Newburyport Public Schools
The Port Where Tradition and Innovation Converge

Newburyport Math Curriculum Framework Guide

Kindergarten Focus Areas

In Kindergarten, the focus of student learning is on two areas:
1. Representing, relating, and operation on whole numbers.
2. Describing shapes and space.

Mathematical Practice Standards

These 8 practice standards describe ways in which students do or approach math. The are the foundation for mathematical thinking and help to develop a more advanced understanding. These standards are the habits & strategies mathematically proficient students have and can be applied in everyday life.
1. Makes sense of problems and persevere in solving them.
2. Reasons abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others
4. Model with mathematics
5. Use appropriate tools strategically
6. Attend to precision
7. Look for and make use of structure
8. Look for and express regularity in repeated reasoning

Kindergarten Overview

Counting & Cardinality
- Know number names and the counting sequence.
- Count to tell the number of objects.
- Compare Numbers

Operations & Algebraic Thinking
- Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from .

Number & Operations in Base Ten
- Work with numbers 11-19 to gain foundations for place value.

Measurement & Data
- Describe and compare measurable attributes.
- Classify objects and count the number of objects in each category.

Geometry
- Identify and describe shapes.
- Analyze, compare, create, and compose shapes.

Counting & Cardinality
Know number names and the count sequence
- Count to 100 by ones and by tens.
- Count forward beginning from a given number (instead of beginning at one).
- Write numbers from 0 to 20. Represent a number of objects with a written number 0-20.

Count to tell the number of objects
- Understand how numbers and quantities are related.
- Knows the last number said tells the number of objects counted.

Compare numbers
- Identifies whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group with up to 10 objects.
- Compare two numbers between 1 and 10 when written as numerals.

Operations & Algebraic Thinking
Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.
- Represent addition and subtraction with objects, mental images, drawings, soungs, verbal explanations, expressions, or equations.
- Solve addition and subtraction word problems within 10.
- Decompose numbers less than or equal to 10 into pairs in more than one way.
- For any number 1-9, find the number that makes 10 when added to the given number.
- Fluently add and subtract within 5, including 0.

Number & Operations in Base Ten
Work with numbers 11-19 to gain foundations for place value.
- Compose and decompose numbers from 11-19 into ten ones and some further ones. Understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.

Measurement & Data
Describe and compare measurable attributes.
- Describe measurable attributes of objects, such as length or weight.
- Compare two objects with a measurable attribute in common, to see which object as "more of"/"less of" the attribute, and describe the difference.

Classify objects and count the number of objects in each category.
- Classify objects into given categories; count the number of objects in each category (up to 10) and sort the categories by count.

Geometry
Identify and describe shapes (squares, circles, rectangles, triangles, hexagons, cubes, cones, cylinders, and spheres).
- Describe objects in the environment using the names of shapes, and describe the relative position of objects using terms such as *above, below, beside, in front of, behind,* and *next to.*
- Correctly names shapes regardless of their orientation or size.
- Identify shapes as two-dimensional ("flat") or three-dimensional ("solid").

Analyze, compare, create, and compose shapes.
- Analyze and compare two- and three-dimensional shapes, in different size and orientations, using informal language to describe their similarities, differences, parts (number of sides and vertices/corners), and other attributes (having sides of equal length).
- Model shapes in the world by building shapes from components and drawing shapes.
- Compose simple shapes to form larger shapes.