Minnesota Math Standards Update: What Teachers Need to Know

Current Standards

- The **2007 Minnesota K-12 Mathematics Standards** are still the official standards in effect.
- These will remain in place through the **2026–27 school year**.

New Standards Adopted

- In **April 2025**, the State of Minnesota officially adopted the **2022 K-12 Mathematics Standards** after a full review and rulemaking process.
- These new standards are designed to update expectations for student learning and reflect current research on how students best develop mathematical understanding.

Implementation Timeline

- **Now – 2026–27:** Teachers continue using the **2007 standards** for instruction, curriculum planning, and assessments.
- **2025–2027:** Schools and districts prepare for the transition (professional development, resource alignment, curriculum updates).
- **2027–28 school year:** The **2022 standards** become fully required and tested statewide.

Why This Matters for You

- For the next two years, your scope & sequence, lesson planning, and testing (NWEA/MCA) will still align to the **2007 benchmarks**.
- However, awareness of the **2022 standards** will help you:
    - Anticipate future shifts in instruction.
    - Update classroom strategies gradually.
    - Integrate new approaches (like stronger focus on reasoning, problem-solving, and mathematical modeling).

Key Takeaway

👉 **Keep teaching to the 2007 standards now ~ but, begin familiarizing yourself with the 2022 standards.** Full implementation doesn't start until 2027–28, but being proactive will make the transition smoother for both teachers and students.

⇢ *For more details and official resources: education.mn.gov → Math Standards*

Combo Class Math Plan (Grades 1–6)

Purpose

To reduce teacher overwhelm while still ensuring students master their grade-level benchmarks, we will emphasize **shared instruction**, **strategic grouping**, and **long-term spiraling**.

General Strategies for All Combo Teachers

1. **Teach by Math Strand, Not Grade Level Alone**
    - Align units so that both grades cover the *same math strand* (e.g., addition/subtraction, geometry, fractions) at the same time.
    - Differentiate within that strand: Grade 1 works with single-digit sums, while Grade 2 extends to two-digit regrouping.

2. **Use Parallel Tasks**
    - Pose one math problem that can be solved at different levels.
    - Example: "Build 3 equal groups of counters."
        - Grade 1 students show repeated addition.
        - Grade 2 students write a multiplication equation.

3. **Leverage Centers & Independent Practice**
    - While one grade gets direct instruction, the other works on centers:
        - Adaptive software (e.g., Freckle, Khan Kids, XtraMath – all free).
        - Fact fluency games.
        - Problem-solving journals.

4. **Spiral Review Fridays**
    - End each week with mixed-grade problem sets.
    - Helps retention and reduces stress about "missing" something.

5. **Anchor Charts & Common Language**
    - Use the same vocabulary wall, number line, manipulatives for both grades.
    - Students see continuity as they advance.

Grade-Level Combos

Grades 1 & 2 – Mrs. Richter

- **Shared Strands:** Place value, addition/subtraction, shapes, measurement.
- **Differentiation:**
    - Grade 1: tens and ones; sums to 20.
    - Grade 2: hundreds; regrouping with sums/differences up to 100.
- **Strategy:** Use the same manipulatives (base-ten blocks, counters) but extend the numbers for 2nd grade.

Grades 3 & 4 – Mrs. Uselman

- **Shared Strands:** Multiplication/division, fractions, geometry.
- **Differentiation:**
    - Grade 3: Intro to multiplication/division up to 100; simple fractions.
    - Grade 4: Multi-digit multiplication, long division, equivalent fractions.
- **Strategy:** Present one problem (e.g., "Divide 24 cookies among friends").
    - Grade 3: Use repeated subtraction or arrays.
    - Grade 4: Use long division algorithm.

