# LITCHFIELD PUBLIC SCHOOLS
# Core Curriculum Scope and Sequence
# Math/Kindergarten

**Algebraic Reasoning: Patterns and Functions**

Patterns and functional relationships can be represented and analyzed using a variety of strategies, tools and technologies.

**Essential Question: How do patterns and functions help us describe data and physical phenomena and solve a variety of problems?**

| UNIT ONE<br><br>Sorting and Classifying<br><br>September | **Connecticut Frameworks/Standards** | **Content and Skill Objectives** Students will be able to: | **Grade 3 CMT Correlations** | **Primary Source Secondary Source** | **Assessments** |
|---|---|---|---|---|---|
| | **1.1 Understand and describe patterns and functional relationships.** | • Sort and classify objects by attributes, including size, shape, color, texture, orientation, position and use, and explain the reason for each sort. | **17A.** Identify and recognize two-dimensional geometric shapes and figures, including number of angles and sides of polygons.<br>**22A.** Extend or complete patterns, or identify rules using numbers and attributes.<br>**22B.** Extend or complete patterns and state rules using numbers and attributes.<br>**24A.** Identify objects that are the same or different by one attribute.<br>**24B.** Sort objects into two groups by a common attribute. | **Growing With Math Topic**<br><br>**Topic 1**: Sorting and Classifying | **September Task Performance**<br>1.1<br>1.2<br>1.3 |
| | | • Describe and make comparisons of qualitative and quantitative changes of a given pattern using terms such as warmer, softer, more, one more, less, one less, bigger, smaller, longer and shorter. | **1A.** Solve problems involving one more/less or 10 more/less using two-digit numbers.<br>**15A.** Estimate lengths and areas by comparing. | | |
| | | • Recognize, reproduce, extend and create repeating patterns using movement, sounds, color, shapes, numbers and textures.<br>• Identify and extend visual, auditory and physical patterns to make predictions. | **17A.** Identify and recognize two-dimensional geometric shapes and figures, including number of angles and sides of polygons.<br>**22A.** Extend or complete patterns, or identify rules using numbers and attributes.<br>**22B.** Extend or complete patterns and state rules using numbers and attributes.<br>**24A.** Identify objects that are the same or different by one attribute.<br>**24B.** Sort objects into two groups by a common attribute.<br>**25A.** Solve extended numerical and statistical problems. | | |

# LITCHFIELD PUBLIC SCHOOLS
# Core Curriculum Scope and Sequence
# Math/Kindergarten

**Numerical and Proportional Reasoning**

Quantitative relationships can be expressed numerically in multiple ways in order to make connections and simplify calculations using a variety of strategies, tools and technologies.

**Essential Question: How are quantitative relationships represented by numbers?**

| UNIT TWO | Connecticut Frameworks/Standards | Content and Skill Objectives Students will be able to: | Grade 3 CMT Correlations | Primary Source Secondary Source | Assessments |
|---|---|---|---|---|---|
| **Counting**<br><br>**October** | **2.1 Understand that a variety of numerical representations can be used to describe quantitative relationships.** | • *Represent quantities of up to 30 objects in a set.*<br>• *Compare sets of up to 30 objects and use the terms more, less or the same to compare the two sets and identify a set with one more or one less than a given set.*<br>• Order sets of up to 30 objects from least to greatest.<br>• Identify the ordinal position of objects: first, second, third, fourth, fifth and last.<br>• Use a variety of models and familiar object to compare two parts of a whole and describe the parts as being closer to a whole or closer to very little.<br>• Use a variety of models and familiar objects to:<br>  • Identify one whole and one half of an object.<br>  • Recognize a half and put two halves of an object together to make a whole.<br>  • Form a whole from two smaller sets that have equal amounts. | **1A.** Solve problems involving one more/less or 10 more/less using two-digit numbers.<br>**2A.** Relate whole numbers to pictorial representations of base ten blocks and vice versa.<br>**2D.** Identify points representing two- and three-digit whole numbers on a number line and vice versa.<br>**4A.** Order two- and three-digit whole numbers<br>**4B.** Describe magnitude of two- and three-digit whole numbers.<br>**4C.** Round two-digit whole numbers in context.<br>**11A.** Identify a reasonable estimate to a problem.<br><br>**2B.** Identify fractional parts of regions and sets using pictures and vice versa.<br>**2C.** Label and/or shade fractional parts of regions and sets.<br>**25A.** Solve extended numerical and statistical problems. | **Growing With Math Topic**<br><br>**Topic 2:**Counting to Ten and Counting to 30 | **October Task Performance**<br><br>**2.1**<br>**2.2**<br>**2.3**<br>**2.4** |
| | **2.2 Use numbers and their properties to compute flexibly and fluently and to reasonably estimate measures and quantities** | • *Count pennies and trade pennies for objects.*<br>• *Count and group up to 30 objects by tens.*<br>• *Identify the numerals 1-30 and match each numeral to an* | | | |

