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| Chapter 1: Number Sense |
| Lesson | Topic | Lesson Objectives | Chapter Materials |
| 1 | Millions Period | • Demonstrate an understanding of the repetition of the Ones, Tens, and Hundreds places in each period• Read numbers with 9 or fewer digits• Write numbers with 9 or fewer digits in standard form, word form, expanded form, and expanded form with multiplication• Identify the value of the digits in a number with 9 or fewer digits• Compare numbers with 9 or fewer digits | Teacher Manipulatives Packet:• Place Value Pocket Chart Kit• Decimal Place Value Pocket Chart Kit (A)• Place Value Kit• Thermometer• Red Strip• Roman Numeral Clock• Number LineStudent Manipulatives Packet:• Place Value Pocket Chart Kit• Decimal Place Value Pocket Chart Kit (A)Instructional Aids (Teacher’s Toolkit CD):• Place Value & Number Forms transparency (page IA1)• Number Lines: Decimals transparency (page IA2)• Number Lines: Decimals (page IA2) for each student• Place Value: Decimals transparency (page IA3)• Equivalent Decimals transparency (page IA4)• Equivalent Decimals (page IA4) for each student• Rounding Decimals transparency (page IA5)• Rounding Decimals (page IA5) for each student• Positive & Negative Number Line transparency (page IA6)• Positive & Negative Number Line (page IA6) for each student• Number Lines (blank) transparency (page IA7)• Number Lines (blank) (page IA7), 2 copies for each student• Cumulative Review Answer Sheet (page IA8) for each studentOther Teaching Aids:• Chalk or erasable markers: black and red• A red colored pencil for each student• A meter stick (optional)Math 5 Tests and Answer KeyOptional (Teacher’s Toolkit CD):• Fact Reviews pages 1–17• Enrichment pages 1–6• Extended Activities |
| 2 | Billions Period | • Demonstrate an understanding of the repetition of the Ones, Tens, and Hundreds places in each period• Read numbers with 12 or fewer digits• Write numbers with 12 or fewer digits in standard form, word form, expanded form, and expanded form with multiplication• Identify the value of the digits in a number with 12 or fewer digits• Compare numbers with 12 or fewer digits• Round numbers to the place of greatest value or to a given place |
| 3 | Decimals | • Develop an understanding of one thousandths• Identify a decimal on a number line• Write decimals in standard form, word form, fraction form, expanded form, and expanded form with multiplication• Identify the value of the digits in a decimal |
| 4 | Equivalent Decimals | • Identify equivalent decimals• Compare decimals• Round decimals to a given place |
| 5 | Positive & Negative Numbers | • Develop an understanding of positive and negative numbers• Label a number line to show positive and negative numbers• Explore positive and negative numbers in real-life situations• Read a Fahrenheit thermometer |
| 6 | Compare Positive & Negative Numbers | • Compare and order positive and negative numbers• Identify the number that is 1 more or 1 less• Plot positive and negative numbers on a number line |
| 7 | Roman Numerals | • Write Roman numerals 1–100• Recognize a pattern in writing Roman numerals |
| 8 | Chapter 1 Review | • Review |
| 9 | Chapter 1 TestGrade 4 Review | • Identify the number that is 100 more• Identify related multiplication and division facts• Solve missing addend facts• Solve addition problems with 3 addends• Subtract 3-digit numbers |

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| Chapter 2: Addition & Subtraction |
| Lesson | Topic | Lesson Objectives | Chapter Materials |
| 10 | Properties | • Apply addition properties: Commutative Property, Identity Property, and Associative Property• Apply the Zero Principle of Subtraction• Solve addition and subtraction equations with variables• Complete input/output tables | Teaching Visuals (Teacher’s Toolkit CD):• Chart 1: Problem-Solving PlanTeacher Manipulatives Packet:• Place Value Kit• Decimal Place Value Kit• Rulers: Centimeter RulerStudent Manipulatives Packet:• Place Value KitInstructional Aids (Teacher’s Toolkit CD):• Cumulative Review Answer Sheet (page IA8) for each student• Equations & Tables transparency (page IA9)• Equations & Tables (page IA9) for each student• Bar Graph transparency (page IA10)• Decimal Number Lines transparency (page IA11)• Line Graph transparency (page IA12)• Addition/Subtraction Relationship transparency (page IA13)• Addition/Subtraction Relationship (page IA13) for each student• Addition & Subtraction transparency (page IA14)• Word Problems transparency (page IA15)Other Teaching Aids:• 2 pencils of different lengths• 2 unused pencil cap erasers of the same sizeMath 5 Tests and Answer KeyOptional (Teacher’s Toolkit CD):• Fact Reviews pages 18–35• Enrichment pages 7–15• Extended Activities |
| 11 | Add Large Numbers | • Add 4-, 5-, and 6-digit numbers• Estimate the sum by rounding to the place of greatest value• Solve addition problems with 3 or more addends• Read a bar graph |
| 12 | Add Decimals | • Round decimals to the place of greatest value• Add decimals with 3 or fewer decimal places• Estimate the sum by rounding to the place of greatest value• Solve addition problems with 3 or more addends |
| 13 | Subtract LargeNumbers | • Subtract numbers with 6 or fewer digits• Estimate the difference by rounding to the place of greatest value• Subtract 5- and 6-digit numbers, renaming zeros• Interpret a line graph |
| 14 | Subtract Decimals | • Subtract decimals with 3 or fewer decimal places• Estimate the difference by rounding to the place of greatest value• Solve subtraction word problems |
| 15 | Add & Subtract | • Demonstrate an understanding of the relationship between addition and subtraction• Solve addition and subtraction equations with variables• Complete input/output tables |
| 16 | Compensation &Word Problems | • Use compensation to add and subtract mentally• Solve addition and subtraction word problems |
| 17 | Chapter 2 Review | • Review |
| 18 | Chapter 2 TestCumulative Review | • Round numbers to the nearest hundred thousand• Identify in a number the period for the place with the greatest value• Locate the position of a number on a number line• Identify the value of a digit within a number• Order numbers from least to greatest |