Grades 5 & 6 – Mr. Underhill

- **Shared Strands:** Fractions, decimals, ratios, geometry, early algebra.
- **Differentiation:**
    - Grade 5: Add/subtract fractions; decimals to hundredths.
    - Grade 6: Ratios, unit rates, coordinate plane, intro to expressions.
- **Strategy:**
    - Teach a "big idea" (e.g., proportional reasoning).
    - 5th: Write as equivalent fractions/decimals.
    - 6th: Solve ratio tables or graph relationships.

Teacher Support Plan

- **Monthly PLC:** Teachers meet together to swap what worked/what didn't.
- **Shared Resources:** Build one master scope & sequence with aligned strands so planning isn't duplicated.
- **Flex Weeks:** Schedule 1–2 weeks per quarter for reteaching/enrichment (instead of pushing forward at all costs).

✅ **Key Takeaway for Teachers:** You don't need to *double teach*. Instead, teach one big concept at a time, then **differentiate by depth, complexity, and numbers.**

Math Scope & Sequence by Strand (Grades 1–6 Combo)

Aligned to MN 2007 Standards & NWEA RIT bands

Month	Strand Focus	1st–2nd	3rd–4th	5th–6th
Sept	**Number Sense & Place Value**	1st: Tens & ones 2nd: Hundreds, regrouping	3rd: 3-digit place value, rounding 4th: Up to 1,000,000, expanded notation	5th: Decimals to thousandths 6th: Negative numbers, coordinate plane
Oct	**Addition & Subtraction**	1st: Sums to 20 2nd: Multi-digit addition/subtraction	3rd: Multi-step problems to 1,000 4th: 4-digit regrouping, estimation	5th: Decimals (+/-) 6th: Integers (+/-)
Nov	**Geometry** (**Shapes & Measurement**)	1st: 2D shapes, halves/quarters 2nd: Polygons, partitioning	3rd: Area, perimeter, quadrilaterals 4th: Symmetry, angles	5th: Volume, coordinate plane 6th: Surface area, 3D nets
Dec	**Data & Graphing**	1st: Picture & bar graphs 2nd: Bar graphs, simple line plots	3rd: Line plots, scaled graphs 4th: Multi-step graph problems	5th: Stem-and-leaf, decimals in data 6th: Box plots, histograms
Jan	**Multiplication & Division**	1st: Equal groups, repeated addition 2nd: Arrays, intro to ÷	3rd: Facts to 100, division as sharing 4th: Multi-digit multiplication/division	5th: Fraction × whole number 6th: Multi-step ratio problems
Feb	**Fractions**	1st: Halves, fourths 2nd: Thirds, partitioning sets	3rd: Fractions on number line 4th: Equivalent fractions, comparing	5th: Add/subtract unlike denominators 6th: Multiply/divide fractions

Mar	**Decimals**	1st: Connect to money 2nd: Dollars & cents	3rd: Tenths 4th: Hundredths, compare decimals	5th: Multi-digit operations with decimals 6th: Percents, decimals, fractions
Apr	**Measurement & Time**	1st: Nonstandard units, telling time to hour/half-hour 2nd: Standard units, time to 5 minutes	3rd: Elapsed time, perimeter/area review 4th: Angles, complex measurement problems	5th: Convert metric/standard units 6th: Complex conversions, rate problems
May	**Algebraic Thinking & Review**	1st: Patterns, simple missing addends 2nd: True/false equations, skip counting	3rd: Patterns in multiplication, 2-step equations 4th: Factors/multiples, multi-step problems	5th: Expressions with parentheses 6th: Equations, inequalities, prep for pre-algebra

How This Helps Teachers

- **Mrs. Richter (1–2):** Can use the same manipulatives and routines—just change the size of numbers.
- **Mrs. Uselman (3–4):** Works from the same problem context but differentiates in method (arrays vs. algorithms, basic vs. multi-step).
- **Mr. Underhill (5–6):** Focuses on the same concept but deepens complexity (fractions → ratios; decimals → percents).
- **School-wide:** Everyone is aligned monthly → easier collaboration, cross-grade projects, and sub coverage.

