

## Trimester 1 Expectations

### **Counting and Cardinality**

#### Count to 20

- Starting with 1.
- Begins to write numbers with correct formations.

#### Count to Tell the Number of Objects

- Counts groups of objects with 1-1 correspondence up to 10.
- Understands that each successive number refers to a quantity that is one larger.
- Given a number from 1-10, counts out that many objects.
- Keeps track of the number counted and has a system for double checking.
- Identifies numerals 1-10 out of order



## Trimester 2 Expectations

### **Counting and Cardinality**

#### Count to 50 by Ones and Tens

- Starting with any given number less than 50.
- Practices writing numbers correctly.

#### Count to Tell the Number of Objects

- Counts groups of objects with 1-1 correspondence up to 15.
- Given a number from 1-15, counts out that many objects and recalls the total count when objects are reconfigured.

#### Compare Numbers

- Compares the objects in two groups. Identifies group which is greater than, less than or equal to the other.

### **Measurement and Data**

#### Describe and Compare Measurable Attributes

- Describe measurable attributes of an object.
- Directly compare the length of two objects.

#### Classify and Count Objects

- Classify objects by attributes.

### **Operations and Algebraic Thinking**

#### Understands Addition as Putting Together and Subtraction as Taking Apart

- Knows one more and one fewer, than a given number.

## Trimester 3 Expectations

### **Counting and Cardinality**

#### Count to 100 by Ones and Tens

- Starting with any given number less than 100
- Continues to practice writing numbers correctly.

#### Count to Tell the Number of Objects

- Counts groups of objects with 1-1 correspondence up to 20.
- Given a number from 1-20, counts out that many objects and recalls the total count when objects are reconfigured.

#### Compare Numbers

- Compares two numbers between 1-10 presented as written numerals.

### **Operations and Algebraic Thinking**

#### Understands Addition as Putting Together and Subtraction as Taking Apart

- Represents addition and subtraction with objects, fingers, drawings, etc.
- Can add and subtract within 5.

### **Geometry**

#### Identify and Describe Shapes

- Describe objects in the environment using names of shapes.
- Identify shapes as 2-D or 3-D.

#### Analyze, Compare, Create and Compose Shapes

- Compose simple shapes to form larger shapes.

## Mathematical Practices in Kindergarten:

- Students begin to build the understanding that doing mathematics involves solving problems and discussing how they solved them.
- Students begin to recognize that a number represents a specific quantity. Then, they connect the quantity to written symbols.
- Students construct arguments using concrete references such as objects, pictures, drawings, and actions. They explain their thinking to others and respond to others' thinking.
- Students experiment with representing problem situations in multiple ways including numbers, words, drawing pictures, using objects, acting out, etc....
- Students begin to consider the tools and strategies available when solving a mathematical problem and then decide when certain tools/strategies might be helpful.
- Students try to use clear and precise mathematical language in their discussions with others and in their own reasoning.
- Students begin to discern a pattern or structure. For instance, students recognize the pattern that exists in the teen numbers; every teen number is written with a 1 (representing one ten) and ends with the digit that is first stated. They also recognize that  $3 + 2 = 5$  and  $2 + 3 = 5$ .

- Student notice repetitive actions in counting and computation, etc... For example they may notice that the next number in a counting sequence is one more.

## Kindergarten Instructional Time

focuses on two critical areas:

1. **NUMBERS:** Knowing number names and the counting sequence. Representing and comparing numbers with sets of objects.
2. **SHAPES:** Identify and describe 2 and 3 dimensional shapes. Use shapes to model and construct more complex shapes.



Trimester 1	Trimester 2	Trimester 3
<ul style="list-style-type: none"> <li>• Counting &amp; Cardinality</li> </ul>	<ul style="list-style-type: none"> <li>• Counting &amp; Cardinality</li> <li>• Measurement &amp; Data</li> <li>• Operations and Algebraic Thinking</li> </ul>	<ul style="list-style-type: none"> <li>• Counting &amp; Cardinality</li> <li>• Operations and Algebraic Thinking</li> <li>• Geometry</li> </ul>

### Report Card Rubric (Grading)

**M:** Meets the standard

**PM:** Partially meets the standard

**NY:** Not yet meeting the standard

## Trumbull Public Schools Kindergarten Topics in Math



- Counting and Cardinality
- Operations and Algebraic Thinking
- Measurement and Data
- Geometry