Centerville-Abington Elementary Curriculum Mapping

Math – Excel Grade 5

1st Nine Weeks

Roderic Rinehart

Unit/ Chapter/ Lesson	Indiana Standard(s)	Key Questions	Resources/Activities	Vocabulary	Assessments
Ch. 1/Les. 1, 2, 4, 5	5.1.1 Numbers to millions and decimals to thousandths 5.NBT.3 Decimals to thousandths 5.NBT.3a decimals to thousandths 5.NS.1: Use a number line to compare and order fractions, mixed numbers, and decimals to thousandths. Write the results using >, =, and < symbols. 5.NS.3: Recognize the relationship that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right, and inversely, a digit in one place represents 1/10 of what it represents in the place to its left. 6.NS.6 - Understand a rational number as a point on the number line	What are different ways to write numbers up to millions and decimals up to thousandths?	Sadlier-Oxford Progress in Mathematics textbook	One billion, millions, 100 billions, ten billions, billions, tenths, hundredths, thousandths, equal decimal, short word name	Chapter 1 test
Ch.1/Les.7	5.1.2 Rounding 5.NBT.4 Place Value	How do you round whole numbers and decimals?	Sadlier-Oxford Progress in Mathematics	Round down, round up, greatest place	Chapter 1 test

	5.NS.3: Recognize the relationship that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right, and inversely, a digit in one place represents 1/10 of what it represents in the place to its left.		textbook		
Ch. 1/Les. 6	5.1.3 Arrange and compare whole numbers or decimals 5.NBT.3 Decimals to thousandths 5.NBT.1 Place Value representations 5.NBT.3b Compare decimals … 5.NS.1: Use a number line to compare and order fractions, mixed numbers, and decimals to thousandths. Write the results using >, =, and < symbols. 6.NS.7.a - Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram.	How do you arrange decimals in numerical order? Using the symbols <, >, =, can you compare whole numbers or decimals?	Sadlier-Oxford Progress in Mathematics textbook	Compare, less than, greater than, order, least, greatest	Chapter 1 test
Ch.1/Les.9, 12	5.2.6 Estimation and reasonable answers CCSS Math Practice	How do you use estimation to decide whether answers are reasonable in addition and subtraction?	Sadlier-Oxford Progress in Mathematics textbook	Estimate, front end estimation, rough estimate, adjusted estimate, rounding	Chapter 1 test
Ch.2/Les.1, 2 Ch.3/Les.1, 2, 3, 4, 5, 6	5.2.1 Multiplication and division of whole numbers 5.NBT.5 Multi-digit multiplication 5.NBT.6-Whole number quotients…	How do you multiply and divide whole numbers?	Sadlier-Oxford Progress in Mathematics textbook	Multiplication, factor, product, equal sets, repeated addition, multiplication	Chapter 2 test Chapter 3 test

	6.NS.2 - Fluently divide multi-digit numbers using the standard algorithm. 6.NS.3 - Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation. 5.C.1: Multiply multi-digit whole numbers fluently using a standard algorithmic approach.			number sentence, quotient, inverse, related division facts, division sentence, multiple, short division, missing factor, commutative, associative, identity, and zero properties, distributive property of multiplication over addition, dividend, divisor	
Ch. 2/Les.3, 4	5.NBT.2 Patterns and the number zero 6.NS.2 - Fluently divide multi-digit numbers using the standard algorithm. 6.NS.3 - Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation. 5.C.1: Multiply multi-digit whole numbers fluently using a standard algorithmic approach. 5.NS.4: Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.	What is the pattern of zeros in products when you multiply by powers of 10?	Sadlier-Oxford Progress in Mathematics textbook	Multiple of 10, nonzero digits, multiple of 100, multiple of 1000	Chapter 2 test

Ch. 2/Les.5	5.2.6 Estimation and reasonable answers CCSS Math Practice 6.NS.3 - Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation. 5.C.1: Multiply multi-digit whole numbers fluently using a standard algorithmic approach. 5.NS.4: Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.	How do you estimate products of whole numbers and money amounts?	Sadlier-Oxford Progress in Mathematics textbook	Greatest place, cluster	Chapter 2 test
Ch.3/Les.9	5.2.6 Estimation and reasonable answers CCSS Math Practice 6.NS.3 - Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.	How do you estimate quotients using compatible numbers?	Sadlier-Oxford Progress in Mathematics textbook	Compatible numbers	Chapter 3 test
Ch.3/ Enrichment	5.3.1 Variables 6.EE.2 Expressions	How do you use a variable to represent an unknown number?	Sadlier-Oxford Progress in Mathematics textbook	Algebraic expressions	Chapter 3 test
Ch.4/Les.8,	5.1.5 Fractions	How do you explain different	Sadlier-Oxford	Mixed number,	Chapter 4 test