MN Math Standards Cheat Sheet (Grades 1–6)

Organized by Strand & Benchmark Code

Number & Operations

- **Whole Numbers & Place Value**
  - 1.1.1.1 – Read/write whole numbers ≤ 120
  - 2.1.1.3 – Place value to 1,000
  - 3.1.1.1 – Place value to 10,000
  - 4.1.1.1 – Place value to 1,000,000
  - 5.1.1.1 – Place value with decimals to thousandths
  - 6.1.1.1 – Negative numbers & coordinate plane
- **Addition & Subtraction**
  - 1.1.2.1 – Basic facts to 20
  - 2.1.2.2 – Add/subtract within 1,000 (with regrouping)
  - 3.1.2.2 – Multi-step problems within 1,000
  - 4.1.2.1 – Multi-digit addition/subtraction
  - 5.1.2.1 – Add/subtract decimals

    6.1.2.1 – Add/subtract integers
- **Multiplication & Division**
  - 2.1.3.1 – Introduce equal groups & arrays
  - 3.1.3.2 – Recall facts through 10 × 10, relate ÷
  - 4.1.3.2 – Multi-digit multiplication/division
  - 5.1.3.1 – Multiply/divide fractions & whole numbers
  - 6.1.3.1 – Ratio reasoning with multiplication/division
- **Fractions & Decimals**
  - 1.1.4.1 – Halves, fourths (shapes/sets)
  - 2.1.4.1 – Thirds, equal shares, simple comparisons
  - 3.1.4.1 – Fractions on number line, equivalent fractions
  - 4.1.4.1 – Equivalent fractions, compare fractions
  - 5.1.4.1 – Add/subtract fractions, unlike denominators
  - 6.1.4.1 – Multiply/divide fractions; decimals, percents

Algebra

- **Patterns & Relationships**
  - 1.2.1.1 – Describe repeating/growing patterns
  - 2.2.1.1 – Skip count, patterns in addition/multiplication
  - 3.2.1.1 – Generalize multiplication patterns
  - 4.2.1.1 – Identify factors, multiples, primes/composites
  - 5.2.1.1 – Generate patterns, relationships
  - 6.2.1.1 – Represent & solve equations, inequalities

Geometry & Measurement

- **Shapes & Spatial Reasoning**
  - 1.3.1.1 – Identify/classify 2D shapes
  - 2.3.1.1 – Recognize/partition polygons, symmetry
  - 3.3.1.1 – Classify quadrilaterals, measure area/perimeter
  - 4.3.1.1 – Angles, symmetry, parallel/perpendicular lines
  - 5.3.1.1 – Volume of rectangular prisms
  - 6.3.1.1 – Surface area & volume of 3D figures
- **Measurement & Time**
  - 1.3.2.1 – Measure length (nonstandard), time to half-hour
  - 2.3.2.1 – Measure with inches/feet/centimeters, time to 5 minutes
  - 3.3.2.1 – Elapsed time, area, perimeter
  - 4.3.2.1 – Angles (protractor), complex measurement problems
  - 5.3.2.1 – Convert metric & customary units
  - 6.3.2.1 – Convert complex rates, unit analysis

Data Analysis & Probability

- **Collect, Display, Interpret**
  - 1.4.1.1 – Organize data in tally charts, picture/bar graphs
  - 2.4.1.1 – Bar graphs, line plots
  - 3.4.1.1 – Scaled bar/line plots, interpret data
  - 4.4.1.1 – Multi-step graphing problems
  - 5.4.1.1 – Line plots, stem-and-leaf, fractions/decimals in data
  - 6.4.1.1 – Box plots, histograms, measures of center

How to Use This Cheat Sheet

- **Monthly Planning:** Match the strand focus (from the combo-class calendar) with the codes above.
- **Lesson Planning:** Pull the exact benchmark language when writing learning targets.
- **Assessment Alignment:** These codes line up with NWEA RIT bands, so teachers can see growth targets.
- **Parent Communication:** Benchmark language can be simplified and pulled into newsletters or parent reports.