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| | | *appropriate set of objects.*<br>• *Act out and solve addition and subtraction story problems that reflect real-world experiences and contextual problems using sets of up to 10 objects and describe the strategy or reasoning used to solve a problem. For example: Put two crayons together with four crayons; then count to determine the number of crayons needed for all students at a table.*<br>• *Write the number sentences that correspond to story problems using addition, subtraction and equals symbols (+, -, =) correctly.*<br>• *Estimate the amount of objects in a set using 10 as a benchmark and then count to determine if the amount is more or less than 10.*<br>• *Identify and name pennies and dimes.*<br>• *Count pennies and trade pennies for objects.*<br>• *Write Numerals 0-30.* | | | |

# LITCHFIELD PUBLIC SCHOOLS
# Core Curriculum Scope and Sequence
# Math/Kindergarten

**Geometry and Measurement**

Shapes and structures can be analyzed, visualized, measured and transformed using a variety of strategies, tools and technologies

**Essential Question: How do geometric relationships and measurements help solve problems and make sense of our world?**

| UNIT THREE<br><br>Geometry<br><br>October | **Connecticut Frameworks/Standards** | **Content and Skill Objectives** Students will be able to: | **Grade 3 CMT Correlations** | **Primary Source Secondary Source** | **Assessments** |
|---|---|---|---|---|---|
| | **3.1 Use properties and characteristics of two- and three-dimensional shapes and geometric theorems to describe relationships, communicate ideas and solve problems.** | • Identify and describe familiar shapes (triangles, squares, rectangles and circles) and solids (cubes, spheres, cylinders, cones and prisms) in the environment.<br>• Compare and sort familiar shapes and solids in the environment and contextual situations.<br>• Construct small sets of shapes and solids using a variety of materials. | **17A.** Identify and recognize two-dimensional geometric shapes and figures, including number of angles and sides of polygons.<br>**17B.** Draw two-dimensional geometric shapes and figures.<br>**25A.** Solve extended numerical and statistical problems. | **Growing With Math Topic**<br><br>**Topic 3:** Space, 3-D Shapes, Patterns | **Calendar Activities**<br><br>**October Task Performance 3.A 3.1 3.2 3.3** |
| | **3.2 Use spatial reasoning, location and geometric relationships to solve problems.** | • Describe location, direction, and position of objects or parts of objects, using terms such as under/over, inside/outside, next to/near, top/bottom, in front of, first and last.<br>• *Complete simple shape and jigsaw puzzles and explain the reasoning used to complete the puzzle and solve the problem.* | **15A.** Estimate lengths and areas by comparing.<br>**17B.** Draw two-dimensional geometric shapes and figures.<br>**25A.** Solve extended numerical and statistical problems. | | |
| | **3.3 Develop and apply units, systems, formulas and appropriate tools to estimate and measure.** | • Recognize events that reoccur (at specific times of the day or week).<br>• *Locate yesterday, today, and tomorrow on a calendar to sequence events and use terms such as before and after to compare events.* | **14B.** Solve problems involving time, elapsed time (15-minute increments) and calendars. | | |
| | | • Use nonstandard units, physical referents (such as a finger) or everyday objects such as links, Unifix cubes or blocks to compare, estimate and order measures of length, area, capacity, weight and | **15A.** Estimate lengths and areas by comparing.<br>**16A.** Measure lengths to the nearest inch or centimeter.<br>**16B.** Draw lengths to the nearest inch or centimeter. | | |

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| | | temperature and describe the reasoning and strategies used.<br>• Describe and order small sets of familiar objects by size, length or area using comparative language such as more, bigger, longer, shorter and taller. | **16C.** Identify appropriate customary or metric units of measure for a given situation (inches, feet, centimeters and meters).<br>**25A.** Solve extended numerical and statistical problems. | | |
| | | • Use a balance scale to compare the weight of two objects and identify which is heavier. | | | |

# LITCHFIELD PUBLIC SCHOOLS
# Core Curriculum Scope and Sequence
# Math/Kindergarten

**Numerical and Proportional Reasoning**

Quantitative relationships can be expressed numerically in multiple ways in order to make connections and simplify calculations using a variety of strategies, tools and technologies.

**Essential Question: How are quantitative relationships represented by numbers?**

| UNIT FOUR<br><br>Exploring Numbers<br><br>November | **Connecticut Frameworks/Standards** | **Content and Skill Objectives** Students will be able to: | **Grade 3 CMT Correlations** | **Primary Source Secondary Source** | **Assessments** |
|---|---|---|---|---|---|
| | **2.1 Understand that a variety of numerical representations can be used to describe quantitative relationships.** | • *Represent quantities of up to 30 objects in a set.*<br>• *Compare sets of up to 30 objects and use the terms more, less or the same to compare the two sets and identify a set with one more or one less than a given set.*<br>• Order sets of up to 30 objects from least to greatest.<br>• Identify the ordinal position of objects: first, second, third, fourth, fifth and last.<br>• Use a variety of models and familiar object to compare two parts of a whole and describe the parts as being closer to a whole or closer to very little.<br>• Use a variety of models and familiar objects to:<br>  • Identify one whole and one half of an object.<br>  • Recognize a half and put two halves of an object together to make a whole.<br>  • Form a whole from two smaller sets that have equal amounts. | **1A.** Solve problems involving one more/less or 10 more/less using two-digit numbers.<br>**2A.** Relate whole numbers to pictorial representations of base ten blocks and vice versa.<br>**2D.** Identify points representing two- and three-digit whole numbers on a number line and vice versa.<br>**4A.** Order two- and three-digit whole numbers<br>**4B.** Describe magnitude of two- and three-digit whole numbers.<br>**4C.** Round two-digit whole numbers in context.<br>**11A.** Identify a reasonable estimate to a problem.<br><br>**2B.** Identify fractional parts of regions and sets using pictures and vice versa.<br>**2C.** Label and/or shade fractional parts of regions and sets.<br>**25A.** Solve extended numerical and statistical problems. | **Growing With Math Topic**<br><br>**Topic 4:**Exploring Numbers 0-9 | **November Task Performance**<br><br>**4.A**<br>**4.B**<br>**4.1**<br>**4.2**<br>**4.4** |
| | **2.2 Use numbers and their properties to compute flexibly and fluently and to reasonably estimate measures and quantities.** | • *Count pennies and trade pennies for objects.*<br>• *Count and group up to 30 objects by tens.*<br>• *Identify the numerals 1-30 and match* | | | |