9	5.NF.3 Fraction as division… 6.NS.1 - Apply and extend previous understandings of multiplication and division to divide fractions by fractions. 5.C.4: Add and subtract fractions with unlike denominators, including mixed numbers. 5.AT.4: Solve real-world problems involving division of unit fractions by non-zero whole numbers, and division of whole numbers by unit fractions (e.g., by using visual fraction models and equations to represent the problem).	interpretations of fractions?	Progress in Mathematics textbook	nearest whole number, improper fraction, fraction bar	
Ch.4/Les.1, 2	5.1.6 Prime and composite numbers 4.OA.4 Find all factor pairs for a whole number in the range 1-100 6.NS.6: Identify and explain prime and composite numbers.	What is the difference between prime and composite numbers?	Sadlier-Oxford Progress in Mathematics textbook	Rectangular array, nonzero whole number, factor, prime number, composite number, factors, prime factor, factor tree, base, exponent	Chapter 4 test

Problem solving throughout year

Ch.1/Les.14, 15
Ch.2/Les.11, 12
Ch.3/Les.15, 16
Ch.4/Les.11, 12

Curriculum Mapping

Math – Excel Grade 5

2nd Nine Weeks

Unit/ Chapter/ Lesson	Indiana Standard(s)	Key Questions	Resources/Activities	Vocabulary	Assessments
Ch. 5/Les. 2, 7	5.2.2 Fractions with different denominators 5.NF.1 Fractions with unlike denominators 5.NF.2 Compute fraction word problems 6.NS.1 - Apply and extend previous understandings of multiplication and division to divide fractions by fractions. 5.C.4: Add and subtract fractions with unlike denominators, including mixed numbers. 5.AT.2: Solve real-world problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators (e.g., by using visual fraction models and equations to represent the problem). Use benchmark fractions and number sense of fractions to estimate mentally and assess whether the answer is reasonable.	How do you add and subtract fractions with different denominators?	Sadlier-Oxford Progress in Mathematics textbook	Unlike denominators, least common denominator, commutative property, identity property	Chapter 5 test
Ch.5/Les.	5.2.6 Estimation and reasonable answers	How do you estimate sums and	Sadlier-Oxford	Estimate, rounding,	Chapter 5 test

12	CCSS Math Practice 6.NS.1 - Apply and extend previous understandings of multiplication and division to divide fractions by fractions.	differences of mixed numbers? **REAL LIFE APPLICATION.** Estimation of marbles, paper clips, cells, atoms, books, sheets of paper, people in school, square footage of different areas, and more.	Progress in Mathematics textbook	front end estimation	
Ch. 6/Les. 1, 8	5.2.3 Multiplication and division of fractions 5.NF.4 Multiplication of fraction or whole number by fraction 5.NF.4a Product as parts of partition… 5.NF.7Division of unit fractions by whole numbers and whole numbers by unit fractions… 6.NS.1 - Apply and extend previous understandings of multiplication and division to divide fractions by fractions. 5.C.5: Use visual fraction models and numbers to multiply a fraction by a fraction or a whole number. 5.AT.3: Solve real-world problems involving multiplication of fractions, including mixed numbers (e.g., by using visual fraction models and equations to represent the problem).	How can you use models to show multiplication and division of fractions?	Sadlier-Oxford Progress in Mathematics textbook	Horizontal, vertical, of (multiply), diagram	Chapter 6 test
Ch.6/Les. 12	5.NF.7 Division of unit fraction by non-zero whole number	How do you interpret division of unit fractions by a nonzero whole number, and compute	Sadlier-Oxford Progress in Mathematics	None	Chapter 6 test

	6.NS.1 - Apply and extend previous understandings of multiplication and division to divide fractions by fractions. 5.C.7: Use visual fraction models and numbers to divide a unit fraction by a non-zero whole number and to divide a whole number by a unit fraction. 5.AT.4: Solve real-world problems involving division of unit fractions by non-zero whole numbers, and division of whole numbers by unit fractions (e.g., by using visual fraction models and equations to represent the problem).	such quotients?	textbook		
Ch.6/Les. 10	5.NF.7b Division of whole number by unit fraction… 6.NS.1 - Apply and extend previous understandings of multiplication and division to divide fractions by fractions. 5.C.7: Use visual fraction models and numbers to divide a unit fraction by a non-zero whole number and to divide a whole number by a unit fraction. 5.AT.4: Solve real-world problems involving division of unit fractions by non-zero whole numbers, and division of whole numbers by unit fractions (e.g., by using visual fraction models and equations to represent the problem).	How do you interpret division of whole number by unit fraction?	Sadlier-Oxford Progress in Mathematics textbook	Reciprocal of the divisor	Chapter 6 test