Teacher-specific 1-page cheat sheets

Mrs. Richter – Grades 1 & 2 Math Benchmarks

Number & Operations

- 1.1.1.1 – Read/write numbers ≤ 120
- 2.1.1.3 – Place value to 1,000
- 1.1.2.1 – Add/subtract facts to 20
- 2.1.2.2 – Add/subtract within 1,000
- 2.1.3.1 – Equal groups & arrays (intro multiplication)
- 1.1.4.1 – Halves, fourths
- 2.1.4.1 – Thirds, equal shares, compare fractions

Algebra

- 1.2.1.1 – Repeating/growing patterns
- 2.2.1.1 – Skip count, patterns in addition/multiplication

Geometry & Measurement

- 1.3.1.1 – Identify/classify 2D shapes
- 2.3.1.1 – Partition polygons, symmetry
- 1.3.2.1 – Measure length (nonstandard), time to half-hour
- 2.3.2.1 – Measure with inches/cm, time to 5 minutes

Data & Probability

- 1.4.1.1 – Tally charts, picture/bar graphs
- 2.4.1.1 – Bar graphs, line plots

Sacred Heart Combo Class Math Roadmap *(Teacher Internal Use)*

Sept 2025 – May 2026

Aligned to MN Standards & NWEA Strands

Grades 1 & 2 – Mrs. Richter

Big Picture: Both grades focus heavily on number sense, place value, and operations. Grade 2 simply extends depth/complexity.

Month	Shared Strand	Grade 1 Focus	Grade 2 Focus	Notes
Sept	Number Sense	Counting to 120, understanding 10s/1s	Place value within 1,000	Use same base-ten manipulatives.
Oct	Operations	Add/subtract within 20	Add/subtract within 100 (regrouping)	Differentiate with problem size.
Nov	Geometry	Recognize/describe 2D & 3D shapes	Partition shapes into halves/thirds/quarters	Use same cut-outs, adjust vocabulary.
Dec	Measurement/Data	Compare lengths, tell time to hour/half	Measure in standard units, tell time to 5 min	Parallel lessons.
Jan	Operations	Word problems within 20	Word problems within 100	Use similar story problems, scale numbers.
Feb	Place Value	Tens/ones models	Hundreds/tens/ones models	Same visuals, extra digit.
Mar	Operations	Add/subtract within 20 fluency	Fluency within 100	
Apr	Fractions	Fair shares	Partition circles/rectangles into equal parts	Shared "pizza/fraction" activities.
May	Review	End-of-year review	End-of-year review	Keep assessments separate.

Mrs. Uselman – Grades 3 & 4 Math Benchmarks

Number & Operations

- 3.1.1.1 – Place value to 10,000
- 4.1.1.1 – Place value to 1,000,000
- 3.1.2.2 – Multi-step addition/subtraction within 1,000
- 4.1.2.1 – Multi-digit addition/subtraction
- 3.1.3.2 – Recall multiplication/division facts through 10 × 10
- 4.1.3.2 – Multi-digit multiplication/division
- 3.1.4.1 – Fractions on number line, equivalent fractions
- 4.1.4.1 – Equivalent fractions, compare fractions

Algebra

- 3.2.1.1 – Multiplication patterns, generalizations
- 4.2.1.1 – Factors, multiples, primes/composites

Geometry & Measurement

- 3.3.1.1 – Classify quadrilaterals, area & perimeter
- 4.3.1.1 – Angles, symmetry, parallel/perpendicular lines
- 3.3.2.1 – Elapsed time, area, perimeter problems
- 4.3.2.1 – Measure angles with protractor, complex measurement

Data & Probability

- 3.4.1.1 – Scaled bar graphs, line plots
- 4.4.1.1 – Multi-step graphing problems

Sacred Heart Combo Class Math Roadmap *(Teacher Internal Use)*

Sept 2025 – May 2026

Aligned to MN Standards & NWEA Strands

Grades 3 & 4 – Mrs. Uselman

Big Picture: Both grades work multiplication/division, fractions, and geometry — Grade 4 extends algorithms and equivalence.