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| | | *each numeral to an appropriate set of objects.*<br>• *Act out and solve addition and subtraction story problems that reflect real-world experiences and contextual problems using sets of up to 10 objects and describe the strategy or reasoning used to solve a problem. For example: Put two crayons together with four crayons; then count to determine the number of crayons needed for all students at a table.*<br>• *Write the number sentences that correspond to story problems using addition, subtraction and equals symbols (+, -, =) correctly.*<br>• *Estimate the amount of objects in a set using 10 as a benchmark and then count to determine if the amount is more or less than 10.*<br>• *Identify and name pennies and dimes.*<br>• *Count pennies and trade pennies for objects.*<br>• *Write Numerals 0-30.* | | | |

# LITCHFIELD PUBLIC SCHOOLS
# Core Curriculum Scope and Sequence
# Math/Kindergarten

**Geometry and Measurement**

Shapes and structures can be analyzed, visualized, measured and transformed using a variety of strategies, tools and technologies

**Essential Question: How do geometric relationships and measurements help solve problems and make sense of our world?**

| UNIT FIVE<br><br>Measurement<br><br>December | State Framework | Grade-Level Expectations | 3rd Grade CMT Correlations | Primary Source<br>Secondary Source | Assessments |
|---|---|---|---|---|---|
| | **3.1 Use properties and characteristics of two- and three-dimensional shapes and geometric theorems to describe relationships, communicate ideas and solve problems.** | • Identify and describe familiar shapes (triangles, squares, rectangles and circles) and solids (cubes, spheres, cylinders, cones and prisms) in the environment.<br>• Compare and sort familiar shapes and solids in the environment and contextual situations.<br>• Construct small sets of shapes and solids using a variety of materials. | **17A.** Identify and recognize two-dimensional geometric shapes and figures, including number of angles and sides of polygons.<br>**17B.** Draw two-dimensional geometric shapes and figures.<br>**25A.** Solve extended numerical and statistical problems. | **Growing With Math TOPIC**<br><br>**Topic 5:** Introducing Measurement | **Calendar Activities**<br><br>**December Task Performance**<br>**5.1**<br>**5.2**<br>**5.3**<br>**5.4** |
| | **3.2 Use spatial reasoning, location and geometric relationships to solve problems.** | • Describe location, direction, and position of objects or parts of objects, using terms such as under/over, inside/outside, next to/near, top/bottom, in front of, first and last.<br>• *Complete simple shape and jigsaw puzzles and explain the reasoning used to complete the puzzle and solve the problem.* | **15A.** Estimate lengths and areas by comparing.<br>**17B.** Draw two-dimensional geometric shapes and figures.<br>**25A.** Solve extended numerical and statistical problems. | | |
| | **3.3 Develop and apply units, systems, formulas and appropriate tools to estimate and measure.** | • Recognize events that reoccur (at specific times of the day or week).<br>• *Locate yesterday, today, and tomorrow on a calendar to sequence events and use terms such as before and after to compare events.*<br>• Use nonstandard units, physical referents (such as a finger) or everyday objects such as links, Unifix cubes or blocks to compare, estimate and order measures of length, area, capacity, weight and | **14B.** Solve problems involving time, elapsed time (15-minute increments) and calendars.<br>**15A.** Estimate lengths and areas by comparing.<br>**16A.** Measure lengths to the nearest inch or centimeter.<br>**16B.** Draw lengths to the nearest inch or centimeter.<br>**16C.** Identify appropriate customary or metric units of | | |

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| | | temperature and describe the reasoning and strategies used.<br>• Describe and order small sets of familiar objects by size, length or area using comparative language such as more, bigger, longer, shorter and taller.<br>• Use a balance scale to compare the weight of two objects and identify which is heavier. | measure for a given situation (inches, feet, centimeters and meters).<br>**25A.** Solve extended numerical and statistical problems. | | |

# LITCHFIELD PUBLIC SCHOOLS
# Core Curriculum Scope and Sequence
# Math/Kindergarten

**Numerical and Proportional Reasoning**

Quantitative relationships can be expressed numerically in multiple ways in order to make connections and simplify calculations using a variety of strategies, tools and technologies.

