NFCSD – Elementary School Math Overview

**Mathematical Practices**

1. Make sense of problems and persevere in solving them.

2. Reason 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.

**Grade 5 Overview**

**Operations and Algebraic Thinking**

• Write and interpret numerical expressions.

• Analyze patterns and relationships.

**Number and Operations in Base Ten**

• Understand the place value system.

• Perform operations with multi-digit whole

 numbers and with decimals to hundredths.

**Number and Operations—Fractions**

• Use equivalent fractions as a strategy to add

 and subtract fractions.

• Apply and extend previous understandings

 of multiplication and division to multiply and

 divide fractions.

**Measurement and Data**

• Convert like measurement units within a

 given measurement system.

• Represent and interpret data.

• Geometric measurement: understand

 Concepts of volume and relate volume to

 multiplication and to addition.

**Geometry**

• Graph points on the coordinate plane to

 solve real-world and mathematical problems.

• Classify two-dimensional figures into categories based on their properties.

**\*Fluency Expectations**

**Multi-digit multiplication**

**using the standard algorithm**.

|  |  |
| --- | --- |
|  | **REPORT CARD BENCHMARKS** |
| **Q 1** | **NBT.1**-Understand that in a number a digit represents ten times as much as the place to its right and 1/10 in the place to its left**NBT.2**-Explain patterns when multiplying and dividing a number by powers of 10.**NBT.4**-Use place value understanding to round decimals to any place.**NBT.5**-Fluently multiply multi-digit whole numbers using the standard algorithm.**NBT.7**-Add, subtract, and multiply decimals to hundredths and explain the strategy used. |
| **Q 2** | **NBT.6**-Divide multi-digit whole numbers by two-digit divisors and explain the strategy used.**NBT.7**-Divide decimal dividends by two-digit divisors and explain the strategy used.**NF.1**-Add and subtract fractions with unlike denominators.**NF.2**-Solve word problems involving addition and subtraction of fractions with unlike denominators and use benchmark fractions to check for reasonableness. |
| **Q 3** | **MD.5** -Use multiplication and addition to solve problems involving volume.**NF.7**-Divide unit fractions by whole numbers and whole numbers by unit fractions.**MD.1**-Convert standard measurement units to solve multi-step, real world problems.**G.4**-Classify two-dimensional figures based on properties.**MD.3**-Recognize volume as an attribute of solid figures; and understand concepts of volume measurement. |
| **Q 4** | **OA.2**-Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them.**G.2**-Graph points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.**OA.3**-Generate two numerical patterns using two given rules, form ordered pairs, and graph the pairs on a coordinate plane.**G.1-** Use the axes, to define a coordinate system with the intersection of the lines arranged to coincide with the 0 on each line and a givenpoint in the plane by using coordinates, with an understanding that the1st and 2nd number indicates how far to travel in the direction of the axis. |