Month	Shared Strand	Grade 3 Focus	Grade 4 Focus	Notes
Sept	Multiplication Concepts	Arrays, repeated addition	Multi-digit multiplication (area model)	Use same array visuals.
Oct	Division Concepts	Relating division to multiplication	Long division with 1-digit divisors	Parallel problems, different strategies.
Nov	Fractions	Unit fractions, fraction models	Equivalent fractions, compare fractions	Use same fraction strips.
Dec	Geometry	Shapes, area/perimeter	Symmetry, angle measurement	Common manipulatives, deeper vocabulary.
Jan	Operations	Multiplication/division within 100	Multi-digit multiplication/division fluency	Differentiated problem sets.
Feb	Fractions	Fractions on number line	Add/subtract fractions with like denominators	Use fraction tiles.
Mar	Measurement	Time, liquid volume, mass	Conversions, area/volume	Shared activities with different precision.
Apr	Algebraic Thinking	Simple patterns, input-output tables	Equations with variables	Same tasks scaled up.
May	Review	Comprehensive review	Comprehensive review	Keep grade-level rigor.

Mr. Underhill – Grades 5 & 6 Math Benchmarks

Number & Operations

- 5.1.1.1 – Place value with decimals to thousandths
- 6.1.1.1 – Negative numbers, coordinate plane
- 5.1.2.1 – Add/subtract decimals
- 6.1.2.1 – Add/subtract integers
- 5.1.3.1 – Multiply/divide fractions & whole numbers
- 6.1.3.1 – Ratio reasoning, multiplication/division with rates
- 5.1.4.1 – Add/subtract fractions with unlike denominators
- 6.1.4.1 – Multiply/divide fractions, connect decimals & percents

Algebra

- 5.2.1.1 – Generate patterns, relationships
- 6.2.1.1 – Represent & solve equations, inequalities

Geometry & Measurement

- 5.3.1.1 – Volume of rectangular prisms
- 6.3.1.1 – Surface area & volume of 3D figures
- 5.3.2.1 – Convert metric & customary units
- 6.3.2.1 – Complex rates, unit analysis

Data & Probability

- 5.4.1.1 – Line plots, stem-and-leaf, fractions/decimals in data
- 6.4.1.1 – Box plots, histograms, measures of center

Sacred Heart Combo Class Math Roadmap *(Teacher Internal Use)*

Sept 2025 – May 2026

Aligned to MN Standards & NWEA Strands

Grades 5 & 6 – Mr. Underhill

Big Picture: Both grades move into fractions/decimals, then ratios, geometry, and algebraic thinking. Grade 6 gets a pre-algebra emphasis.

Month	Shared Strand	Grade 5 Focus	Grade 6 Focus	Notes
Sept	Fractions	Add/subtract fractions	Multiply/divide fractions	Shared models, scaffolded tasks.
Oct	Decimals	Place value, add/sub decimals	Operations with decimals, connect to fractions	Same grids & visuals.
Nov	Ratios & Proportions	Intro to equivalent fractions/ratios	Unit rates, ratio tables, coordinate plane	Use cooking/real-life examples.
Dec	Geometry	Volume of rectangular prisms	Area/volume of complex shapes	Shared manipulatives.
Jan	Expressions & Equations	Patterns, numerical expressions	Variables, one-step equations	Parallel "mystery number" problems.
Feb	Fractions & Decimals	Word problems with fractions/decimals	Rational numbers, integers on number line	Number line can show both.
Mar	Statistics/Data	Graphs, line plots	Mean, median, variability	Use same data sets.
Apr	Geometry	Coordinate plane basics	Coordinate plane quadrants, polygons	Same graphing paper, scale up complexity.
May	Review	Year-end mastery check	Year-end mastery check	Separate assessments.