**Essential Question: How are quantitative relationships represented by numbers?**

| UNIT SIX | State Framework | Grade-Level Expectations | 3rd Grade CMT Correlations | Primary Source Secondary Source | Assessments |
|---|---|---|---|---|---|
| **Comparing and Ordering Numbers**<br><br>**January** | **2.1 Understand that a variety of numerical representations can be used to describe quantitative relationships.** | • *Represent quantities of up to 30 objects in a set.*<br>• *Compare sets of up to 30 objects and use the terms more, less or the same to compare the two sets and identify a set with one more or one less than a given set.*<br>• Order sets of up to 30 objects from least to greatest.<br>• Identify the ordinal position of objects: first, second, third, fourth, fifth and last.<br>• Use a variety of models and familiar object to compare two parts of a whole and describe the parts as being closer to a whole or closer to very little.<br>• Use a variety of models and familiar objects to:<br>  ◦ Identify one whole and one half of an object.<br>  ◦ Recognize a half and put two halves of an object together to make a whole.<br>  ◦ Form a whole from two smaller sets that have equal amounts. | **1A.** Solve problems involving one more/less or 10 more/less using two-digit numbers.<br>**2A.** Relate whole numbers to pictorial representations of base ten blocks and vice versa.<br>**2D.** Identify points representing two- and three-digit whole numbers on a number line and vice versa.<br>**4A.** Order two- and three-digit whole numbers<br>**4B.** Describe magnitude of two- and three-digit whole numbers.<br>**4C.** Round two-digit whole numbers in context.<br>**11A.** Identify a reasonable estimate to a problem.<br><br>**2B.** Identify fractional parts of regions and sets using pictures and vice versa.<br>**2C.** Label and/or shade fractional parts of regions and sets.<br>**25A.** Solve extended numerical and statistical problems. | **Growing With Math Topic**<br><br>**Topic 6:** Comparing, Joining and Ordering Numbers | **January Task Performance**<br><br>**6.1**<br>**6.2**<br>**6.3**<br>**6.4** |
| | **2.2 Use numbers and their properties to compute flexibly and fluently and to reasonably estimate measures and quantities.** | • *Count pennies and trade pennies for objects.*<br>• *Count and group up to 30 objects by tens.*<br>• *Identify the numerals 1-30 and match* | | | |

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| | | *each numeral to an appropriate set of objects.*<br>• *Act out and solve addition and subtraction story problems that reflect real-world experiences and contextual problems using sets of up to 10 objects and describe the strategy or reasoning used to solve a problem. For example: Put two crayons together with four crayons; then count to determine the number of crayons needed for all students at a table.*<br>• *Write the number sentences that correspond to story problems using addition, subtraction and equals symbols (+, -, =) correctly.*<br>• *Estimate the amount of objects in a set using 10 as a benchmark and then count to determine if the amount is more or less than 10.*<br>• *Identify and name pennies and dimes.*<br>• *Count pennies and trade pennies for objects.*<br>• *Write Numerals 0-30* | | | |

# LITCHFIELD PUBLIC SCHOOLS
# Core Curriculum Scope and Sequence
# Math/Kindergarten

**Geometry and Measurement**

Shapes and structures can be analyzed, visualized, measured and transformed using a variety of strategies, tools and technologies

**Essential Question: How do geometric relationships and measurements help solve problems and make sense of our world?**

| UNIT SEVEN<br><br>2D Shapes and Patterns<br><br>February | State Framework | Grade-Level Expectations | 3rd Grade CMT Correlations | Primary Source Secondary Source | Assessments |
|---|---|---|---|---|---|
| | **3.1 Use properties and characteristics of two- and three-dimensional shapes and geometric theorems to describe relationships, communicate ideas and solve problems.** | • Identify and describe familiar shapes (triangles, squares, rectangles and circles) and solids (cubes, spheres, cylinders, cones and prisms) in the environment.<br>• Compare and sort familiar shapes and solids in the environment and contextual situations.<br>• Construct small sets of shapes and solids using a variety of materials. | **17A.** Identify and recognize two-dimensional geometric shapes and figures, including number of angles and sides of polygons.<br>**17B.** Draw two-dimensional geometric shapes and figures.<br>**25A.** Solve extended numerical and statistical problems. | **Growing With Math Topic**<br><br>**Topic 7:** Exploring 2D Shapes and Patterns | **Calendar Activities**<br><br>**February Task Performance**<br>**7.A**<br>**7.1**<br>**7.2**<br>**7.3**<br>**7.4** |
| | **3.2 Use spatial reasoning, location and geometric relationships to solve problems.** | • Describe location, direction, and position of objects or parts of objects, using terms such as under/over, inside/outside, next to/near, top/bottom, in front of, first and last.<br>• *Complete simple shape and jigsaw puzzles and explain the reasoning used to complete the puzzle and solve the problem.* | **15A.** Estimate lengths and areas by comparing.<br>**17B.** Draw two-dimensional geometric shapes and figures.<br>**25A.** Solve extended numerical and statistical problems. | | |
| | **3.3 Develop and apply units, systems, formulas and appropriate tools to estimate and measure.** | • Recognize events that reoccur (at specific times of the day or week).<br>• *Locate yesterday, today, and tomorrow on a calendar to sequence events and use terms such as before and after to compare events.*<br>• Use nonstandard units, physical referents (such as a finger) or everyday objects such as links, Unifix cubes or | **14B.** Solve problems involving time, elapsed time (15-minute increments) and calendars.<br>**15A.** Estimate lengths and areas by comparing.<br>**16A.** Measure lengths to the nearest inch or centimeter.<br>**16B.** Draw lengths to the nearest inch or centimeter.<br>**16C.** Identify appropriate customary or | | |

