



Newburyport Math Curriculum Framework Guide

Grade 1 Focus Areas

In grade 1, the focus of student learning is on four areas:

1. Developing understanding of addition, subtraction, and strategies for addition and subtraction within 20
2. Developing understanding of whole number relationships and place value, including grouping in tens and ones
3. Developing understanding of linear measurement and measuring lengths as iterating length units
4. Reasoning about attributes of, and composing and decomposing geometric shapes

Mathematical Practice Standards

These 8 practice standards describe ways in which students do or approach math. They 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 perseveres in solving them.
2. Reasons abstractly and quantitatively.
3. Constructs viable arguments and critiques the reasoning of others
4. Models with mathematics
5. Uses appropriate tools strategically
6. Attends to precision
7. Looks for and makes use of structure
8. Looks for and expresses regularity in repeated reasoning

Grade 1 Overview

Operations & Algebraic Thinking

- Represent and solve problems involving addition and subtraction.
- Understand and apply properties of operations and the relationship between addition and subtraction.
- Add and subtract within 20.
- Work with addition and subtraction equations.

Number & Operations in Base Ten

- Extend the counting sequence.
- Understand place value.
- Use place value understanding and properties of operations to add and subtract.

Measurement & Data

- Measure lengths indirectly and by iterating length units.
- Tell and write time.
- Represent and interpret data.
- Work with money.

Geometry

- Reason with shapes and their attributes.

Operations & Algebraic Thinking

Represent and solve problems involving addition and subtraction

- Use addition and subtraction within 20 to solve word problems by using objects, drawings, and equations.

Understand and apply properties of operations and the relationship between addition and subtraction

- Understand subtraction as an unknown-addend problem.

Add and Subtract within 20

- Relate counting to addition and subtraction.
- Use strategies to add and subtract within 20.
- Demonstrate fluency with addition and subtraction facts within 10.

Work with addition and subtraction equations

- Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false.
- Determine the unknown whole number in an addition or subtraction equation.

Number & Operations in Base Ten

Extend the counting sequence

- Read, write, and compare numbers to 120.

Understand place value

- Understand that the two digits of a two digit number represent amount of tens and ones.
- Compare two two-digit numbers using the symbols $>$, $<$, and $=$.

Use place value understanding and properties of operations to add and subtract

- Use place value and properties of operations to add within 100 (2-digit + 1-digit, 2-digit + multiple of 10)
- Use place value and properties of operations to subtract multiples of 10 from multiples of 10 within 100.
- Mentally find 10 more or 10 less than a number.

Measurement & Data

Measure lengths indirectly and by iterating length units

- Order 3 objects by length; compare the lengths of 2 objects indirectly by using a third object.
- Express the length of an object as a whole number of length units.

Tell and write time

- Tell and write time in hours and half-hours using analog and digital clocks.

Represent and interpret data

- Organize, represent, and interpret data with up to three categories

Work with money

- Identify the values of all U.S. coins and know their values and use appropriate symbols.

Geometry

Reason with shapes and their attributes

- Understand the difference between defining attributes (triangles are closed and three-sided) and non-defining attributes (color, orientation, overall size).
- Compose two-dimensional and three-dimensional shapes
- Partition circles and rectangles into two and four equal shares and describe them using the words halves, fourths, and quarters..