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| Chapter 3: Multiplication |
| Lesson | Topic | Lesson Objectives | Chapter Materials |
| 19 | Multiplication Properties | • Demonstrate an understanding of multiplication and the terms factor and product• Solve multiplication equations with a multiplication dot• Apply properties of multiplication to variables and numbers: Commutative Property, Identity Property, Zero Property, and Associative Property• Write a mathematical expression for a word phrase | Teaching Visuals (Teacher’s Toolkit CD):• Chart 1: Problem-Solving PlanTeacher Manipulatives Packet:• Place Value KitStudent Manipulatives Packet:• Place Value KitInstructional Aids (Teacher’s Toolkit CD):• Cumulative Review Answer Sheet (page IA8) for each student• Properties of Multiplication (page IA16) one for each student• Associative Property of Multiplication transparency (page IA17)• Associative Property of Multiplication (page IA17) for each student• Prime & Composite Numbers transparency (page IA18)• Prime & Composite Numbers (page IA18) for each student• Multiples of 10, 100 & 1,000 transparency (page IA19)• Grid Paper transparency (page IA20)• Input/Output Tables transparency (page IA21)• Sticker Sheet (page IA22), 3 copies• Divisibility Rules transparency (page IA23)Other Teaching Aids:• Overhead marker: red• 135 sheets of paper• 5 sentence stripsMath 5 Tests and Answer KeyOptional (Teacher’s Toolkit CD):• Fact Reviews pages 1–17• Enrichment pages 16–21• Extended Activities |
| 20 | Prime & Composite Numbers | • Demonstrate an understanding of the term multiple• Determine whether a number is prime or composite• Develop number sense with multiplication |
| 21 | Distributive Property | • Analyze patterns and use mental math to multiply factors that are multiples of 10• Apply properties of multiplication: Associative Property, Commutative Property, and Distributive Property of Multiplication over Addition |
| 22 | 1-Digit Multipliers | • Apply the Distributive Property of Multiplication over Addition• Estimate the product by rounding to the place of greatest value• Solve a multiplication word problem• Multiply a 2-, 3-, or 4-digit factor by a 1-digit multiplier• Solve money multiplication problems |
| 23 | 2-Digit Multipliers | • Multiply a 2- or 3-digit factor by a 1- or 2-digit multiplier• Estimate the product by rounding to the place of greatest value• Solve multiplication word problems• Complete an input/output table |
| 24 | Multiply & Estimate | • Multiply a 2-, 3-, or 4-digit factor by a 2-digit multiplier• Solve multiplication word problems• Solve money multiplication problems• Solve a multiplication problem with a variable, using substitution• Complete an input/output table |
| 25 | 3-Digit Multipliers | • Multiply a 3-digit factor by a 3-digit multiplier• Solve money multiplication problems• Solve multiplication problems with zeros in the multiplier |
| 26 | Factor Trees | • Demonstrate an understanding of prime and composite numbers• Develop an understanding of a factor tree• Write the prime factorization of a number• Determine whether a number is divisible by 2, 5, or 10 |
| 27 | Exponent Form | • Develop an understanding of exponents• Develop an understanding of powers of 10• Develop an understanding of the relationship between exponential notation and prime factorization |
| 28 | Chapter 2 Review | • Review |
| 29 | Chapter 2 TestCumulative Review | • Use the information on a chart to solve problems• Identify the value of a digit in a number• Identify the expanded form or word form of a number• Identify an odd number• Order decimals from greatest to least• Add decimals• Round whole numbers and decimals• Determine the rule for an input/output table• Apply the Commutative and Associative Properties of Addition |

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| Chapter 4: Geometry—Lines & Angles |
| Lesson | Topic | Lesson Objectives | Chapter Materials |
| 30 | Points, Lines & Planes | • Identify and name points, lines, line segments, and planes• Write ordered pairs to identify points on a coordinate graph• Plot points on a coordinate graph• Construct a line using points on a coordinate graph | Teaching Visuals (Teacher’s Toolkit CD):• Chart 4: Points, Lines & Planes• Chart 5: Line Segments, Rays & Angles• Chart 6: Angles• Chart 7: Triangles• Chart 8: Center Points, Radii, & Diameters• Chart 9: Chords & Central Angles• Chart 24: Coordinate GraphTeacher Manipulatives Packet:• 2 Rays (Angler)• Fractions Kit: 1 whole fraction circle, 1 fourth fraction circleStudent Manipulatives Packet:• 2 Rays (Angler)Instructional Aids (Teacher’s Toolkit CD):• Cumulative Review Answer Sheet (page IA8) for each student• Coordinate Graph transparency (page IA24)• Coordinate Graph (page IA24), laminate 1 copy for each student• Angles transparency (page IA25)• Angles (page IA25) for each student• Graph Paper transparency (page IA26)• Graph Paper (page IA26) for each student• More Angles transparency (page IA27)• More Angles (page IA27) for each student• Measuring Angles transparency (page IA28)• Measuring Angles (page IA28) for each student• Supplementary Angles transparency (page IA29)• Supplementary Angles (page IA29) for each student• Triangles transparency (page IA30)• Triangles (page IA30) for each student• Missing Angle transparency (page IA31)• Missing Angle (page IA31) for each student• Circle & Center Point transparency (page IA32)• Circle & Center Point (page IA32) for each student• Central Angles transparency (page IA33)• Central Angles (page IA33) for each student• Angle Review transparency (page IA34)• Angle Review (page IA34) for each studentChristian Worldview Shaping (Teacher’s Toolkit CD):• Pages 1–6Other Teaching Aids:• 5 strands of beads, each strand a different solid color• 9 sheets of graph paper• A ruler• A transparent ruler• A brass fastener for each student and the teacher• An overhead protractor• A protractor for each student• Overhead markers: black, red, blue, and green• Building blocks, to make an approximately 1-foot-tall tower• Colored pencils: red, blue, and green for each student• Three 8 ½ × 11 sheets of paper• A washable marker for each studentMath 5 Tests and Answer KeyOptional (Teacher’s Toolkit CD):• Fact Reviews pages 35–61• Enrichment pages 22–26• Extended Activities |
| 31 | Rays & Angles | • Identify and name rays and angles• Classify right, acute, obtuse, and straight angles• Use a protractor to measure angles |
| 32 | Measuring Angles | • Identify lines as parallel, perpendicular, or intersecting• Identify right, acute, obtuse, and straight angles• Use a protractor to measure angles• Relate angles to real-life situations |
| 33 | Measure & Draw Angles | • Use a protractor to measure angles• Draw angles using a protractor• Develop an understanding of supplementary angles and that the sum of the two angle measurements is 180°• Write an equation to find the unknown measure of an angle in a pair of supplementary angles |
| 34 | Triangles | • Identify right, acute, and obtuse triangles• Measure the angles within a triangle• Develop an understanding that the sum of the angle measurements of any triangle is 180°• Find the unknown measure of an angle in a triangle |
| 35 | Circles | • Identify the center point of a circle• Name a circle• Identify, name, and draw a radius, a diameter, a chord, and a central angle in a circle• Develop an understanding that the sum of the measures of the central angles in a circle equals 360°• Measure the central angles in a circle using a protractor• Relate circles to real-life situations |
| 36 | Graphing Figures | • Construct geometric figures on a coordinate graph |
| 37 | Chapter 4 Review | • Review |
| 38 | Chapter 4 TestCumulative Review | • Identify the related fact• Identify the prime factorization of a number• Identify the factors of a number• Identify names for a number• Determine the perimeter of a square• Identify names for sets of objects• Identify the fraction that names part of a whole and part of a set |