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| | | blocks to compare, estimate and order measures of length, area, capacity, weight and temperature and describe the reasoning and strategies used.<br>• Describe and order small sets of familiar objects by size, length or area using comparative language such as more, bigger, longer, shorter and taller.<br>• Use a balance scale to compare the weight of two objects and identify which is heavier. | metric units of measure for a given situation (inches, feet, centimeters and meters).<br>**25A.** Solve extended numerical and statistical problems. | | |

# LITCHFIELD PUBLIC SCHOOLS
# Core Curriculum Scope and Sequence
# Math/Kindergarten

**Algebraic Reasoning: Patterns and Functions**

Patterns and functional relationships can be represented and analyzed using a variety of strategies, tools and technologies.

**Essential Question: How do patterns and functions help us describe data and physical phenomena and solve a variety of problems?**

| UNIT EIGHT<br><br>Grouping and Separating Numbers<br><br>March | Connecticut Frameworks/Standards | Content and Skill Objectives<br>Students will be able to: | Grade 3<br>CMT Correlations | Primary Source<br>Secondary Source | Assessments |
|---|---|---|---|---|---|
| | **1.1 Understand and describe patterns and functional relationships.** | 1. Sort and classify objects by attributes, including size, shape, color, texture, orientation, position and use, and explain the reason for each sort. | **17A.** Identify and recognize two-dimensional geometric shapes and figures, including number of angles and sides of polygons.<br>**22A.** Extend or complete patterns, or identify rules using numbers and attributes.<br>**22B.** Extend or complete patterns and state rules using numbers and attributes.<br>**24A.** Identify objects that are the same or different by one attribute.<br>**24B.** Sort objects into two groups by a common attribute. | **Growing With Math Topic**<br><br>**Topic 8**: Grouping and Separating Numbers | **March Task Performance**<br>**8.1**<br>**8.2**<br>**8.3**<br>**8.4** |
| | | 2. Describe and make comparisons of qualitative and quantitative changes of a given pattern using terms such as warmer, softer, more, one more, less, one less, bigger, smaller, longer and shorter. | **1A.** Solve problems involving one more/less or 10 more/less using two-digit numbers.<br>**15A.** Estimate lengths and areas by comparing. | | |
| | | 3. Recognize, reproduce, extend and create repeating patterns using movement, sounds, color, shapes, numbers and textures.<br>4. Identify and extend visual, auditory and physical patterns to make predictions. | **17A.** Identify and recognize two-dimensional geometric shapes and figures, including number of angles and sides of polygons.<br>**22A.** Extend or complete patterns, or identify rules using numbers and attributes.<br>**22B.** Extend or complete patterns and state rules using numbers and attributes.<br>**24A.** Identify objects that are the same or different by one attribute.<br>**24B.** Sort objects into two groups by a common attribute.<br>**25A.** Solve extended numerical and statistical problems. | | |

# LITCHFIELD PUBLIC SCHOOLS
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**Numerical and Proportional Reasoning**

Quantitative relationships can be expressed numerically in multiple ways in order to make connections and simplify calculations using a variety of strategies, tools and technologies.

**Essential Question: How are quantitative relationships represented by numbers?**

| UNIT NINE | Connecticut Frameworks/Standards | Content and Skill Objectives<br>Students will be able to: | Grade 3<br>CMT Correlations | Primary Source<br>Secondary Source | Assessments |
|---|---|---|---|---|---|
| **Quantities to 30**<br><br>**March** | **2.1 Understand that a variety of numerical representations can be used to describe quantitative relationships.** | • *Represent quantities of up to 30 objects in a set.*<br>• *Compare sets of up to 30 objects and use the terms more, less or the same to compare the two sets and identify a set with one more or one less than a given set.*<br>• Order sets of up to 30 objects from least to greatest.<br>• Identify the ordinal position of objects: first, second, third, fourth, fifth and last.<br>• Use a variety of models and familiar object to compare two parts of a whole and describe the parts as being closer to a whole or closer to very little.<br>• Use a variety of models and familiar objects to:<br>  • Identify one whole and one half of an object.<br>  • Recognize a half and put two halves of an object together to make a whole.<br>  • Form a whole from two smaller sets that have equal amounts. | **1A.** Solve problems involving one more/less or 10 more/less using two-digit numbers.<br>**2A.** Relate whole numbers to pictorial representations of base ten blocks and vice versa.<br>**2D.** Identify points representing two- and three-digit whole numbers on a number line and vice versa.<br>**4A.** Order two- and three-digit whole numbers<br>**4B.** Describe magnitude of two- and three-digit whole numbers.<br>**4C.** Round two-digit whole numbers in context.<br>**11A.** Identify a reasonable estimate to a problem.<br>**2B.** Identify fractional parts of regions and sets using pictures and vice versa.<br>**2C.** Label and/or shade fractional parts of regions and sets.<br>**25A.** Solve extended numerical and statistical problems. | **Growing With Math Topic**<br><br>**Topic 9: Exploring Numbers 11-15**<br><br>*Teacher created graphing activities | **March Task Performance**<br><br>**9.A**<br>**9.B**<br>**9.C**<br>**9.D**<br>**9.2**<br>**9.3** |
| | **2.2 Use numbers and their properties to compute flexibly and fluently and to reasonably estimate measures and quantities** | • *Count pennies and trade pennies for objects.*<br>• *Count and group up to 30 objects by tens.*<br>• *Identify the numerals 1-30 and* | | | |