📘 Math Scope & Sequence 2025-26

(Aligned to MN 2007 Math Standards + NWEA MAP Growth Domains)

PreK

Focus Strands (ECIPs Early Math): Counting/Quantity, Shapes/Spatial, Patterns, Measurement
MAP Domain Emphasis: Readiness (number sense, shapes, measurement language)

- **September** – Count sets (0–5), compare quantities (more/less) → *ECIP M.1*
- **October** – Extend AB patterns with objects/colors → *ECIP M.2*
- **November** – Identify shapes (circle, square, triangle) → *ECIP M.3*
- **December** – Positional words (in, on, under, next to) → *ECIP M.4*
- **January** – Subitize (0–5), informal measurement words → *ECIP M.5*
- **February** – Build sets (up to 10), classify objects → *ECIP M.6*
- **March** – Compare length/weight → *ECIP M.7*
- **April** – Simple addition/subtraction stories → *ECIP M.8*
- **May** – Readiness review → *ECIP M.9*

Kindergarten

Strands: Number & Operation, Algebra, Geometry & Measurement, Data Analysis & Probability
MAP Domains: Numbers & Operations, Operations & Algebraic Thinking, Geometry, Measurement & Data

- **September** – Numbers 0–20, counting, cardinality → *K.1.1.1, K.1.1.2*
- **October** – Add/subtract within 10 using objects → *K.1.2.1, K.2.1.1*
- **November** – Measurement with informal units; data → *K.3.1.1, K.4.1.1*
- **December** – 2D/3D shapes, compose/decompose → *K.3.2.1, K.3.2.2*
- **January** – Review + Winter MAP → spiral of above
- **February** – Add/subtract within 20; equations with unknowns → *K.1.2.3, K.2.1.2*
- **March** – Teen numbers; place value (tens/ones) → *K.1.1.3*
- **April** – Time to hour; coin ID; data → *K.3.3.1, K.4.1.2*
- **May** – Spiral review + Spring MAP → spiral of all

Grade 1

- **Sept** – Place value to 120; count skip patterns → *1.1.1.1, 1.1.1.2*
- **Oct** – Add/subtract within 20 → *1.1.2.1, 1.2.1.1*
- **Nov** – Measurement (length), time to hour/half → *1.3.1.1, 1.4.1.1*
- **Dec** – 2D/3D shapes; equal shares → *1.3.2.1, 1.3.2.2*
- **Jan** – Word problems (1–2 step) → *1.2.1.2*
- **Feb** – Place value (tens/ones), compare → *1.1.1.3*
- **Mar** – Money to $1; graphs → *1.3.3.1, 1.4.1.2*
- **Apr** – Add/subtract within 100 strategies → *1.1.2.3*
- **May** – Spiral review + Spring MAP

Grade 2

- **Sept** – Place value to 1,000; even/odd → *2.1.1.1, 2.1.1.2*
- **Oct** – Add/subtract within 100 → *2.1.2.1*
- **Nov** – Measurement (time, money), data → *2.3.1.1, 2.4.1.1*
- **Dec** – Geometry (polygons, partition) → *2.3.2.1*
- **Jan** – Add/subtract within 1,000 → *2.1.2.2*
- **Feb** – Multiplication foundations → *2.2.1.1*
- **Mar** – Measurement applications; graphs → *2.3.3.1, 2.4.1.2*
- **Apr** – Problem solving across strands → spiral of all
- **May** – Spiral review + Spring MAP