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| Chapter 5: Division: 1-Digit Divisors |
| Lesson | Topic | Lesson Objectives | Chapter Materials |
| 39 | Division | • Demonstrate an understanding of division• Identify the dividend, divisor, and quotient in division problems• Illustrate and solve division word problems• Demonstrate an understanding of the inverse relationship between multiplication and division• Solve a missing factor equation | Teaching Visuals (Teacher’s Toolkit CD):• Chart 4: Points, Lines & Planes• Chart 5: Line Segments, Rays & Angles• Chart 6: AnglesTeacher Manipulatives Packet:• Place Value Kit• Money KitStudent Manipulatives Packet:• Place Value Kit• Money Kit• Multiplication/Division MatInstructional Aids (Teacher’s Toolkit CD):• Cumulative Review Answer Sheet (page IA8) for each student• Input/Output Tables transparency (page IA21)• Division Grids (4) transparency (page IA35)• Division Grids (4) (page IA35), several copies for each student• Division Grids (2) transparency (page IA36)• Division Grids (2) (page IA36) for each student• Mathematical Expressions transparency (page IA37)Other Teaching Aids:• Several half-sheets of paper for each student and the teacher• 3 pencilsMath 5 Tests and Answer KeyOptional (Teacher’s Toolkit CD):• Fact Reviews pages 18–35• Enrichment pages 27–31• Extended Activities |
| 40 | 1-Digit Quotients | • Divide to find a 1-digit quotient, using manipulatives• Solve a division word problem• Write a division equation for a word problem• Demonstrate an understanding of the long division process• Check the quotient of a division problem, using multiplication |
| 41 | 1- & 2-Digit Quotients | • Divide to find 1- and 2-digit quotients, using manipulatives• Solve a division word problem• Write a division equation for a word problem• Interpret a remainder• Check a division problem using multiplication |
| 42 | 2- & 3-Digit Quotients | • Divide to find 2- and 3-digit quotients• Write a division equation for a word problem• Interpret a remainder• Illustrate a division word problem using a part-part-whole model• Check a division problem using multiplication• Determine the average (mean) |
| 43 | Zero in the Quotient | • Complete an input/output table• Divide to find quotients with zero• Solve a division word problem |
| 44 | 4-Digit Dividends | • Solve a missing factor equation with a variable• Divide a 4-digit dividend• Divide money• Solve a money division word problem• Write a money division word problem |
| 45 | Estimate | • Complete a division input/output table• Analyze patterns and use mental math to divide multiples of 10• Estimate a quotient using compatible numbers |
| 46 | Short Form of Division | • Write a mathematical expression for a word phrase• Use the short form of division to find a quotient• Solve a division word problem |
| 47 | Chapter 5 Review | • Review |
| 48 | Chapter 5 TestCumulative Review | • Demonstrate an understanding of the Distributive Property of Multiplication over Addition• Identify a name for a given number• Identify a multiple of a given number• Identify prime and composite numbers• Identify the number rounded to a given amount• Round to determine the estimate• Determine the unknown measure of an angle in a triangle• Read and interpret the data in a bar graph |

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| Chapter 6: Fractions |
| Lesson | Topic | Lesson Objectives | Chapter Materials |
| 49 | Compare & Order Fractions | • Demonstrate an understanding of a fraction• Demonstrate an understanding of equivalent fractions• Compare and order like fractions• Compare and order unlike fractions• Compare fractions to 1 or ½ using >, <, =, or ≠ | Teacher Manipulatives Packet:• Fraction KitStudent Manipulatives Packet:• Fraction KitInstructional Aids (Teacher’s Toolkit CD):• Cumulative Review Answer Sheet (page IA8) for each student• Fraction Number Lines transparency (page IA38)• Fraction Number Lines (page IA38) for each student• Equivalent Fractions transparency (page IA39)• More Fraction Number Lines transparency (page IA40)• Fraction Number Lines (blank) transparency (page IA41)• Venn Diagram transparency (page IA42)• Venn Diagram (page IA42) for each student• Grouping Fractions transparency (page IA43)• Problem Solving transparency (page IA44)• Problem Solving (page IA44) for each studentMath 5 Tests and Answer KeyOptional (Teacher’s Toolkit CD):• Fact Reviews pages 62–78• Enrichment pages 32–35• Extended Activities |
| 50 | Rename Fractions | • Rename a fraction to higher terms• Rename a fraction to lower terms, using divisibility rules• Compare and order related fractions |
| 51 | Improper Fractions & Mixed Numbers | • Rename an improper fraction as a mixed number• Rename a mixed number as an improper fraction |
| 52 | Compare Mixed Numbers | • Compare mixed numbers and improper fractions• Round mixed numbers to the nearest whole number |
| 53 | Common Factors | • List the factors of a number• Identify prime and composite numbers• Use a Venn diagram to identify common factors• Determine if a number is divisible by 2, 3, 4, 5, 6, or 10• Use divisibility rules to identify common factors• Rename a fraction to lowest terms |
| 54 | Lowest Terms | • Identify common factors of two numbers• Demonstrate an understanding of renaming fractions to lower terms• Rename a fraction to lowest terms using the Greatest Common Factor (GCF) |
| 55 | More Lowest Terms | • Construct a factor tree• Determine the GCF for two numbers using prime factorization• Use a Venn diagram to determine the GCF for two numbers• Write the prime factorization of a number, using exponents• Rename a fraction to lowest terms using the GCF |
| 56 | Guess & Check | • Use the guess and check strategy to solve problems |
| 57 | Chapter 6 Review | • Review |
| 58 | Chapter 6 TestCumulative Review | • Compare and order positive and negative numbers• Compare equations using using >, <, or =• Determine the radius of a circle, given the diameter• Determine the diameter of a circle, given the radius• Identify acute, obtuse, and right angles• Determine the unknown measure of an angle in a pair of supplementary angles• Identify lines containing rays and line segments |

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| Chapter 7: Division: 2-Digit Divisors |
| Lesson | Topic | Lesson Objectives | Chapter Materials |
| 59 | Multiples of 10 | • Analyze patterns and use mental math to divide multiples of 10• Estimate a quotient using compatible numbers• Divide by a multiple of 10 | Teaching Visuals (Teacher’s Toolkit CD):• Chart 1: Problem-Solving Plan• Chart 2: Adjust the Quotient (higher)• Chart 3: Adjust the Quotient (lower)• Chart 25: Line Graph: Fair WeekTeacher Manipulatives Packet:• Place Value KitStudent Manipulatives Packet:• Place Value KitInstructional Aids (Teacher’s Toolkit CD):• Cumulative Review Answer Sheet (page IA8) for each student• Input/Output Tables transparency (page IA21)• Division Grids (4) transparency (page IA35)• Division Grids (4) (page IA35), several copies for each student• More Fraction Number Lines transparency (page IA40)• Venn Diagram transparency (page IA42)• Too Much or Not Enough transparency (page IA45)• Too Much or Not Enough (page IA45) for each student• Chart & Line Graph transparency (page IA46)• Class Popcorn Sales transparency (page IA47)• Multi-step Word Problems transparency (page IA48)• Line Graph: Air Show Attendance transparency (page IA49)• Bar Graph: Airline Flight 253 transparency (page IA50)Other Teaching Aids:• 130 small dried beans• A red overhead marker• A calculator for each student (optional)Math 5 Tests and Answer KeyOptional (Teacher’s Toolkit CD):• Fact Reviews pages 1–78• Enrichment pages 36–44• Extended Activities |
| 60 | 1-Digit Quotients | • Divide to find 1-digit quotients• Estimate a quotient using compatible numbers• Solve a division word problem• Check division problems using multiplication |
| 61 | Adjust the Quotient | • Adjust the quotient in a division problem• Divide to find 1-digit quotients• Check division problems using multiplication |
| 62 | 2-Digit Quotients | • Divide to find 2-digit quotients• Adjust the quotient in a division problem• Solve a division word problem• Interpret a remainder |
| 63 | 4-Digit Dividends | • Complete an input/output table using mental math• Divide 4-digit dividends to find 2-digit quotients• Adjust the quotient in a division problem• Solve a division word problem• Interpret a remainder |
| 64 | 3-Digit Quotients | • Divide to find 3-digit quotients• Determine whether a word problem has too much or not enough information• Solve a word problem• Write an equation for a division word problem• Interpret a remainder• Develop an understanding of a remainder written as a fraction |
| 65 | More 3-Digit Quotients | • Divide to find 3-digit quotients• Divide to find a quotient containing 0• Analyze a line graph• Use a line graph to solve word problems |
| 66 | More Division | • Determine the rule for an input/output table• Analyze a pictograph• Use a pictograph to solve word problems• Develop an understanding of a remainder written as a fraction |
| 67 | Order of Operations | • Use the order of operations to solve equations and multi-step word problems |
| 68 | Chapter 7 Review | • Review |
| 69 | Chapter 7 TestCumulative Review | • Recognize related numbers and fractions• Identify equivalent fractions• Determine the number for a point on a number line• Rename improper fractions and mixed numbers• Read and interpret the data in a bar graph |