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| | | *match each numeral to an appropriate set of objects.*<br>• *Act out and solve addition and subtraction story problems that reflect real-world experiences and contextual problems using sets of up to 10 objects and describe the strategy or reasoning used to solve a problem. For example: Put two crayons together with four crayons; then count to determine the number of crayons needed for all students at a table.*<br>• *Write the number sentences that correspond to story problems using addition, subtraction and equals symbols (+, -, =) correctly.*<br>• *Estimate the amount of objects in a set using 10 as a benchmark and then count to determine if the amount is more or less than 10.*<br>• *Identify and name pennies and dimes.*<br>• *Count pennies and trade pennies for objects.*<br>• *Write Numerals 0-30.* | | | |

# LITCHFIELD PUBLIC SCHOOLS
# Core Curriculum Scope and Sequence
# Math/Kindergarten

**Working with Data: Probability and Statistics**

Data can be analyzed to make informed decisions using a variety of strategies, tools and technologies

**Essential Question: How can collecting, organizing and displaying data help us analyze information and make reasonable predictions and informed decisions?**

| UNIT NINE | Connecticut Frameworks/Standards | Content and Skill Objectives<br>Students will be able to: | Grade 3<br>CMT Correlations | Primary Source<br>Secondary Source | Assessments |
|---|---|---|---|---|---|
| **Data Collecting and Graphing**<br><br>**March** | **4.1 Collect, organize and display data using appropriate statistical and graphical methods.** | • *Pose questions about objects and events in the environment that can be used to guide the collection of data.*<br>• *Collect data, record and the results using real graphs and picture graphs.*<br>• *Arrange information in a systematic way using counting, sorting, lists and graphic organizers.* | **19A.** Identify correct information from tables, bar graphs, pictographs and charts.<br>**19B.** Create bar graphs and pictographs from data in tables and charts.<br>**25A.** Solve extended numerical and statistical problems. | *Teacher created units | **March Performance Task**<br>**9.A**<br>**9.B**<br>**9.C**<br>**9.D** |
| | **4.2 Analyze data sets to form hypotheses and make predictions.** | • *Describe data using the terms more, less and the same.*<br>• *Identify and extend patterns from organized data to make predictions. For example: More boys than girls in our class watch television every day. We predict that the same will be true for another kindergarten class.* | **22A.** Extend or complete patterns, or identify rules using numbers and attributes.<br>**22B.** Extend or complete patterns and state rules using numbers and attributes.<br>**25A.** Solve extended numerical and statistical problems. | | |
| | **4.3 Understand and apply basic concepts of probability.** | • *Describe the likelihood of the future occurrence of events based on patterns and personal experiences using terms such as likely, unlikely or certainly.*<br>• *Engage in simple probability activities and discuss the results.* | **21A.** Identify correct solutions to problems involving elementary notions of probability.<br>**25A.** Solve extended numerical and statistical problems. | | |

# LITCHFIELD PUBLIC SCHOOLS
# Core Curriculum Scope and Sequence
# Math/Kindergarten

**Geometry and Measurement**

Shapes and structures can be analyzed, visualized, measured and transformed using a variety of strategies, tools and technologies