Grade 3

- **Sept** – Place value to 10,000 → *3.1.1.1*
- **Oct** – Multiplication concepts; 0–5 facts → *3.1.2.1*
- **Nov** – Multiplication/division 6–10 → *3.1.2.2*
- **Dec** – Area/perimeter → *3.3.1.1, 3.3.1.2*
- **Jan** – Fractions basics → *3.1.3.1, 3.1.3.2*
- **Feb** – Measurement & graphs → *3.3.2.1, 3.4.1.1*
- **Mar** – Geometry, quadrilaterals, symmetry → *3.3.3.1*
- **Apr** – Mixed multi-step problems → spiral
- **May** – Spiral review + Spring MAP

Grade 4

- **Sept** – Place value to 1,000,000 → *4.1.1.1*
- **Oct** – Multiplication (multi-digit) → *4.1.2.1*
- **Nov** – Division with remainders → *4.1.2.2*
- **Dec** – Fractions equivalent, add/subtract → *4.1.3.1, 4.1.3.2*
- **Jan** – Measurement (angles, conversions) → *4.3.1.1, 4.4.1.1*
- **Feb** – Multiply fractions; mixed numbers → *4.1.3.3*
- **Mar** – Geometry lines, symmetry, grid → *4.3.2.1*
- **Apr** – Multi-step problems → spiral
- **May** – Spiral review + Spring MAP

Grade 5

- **Sept** – Place value to decimals → *5.1.1.1*
- **Oct** – Division multi-digit; conversions → *5.1.2.1, 5.3.1.1*
- **Nov** – Fractions add/subtract unlike denoms → *5.1.3.1*
- **Dec** – Fractions multiply/divide → *5.1.3.2, 5.1.3.3*
- **Jan** – Volume, coordinate plane → *5.3.2.1, 5.4.1.1*
- **Feb** – Decimals add/sub/mult → *5.1.4.1*
- **Mar** – Decimals division → *5.1.4.2*
- **Apr** – Statistics (plots, measures) → *5.4.2.1*
- **May** – Spiral review + Spring MAP

Grade 6

- **Sept** – Ratios & rates → *6.2.1.1*
- **Oct** – Integers & rational numbers → *6.1.1.1*
- **Nov** – Expressions; order of ops → *6.2.2.1*
- **Dec** – Equations/inequalities → *6.2.2.2*
- **Jan** – Area, surface area, volume → *6.3.1.1*
- **Feb** – Percent applications → *6.1.2.1*
- **Mar** – Statistics: distributions → *6.4.1.1*
- **Apr** – Geometry applications → *6.3.2.1*
- **May** – Spiral review + Spring MAP

📄 Family Math Overviews 2025–2026

PreK Math Overview for Families

What We're Learning:
Your child will explore numbers, shapes, and patterns through play. They will count sets up to 10, compare "more" and "less," name shapes like circles and triangles, notice patterns, and use words like "longer/shorter" or "heavier/lighter."

Why It Matters:
These skills are the building blocks for kindergarten. PreK math is about curiosity and confidence with numbers and shapes.

Checkpoints:
Teachers will observe skills monthly, and by spring, children will show readiness for kindergarten counting and shape recognition.

At Home:
Count toys or snacks, play shape hunts, clap out patterns (clap–tap–clap), and use words like "big" and "small" while comparing objects.

Kindergarten Math Overview for Families

What We're Learning:

Students will count to 100, recognize and write numbers 0–20, and understand "teen" numbers as tens and ones. They'll add and subtract within 10, identify and build 2D and 3D shapes, measure objects with nonstandard units (like blocks), and tell time to the hour.

Why It Matters:

This year sets the foundation for problem-solving, preparing for both NWEA MAP assessments and daily life skills.

Checkpoints:

MAP tests in September, January, and May. Regular classroom checks through games, stories, and activities.

At Home:

Practice counting stairs or steps, play with coins, use blocks to compare lengths, and encourage solving "how many more" or "how many left" problems in daily routines.