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| Chapter 8: Time & Customary Measurement |
| Lesson | Topic | Lesson Objectives | Chapter Materials |
| 70 | Time | • Identify equivalent units of time• Tell and write time to the minute• Differentiate between am and pm• Convert (rename) units of time to smaller or larger units• Read a calendar and write a date | Teaching Visuals (Teacher’s Toolkit CD):• Chart 17: Time Measurement• Chart 18: Time Line: Air & Space• Chart 19: Customary MeasurementTeacher Manipulatives Packet:• Clock• Rulers: Inch Ruler (fourths), Inch Ruler (eighths)• Thermometer• Red Strip• Boiling Point steam cloud• Measurement Flashcards: customaryStudent Manipulatives Packet:• Clock• Rulers: Inch Ruler (fourths), Inch Ruler (eighths), Measuring Tape (yard)• Thermometer• Red StripInstructional Aids (Teacher’s Toolkit CD):• Cumulative Review Answer Sheet (page IA8) for each student• 1776 transparency (page IA51)• Map Key transparency (page IA52)• Map Key (page IA52) for each student• Input/Output Tables (blank) transparency (page IA53)• Input/Output Tables (blank) (page IA53), 2 copies for each student• Temperature Chart (page IA54) for each student• Line Graph: Temperature transparency (page IA55)• Word Problems transparency (page IA56)Christian Worldview Shaping (Teacher’s Toolkit CD):• Pages 7–10Other Teaching Aids:• Judy Clock• A yardstick• A tape measure• A drinking straw• 14 feet of rope• A spring scale• 1 lb of sugar and 1 oz of sugar• A 1-lb loaf of bread• A small onion• An apple• A cabbage• Unpopped popcorn, rice, or dried beans• Two clear 1-cup measuring cups, an 8-ounce paper cup, a 1-pint container, a 1-quart container, and a 1-gallon container• 1 gallon of colored water• A thermometer for each group of 4 students• Six 3 × 5 cards• A calculator for each student (optionalMath 5 Tests and Answer KeyOptional (Teacher’s Toolkit CD):• Fact Reviews pages 1–78• Enrichment pages 45–50• Extended Activities |
| 71 | Elapsed Time | • Determine the elapsed time to the hour and minute• Determine the future elapsed time• Add and subtract time• Demonstrate an understanding of elapsed time on a time line |
| 72 | Linear Measurement | • Recognize inch, foot, yard, and mileas linear measurement units• Use a map key to determine distance• Estimate length to the nearest inch• Measure to the nearest inch, half inch, fourth inch, and eighth inch• Draw a line to the nearest inch, half inch, fourth inch, and eighth inch• Measure the perimeter of a figure |
| 73 | **Rename Measurements** | • Convert (rename) units of linear measurement to smaller or larger units• Recognize the symbols for *foot* and *inch* |
| 74 | Weight & Capacity | • Recognize pound, ounce, and ton as measuring units for weight• Recognize *fluid ounce*, *cup*, *pint*, *quart*, and *gallon* as measuring units for capacity• Convert (rename) units of weight and capacity to smaller or larger units• Read a spring scale |
| 75 | Temperature | • Recognize degree as a measuring unit for temperature• Recognize that °F represents degrees Fahrenheit• Read and set a Fahrenheit thermometer• Recognize standard Fahrenheit temperatures• Measure temperature using a Fahrenheit thermometer• Interpret a line graph |
| 76 | **Measurement Problems** | • Add, subtract, and multiply customary measurements• Solve rate (speed) and distance word problems |
| 77 | Chapter 8 Review | • Review |
| 78 | Chapter 8 TestCumulative Review | • Multiply a 2- or 3-digit factor by a 1- or 2-digit multiplier• Solve multiplication and division problems mentally• Identify lines, rays, and angles in a plane figure• Determine equivalent fractions |

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| Chapter 9: Fractions: Addition & Subtraction |
| Lesson | Topic | Lesson Objectives | Chapter Materials |
| 79 | Add Like Fractions | • Add fractions and mixed numbers with like denominators• Estimate the sum of mixed numbers by rounding to the nearest whole number• Simplify fraction answers by renaming to lowest terms• Simplify improper fraction answers by renaming as mixed numbers• Apply addition properties to fractions | Teaching Visuals (Teacher’s Toolkit CD):• Chart 3: Points, Lines & Planes• Chart 4: Line Segments, Rays & Angles• Chart 5: Angles• Chart 6: TrianglesTeacher Manipulatives Packet:• Fraction Kit: fraction circles• Fraction Number Line (tan)• Measurement Flashcards: customary capacityStudent Manipulatives Packet:• Fraction Kit: fraction circles• Fraction Number Line (tan)Instructional Aids (Teacher’s Toolkit CD):• Cumulative Review Answer Sheet (page IA8) for each student• Fraction Number Lines (blank) transparency (page IA41)• Venn Diagram transparency (page IA42)• Venn Diagram (page IA42) for each student• Fraction Paper (page IA57) (optional)• Hundred Chart (page IA58) for each student• Add & Subtract Fractions transparency (page IA59)Other Teaching Aids:• 26 Unifix Cubes for each student (10 of one color and 16 of another)• A calculator for each student (optional)• A measuring teaspoon• A measuring tablespoon• Ingredients, utensils, and other supplies for making cookies (optional; see recipe in Lesson 89)Math 5 Tests and Answer KeyOptional (Teacher’s Toolkit CD):• Fact Reviews pages 1–78• Enrichment pages 51–58• Extended Activities |
| 80 | Subtract Like Fractions | • Subtract fractions and mixed numbers with like denominators• Estimate the difference of mixed numbers by rounding to the nearest whole number• Rename 1 as an improper fraction to subtract• Simplify answers by renaming to lowest terms• Write an equation to solve a fraction word problem |
| 81 | Add Unlike Fractions | • Add fractions and mixed numbers with unlike (related) denominators• Estimate the sum of mixed numbers by rounding• Simplify answers by renaming to lowest terms• Write an equation to solve a fraction word problem |
| 82 | Subtract UnlikeFractions | • Subtract fractions and mixed numbers with unlike (related) denominators• Estimate the difference of mixed numbers by rounding• Simplify answers by renaming to lowest terms• Write an equation to solve a fraction word problem |
| 83 | Least Common Multiple | • List multiples to determine the Least Common Multiple (LCM) of two numbers• Use a Venn diagram to determine the LCM of two numbers• Write equivalent fractions using the Least Common Denominator (LCD)• Add and subtract unlike fractions• Complete an input/output table |
| 84 | Compare Fractions | • Determine the Least Common Denominator (LCD) by finding the Least Common Multiple (LCM) or find a common denominator by multiplying the unlike denominators• Compare unlike fractions (use the LCD to make equivalent fractions)• Add and subtract unlike fractions• Apply the LCM to problem-solving situations |
| 85 | Least Common Denominator | • Determine the LCD by finding the LCM• Add and subtract fractions• Simplify answers by renaming to lowest terms• Evaluate equations by substituting fractions for variables |
| 86 | Add & Subtract Unlike Fractions | • Determine the LCD by finding the LCM or find a common denominator by multiplying the unlike denominators• Add and subtract fractions• Simplify answers by renaming to lowest terms• Write an equation to solve a fraction word problem |
| 87 | Add & Subtract Mixed Numbers | • Determine the LCD by finding the LCM or find a common denominator by multiplying the unlike denominators• Add and subtract mixed numbers• Simplify answers by renaming to lowest terms• Estimate by rounding to the nearest whole number• Write >, <, or = to complete statements comparing sums or differences• Write an equation to solve a fraction word problem |
| 88 | Add & Subtract Fractions | • Add fractions and mixed numbers• Subtract fractions and mixed numbers• Determine the LCD by finding the LCM• Simplify answers by renaming to lowest terms• Estimate by rounding to the nearest whole number• Apply the LCM to problem-solving situations• Solve math phrases• Complete an input/output table |
| 89 | Factoring to Compare Fractions | • Construct a factor tree• Write the prime factorization of a number• Determine the LCM for two numbers using prime factorization• Apply knowledge of fractions to everyday life• Use a recipe to solve fraction problems |
| 90 | Chapter 9 Review | • Review |
| 91 | Chapter 9 TestCumulative Review | • Read a circle graph, a line graph, and a bar graph• Determine the number, variable, or operation needed to complete an equation |