**Essential Question: How do geometric relationships and measurements help solve problems and make sense of our world?**

| UNIT TEN<br><br>Measurement<br><br>April | State Framework | Grade-Level Expectations | 3rd Grade CMT Correlations | Primary Source Secondary Source | Assessments |
|---|---|---|---|---|---|
| | **3.1 Use properties and characteristics of two- and three-dimensional shapes and geometric theorems to describe relationships, communicate ideas and solve problems.** | • Identify and describe familiar shapes (triangles, squares, rectangles and circles) and solids (cubes, spheres, cylinders, cones and prisms) in the environment.<br>• Compare and sort familiar shapes and solids in the environment and contextual situations.<br>• Construct small sets of shapes and solids using a variety of materials. | **17A.** Identify and recognize two-dimensional geometric shapes and figures, including number of angles and sides of polygons.<br>**17B.** Draw two-dimensional geometric shapes and figures.<br>**25A.** Solve extended numerical and statistical problems. | **Growing With Math TOPIC**<br><br>**Topic 10:** Measurement | **Calendar Activities**<br><br>**April Task Performance**<br><br>**10.A**<br>**10.1**<br>**10.2**<br>**10.3** |
| | **3.2 Use spatial reasoning, location and geometric relationships to solve problems.** | • Describe location, direction, and position of objects or parts of objects, using terms such as under/over, inside/outside, next to/near, top/bottom, in front of, first and last.<br>• *Complete simple shape and jigsaw puzzles and explain the reasoning used to complete the puzzle and solve the problem.* | **15A.** Estimate lengths and areas by comparing.<br>**17B.** Draw two-dimensional geometric shapes and figures.<br>**25A.** Solve extended numerical and statistical problems. | | |
| | **3.3 Develop and apply units, systems, formulas and appropriate tools to estimate and measure.** | • Recognize events that reoccur (at specific times of the day or week).<br>• *Locate yesterday, today, and tomorrow on a calendar to sequence events and use terms such as before and after to compare events.*<br>• Use nonstandard units, physical referents (such as a finger) or everyday objects such as links, Unifix cubes or blocks to compare, estimate and order measures of | **14B.** Solve problems involving time, elapsed time (15-minute increments) and calendars.<br>**15A.** Estimate lengths and areas by comparing.<br>**16A.** Measure lengths to the nearest inch or centimeter.<br>**16B.** Draw lengths to the nearest inch or centimeter.<br>**16C.** Identify appropriate customary or metric units of | | |

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| | | length, area, capacity, weight and temperature and describe the reasoning and strategies used.<br>• Describe and order small sets of familiar objects by size, length or area using comparative language such as more, bigger, longer, shorter and taller.<br>• Use a balance scale to compare the weight of two objects and identify which is heavier. | measure for a given situation (inches, feet, centimeters and meters).<br>**25A.** Solve extended numerical and statistical problems. | | |

# LITCHFIELD PUBLIC SCHOOLS
# Core Curriculum Scope and Sequence
# Math/Kindergarten

**Numerical and Proportional Reasoning**

Quantitative relationships can be expressed numerically in multiple ways in order to make connections and simplify calculations using a variety of strategies, tools and technologies.

**Essential Question: How are quantitative relationships represented by numbers?**

| UNIT ELEVEN<br><br>Numbers 0-30 with Addition and Subtraction<br><br>May | **Connecticut Frameworks/Standards** | **Content and Skill Objectives** Students will be able to: | **Grade 3 CMT Correlations** | **Primary Source Secondary Source** | **Assessments** |
|---|---|---|---|---|---|
| | **2.1 Understand that a variety of numerical representations can be used to describe quantitative relationships.** | • *Represent quantities of up to 30 objects in a set.*<br>• *Compare sets of up to 30 objects and use the terms more, less or the same to compare the two sets and identify a set with one more or one less than a given set.*<br>• Order sets of up to 30 objects from least to greatest.<br>• Identify the ordinal position of objects: first, second, third, fourth, fifth and last.<br>• Use a variety of models and familiar object to compare two parts of a whole and describe the parts as being closer to a whole or closer to very little.<br>• Use a variety of models and familiar objects to:<br>  • Identify one whole and one half of an object.<br>  • Recognize a half and put two halves of an object together to make a whole.<br>  • Form a whole from two smaller sets that have equal amounts. | **1A.** Solve problems involving one more/less or 10 more/less using two-digit numbers.<br>**2A.** Relate whole numbers to pictorial representations of base ten blocks and vice versa.<br>**2D.** Identify points representing two- and three-digit whole numbers on a number line and vice versa.<br>**4A.** Order two- and three-digit whole numbers<br>**4B.** Describe magnitude of two- and three-digit whole numbers.<br>**4C.** Round two-digit whole numbers in context.<br>**11A.** Identify a reasonable estimate to a problem.<br><br>**2B.** Identify fractional parts of regions and sets using pictures and vice versa.<br>**2C.** Label and/or shade fractional parts of regions and sets.<br>**25A.** Solve extended numerical and statistical problems. | **Growing With Math Topic**<br><br>**Topic 11: Exploring Numbers 0-30** | **Calendar activities**<br><br>**May Task Performance**<br><br>**11.A**<br>**11.B**<br>**11.C**<br>**11.1**<br>**11.2**<br>**11.3**<br>**11.4** |
| | **2.2 Use numbers and their properties to compute flexibly and fluently and to reasonably estimate measures and quantities.** | • *Count pennies and trade pennies for objects.*<br>• *Count and group up to 30 objects by tens.*<br>• *Identify the numerals 1-30 and match* | | | |

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| | | *each numeral to an appropriate set of objects.*<br>• *Act out and solve addition and subtraction story problems that reflect real-world experiences and contextual problems using sets of up to 10 objects and describe the strategy or reasoning used to solve a problem. For example: Put two crayons together with four crayons; then count to determine the number of crayons needed for all students at a table.*<br>• *Write the number sentences that correspond to story problems using addition, subtraction and equals symbols (+, -, =) correctly.*<br>• *Estimate the amount of objects in a set using 10 as a benchmark and then count to determine if the amount is more or less than 10.*<br>• *Identify and name pennies and dimes.*<br>• *Count pennies and trade pennies for objects.*<br>• *Write Numerals 0-30.* | | | |

# LITCHFIELD PUBLIC SCHOOLS
# Core Curriculum Scope and Sequence
# Math/Kindergarten

**Numerical and Proportional Reasoning**

Quantitative relationships can be expressed numerically in multiple ways in order to make connections and simplify calculations using a variety of strategies, tools and technologies.