Ch.6/Les. 3	5.NF.5b Multiplying number by fraction greater than one results… 6.NS.1 - Apply and extend previous understandings of multiplication and division to divide fractions by fractions. 5.C.5: Use visual fraction models and numbers to multiply a fraction by a fraction or a whole number. 5.AT.3: Solve real-world problems involving multiplication of fractions, including mixed numbers (e.g., by using visual fraction models and equations to represent the problem).	How do you explain why multiplying a given number by a fraction greater than 1 results in a product greater than given number…?	Sadlier-Oxford Progress in Mathematics textbook	Identity property, zero property	Chapter 6 test
Ch.6/Les. 12, 17	5.NF.7c Division of unit fractions by non-zero whole number real world problems… 6.NS.1 - Apply and extend previous understandings of multiplication and division to divide fractions by fractions. 5.C.7: Use visual fraction models and numbers to divide a unit fraction by a non-zero whole number and to divide a whole number by a unit fraction. 5.AT.4: Solve real-world problems involving division of unit fractions by non-zero whole numbers, and division of	Can you solve real world problems involving division of unit fraction by non-zero whole numbers…?	Sadlier-Oxford Progress in Mathematics textbook	None	Chapter 6 test

	whole numbers by unit fractions (e.g., by using visual fraction models and equations to represent the problem).				
Ch.6/Les. 15	5.2.6 Estimation and reasonable answers CCSS Math Practice 6.NS.1 - Apply and extend previous understandings of multiplication and division to divide fractions by fractions.	How do you use rounding to estimate products and quotients with mixed numbers? Can you use compatible numbers to estimate products and quotients with mixed numbers?	Sadlier-Oxford Progress in Mathematics textbook	Round up, round down, estimated product, compatible number	Chapter 6 test
Ch.8/Les. 3, 5, 6, 8	5.2.5 Decimals 5.NBT.7 Compute decimals to hundredths using models… 6.NS.3 - Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation. 5.AT.5: Solve real-world problems involving addition, subtraction, multiplication, and division with decimals to hundredths, including problems that involve money in decimal notation (e.g. by using equations to represent the problem). 5.C.8: Add, subtract, multiply, and divide decimals to hundredths, using models or drawings and strategies based on place value or the properties of operations. Describe the strategy and explain the reasoning.	What are ways you can add and subtract decimals and verify the reasonableness of the results?	Sadlier-Oxford Progress in Mathematics textbook	None	Chapter 8 test

Ch.8/Les. 3, 5, 6, 8	5.2.7 Mental math and decimals 5.NBT.7 Compute decimals to hundredths using models… 6.NS.3 - Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation. 5.AT.5: Solve real-world problems involving addition, subtraction, multiplication, and division with decimals to hundredths, including problems that involve money in decimal notation (e.g. by using equations to represent the problem). 5.C.8: Add, subtract, multiply, and divide decimals to hundredths, using models or drawings and strategies based on place value or the properties of operations. Describe the strategy and explain the reasoning.	How do you use mental arithmetic to add or subtract simple decimals?	Sadlier-Oxford Progress in Mathematics textbook	None	Chapter 8 test
Ch.8/Les. 3, 5, 6, 8	5.5.7 Money and decimals 5.NBT.7 Compute decimals to hundredths using models… 6.NS.3 - Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation. 5.AT.5: Solve real-world problems involving addition, subtraction, multiplication, and division with decimals	How do you add and subtract with money in decimal notation? **REAL LIFE APPLICATION.** Use of real-life budgets for themselves (allowance and jobs) or their family.	Sadlier-Oxford Progress in Mathematics textbook	None	Chapter 8 test

	to hundredths, including problems that involve money in decimal notation (e.g. by using equations to represent the problem). 5.C.8: Add, subtract, multiply, and divide decimals to hundredths, using models or drawings and strategies based on place value or the properties of operations. Describe the strategy and explain the reasoning.				
Ch.8/Les. 4, 7	5.2.6 Estimation and reasonable answers CCSS Math Practice 6.NS.3 - Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation. 5.AT.5: Solve real-world problems involving addition, subtraction, multiplication, and division with decimals to hundredths, including problems that involve money in decimal notation (e.g. by using equations to represent the problem). 5.C.8: Add, subtract, multiply, and divide decimals to hundredths, using models or drawings and strategies based on place value or the properties of operations. Describe the strategy and explain the reasoning.	How do you estimate decimal sums and differences?	Sadlier-Oxford Progress in Mathematics textbook	Estimate, nonzero place, front end estimation	Chapter 8 test