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| Chapter 10: Equations |
| Lesson | Topic | Lesson Objectives | Chapter Materials |
| 92 | Expressions | • Write a mathematical expression for a real-life situation or a word phrase• Use two equal expressions to write an equation• Evaluate and relate expressions using >, <, or = | Teaching Charts (Teacher’s Toolkit CD):• Chart 24: Coordinate Graph• Chart 26: Double Bar GraphStudent Manipulatives Packet:• Place Value KitInstructional Aids (Teacher’s Toolkit CD):• Cumulative Review Answer Sheet (page IA8) for each student• Bar Graph transparency (page IA10)• Input/Output Tables transparency (page IA21)• Coordinate Graph transparency (page IA24)• Class Popcorn Sales transparency (page IA47)• Expressions & Equations I transparency (page IA60)• Expressions & Equations II transparency (page IA61)• Apply Properties transparency (page IA62)• Solve for xtransparency (page IA63)• Solve for x(page IA63) for each student• Balanced Equations (numbers) transparency (page IA64)• Balanced Equations (objects) transparency (page IA65)• Part-Part-Whole Model (page IA66) for each student• Equations: Word Problems I transparency (page IA67)• Equations: Word Problems II transparency (page IA68)• More Expressions & Equations transparency (page IA69)• Part-Part-Whole Model (variable) transparency (page IA70)Other Teaching Aids:• 3 coffee stirrers for each studentMath 5 Tests and Answer KeyOptional (Teacher’s Toolkit CD):• Fact Reviews pages 1–78• Enrichment pages 59–62• Extended Activities |
| 93 | Equations | • Apply properties and strategies to evaluate and relate equivalent expressions• Write an equation for a part-part-whole model |
| 94 | Balanced Equations | • Determine the value of an expression using substitution• Determine an unknown value (value of a variable) in an equation using substitution or mental math• Determine the value of objects on a balanced scale |
| 95 | Equations in Word Problems | • Solve word problems with unlike parts• Write an equation for a word problem• Rename parts with unlike labels |
| 96 | Chapter 10 Review | • Review |
| 97 | Chapter 10 TestCumulative Review | • Solve problems mentally• Determine the perimeter of a triangle• Determine the unknown measure of an angle in a triangle• Identify the kind of angle• Recognize the diameter of a circle• Identify the equivalent fraction• Add fractions |

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| Chapter 11: Geometry—Perimeter & Area |
| Lesson | Topic | Lesson Objectives | Chapter Materials |
| 98 | Quadrilaterals & Other Polygons | • Describe and identify regular and irregular polygons• Calculate the perimeter of a polygon• Identify a square, a rectangle, a parallelogram, a trapezoid, and a rhombus as quadrilaterals• Develop an understanding that the sum of the angle measurements of any quadrilateral is 360º | Teaching Visuals (Teacher’s Toolkit CD):• Chart 7: Triangles• Chart 8: Center Points, Radii & Diameters• Chart 10: Polygons• Chart 11: Quadrilaterals• Chart 12: Similar, Congruent & Symmetrical• Chart 13: Perimeter• Chart 14: AreaStudent Manipulatives Packet:• Shapes Kit: 1 quadrilateralInstructional Aids (Teacher’s Toolkit CD):• Cumulative Review Answer Sheet (page IA8) for each student• Triangles transparency (page IA30)• Triangles (page IA30) for each student• Equations: Word Problems I transparency (page IA67)• Quadrilaterals transparency (page IA71)• Quadrilaterals (page IA71) for each student• Circumference A (page IA72) for one third of the students• Circumferences B & C (page IA73) for two thirds of the students• Transformations transparency (page IA74)• Transformations (page IA74) for each student• More Triangles transparency (page IA75)• Area Grid transparency (page IA76)• Area Grid (page IA76) for each student• Complex Area transparency (page IA77)• Complex Area (page IA77) for each student• Area of Triangles transparency (page IA78)• Area of Triangles (page IA78) for each student• Perimeter & Area transparency (page IA79)• Perimeter & Area (page IA79) for each studentChristian Worldview Shaping (Teacher’s Toolkit CD):• Page 11Other Teaching Aids:• A 25-inch strand of yarn for each student• Quadrilaterals of different shapes for each student• A 12-inch ruler for each student• A centimeter ruler for each student• Scissors for each student• A protractor for each student• An overhead protractorMath 5 Tests and Answer KeyOptional (Teacher’s Toolkit CD):• Fact Reviews pages 1–78• Enrichment pages 63–70• Extended Activities |
| 99 | Perimeter & Circumference | • Develop an understanding of the relationship between the diameter and the circumference of a circle• Estimate the circumference of a circle• Identify and describe similar, congruent, and symmetrical figures• Identify, model, and describe translations, rotations, and reflections• Calculate the perimeter of a polygon |
| 100 | Classify Triangles | • Develop an understanding that the sum of the angle measurements of any triangle is 180°• Measure the angles in a triangle using a protractor• Classify triangles by angles (right, acute, obtuse)• Classify triangles by sides (equilateral, isosceles, scalene) |
| 101 | Area | • Use a formula to calculate the area of squares and rectangles• Calculate the area of a complex polygon• Solve geometry word problems |
| 102 | Area of a Triangle | • Develop an understanding of the area of a triangle• Solve geometry word problems |
| 103 | Perimeter & Area | • Calculate the area of a square, a rectangle, a complex figure, and a triangle• Calculate the perimeter of a rectangle |
| 104 | Chapter 11 Review | • Review |
| 105 | Chapter 11 TestCumulative Review | • Add and subtract fractions and mixed numbers• Determine equivalent measurements• Determine equivalent expressions• Solve problems with variables |

