

**Flossmoor School District 161
Mathematics Curriculum Framework
Grade 2**

Month August/September

Goal #6 Number Sense

Objective
SD161 Fluently compute addition and subtraction facts any number 0-12 without regrouping
SD161 Addition and subtraction times test through 12 by December
SD161 Placement test includes facts to 10
6.2.01 Read, write, recognize, and model equivalent representations of whole numbers and their place values up to 1,000
6.2.02 Identify and write (in words and standard form) whole numbers up to 1,000
6.2.03 Recognize a fraction represented with a pictorial model <ul style="list-style-type: none">• M- whole, half, fourths• D/M-thirds• I- sixths• I- eighths
6.2.05 Order and compare whole numbers up to 1,000 using symbols ($>$, $<$, or $=$) and words (e.g., greater (more) than, less than, equal to, between)
6.2.08 Solve problems involving descriptions of numbers, including characteristics and relationships (e.g., odd/even, greater than, less than)
6.2.13 Solve problems involving the additive identity of zero (e.g., $3+0=3$)

Goal #8 Algebra

8.2.01 Determine a missing term in a pattern (sequence), describe a pattern (sequence), and extend a pattern (sequence) when given a description or pattern (sequence)
8.2.02 Write an expression to represent a given situation
8.2.03 Represent simple mathematical relationships with number sentences (equations and inequalities)

8.2.04 Solve one-step addition and subtraction equations that have a missing number or missing operation sign (e.g., $3 + \square = 5$, $6 \square 1 = 7$)

8.2.05 Solve word problems involving unknown quantities

Mathematics Curriculum Framework – Grade 2

Month October

Goal #6 Number Sense

Objective
SD161 Addition and subtraction facts 13-18; addition and subtraction timed test through 12 by December
6.2.01 Read, write, recognize, and model equivalent representations of whole numbers and their place values up to 1,000
6.2.02 Identify and write (in words and standard form) whole numbers up to 1,000
6.2.05 Order and compare whole numbers up to 1,000 using symbols ($>$, $<$, or $=$) and words (e.g., greater (more) than, less than, equal to, between)
6.2.10 Solve problems involving the value of a collection of coins whose total value is \$1.00 or less, and make change
6.2.12 Use the inverse relationships between addition and subtraction to complete basic fact sentences and solve problems (e.g., $5 + 3 = 8$ and $8 - 3 = \underline{\quad}$)

Goal #9 Geometry

9.2.11 Determine the distance between two points on the number line in whole numbers
--

Goal #10 Data Analysis, Statistics, and Probability

10.2.01 Read and interpret data represented in a pictograph, bar graph, Venn diagram (with two circles), tally chart, or table
10.2.02 Complete missing parts of a pictograph, bar graph, tally chart, or table for a given set of data
10.2.03 Determine the mode, given a set of data or a graph

Mathematics Curriculum Framework – Grade 2

Month November

Goal #6 Number Sense

Objective
SD161 Addition and subtraction timed test through 12 by December
6.2.01 Read, write, recognize, and model equivalent representations of whole numbers and their place values up to 1,000
6.2.02 Identify and write (in words and standard form) whole numbers up to 1,000
6.2.05 Order and compare whole numbers up to 1,000 using symbols ($>$, $<$, or $=$) and words (e.g., greater (more) than, less than, equal to, between)
6.2.06 Order and compare decimals expressed using monetary units
6.2.10 Solve problems involving the value of a collection of bills and coins whose total value is \$10.00 or less

Goal #10 Data Analysis, Statistics, and Probability

10.2.04 Classify events using words such as certain, most likely, equally likely, least likely, possible, and impossible
10.2.05 Describe the chances associated with a context presented visually, including using the response format “3 out of 4”

Mathematics Curriculum Framework – Grade 2

Month December

Goal #6 Number Sense

Objective
SD161 Addition and subtraction timed test through 18 by the end of May
6.2.01 Read, write, recognize, and model equivalent representations of whole numbers and their place values up to 10,000
6.2.02 Identify and write (in words and standard form) whole numbers up to 10,000
6.2.05 Order and compare whole numbers up to 1,000 using symbols ($>$, $<$, or $=$) and words (e.g., greater (more) than, less than, equal to, between
6.2.06 Order and compare decimals expressed using monetary units
6.2.10 Solve problems involving the value of a collection of bills and coins who total value is \$10.00 or less

Mathematics Curriculum Framework – Grade 2

Month January

Goal #6 Number Sense

Objective
SD161 Know how and when to use a calculator
SD161 Use estimation to judge the reasonableness of an answer, with or without a calculator
SD161 Addition and subtraction timed test through 18 by end of May
6.2.01 Read, write, recognize, and model equivalent representations of whole numbers and their place values up to 10,000
6.2.02 Identify and write (in words and standard form) whole numbers up to 10,000
6.2.05 Order and compare whole numbers up to 10,000 using symbols ($>$, $<$, or $=$) and words (e.g., greater (more) than, less than, equal to, between)

Goal #7 Measurement

7.2.01 Solve problems involving simple elapsed time in compound units (e.g., hours, minutes, days)
7.2.01 Solve problems involving telling time in compound units (e.g., hours, minutes, days)
7.2.07 Solve problems involving simple unit conversions <u>within the same measurement system</u> for time (hours to days to weeks to months)