Problem Solving throughout year
Ch. 5/Les. 13, 14
Ch. 6/Les. 16, 17
Ch. 8/Les. 9, 10

Curriculum Mapping
Math – Excel Grade 5
3rd Nine Weeks

Unit/ Chapter/ Lesson	Indiana Standard(s)	Key Questions	Resources/Activities	Vocabulary	Assessments
Ch.7/Les. 4, 6, 7, 8, 9	5.6.1 Data displays CCSS Math practice 6.SP.4 - Display numerical data in plots on a number line, including dot plots, histograms, and box plots. 5.DS.1: Formulate questions that can be addressed with data and make predictions about the data. Use observations, surveys, and experiments to collect, represent, and interpret the data using tables (including frequency tables), line plots, bar graphs, and line graphs. Recognize the differences in representing categorical and numerical data. 5.DS.2: Understand and use measures of center (mean and median) and frequency (mode) to describe a data set.	How can you tell which types of displays are appropriate for various sets of data? **REAL LIFE APPLICATION.** Doing surveys on questions they develop and ask. Making the data displays based on those questions. Could be on paper or digital.	Sadlier-Oxford Progress in Mathematics textbook	Data, survey, frequency table, pictograph, key, circle graph, cumulative frequency table, graph, bar graph, scale, line graph, trend, line segment, line plot, equal intervals, points, clusters, outlier, stem & leaf plot, histogram, line graph, trend, broken scale	Chapter 7 test
Ch.7/Les. 5	5.6.2 Mean, median, mode, range	How do you find mean, median,	Sadlier-Oxford	Interpret, range,	Chapter 7 test

	6.SP.5 Summarize numerical data 5.DS.1: Formulate questions that can be addressed with data and make predictions about the data. Use observations, surveys, and experiments to collect, represent, and interpret the data using tables (including frequency tables), line plots, bar graphs, and line graphs. Recognize the differences in representing categorical and numerical data. 5.DS.2: Understand and use measures of center (mean and median) and frequency (mode) to describe a data set.	mode, and range of a set of data and describe what each does or doesn't tell us about data?	Progress in Mathematics textbook	median, mode, mean, measures of central tendency	
Ch. 7/Les. 1, 3	5.6.3 Probability values between zero and one 7.SP.5 Probability of chance between zero and one	How can probability take any value between zero and one, more likely events have higher probability than less likely events?	Sadlier-Oxford Progress in Mathematics textbook	Probability, event, random experiment, outcome, possible outcome, equally likely, favorable outcome, independent events, dependent events, prediction, combined events, impossible, certain	Chapter 7 test
Ch. 7/Les.7	5.MD.2 Line plots… 6.SP.4 - Display numerical data in plots on a number line, including dot plots, histograms, and box plots. 5.DS.1: Formulate questions that can be addressed with data and make predictions about the data. Use observations, surveys,	How do you make a line plot to display a data set of measurements in fractions of unit?	Sadlier-Oxford Progress in Mathematics textbook Indiana Department of Education Resources page	Line plot, scale, graph, equal intervals, points, clusters, outliers, stem & leaf plots	Chapter 7 test

	and experiments to collect, represent, and interpret the data using tables (including frequency tables), line plots, bar graphs, and line graphs. Recognize the differences in representing categorical and numerical data. 5.DS.2: Understand and use measures of center (mean and median) and frequency (mode) to describe a data set.				
Ch. 7/Les. 6, 8, 10, 11 Ch. 14/Les. 1, 3, 4	5.3.7 Graph, equations CCSS Math Practice 6.SP.1 - Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers. 6.SP.2 - Understand that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape. 5.DS.1: Formulate questions that can be addressed with data and make predictions about the data. Use observations, surveys, and experiments to collect, represent, and interpret the data using tables (including frequency tables), line plots, bar graphs, and line graphs. Recognize the differences in representing categorical and numerical data. 5.DS.2: Understand and use measures of center (mean and median) and frequency (mode) to describe a data set.	Can you use information taken from a graph or equation to answer questions from a problem solving situation?	Sadlier-Oxford Progress in Mathematics textbook Indiana Department of Education Resources page	Math expression, variable, algebraic expression, equation, evaluation, like terms, addition equation, subtraction equation, solve, multiplication equation, division equation, Venn Diagram, budget, histogram, graph, bar graph, scale, line graph, trend, line segment, pictograph, key, circle graph	Chapter 7 test Chapter 14 test