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| Chapter 12: Fractions—Multiplication & Division |
| Lesson | Topic | Lesson Objectives | Chapter Materials |
| 106 | Multiply a Whole Number and a Fraction | • Write a multiplication equation for a repeated addition equation• Multiply a whole number and a fraction• Simplify answers by renaming to lowest terms• Write an equation to solve a fraction word problem• Complete an input/output table | Teacher Manipulatives Packet:• Fraction Kit: fraction circles• Shapes Kit: 12 red squares• Fraction Number Line (tan)Student Manipulatives Packet:• Fraction Kit: fraction circles• Shapes Kit: 12 red squares• Fraction Number Line (tan)Instructional Aids (Teacher’s Toolkit CD):• Cumulative Review Answer Sheet (page IA8) for each student• Input/Output Tables (blank) transparency (page IA53)• More Fractions transparency (page IA80)Other Teaching Aids:• Four 8 ½ × 11 sheets of unruled white paper for each student and the teacher• 2 different colored crayons for each student• 2 different colored markers or chalk• Examples of fractions from home (e.g., measuring cups, recipes, serving labels from canned goods, fabric, ruler)• A bar graph (from a newspaper, a magazine, or an online encyclopedia)• A ruler for each student• A BibleMath 5 Tests and Answer KeyOptional (Teacher’s Toolkit CD):• Fact Reviews pages 1–78• Enrichment pages 71–74• Extended Activities |
| 107 | Find a Fraction of a Whole Number | • Find a fraction of a whole number using manipulatives• Multiply to find a fraction of a whole number• Simplify answers by renaming to lowest terms• Write an equation to solve a fraction word problem |
| 108 | Find a Fraction of a Fraction | • Make a model or diagram to find a fraction of a fraction• Multiply to find a fraction of a fraction• Simplify answers by renaming to lowest terms• Write an equation to solve a fraction word problem• Apply multiplication properties to fractions |
| 109 | Multiply a Mixed Number | • Multiply a whole number and a mixed number• Apply the Distributive Property of Multiplication over Addition to multiply a whole number and a mixed number• Simplify answers by renaming to lowest terms• Write an equation to solve a fraction word problem |
| 110 | Multiply Mixed Numbers | • Estimate the product of mixed numbers by rounding to the nearest whole number• Multiply mixed numbers• Simplify answers by renaming to lowest terms• Write an expression for a phrase |
| 111 | Divide a Whole Number by a Fraction | • Draw a diagram to solve a division equation with a fraction• Use a number line to solve a division equation with a fraction• Demonstrate an understanding of dividing a whole number by a fraction• Check a division problem using multiplication• Complete an input/output table |
| 112 | Divide a Fraction by a Fraction | • Draw a diagram to solve a division equation with a fraction• Use a number line to solve a division equation with a fraction• Demonstrate an understanding of dividing a fraction by a fraction• Check a division problem using multiplication• Write an equation to solve a fraction word problem |
| 113 | Use Reciprocals to Divide Fractions | • Write multiplication and division equations for a fraction family• Identify the reciprocal of a fraction• Divide by multiplying by the reciprocal of the divisor• Check a division problem using multiplication |
| 114 | Divide Fractions | • Identify the reciprocal of a fraction• Divide by multiplying by the reciprocal of the divisor• Check a division problem using multiplication• Complete an input/output table• Write an equation to solve a fraction word problem |
| 115 | The World of Fractions | • Connect math to other subjects in real-world situations• Write an equation to solve a fraction word problem• Solve multi-step word problems |
| 116 | Chapter 12 Review | • Review |
| 117 | Chapter 12 TestCumulative Review | • Recognize the factors of a number• Recognize the multiples of a number• Recognize characteristics of a number• Recognize addition properties• Determine the value of nin a part-part-whole model• Calculate perimeter and area of figures• Calculate the unknown measure of an angle in a triangle• Convert inches to feet |

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| Chapter 13: Decimals—Multiplication & Division |
| Lesson | Topic | Lesson Objectives | Chapter Materials |
| 118 | Decimals | • Demonstrate an understanding of decimals• Read and write decimals to the One Thousandths place• Identify the value of digits in a decimal• Write decimals as fractions and mixed numbers• Identify the equivalent fraction for a decimal | Teacher Manipulatives Packet:• Decimal Place Value Pocket Chart Kit (B)• Place Value KitStudent Manipulatives Packet:• Decimal Place Value Pocket Chart Kit (B)• Place Value KitInstructional Aids (Teacher’s Toolkit CD):• Cumulative Review Answer Sheet (page IA8) for each student• Input/Output Tables (blank) transparency (page IA53)• Tenths transparency (page IA81)• Hundredths transparency (page IA82)• Hundredths (page IA82) for each student• One Thousandths transparency (page IA83)• Number Line Patterns transparency (page IA84)• Number Line Patterns (page IA84) for each student• Decimal Word Problems transparency (page IA85)• Multiply & Divide by Powers of 10 transparency (page IA86)• Multiply & Divide by Powers of 10 (page IA86) for each student• Decimal Review transparency (page IA87)• Decimal Review (page IA87) for each student• Decimal Review, Continued transparency (page IA88)• Decimal Review, Continued (page IA88) for each studentChristian Worldview Shaping (Teacher’s Toolkit CD):• Page 12Other Teaching Aids:• A calculator for each student• Overhead markers: red, blue, orange, purple, and brown• Crayons: red and blue for each studentMath 5 Tests and Answer KeyOptional (Teacher’s Toolkit CD):• Fact Reviews pages 1–78• Enrichment pages 75–80• Extended Activities |
| 119 | Rounding Decimals | • Demonstrate an understanding of decimals• Plot decimals on a number line• Round decimals to a given place• Order decimals from least to greatest |
| 120 | Compare & Multiply | • Order decimals from least to greatest• Compare decimals• Multiply a decimal by a whole number• Estimate the product of a multiplication problem by rounding to the nearest whole number• Solve decimal word problems |
| 121 | Multiply Decimals | • Multiply a decimal by a multiple of ten• Multiply a decimal by a decimal• Solve decimal word problems• Write an equation for a word problem |
| 122 | Estimate & Multiply | • Write a decimal in expanded form with multiplication• Estimate the product by rounding to the nearest whole number• Multiply a decimal by a decimal• Determine the number of decimal places in a product• Annex zeros in the product• Write a multiplication equation for a word problem |
| 123 | Division: Decimal by a 1-Digit Divisor | • Divide a decimal by a 1-digit whole number, with and without renaming in the dividend• Check a division problem using multiplication• Read a chart |
| 124 | Quotients Less Than One | • Annex a 0 to rename a decimal• Check a division problem using multiplication• Determine if a quotient will be less than 1• Divide a whole number by a 1-digit whole number to find a quotient less than 1• Divide to rename a fraction as a decimal• Write an equation for a word problem |
| 125 | Zero in the Quotient | • Round a decimal to the nearest Ones, Tenths, or Hundredths place• Demonstrate an understanding of zeros in the quotient• Estimate the quotient of a decimal division problem• Divide a decimal by a 1-digit whole number• Check a division problem using multiplication• Divide to rename a fraction as a decimal• Solve a money word problem |
| 126 | Powers of Ten | • Multiply or divide a decimal by a power of 10 using mental math• Write an equation for a word problem |
| 127 | Solve Problems Backwards | • Solve word problems, working backwards |
| 128 | Chapter 13 Review | • Review |
| 129 | Chapter 13 TestCumulative Review | • Calculate area and perimeter of figures• Determine the measure of the unknown angle of a triangle and a quadrilateral• Identify the transformation of a figure• Recognize congruent figures• Identify parallel line segments in a figure• Add fractions• Multiply fractions• Identify equivalent fractions• Write an expression for a number• Complete a part-part-whole model• Solve a multi-step money word problem |

