

5th Grade Curriculum Map: Math

Lessons	GLCEs
3.6 & 4.4 (decimals only)	N.MR.05.01 Understand the meaning of division of whole numbers with and without remainders; relate division to fractions and to repeated subtraction.
3.8 (not specific to formula mentioned)	N.MR.05.02 Relate division of whole numbers with remainders to the form $a = bq + r$ , e.g., $34 \div 5 = 6 \text{ r } 4$ , so $5 \cdot 6 + 4 = 34$ ; note remainder (4) is less than divisor (5).
2.2 extra practice, no specific lesson, 3 digit multipliers	N.MR.05.03 Write mathematical statements involving division for given situations.
1.4 (order of op) 1.5, 1.6	N.FL.05.04 Multiply a multi-digit number by a two-digit number; recognize and be able to explain common computational errors such as not accounting for place value.
Basic skills practice pg 754 (not specific lesson)	N.FL.05.05 Solve applied problems involving multiplication and division of whole numbers.*
4.2, Chapter 4 Review pg 178, Chapter 4 study guide review p 217, 219	N.FL.05.06 Divide fluently up to a four-digit number by a two-digit number.
3.1, Chapter 3 Review study guide review pg 158	N.MR.05.07 Find the prime factorization of numbers from 2 through 50, express in exponential notation, e.g., $24 = 2^3 \times 3^1$ , and understand that every whole number greater than 1 is either prime or can be expressed as a product of primes.*
7.7, 7.8, lab 7.8, 7.9 problems	N.ME.05.08 Understand the relative magnitude of ones, tenths, and hundredths and the relationship of each place value to the place to its right, e.g., one is 10 tenths, one tenth is 10 hundredths.
4.4	N.ME.05.09 Understand percentages as parts out of 100, use % notation, and express a part of a whole as a percentage.
4.5 (=fractions), comparing 4.7, Chapter 4 review pg 218	N.ME.05.10 Understand a fraction as a statement of division, e.g., $2 \div 3 = \frac{2}{3}$ , using simple fractions and pictures to represent.
5.7 (multiply) 5.7 lab for model	N.ME.05.11 Given two fractions, e.g., $\frac{1}{2}$ and $\frac{1}{3}$ , express them as fractions with a common denominator, but not necessarily a least common denominator, e.g., $\frac{1}{2} = \frac{3}{6}$ and $\frac{1}{3} = \frac{2}{6}$ ; use denominators less than 12 or factors of 100.*
5.9 lab 5.9 (fractions and mixed numbers), no whole number by fraction	N.ME.05.12 Find the product of two unit fractions with small denominators using an area model.*
5.2, Chapter 5 quiz pg 252, Chapter 5 study guide p 285	N.MR.05.13 Divide a fraction by a whole number and a whole number by a fraction, using simple unit fractions.*
Basic skills practice pg 753 (no specific lesson)	N.FL.05.14 Add and subtract fractions with unlike denominators through 12 and/or 100, using the common denominator that is the product of the denominators of the 2 fractions, e.g., $\frac{1}{3} + \frac{1}{4}$ : use 12 as the common denominator.*
1.2 (using estimation) addition, subtraction, multiplication and division	N.MR.05.15 Multiply a whole number by powers of 10: 0.01, 0.1, 1, 10, 100, 1,000; and identify patterns.
	N.FL.05.16 Divide numbers by 10's, 100's, 1,000's using mental strategies.