Ch. 7/ Les. 1,3	5.6.4 Experimental Probability 7.SP.6 Probability of chance event	How can you express outcomes of experimental probability situations verbally and numerically?	Sadlier-Oxford Progress in Mathematics textbook	None	Chapter 7 test
Ch. 10/Les. 1, 2, 5, 6, 8, 9	5.4.1 Measure, identify, draw angles, lines and other shapes 4.MD.5a An angle is measured with reference to a circle at the common endpoint of the rays… 4.MD.5b An angle that turns through x degrees is said to have an angle measure of x degrees… 4.MD.6 Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure 4.MD.7 Recognize angle measure as additive. 6.G.1 - Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems. 5.G.1: Identify, describe, and draw triangles (right, acute, obtuse) and circles using appropriate tools (e.g., ruler or straightedge, compass and technology). Understand the relationship between radius and diameter. 5.G.2: Identify and classify polygons including quadrilaterals, pentagons,	How do you measure, identify, and draw angles, perpendicular and parallel lines, rectangles, triangles, circles by using appropriate tools?	Sadlier-Oxford Progress in Mathematics textbook	Quadrilateral, trapezoid, parallelogram, rectangle, square, rhombus, diagonal, tangram, straight angle, perpendicular lines, scalene triangle, isosceles triangle, equilateral triangle, acute triangle, right triangle, obtuse triangle, angle, sides, vertex, interior, exterior, degrees, protractor, base, center mark, classify right angle, acute angle, obtuse angle	Chapter 10 test

	hexagons, and triangles (equilateral, isosceles, scalene, right, acute and obtuse) based on angle measures and sides. Classify polygons in a hierarchy based on properties.				
Ch. 10/Les. 5	5.4.2 Identify, describe, draw, and classify triangles 5.G.3 Attributes of two-dimensional figures… 6.G.1 - Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems. 5.G.1: Identify, describe, and draw triangles (right, acute, obtuse) and circles using appropriate tools (e.g., ruler or straightedge, compass and technology). Understand the relationship between radius and diameter. 5.G.2: Identify and classify polygons including quadrilaterals, pentagons, hexagons, and triangles (equilateral, isosceles, scalene, right, acute and obtuse) based on angle measures and sides. Classify polygons in a hierarchy based on properties.	How do you identify, describe, draw, and classify triangles as equilateral, isosceles, scalene, right, acute, obtuse, and equiangular?	Sadlier-Oxford Progress in Mathematics textbook	Scalene triangle, isosceles triangle, equilateral triangle, acute triangle, right triangle, obtuse angle	Chapter 10 test
Ch. 10/ Les. 5	5.4.3 Congruent triangles	How do you identify congruent triangles and justify your	Sadlier-Oxford Progress in	Scalene triangle, isosceles triangle,	Chapter 10 test

	8.4.2 Construct segments and angles 5.G.1: Identify, describe, and draw triangles (right, acute, obtuse) and circles using appropriate tools (e.g., ruler or straightedge, compass and technology). Understand the relationship between radius and diameter. 5.G.2: Identify and classify polygons including quadrilaterals, pentagons, hexagons, and triangles (equilateral, isosceles, scalene, right, acute and obtuse) based on angle measures and sides. Classify polygons in a hierarchy based on properties.	decisions by referring to sides and angles?	Mathematics textbook	equilateral triangle, acute triangle, right triangle, obtuse angle	
Ch. 10/Les. 3	5.4.4 Identify, describe, draw, classify polygons 5.G.1: Identify, describe, and draw triangles (right, acute, obtuse) and circles using appropriate tools (e.g., ruler or straightedge, compass and technology). Understand the relationship between radius and diameter. 5.G.2: Identify and classify polygons including quadrilaterals, pentagons, hexagons, and triangles (equilateral, isosceles, scalene, right, acute and obtuse) based on angle measures and sides. Classify polygons in a hierarchy based on properties. 5.G.3 Attributes of two-dimensional figures… 6.G.3 - Draw polygons in the coordinate	How can you identify, describe, draw, and classify polygons, such as pentagons and hexagons?	Sadlier-Oxford Progress in Mathematics textbook	Plane figure, open figure, closed figure, polygon, sides, vertex, heptagon, octagon, nonagon, decagon, regular polygon	Chapter 10 test

	plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems.				
Ch. 10/Les. 8	5.4.5 Radius and diameter of circle 7.5.4 Perimeter, area, surface area, and volume 5.G.1: Identify, describe, and draw triangles (right, acute, obtuse) and circles using appropriate tools (e.g., ruler or straightedge, compass and technology). Understand the relationship between radius and diameter.	How do you identify and draw the radius and diameter of a circle and understand the relationship between radius and diameter?	Sadlier-Oxford Progress in Mathematics textbook	Circle, center, chord, diameter, radius, simple closed curve, compass, central angle, arc	Chapter 10 test
Ch. 10/Les. 11	5.4.6 Reflectional and rotational symmetry 8.4.4 Translation, rotation, reflection, dilation	How can you identify shapes that have reflectional and rotational symmetry?	Sadlier-Oxford Progress in Mathematics textbook	Transformation, translation, reflection, rotation, line of reflection	Chapter 10 test
Ch. 10/Les. 11	5.4.7 Turning objects using degrees or fractions 4.5.1 Measure length to the nearest quarter-inch, eighth-inch, and millimeter 8.4.4 Translation, rotation, reflection, dilation	How can you understand that 90, 180, 270, and 360 are associated with ¼, ½, ¾, and full turns respectively?	Sadlier-Oxford Progress in Mathematics textbook	Transformation, translation, reflection, rotation, line of reflection	Chapter 10
Ch. 10/Les.	5.G.4	Can you classify 2D figures in a	Sadlier-Oxford	Quadrilateral,	Chapter 10 test

5, 6	2D figures and their properties 6.G.3 - Draw polygons in the coordinate plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems. 5.G.1: Identify, describe, and draw triangles (right, acute, obtuse) and circles using appropriate tools (e.g., ruler or straightedge, compass and technology). Understand the relationship between radius and diameter. 5.G.2: Identify and classify polygons including quadrilaterals, pentagons, hexagons, and triangles (equilateral, isosceles, scalene, right, acute and obtuse) based on angle measures and sides. Classify polygons in a hierarchy based on properties.	hierarchy based on properties?	Progress in Mathematics textbook	trapezoid, parallelogram, rectangle, square, rhombus, diagonal, tangram, Scalene triangle, isosceles triangle, equilateral triangle, acute triangle, right triangle, obtuse angle	
Ch. 10/Les. 7, Ch. 12/Les. 6, 7	5.5.2 Perimeter and area of shapes 4.MD.3 Perimeter and area of rectangles 6.G.1 Area of triangles, polygons, quadrilaterals 5.G.1: Identify, describe, and draw triangles (right, acute, obtuse) and circles using appropriate tools (e.g., ruler or straightedge, compass and technology). Understand the relationship between radius and diameter. 5.G.2: Identify and classify polygons	How do you solve problems involving perimeter and area of a rectangle, triangle, parallelogram, trapezoid using appropriate units?	Sadlier-Oxford Progress in Mathematics textbook	None	Chapter 10 test Chapter 12 test

	including quadrilaterals, pentagons, hexagons, and triangles (equilateral, isosceles, scalene, right, acute and obtuse) based on angle measures and sides. Classify polygons in a hierarchy based on properties.				
Ch. 11/Les. 4	5.5.6 Temperature 6.NS.5 - Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation. 6.NS.7.b - Write, interpret, and explain statements of order for rational numbers in real-world contexts. *For example, write –3 oC > –7 oC to express the fact that –3 oC is warmer than –7 oC.* 5.M.1: Convert among different-sized standard measurement units within a given measurement system, and use these conversions in solving multi-step real-world problems.	How do you compare temperatures in Celsius and Fahrenheit knowing what boiling point and freezing point of water is for both?	Sadlier-Oxford Progress in Mathematics textbook	Temperature, thermometer, degrees Fahrenheit, degrees Celsius	Chapter 11 test
Ch. 11/Les. 3 Ch. 12/Les.	5.5.5 Comparing measurements 4.MD.1 Know the relative sizes of	Do you understand and can you use small and large units for measuring weight and the	Sadlier-Oxford Progress in Mathematics	Milligram, centigram, decagram, gram,	Chapter 11 test Chapter 12 test