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| Chapter 14: Geometry—Surface Area & Volume |
| Lesson | Topic | Lesson Objectives | Chapter Materials |
| 130 | 3-Dimensional Figures | • Distinguish between 2-dimensional and 3-dimensional figures• Recognize 3-dimensional figures: a sphere, a cone, a cylinder, a prism, and a pyramid• Identify flat and curved surfaces of 3-dimensional figures• Develop an understanding of polyhedrons• Identify faces, edges, and vertices of a polyhedron• Distinguish between prisms and pyramids• Recognize a square prism (cube), a rectangular prism, a triangular prism, a square pyramid, a rectangular pyramid, and a triangular pyramid• Construct a cone, a cylinder, a prism, and a pyramid from nets | Teaching Visuals (Teacher’s Toolkit CD):• Chart 13: Perimeter• Chart 14: Area• Chart 15: Volume• Chart 16: 3-Dimensional FiguresTeacher Manipulatives Packet:• Shapes Kit• Rulers: Centimeter RulerStudent Manipulatives Packet:• Rulers: Centimeter RulerInstructional Aids (Teacher’s Toolkit CD):• Cumulative Review Answer Sheet (page IA8) for each student• Nets I transparency (page IA89)• Nets II transparency (page IA90)• Solid Figure Patterns (pages IA91–IA98) for each student and the teacher• Pyramids transparency (page IA99)• Prisms transparency (page IA100)• Surface Area: Rectangular Prism transparency (page IA101)• Surface Area: Rectangular Prism (page IA101) for each student• Surface Area: Square Prism transparency (page IA102)• Surface Area: Square Prism (page IA102) for each student• Cube Pattern (page IA103) for each student and the teacher• Face Area (page IA104) for the teacher• 3-Dimensional Figures transparency (page IA105)• 3-Dimensional Figures (page IA105) for each student• Nets Review transparency (page IA106)Other Teaching Aids:• An object to represent each of the following: sphere, cone, cylinder, rectangular prism, square prism (cube), triangular prism, rectangular pyramid, square pyramid, triangular pyramid• A cereal box• Construction paper: red, yellow, and blue• Scissors for each student and the teacher• Transparent tape for each student and the teacher• Crayons for each student: green, orange, purple• A shoebox• A piece of cardboard (large enough to cover the opening of the shoebox)Math 5 Tests and Answer KeyOptional (Teacher’s Toolkit CD):• Fact Reviews pages 1–78• Extended Activities |
| 131 | Prisms & Pyramids | • Distinguish between prisms and pyramids• Construct a rectangular prism, a triangular prism, a rectangular pyramid, and a triangular pyramid from nets• Identify the characteristics of 3-dimensional figures: cone, cylinder, square prism (cube), rectangular prism, triangular prism, square pyramid, rectangular pyramid, triangular pyramid• Demonstrate an understanding of nets |
| 132 | Surface Area | • Develop an understanding of surface area• Find the surface area of a rectangular prism and a square prism (cube) |
| 133 | Volume | • Develop an understanding of volume• Use a formula to determine the volume of a 3-dimensional figure |
| 134 | More Volume | • Develop an understanding of the relationship between perimeter, area, and volume• Use a formula to determine the volume of a 3-dimensional figure• Develop an understanding of square units and cubic units• Solve geometry word problems |
| 135 | More Surface Area & Volume | • Demonstrate an understanding of surface area and volume• Find the surface area of a square prism (cube) and a rectangular prism• Use a formula to determine the volume of a 3-dimensional figure• Solve geometry word problems |
| 136 | Chapter 14 Review | • Review |
| 137 | Chapter 14 TestCumulative Review | • Demonstrate an understanding of multiplication properties• Substitute a value for a variable to determine the value of the expression• Determine the operation needed to make an equation true• Solve multiplication and division problems• Solve time and measurement problems• Determine the standard form for the given word form of a number• Determine the value of an improper fraction• Solve a multi-step word problem |

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| Chapter 15: Metric Measurement |
| Lesson | Topic | Lesson Objectives | Chapter Materials |
| 138 | Metric Measurement: Linear | • Develop an understanding of the metric system• Recognize metric prefixes and abbreviations• Develop an understanding of meter, kilometer, centimeter, and millimeter• Estimate and measure length, width, and height to the nearest meter, centimeter, and millimeter• Draw a line to the nearest centimeter or millimeter• Recognize that 1000 meters equal 1 kilometer• Determine the appropriate linear unit | Teaching Visuals (Teacher’s Toolkit CD):• Chart 13: Perimeter• Chart 20: Metric Measurement• Chart 21: Metric Measurement: Length & Distance• Chart 22: Metric Measurement: Capacity• Chart 23: Metric Measurement: MassTeacher Manipulatives Packet:• Rulers: Centimeter Ruler, Measuring Tape (meter)• Thermometer• Red Strip• Boiling Point Steam CloudStudent Manipulatives Packet:• Rulers: Centimeter Ruler, Measuring Tape (meter)• Thermometer• Red StripInstructional Aids (Teacher’s Toolkit CD):• Cumulative Review Answer Sheet (page IA8) for each student• Input/Output Tables transparency (page IA21)• Input/Output Tables transparency (page IA21) for each student• Pyramids transparency (page IA99)• Prisms transparency (page IA100)• 3-Dimensional Figures transparency (page IA105)• Metric Conversions transparency (page IA107)• Metric Conversions (page IA107) for each student• Metric Conversions Review transparency (page IA108)• Metric Conversions Review (page IA108) for each studentChristian Worldview Shaping (Teacher’s Toolkit CD):• Pages 13–15Other Teaching Aids:• A meter stick• A 1-liter resealable plastic bag filled with 1 liter of water• A round bowl (to hold water-filled bag)• A square container (to hold water-filled bag)• A 1-liter beaker or metric measuring cup• A small medicine cup marked 1 to 5 mL or a medicine syringe• A balance or metric scale• A large paper clip and a standard-sized paper clip for each student• A dictionary with a mass of about 1 kg• 3 items, each with a mass of less than 1 kg, and 3 other items, each with a mass of 1 kg or more, that can be measured on a balance or metric scale• Several types of thermometers (e.g., medical, candy, weather)• Celcius thermometers for a group activity• 3 containers to hold water at varied temperaturesMath 5 Tests and Answer KeyOptional (Teacher’s Toolkit CD):• Fact Reviews pages 1–78• Enrichment pages 81–85• Extended Activities |
| 139 | More Linear Measurement | • Convert millimeters, centimeters, or kilometers to meters and meters to millimeters, centimeters, or kilometers• Convert centimeters to millimeters and millimeters to centimeters• Compare linear measurements using >, <, or = |
| 140 | Metric Measurement: Capacity & Mass | • Develop an understanding of literand milliliter• Convert milliliters to liters and liters to milliliters• Develop an understanding of gram, kilogram, and milligram• Convert milligrams or kilograms to grams and grams to milligrams or kilograms• Compare capacity measurements using >, <, or =• Compare mass measurements using >, <, or = |
| 141 | Celsius Temperature | • Recognize degreeas a measuring unit for temperature• Recognize that °Crepresents degrees Celsius• Recognize standard Celsius temperatures• Read and set a Celsius thermometer• Determine the temperature 10° warmer or 10° colder• Determine the amount of increase or decrease between two temperatures• Measure temperature using a Celsius thermometer• Determine the more reasonable temperature |
| 142 | Add & Subtract Metric Units | • Add and subtract metric measurements with and without decimal form• Solve measurement word problems |
| 143 | Chapter 15 Review | • Review |
| 144 | Chapter 15 TestCumulative Review | • Round a whole number or a decimal to a given place• Complete a mathematical statement or equation• Read a bar graph• Estimate the sum of 2 mixed numbers• Add unlike fractions• Determine the volume of a prism |

