

**BELLEFONTE AREA SCHOOL DISTRICT**  
**GRADE 1 MATHEMATICS LEARNING OBJECTIVES – Marking Period 2**

**2.1 Numbers, Number Systems and Number Relationships**

*By the end of the second marking period, first grade students should be able to:*

- 1. Demonstrate an understanding of the meanings, uses, and representations of numbers by:**
  - Counting on by 1s, 2s, 5s, and 10s past 50.
  - Counting back by 1s from any number less than 50.
  - Counting collections of objects accurately and reliably.
  - Reading, writing, and modeling whole numbers up to 100 using manipulatives.
  - Identifying and modeling odd and even numbers using manipulatives.
- 2. Demonstrate an understanding of various ways to represent numbers** *(not assessed during second marking period)*
- 3. Demonstrate an understanding of the relationships between numbers by:**
  - Comparing and ordering whole numbers up to 100.

**2.2 Computation and Estimation**

*By the end of the second marking period, first grade students should be able to:*

- 1. Compute accurately by:**
  - Demonstrating proficiency with  $+/- 0$ ,  $+/- 1$ , doubles, and sum-equals-ten addition and subtraction facts such as  $6 + 4 = 10$  and  $10 - 7 = 3$ .
  - Solving problems involving the addition and subtraction of 1-digit whole numbers with 1- or 2-digit whole numbers using manipulatives, number grids, tally marks, mental arithmetic, and calculators.
- 2. Make reasonable estimates** *(not assessed during second marking period)*
- 3. Demonstrate an understanding of the meanings of operations by:**
  - Identifying change-to-more, change-to-less, comparison, and parts-and-total situations.

**2.3 Measurement and Estimation**

*By the end of the second marking period, first grade students should be able to:*

- 1. Demonstrate an understanding of measurement/Measure accurately by:**
  - Measuring length with standard measuring tools.
  - Knowing and comparing the value of pennies, nickels, and dimes; making exchanges between coins.
- 2. Demonstrate an understanding of reference frames/Use reference frames** *(not assessed during second marking period)*

**2.6 Statistics and Data Analysis & 2.7 Probability and Predictions**

*By the end of the second marking period, first grade students should be able to:*

- 1. Select and create appropriate graphs of collected or given data** *(not assessed during the second marking period)*
- 2. Analyze and interpret data** *(not assessed during the second marking period)*
- 3. Demonstrate an understanding of probability/Apply basic concepts of probability** *(not assessed during the second marking period)*

**2.8 Algebra and Functions, 2.10 Trigonometry, & 2.11 Calculus**

*By the end of the second marking period, first grade students should be able to:*

- 1. Demonstrate an understanding of patterns and functions by:**
  - Extending, describing and creating numeric, visual, and concrete patterns.
  - Solving problems involving “What’s My Rule?” tables, and Frames-and-Arrows diagrams.
- 2. Use symbols to represent and analyze situations** *(not assessed during the second marking period)*

**2.9 Geometry**

*By the end of the second marking period, first grade students should be able to:*

- 1. Demonstrate an understanding of the characteristics and properties of two- and three-dimensional shapes** *(not assessed during the second marking period)*
- 2. Apply transformations and symmetry in geometric situations by:** *(not assessed during the second marking period)*