3.5, Chapter 3 study guide and review pg 153	N.MR.05.17 Multiply one-digit and two-digit whole numbers by decimals up to two decimal places.
4.8, 5.5 (unknown variable)	N.FL.05.18 Use mathematical statements to represent an applied situation involving addition and subtraction of fractions.*
5.2, Chapter 5 Study guide pg 285 various story problems and "Links" throughout text	N.MR.05.19 Solve contextual problems that involve finding sums and differences of fractions with unlike denominators using knowledge of equivalent fractions.*
5.5, Quiz p. 252, muli and div 5.10	N.FL.05.20 Solve applied problems involving fractions and decimals; include rounding of answers and checking reasonableness.*
7.8, Ready to go on Quiz p 398	N.MR.05.21 Solve for the unknown in equations such as $14 + x = 712$ .*
7.1, 7.2, Chapter 7 study guide p404	N.MR.05.22 Express fractions and decimals as percentages and vice versa. N.ME.05.23 Express ratios in several ways given applied situations, e.g., 3 cups to 5 people, 3 : 5, 35; recognize and find equivalent ratios.
9.2, 9.4, Chapter 9 Review p 531	M.UN.05.01 Recognize the equivalence of 1 liter, 1,000 ml and 1,000 cm <sup>3</sup> and include conversions among liters, milliliters, and cubic centimeters.
10.7, 10.8, Chapter 10 Study guide, 592, Basic Skills p. 770	M.UN.05.02 Know the units of measure of volume: cubic centimeter, cubic meter, cubic inches, cubic feet, cubic yards, and use their abbreviations (cm <sup>3</sup> , m <sup>3</sup> , in <sup>3</sup> , ft <sup>3</sup> , yd <sup>3</sup> ).
Skills Bank pg796	M.UN.05.03 Compare the relative sizes of one cubic inch to one cubic foot, and one cubic centimeter to one cubic meter.
9.3, 9.4, 9.5 Ready to Go On 9, Chapter 9 review p. 531	M.UN.05.04 Convert measurements of length, weight, area, volume, and time within a given system using easily manipulated numbers.
10.1, 10.2 Chapter 10 lab p 550, Chapter 10 study guide p 590	M.PS.05.05 Represent relationships between areas of rectangles, triangles, and parallelograms using models.
10.2, Ready p 562, Study p 591	M.TE.05.06 Understand and know how to use the area formula of a triangle: M.TE.05.07 Understand and know how to use the area formula for a parallelogram: $A = bh$ , and represent using models and manipulatives.
10.1, Ready p 562, Study Guide p 590	M.TE.05.08 Build solids with unit cubes and state their volumes.
Lab on page 570 (10.7 lab)	M.TE.05.09 Use filling (unit cubes or liquid), and counting or measuring to find the volume of a cube and rectangular prism.
10.7	M.PS.05.10 Solve applied problems about the volumes of rectangular prisms using multiplication and division and using the appropriate units.
10.7, 10.8 Ready p 586, Study Guide p 592	G.TR.05.01 Associate an angle with a certain amount of turning; know that angles are measured in degrees; understand that 90°, 180°, 270°, and 360° are associated respectively, with 14, 12, and 34, and full turns.
8.2	G.GS.05.02 Measure angles with a protractor and classify them as acute, right, obtuse, or straight.
8.2, Ready to Go p 434, Chapter 8 Study Guide, p 474	G.GS.05.03 Identify and name angles on a straight line and vertical angles.
8.3, Ready 434, Study p 474	G.GS.05.04 Find unknown angles in problems involving angles on a straight line, angles surrounding a point, and vertical angles.
8.3, Ready 434, Study p 474	

8.3, Ready 434, Study p 434, 9.6, Ready p 526, 9 Study Guide 532	G.GS.05.05 Know that angles on a straight line add up to $180^\circ$ and angles surrounding a point add up to $360^\circ$ ; justify informally by “surrounding” a point with angles.
8.5 Lab, 9.6, Ready 526, Review 532	G.GS.05.06 Understand why the sum of the interior angles of a triangle is $180^\circ$ and the sum of the interior angles of a quadrilateral is $360^\circ$ , and use these properties to solve problems.
8.5, Ready 454, Study p 475	G.GS.05.07 Find unknown angles and sides using the properties of: triangles, including right, isosceles, and equilateral triangles; parallelograms, including rectangles and rhombuses; and trapezoids.
6.7, Ready to go 336, Study 336	D.RE.05.01 Read and interpret line graphs, and solve problems based on line graphs, e.g., distance-time graphs, and problems with two or three line graphs on same axes, comparing different data.
6.7, Ready to go 336, Study 342	D.RE.05.02 Construct line graphs from tables of data; include axis labels and scale.
6.2, 6.3 Ready to go p 306, Study p 340	D.AN.05.03 Given a set of data, find and interpret the mean (using the concept of fair share) and mode.
6.2, 6.3	D.AN.05.04 Solve multi-step problems involving means.