Mathematics Curriculum Framework – Grade 2

Month February

Goal #6 Number Sense

Objective
SD161 Addition and subtraction timed test through 18 by the end of May
6.2.01 Read, write, recognize, and model equivalent representations of whole numbers and their place values up to 100,000
6.2.02 Identify and write (in words and standard form) whole numbers up to 100,000
6.2.05 Order and compare whole numbers up to 10,000 using symbols ($>$, $<$, or $=$) and words (e.g., greater (more) than, less than, equal to, between)
6.2.09 Solve problems and number sentences involving addition with regrouping
6.2.14 Make estimates appropriate to a given situation with whole numbers

Goal #9 Geometry

9.2.01 Identify, describe, and sketch two-dimensional shapes (triangles, squares, rectangles, pentagons, hexagons, and octagons) according to the number of sides, length of sides, and number of vertices
9.2.02 Identify and describe three-dimensional shapes (cubes, spheres, cones, cylinders, prisms, and pyramids) according to their characteristics (faces, edges, vertices)
9.2.04 Identify whether or not a figure has a line of symmetry, and sketch or identify the line of symmetry

Goal # 9 Geometry (Continued)

9.2.05 Identify images resulting from flips (reflections), slides (translations), or turns (rotations)
9.2.06 Identify parallel lines
9.2.07 Identify the two-dimensional components of a three-dimensional object (e.g., a cube has square faces)
9.2.08 Identify a three-dimensional object from its net
9.2.09 Predict the result of putting shapes together (composing) and taking them apart (decomposing)
9.2.10 Identify congruent and similar figures by visual inspection

Mathematics Curriculum Framework – Grade 2

Month March

Goal #6 Number Sense

Objective
SD161 Addition and subtraction timed test through 18 by the end of May
SD161 Multiplication facts through 13 (x 0, x 1, x 2, x 5, x 10)
6.2.01 Read, write, recognize, and model equivalent representations of whole numbers and their place values up to 100,000
6.2.02 Identify and write (in words and standard form) whole numbers up to 100,000
6.2.05 Order and compare whole numbers up to 10,000 using symbols ($>$, $<$, or $=$) and words (e.g., greater (more) than, less than, equal to, between)
6.2.09 Solve problems and number sentences involving subtraction with regrouping

Goal #7 Measurement

7.2.04 Solve problems involving the area of a figure when whole and half square units are shown within the figure
7.2.05 Compare and estimate length (including perimeter), area, and weight/mass using referents
7.2.06 Determine the volume of a solid figure that shows cubic units
7.2.07 Solve problems involving simple unit conversions <u>within the same measurement system</u> for length (inches to feet to yards)

Goal #9 Geometry

9.2.03 Locate and identify points using numbers and symbols on a grid, and describe how points relate to each other on a grid (e.g., ♥ is 2 units below ☼, point A is 3 units to the right of point B)
--

Mathematics Curriculum Framework – Grade 2

Month April

Goal #6 Number Sense

Objective
SD161 Addition and subtraction timed test through 18 by end of May
SD161 Multiplication facts through 13 (x 0, x 1, x 2, x 5, x 10)
6.2.01 Read, write, recognize, and model equivalent representations of whole numbers and their place values up to 100,000
6.2.02 Identify and write (in words and standard form) whole numbers up to 100,000
6.2.03 Recognize a fraction represented with a pictorial model
6.2.04 Represent multiplication as repeated addition <ul style="list-style-type: none">• M/A- skip count by 3's• I/D – skip count by 4's• I – multiplication concept (repeated addition)
6.2.05 Order and compare whole numbers up to 10,000 using symbols (>, <, or =) and words (e.g., greater (more) than, less than, equal to, between)
6.2.08 Solve problems involving descriptions of numbers, including characteristics and relationships (factors/multiples)
6.2.09 Solve problems and number sentences involving addition and subtraction with regrouping
6.2.10 Solve problems involving the value of a collection of bills and coins whose total value is \$10.00 or less, and make change

Goal #7 Measurement

7.2.02 Select and use appropriate standard units and tools to measure length (to the nearest inch or cm), time (to the nearest minute), and ***temperature (to the nearest degree)

7.2.03 Solve problems involving the perimeter of a polygon with given side lengths or a given non-standard unit (e.g., paperclip)

7.2.04 Solve problems involving the area of a figure when whole and half square units are shown within the figure

7.2.05 Compare and estimate length (including perimeter), area, and weight/mass using referents

7.2.06 Determine the volume of a solid figure that shows cubic units

7.2.07 Solve problems involving simple unit conversions within the same measurement system for length (inches to feet to yards)

Mathematics Curriculum Framework – Grade 2

Month May/June

Goal #6 Number Sense

Objective
SD161 Addition and subtraction timed test through 18 by the end of May
SD161 Fluently compute multiplication facts of 0, 1, 2, 5, 10)
6.2.01 Read, write, recognize, and model equivalent representations of whole numbers and their place values up to 100,000
6.2.02 Identify and write (in words and standard form) whole numbers up to 100,000
6.2.03 Recognize a fraction represented with a pictorial model
6.2.04 Represent multiplication as repeated addition
6.2.05 Order and compare whole numbers up to 10,000 using symbols ($>$, $<$, or $=$) and words (e.g., greater (more) than, less than, equal to, between
6.2.07 Identify and locate whole numbers and halves on a number line
6.2.08 Solve problems involving descriptions of numbers, including characteristics and relationships (factors/multiples)
6.2.11 Model and apply basic multiplication facts (up to 13×10 for $x 0$, $x 1$, $x 2$, $x 5$, $x 13$), and apply them to related multiples of 10 (e.g., $3 \times 4 = 12$, $30 \times 4 = 120$).
6.2.13 Solve problems involving the multiplicative identity of one (e.g., $3 \times 1 = 3$)