4	measurement units … 6.RP.d - Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities. 5.M.1: Convert among different-sized standard measurement units within a given measurement system, and use these conversions in solving multi-step real-world problems.	relationship to pounds and kilograms?	textbook	kilogram, metric Ton, ounce, pound, Ton	
Ch.11/ Les. 1, 2, 3, 7 Ch.12/ Les.1, 3	5.MD.1 Convert standard measurement with given measurement system 6.RP.d - Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities. 5.M.1: Convert among different-sized standard measurement units within a given measurement system, and use these conversions in solving multi-step real-world problems.	Can you convert among different sized standard measurement units within a given measurement system? Can you use these in solving multi-step real world problems?	Sadlier-Oxford Progress in Mathematics textbook	Fl. Oz., cup, pt., qt., gal., in., ft., yd., mi., nearest in., mL, cL., dL., L., kL., m., g., length, capacity, metric system, mass, kilo-, centi-, milli-, deci-, custom units	Chapter 11 test Chapter 12 test
Ch.12/ Les. 7	5.5.1 Area of triangle, parallelogram, trapezoid 6.G.1 Area of triangles, quadrilaterals, and polygons 5.M.2: Find the area of a rectangle with fractional side lengths by modeling with unit squares of the appropriate unit fraction	Do you understand and can you apply formulas for area of a triangle, parallelogram, and trapezoid?	Sadlier-Oxford Progress in Mathematics textbook	Polygon, parallelogram, base, height, diagonal, perpendicular segment, opposite vertex	Chapter 12 test

	side lengths,and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas. 5.M.3: Develop and use formulas for the area of triangles, parallelograms and trapezoids. Solve real-world and other mathematical problems that involve perimeter and area of triangles, parallelograms and trapezoids, using appropriate units for measures.				
Ch. 12/Les. 6, 7	5.5.3 Area of rectangles and triangles 6.G.1 Area of triangles, quadrilaterals, and polygons 5.M.2: Find the area of a rectangle with fractional side lengths by modeling with unit squares of the appropriate unit fraction side lengths,and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas. 5.M.3: Develop and use formulas for the area of triangles, parallelograms and trapezoids. Solve real-world and other mathematical problems that involve perimeter and area of triangles,	Can you use formulas for areas of rectangles and triangles to find area of complex shapes by dividing them into basic shapes?	Sadlier-Oxford Progress in Mathematics textbook	Polygon, parallelogram, base, height, diagonal, perpendicular segment, opposite vertex, area of rectangle, form, area, length, area of square, width, side, square	Chapter 12 test

	parallelograms and trapezoids, using appropriate units for measures.				
Ch.12/Les. 6	5.NF.4b Area of rectangle with fractions… 3.MD.7d Area as additive 6.G.4 - Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems. 5.M.2: Find the area of a rectangle with fractional side lengths by modeling with unit squares of the appropriate unit fraction side lengths,and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas. 5.M.3: Develop and use formulas for the area of triangles, parallelograms and trapezoids. Solve real-world and other mathematical problems that involve perimeter and area of triangles, parallelograms and trapezoids, using appropriate units for measures.	Can you find the area of a rectangle with fractional side lengths by tiling it with unit squares of appropriate unit fraction side lengths…? Can you find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding areas of non-overlapping parts, applying technique to solve real world problems?	Sadlier-Oxford Progress in Mathematics textbook	Formula, area, length, width, side, squared, area of rectangle, area of square	Chapter 12 test
Ch. 12/Les.	5.4.8 Prisms and pyramids	Can you construct prisms and	Sadlier-Oxford	None	Chapter 12 test

8	6.G.4 - Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems. 7.5.4 Surface area of prisms and pyramids 5.G.1: Identify, describe, and draw triangles (right, acute, obtuse) and circles using appropriate tools (e.g., ruler or straightedge, compass and technology). Understand the relationship between radius and diameter. 5.G.2: Identify and classify polygons including quadrilaterals, pentagons, hexagons, and triangles (equilateral, isosceles, scalene, right, acute and obtuse) based on angle measures and sides. Classify polygons in a hierarchy based on properties. 6.GM.6: Construct right rectangular prisms from nets and use the nets to compute the surface area of prisms; apply this technique to solve real-world and other mathematical problems.	pyramids using appropriate materials?	Progress in Mathematics textbook		
Ch. 12/ Les. 8	5.4.9 Three-dimensional object 5.G.2: Identify and classify polygons including quadrilaterals, pentagons, hexagons, and triangles (equilateral,	Can you build a 3D object with blocks when given a picture of that 3D object?	Sadlier-Oxford Progress in Mathematics textbook	None	Chapter 12 test