Grade 1 Math Overview for Families

What We're Learning:

Students will understand place value to 120, add and subtract within 20 fluently, and begin solving two-step word problems. They'll measure length, tell time to the half-hour, count coins up to $1, and use simple graphs to show data. Geometry includes naming and partitioning shapes into halves and fourths.

Why It Matters:

First grade strengthens number fluency and introduces problem-solving strategies that carry into every subject.

Checkpoints:

MAP assessments three times per year, plus weekly reviews and unit quizzes.

At Home:

Practice simple addition/subtraction facts, play store with coins, use rulers for measuring household items, and talk about dividing food (like pizza) into equal shares.

Grade 2 Math Overview for Families

What We're Learning:

Students will deepen place value understanding up to 1,000 and fluently add and subtract within 100 and 1,000. They'll start exploring multiplication as repeated addition, measure time to 5 minutes, count money with dollar bills and coins, read graphs, and identify shapes and their attributes.

Why It Matters:

Second grade bridges early counting with the foundation of multiplication and division. Strong place value skills prepare students for more complex operations.

Checkpoints:

MAP assessments in fall, winter, and spring. Quick checks through timed math practice and real-world problem solving.

At Home:

Skip-count by 2s, 5s, and 10s, play multiplication games with arrays (rows of items), practice reading clocks, and let children help count money at the store.

Grade 3 Math Overview for Families

What We're Learning:

Students will master multiplication and division facts up to 10, understand place value to 10,000, and use strategies to solve multi-step problems. Fractions are introduced with number lines and shapes. Measurement includes area, perimeter, and graphs. Geometry includes quadrilaterals, symmetry, and classifying shapes.

Why It Matters:

Third grade is a milestone: multiplication and division facts unlock higher-level math and problem-solving confidence.

Checkpoints:

MAP assessments in September, January, and May, plus unit tests and fluency practice.

At Home:

Practice multiplication and division facts daily, cook together to explore fractions, measure room items for area/perimeter, and point out symmetrical designs in nature or art.

Grade 4 Math Overview for Families

What We're Learning:

Students will work with place value up to 1,000,000, master multi-digit multiplication and division, and deepen fraction knowledge by adding, subtracting, and multiplying fractions. They'll also measure angles, learn about lines and symmetry, graph points, and explore geometry in the coordinate plane.

Why It Matters:

Fourth grade connects whole number operations with fractions and geometry, preparing students for more abstract math.

Checkpoints:

MAP assessments three times per year, with ongoing practice in class.

At Home:

Practice long multiplication and division problems, explore equivalent fractions with measuring cups, and use protractors or angles in real life (like corners of books or walls).

Grade 5 Math Overview for Families

What We're Learning:

Students will master operations with fractions and decimals, including adding, subtracting, multiplying, and dividing them. They'll apply powers of 10, measure and calculate volume, graph patterns on the coordinate plane, and interpret data in line plots.

Why It Matters:

Fifth grade math prepares students for middle school by applying operations to fractions/decimals and using math to solve real-world problems.

Checkpoints:

MAP tests in September, January, and May. Unit assessments throughout the year.

At Home:

Work with fractions in cooking or baking, convert between measurements, track data (like sports scores or family activities) and graph it, and use money problems for decimal practice.

Grade 6 Math Overview for Families

What We're Learning:

Students will study ratios, rates, and percentages; work with integers and rational numbers; and write and solve equations and inequalities. They'll also calculate area, surface area, and volume, and explore data distributions, averages, and variability. Geometry applications include nets and coordinate geometry.

Why It Matters:

Sixth grade transitions students from arithmetic to algebraic thinking, building the skills they'll need for middle school and beyond.

Checkpoints:

MAP assessments three times per year, classroom checks, and multi-step projects.

At Home:

Compare unit prices while shopping (ratios), practice positive and negative number problems (like temperatures), use percent in real-world contexts (sales, tips), and calculate volume in household containers.