**Essential Question: How are quantitative relationships represented by numbers?**

| UNIT TWELVE<br><br>Fractions<br><br>June | Connecticut Frameworks/Standards | Content and Skill Objectives<br>Students will be able to: | Grade 3<br>CMT Correlations | Primary Source<br>Secondary Source | Assessments |
|---|---|---|---|---|---|
| | **2.1 Understand that a variety of numerical representations can be used to describe quantitative relationships.** | • *Represent quantities of up to 30 objects in a set.*<br>• *Compare sets of up to 30 objects and use the terms more, less or the same to compare the two sets and identify a set with one more or one less than a given set.*<br>• Order sets of up to 30 objects from least to greatest.<br>• Identify the ordinal position of objects: first, second, third, fourth, fifth and last.<br>• Use a variety of models and familiar object to compare two parts of a whole and describe the parts as being closer to a whole or closer to very little.<br>• Use a variety of models and familiar objects to:<br>  • Identify one whole and one half of an object.<br>  • Recognize a half and put two halves of an object together to make a whole.<br>  • Form a whole from two smaller sets that have equal amounts. | **1A.** Solve problems involving one more/less or 10 more/less using two-digit numbers.<br>**2A.** Relate whole numbers to pictorial representations of base ten blocks and vice versa.<br>**2D.** Identify points representing two- and three-digit whole numbers on a number line and vice versa.<br>**4A.** Order two- and three-digit whole numbers<br>**4B.** Describe magnitude of two- and three-digit whole numbers.<br>**4C.** Round two-digit whole numbers in context.<br>**11A.** Identify a reasonable estimate to a problem.<br><br>**2B.** Identify fractional parts of regions and sets using pictures and vice versa.<br>**2C.** Label and/or shade fractional parts of regions and sets.<br>**25A.** Solve extended numerical and statistical problems. | **Growing With Math Topic**<br><br>**Topic 12: Equal Groups, Sharing and Fractions** | **June Task Performance**<br><br>**12.1**<br>**12.2**<br>**12.3** |
| | **2.2 Use numbers and their properties to compute flexibly and fluently and to reasonably estimate measures and quantities.** | • *Count pennies and trade pennies for objects.*<br>• *Count and group up to 30 objects by tens.* | | | |

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| | | • *Identify the numerals 1-30 and match each numeral to an appropriate set of objects.*<br>• *Act out and solve addition and subtraction story problems that reflect real-world experiences and contextual problems using sets of up to 10 objects and describe the strategy or reasoning used to solve a problem. For example: Put two crayons together with four crayons; then count to determine the number of crayons needed for all students at a table.*<br>• *Write the number sentences that correspond to story problems using addition, subtraction and equals symbols (+, -, =) correctly.*<br>• *Estimate the amount of objects in a set using 10 as a benchmark and then count to determine if the amount is more or less than 10.*<br>• *Identify and name pennies and dimes.*<br>• *Count pennies and trade pennies for objects.*<br>• *Write Numerals 0-30.* | | | |

# LITCHFIELD PUBLIC SCHOOLS
# Core Curriculum Scope and Sequence
# Math/Kindergarten

**Working with Data: Probability and Statistics**

Data can be analyzed to make informed decisions using a variety of strategies, tools and technologies

**Essential Question: How can collecting, organizing and displaying data help us analyze information and make reasonable predictions and informed decisions?**

| UNIT TWELVE<br><br>Probability<br><br>June | State Framework | Grade-Level Expectations | 3rd Grade CMT Correlations | Primary Source Secondary Source | Assessments |
|---|---|---|---|---|---|
| | **4.1 Collect, organize and display data using appropriate statistical and graphical methods.** | • *Pose questions about objects and events in the environment that can be used to guide the collection of data.*<br>• *Collect data, record and the results using real graphs and picture graphs.*<br>• *Arrange information in a systematic way using counting, sorting, lists and graphic organizers.* | **19A.** Identify correct information from tables, bar graphs, pictographs and charts.<br>**19B.** Create bar graphs and pictographs from data in tables and charts.<br>**25A.** Solve extended numerical and statistical problems. | ***Teacher created units** | **June Performance Task**<br><br>**12.A**<br>**12.B** |
| | **4.2 Analyze data sets to form hypotheses and make predictions.** | • *Describe data using the terms more, less and the same.*<br>• *Identify and extend patterns from organized data to make predictions. For example: More boys than girls in our class watch television every day. We predict that the same will be true for another kindergarten class.* | **22A.** Extend or complete patterns, or identify rules using numbers and attributes.<br>**22B.** Extend or complete patterns and state rules using numbers and attributes.<br>**25A.** Solve extended numerical and statistical problems. | | |
| | **4.3 Understand and apply basic concepts of probability.** | • *Describe the likelihood of the future occurrence of events based on patterns and personal experiences using terms such as likely, unlikely or certainly.*<br>• *Engage in simple probability activities and discuss the results.* | **21A.** Identify correct solutions to problems involving elementary notions of probability.<br>**25A.** Solve extended numerical and statistical problems. | | |