justify that each successive number is one more than the previous.
• Numerals represent a quantity and can be compared to determine which is greater or less than.	• Match objects from different groups and identify the part of the group that is "more." • Determine which numeral is greater or less within 10 without concrete materials or visuals.
• Numbers can be composed and decomposed in various ways.	• Express decompositions, as part whole relationships

Evidence of Learning: ***(Student learning will be measured by . . .)***	Journal Entries, Teacher Observation, Exit Slips, Performance Assessments, Self Assessments, Curriculum Based Measures

Systemic Implementation ***(Years 3-7):*** **Anticipated Review Year (Year 1):**

Unit Title	**Counting, Sorting, and Comparing**	**Length of Unit**	4-6weeks

Essential Questions	❖ How are objects in the physical world described and categorized? ❖ What patterns occur in our number system?
Standards	K.CC.A.1; K.CC.A.2; K.CC.A.3; K.CC.B.4; K.CC.B.5; K.CC.C.^; K.CC.,C.7; K.MD.A.1; K.MD.A.2; K.MD.B.3
Key Vocabulary	Length, Weight, Greater than/Less than, More than/Fewer than, Equal, Compare

Critical Content ***Students will KNOW…***	**Key Skills:** ***Students will be able to (DO)…***
• Categories of objects can be counted and then the quantities can be compared to determine which has the most/least. • Objects can be described according to their relative position to other objects.	• Use positional words to describe the relative position of a shape or object. • Sort groups of objects according to a common attribute and defend the reasoning used in classifying/categorizing the objects. • Compare categories and order them based on the quantity in each.

Systemic Implementation *(Years 3-7):* **Anticipated Review Year (Year 1):**

• Mathematicians use specific math vocabulary (more/fewer, greater/less, taller/shorter, equal) to make comparisons.
 	
• Objects and shapes can be compared and described according to various measurable attributes (i.e. length, weight).
	• Compare objects according to measurable attributes and justify which has more/less of the chosen attribute.
	
	• Consistently use math vocabulary to make comparisons.
	  ○ Quantity: greater/less, more/fewer, equal
	  ○ Measurement: taller/shorter, longer/shorter, equal
	  ○ Weight: heavier/lighter

• When investigating length the endpoints of the objects being compared must align (*For example, directly compare the heights of two children and describe one child as taller/shorter*.). • The length of a given object is preserved despite its orientation or position (Conservation of length).	• Describe two equal length objects (two pencils, two blocks) as the same/equal length regardless of orientation. • Students line up(align) objects in order to determine which is longer/shorter.
• Unitizing and subitizing help us to see groups when sorting and counting • Numbers can be composed and decomposed in various ways.	• Utilize the five and ten structure when grouping and counting • Express decompositions as part-whole relationships. • Choose an efficient strategy to group and count large sets of objects

Evidence of Learning: ***(Student learning will be measured by . . .)***	Journal Entries, Teacher Observation, Exit Slips, Performance Assessments, Self Assessments, Curriculum Based Measures

Systemic Implementation *(Years 3-7):* **Anticipated Review Year (Year 1):**

Unit Title	**Describing Shapes and Space**	**Length of Unit**	3-5 weeks

Essential Questions	❖ How are objects in the physical world described and categorized?
Standards	K.G.A.1; K.G.A.2; .K.G.A.3; K.G.B.4; K.G.B.5; K.G.B.6; K.MD.A.1; K.MD.A.2; K.MD.B.3
Key Vocabulary	Square, Triangle, Rectangle, Circle, Sphere, Cube, Cylinder, Cone, Sides, Vertices/Corners, Faces, Long, Short, Equal, Flat, Solid, 2-D, 3-D, Length, Weight

Critical Content ***Students will KNOW…***	**Key Skills:** ***Students will be able to (DO)…***
• Shapes can be analyzed and compared using attribute and measurement vocabulary to describe their similarities and differences. • Shapes are categorized depending on their properties. • Each category can be counted and then the quantities can be compared to determine which has the most/least.	• Describe shapes using proper attribute vocabulary (sides, vertices/corners, faces, long, short, equal) • Identify two and three dimensional shapes and justify the choice of shape name or category based on the features(attributes) of the shape as opposed to concept images (i.e. it's a triangle because it looks like a triangle). • Use positional words to describe the relative position of a shape or object. • Locate two and three dimensional shapes in the physical world and justify the choice of shape name or category based on the features of the shape as opposed to concept images (i.e. it's a triangle because it looks like a triangle). • Sort groups of objects according to a common attribute and defend