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| Chapter 16: Ratios, Proportions & Percents |
| Lesson | Topic | Lesson Objectives | Chapter Materials |
| 145 | Ratios | • Write ratios in 3 forms: word form, ratio form, fraction form• Write ratios to describe part-to-part, part-to-whole, and whole-to-part comparisons• Solve problems with ratios | Teacher Manipulatives Packet:• Shapes Kit: squares, triangles, parallelograms, rhombi, and trapezoids• Measurement Flashcards: metricStudent Manipulatives Packet:• Shapes Kit: squares, triangles, parallelograms, rhombi, and trapezoidsInstructional Aids (Teacher’s Toolkit CD):• Cumulative Review Answer Sheet (page IA8) for each student• Favorite Sport Survey transparency (page IA109)• Favorite Sport Survey (page IA109) for each student• Percent of a Number transparency (page IA110)• Probability transparency (page IA111)• Probability (page IA111) for each student• Probability Experiments (page IA112), 1 table for each pair of students• Percent Practice transparency (page IA113)Christian Worldview Shaping (Teacher’s Toolkit CD):• Page 16Other Teaching Aids:• A model car or train• A map• A ruler for each student• A builder’s square (optional)• A calculator for each student (optional)• Colored chalk or white board markers: yellow and blue• Overhead markers: 5 different colors• Colored pencils for each student: 5 different colors• 4 Unifix Cubes: 2 red, 1 blue, and 1 green• A container to hold 4 Unifix Cubes• Approximately 4 paper cups, 4 quarters, and 4 number cubes (1 item needed for each pair of students)Math 5 Tests and Answer KeyOptional (Teacher’s Toolkit CD):• Fact Reviews pages 1–78• Enrichment pages 86–92• Extended Activities |
| 146 | Equivalent Ratios | • Write ratios in 3 forms: word form, ratio form, fraction form• Write ratios to describe comparisons• Develop an understanding of equivalent ratios (proportion)• Make equivalent ratios by multiplying and dividing |
| 147 | Map Scales | • Interpret a model, a scale drawing, or a diagram |
| 148 | Rates | • Develop an understanding of rates• Use ratios to represent real-life situations and to solve problems• Make equivalent ratios to determine the unit rate• Calculate the distance traveled at a given rate and time |
| 149 | Ratios & Percents | • Develop an understanding of percents• Write a percent as a ratio with 100 as the second term• Write a percent as a ratio (fraction) in lowest terms• Write a ratio (fraction) as a percent• Use a ratio to solve a percent problem |
| 150 | Decimals & Percents | • Write a percent as a decimal• Write a decimal as a percent• Write a fraction as a percent• Compare percents to decimals and fractions using >, <, or =• Solve percent problems |
| 151 | Percent of a Number | • Use a proportion to find the percent of a number• Multiply by a decimal to find the percent of a number• Use mental math to find 10% and multiples of 10% of a number• Solve percent word problems |
| 152 | Probability | • Develop an understanding of probability• Write probability as a fraction and a percent• Conduct a probability experiment |
| 153 | Chapter 16 Review | • Review |
| 154 | Chapter 16 TestCumulative Review | • Determine the unknown measure of an angle• Determine the volume of a cube• Identify a line of symmetry in a figure• Identify congruent figures• Add and subtract customary measurements• Round whole numbers and decimals to a given place• Demonstrate an understanding of place value• Solve word problems |

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| Chapter 17: Integers |
| Lesson | Topic | Lesson Objectives | Chapter Materials |
| 155 | Positive & Negative Numbers | • Demonstrate an understanding of positive and negative numbers• Compare and order positive and negative numbers• Subtract positive numbers to get a negative number using a number line• Add positive numbers or negative numbers using manipulatives• Add negative numbers using a number line | Teacher Manipulatives Packet:• Number LineStudent Manipulatives Packet:• Algebra Mat Kit• Number LineInstructional Aids (Teacher’s Toolkit CD):• Cumulative Review Answer Sheet (page IA8) for each student• Algebra Mat transparency (page IA114)• Integer Review transparency (page IA115)Other Teaching Aids:• Plastic counters: opaque (to appear black on a transparency) and transparent redMath 5 Tests and Answer KeyOptional (Teacher’s Toolkit CD):• Fact Reviews pages 1–78• Enrichment pages 93–96• Extended Activities |
| 156 | Adding Positive & Negative Numbers | • Add positive and negative numbers using manipulatives• Add positive and negative numbers using a number line• Write an addition equation for a word problem |
| 157 | Subtracting Negative Numbers | • Subtract positive and negative numbers using manipulatives• Subtract positive and negative numbers using a number line• Write a subtraction equation for a word problem |
| 158 | Adding & Subtracting | • Add and subtract positive and negative numbers using manipulatives• Add and subtract positive and negative numbers using a number line• Write an equation for a word problem |
| 159 | Chapter 17 Review | • Review |
| 160 | Chapter 17 TestCumulative Review | • Determine the value of a digit in a number• Round decimals to a given place• Identify 2-dimensional figures• Add, subtract, and multiply fractions• Add and subtract whole numbers and decimals• Multiply and divide whole numbers• Use mental math to multiply a factor that is a multiple of 10 |

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| Chapter 18: Data & Graphs |
| Lesson | Topic | Lesson Objectives | Chapter Materials |
| 161 | Line Plot & Stem-and-Leaf Plot | • Complete a tally/frequency table using given data• Calculate the mean (average) for a set of data• Determine the range, mode, and median for a set of data• Read and interpret a line plot• Read and interpret a stem-and-leaf plot | Teaching Visuals (Teacher’s Toolkit CD):• Chart 26: Double Bar Graph• Chart 27: Pictograph• Chart 28: Double Line GraphInstructional Aids (Teacher’s Toolkit CD):• Tally Table transparency (page IA116)• Tally Table (page IA116) for each student• Line Plot & Stem-and-Leaf Plot transparency (page IA117)• Double Bar Graph transparency (page IA118)• Double Bar Graph (page IA118) for each student• Double Line Graph transparency (page IA119)• Double Line Graph (page IA119) for each student• Pictograph & Circle Graph transparency (page IA120)• Make a Pictograph transparency (page IA121)• Circle: Tenths transparency (page IA122)• Test Scores transparency (page IA123)• Circle Graph transparency (page IA124)• Mental Math Problems (page IA125) (optional)Other Teaching Aids:• Colored pencils: red and blue for each student• Overhead markers: red and blue; 2 other colorsMath 5 Tests and Answer KeyOptional (Teacher’s Toolkit CD):• Fact Reviews pages 1–78• Enrichment pages 97–100• Extended Activities |
| 162 | Double Bar & Double Line Graphs | • Read and interpret a double bar graph• Complete a double bar graph using given data• Read and interpret a double line graph• Complete a double line graph using given data |
| 163 | Pictograph & Circle Graph | • Read and interpret a pictograph• Make a pictograph using a table of data• Read and interpret a circle graph• Make a circle graph using given data |
| 164 | Chapter 18 Review | • Review |
| 165 | Chapter 18 TestCumulative Review | • Estimate a product or a quotient of given whole numbers• Find the sum of given whole numbers or fractions• Identify an expression for a given value• Solve word problems• Calculate area, surface area, and volume of figures• Rename improper fractions to lowest terms• Solve for a variable• Find a fraction of a whole number• Divide a decimal by a 1-digit divisor |