Systemic Implementation *(Years 3-7):* **Anticipated Review Year (Year 1):**

	the reasoning used in classifying/categorizing the objects. • Compare categories and order them based on the quantity in each.
• Shapes are conserved through flips and turns, and the resulting shape is the same - congruent to the original. • Objects can be described according to their relative position to other objects.	• Analyze two and three dimensional shapes in order to reason about their attributes regardless of size or orientation
• Shapes can be composed and decomposed into other shapes	• Join two or more shapes to compose and draw other shapes and designs.
• Some shapes are "flat" or two dimensional while others are "solid" and thus three dimensional • The faces of three-dimensional shapes can be described as two dimensional figures	• Compare and contrast two and three dimensional shapes in order to distinguish between them.

Evidence of Learning: ***(Student learning will be measured by . . .)***	Journal Entries, Teacher Observation, Exit Slips, Performance Assessments, Self Assessments, Curriculum Based Measures

Systemic Implementation ***(Years 3-7):*** **Anticipated Review Year (Year 1):**

Unit Title	**Early Addition & Subtraction**	**Length of Unit**	4-6 weeks

Essential Questions	❖ What makes a context additive and how can that be modeled? ❖ What is the relationship between addition and subtraction?
Standards	K.OA.A.1; K.OA.A.2; K.OA.A.3; K.OA.A.4; K.OA.A.5
Key Vocabulary	Part, Whole, Separate, Combine, Add, Subtract, Count, Compare, Organize, Take Apart, Take From, Join,Total, Plus, Minus, Equal, Difference, Sum

Critical Content ***Students will KNOW…***	**Key Skills:** ***Students will be able to (DO)…***
• Addition is putting together and adding to, and subtraction is taking apart and taking from. • There is an inverse relationship between addition and subtraction. • Addition and subtraction can be represented both in concrete and abstract ways.	• Represent addition and subtraction within 10 concretely, representationally, and abstractly • Use models and concrete materials to show putting together and taking apart quantities in different ways. (Show me how to make 8. 3 and 5, 6 and 2...) and justify the equivalence between the pictures/models. • Connect concrete or representational/pictorial models to an equation.
• Unitizing and subitizing help us to see groups when adding and subtracting. • Numbers can be composed and decomposed in various ways.	• Utilize the five structure when adding and subtracting within 10 (i.e. 5 + n pattern). • Express decompositions, sums, and differences as part whole relationships. • Choose an efficient strategy to fluently add and subtract within 5.

Systemic Implementation *(Years 3-7):* **Anticipated Review Year (Year 1):**

• Addition and subtraction word problems can be presented with different unknowns (whole, start, change).	• Determine the type of context described and thus the most appropriate operation to use (addition or subtraction).

Evidence of Learning: ***(Student learning will be measured by . . .)***	Journal Entries, Teacher Observation, Exit Slips, Performance Assessments, Self Assessments, Curriculum Based Measures

Systemic Implementation ***(Years 3-7):*** **Anticipated Review Year (Year 1):**

Unit Title	**Working With Larger Numbers**	**Length of Unit**	4-5 weeks

Essential Questions	❖ What patterns occur in our number system? ❖ How can understanding these help us count efficiently?
Standards	K.NBT.A.1, K.CC.A.1
Key Vocabulary	Group, Tens, Ones, Teen Number Names, Decade Number Names

Critical Content ***Students will KNOW…***	**Key Skills:** ***Students will be able to (DO)…***
• A group of ten ones can be unitized as one group of ten. • Numbers grow by ten when counting by ten. • Patterns are used in our number system when counting. • Place value patterns occur when making and adding on groups of ten	• Recognize an organized group of ten without counting. • Count to 100 by ones and by tens. • Count to 100 and recognize patterns when reaching each landmark 10. • Use landmark tens to establish patterns when counting to 20 and beyond.
• Teen numbers are composed and decomposed using a group of ten and some ones.	• Compare two teen numbers to determine which is greater or less than without concrete materials or visuals. • Utilize the ten structure to compose and decompose teen numbers (i.e. a group of ten and some ones). • Unitize a group of ten as 1 ten when working with numbers 11-19 to gain a foundation for place value.

Systemic Implementation *(Years 3-7):* **Anticipated Review Year (Year 1):**

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Systemic Implementation ***(Years 3-7):*** **Anticipated Review Year (Year 1):**