	isosceles, scalene, right, acute and obtuse) based on angle measures and sides. Classify polygons in a hierarchy based on properties. 6.GM.6: Construct right rectangular prisms from nets and use the nets to compute the surface area of prisms; apply this technique to solve real-world and other mathematical problems.				
Ch. 12/Les. 9	5.5.4 Surface area and volume 5.MD.3 Volume as attribute of solid figures 5.MD.4 Measuring volume 5.M.4: Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths or multiplying the height by the area of the base. 5.M.5: Apply the formulas $V = l \times w \times h$ and $V = B \times h$ for right rectangular prisms to find volumes of right rectangular prisms with whole- number edge lengths to solve real-world problems and other mathematical problems.	How do you find the surface area and volume of rectangular solids using appropriate units? **REAL LIFE APPLICATION.** Using wrapping paper for presents. How much to buy for the gift you have chosen?	Sadlier-Oxford Progress in Mathematics textbook	Surface area	Chapter 12 test
Ch. 12/Les.	5.MD.3a Unit cubes and measuring volume	What is the generic way to label	Sadlier-Oxford	Volume, length,	Chapter 12 test

10, 11	6.G.2 - Find the volume of a right rectangular prism 5.M.4: Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths or multiplying the height by the area of the base. 5.M.5: Apply the formulas V = l × w × h and V = B × h for right rectangular prisms to find volumes of right rectangular prisms with whole- number edge lengths to solve real-world problems and other mathematical problems.	volume answers?	Progress in Mathematics textbook	width, height, layer, volume of rectangular prism, cubic measure, cm cubed, inches cubed, mm cubed, dm cubed, ft cubed, yd cubed, meter cubed	
Ch.12/ Les. 10, 11	5.MD.3b Volume of *n* cubic units 6.G.2 - Find the volume of a right rectangular prism 5.M.4: Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths or multiplying the height by the area of the base. 5.M.5: Apply the formulas V = l × w × h and V = B × h for right rectangular prisms to find volumes of right rectangular prisms with whole- number edge lengths to solve real-world	What do you call a solid figure that can be packed without gaps or overlaps using n unit cubes, and has volume of n cubic units?	Sadlier-Oxford Progress in Mathematics textbook	None	Chapter 12 test

	problems and other mathematical problems.				
Ch.12/ Les.11	5.MD.5 Volume to solve real world problems 6.G.4 - Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems. 5.M.4: Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths or multiplying the height by the area of the base. 5.M.5: Apply the formulas V = l × w × h and V = B × h for right rectangular prisms to find volumes of right rectangular prisms with whole- number edge lengths to solve real-world problems and other mathematical problems.	How can you relate volume to operations of multiplication and addition and solve real world and mathematical problems involving volume?	Sadlier-Oxford Progress in Mathematics textbook	Volume, length, width, height, layer, volume of rectangular prism	Chapter 12 test
Ch.12/ Les. 11	5.MD.5a Volume of right rectangular prism… 6.G.2 - Find the volume of a right rectangular prism 5.M.4: Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would	How can you find volume of right rectangular prism with whole number side lengths by packing it with unit cubes and show volume?	Sadlier-Oxford Progress in Mathematics textbook	Volume, length, width, height, layer, volume of rectangular prism	Chapter 12 test

	be found by multiplying the edge lengths or multiplying the height by the area of the base. 5.M.5: Apply the formulas V = l × w × h and V = B × h for right rectangular prisms to find volumes of right rectangular prisms with whole- number edge lengths to solve real-world problems and other mathematical problems.				
Ch. 12/ Les. 11	5.MD.5b Formulas for volume of right rectangular prisms 6.G.2 - Find the volume of a right rectangular prism 5.M.4: Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths or multiplying the height by the area of the base. 5.M.5: Apply the formulas V = l × w × h and V = B × h for right rectangular prisms to find volumes of right rectangular prisms with whole- number edge lengths to solve real-world problems and other mathematical problems.	How can you apply V=lwh and V=bh for rectangular prisms to find volume to solve real world problems?	Sadlier-Oxford Progress in Mathematics textbook	Volume, length, width, height, layer, volume of rectangular prism	Chapter 12 test
Ch. 12/ Les. 11	5.MD.5c Volume as additive 6.G.2 - Find the volume of a right rectangular prism	How do you find the volume of a solid figure compared to two non-overlapping right rectangular prism by adding volume of the non-overlapping	Sadlier-Oxford Progress in Mathematics textbook	Volume, length, width, height, layer, volume of rectangular prism	Chapter 12 test

	5.M.4: Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths or multiplying the height by the area of the base. 5.M.5: Apply the formulas V = l × w × h and V = B × h for right rectangular prisms to find volumes of right rectangular prisms with whole- number edge lengths to solve real-world problems and other mathematical problems.	and apply technology to solve real world problems?			
Ch. 14/Les. 1	5.3.2 Simple algebraic expressions 5.OA.2 Write simple algebraic expressions 6.EE.2 - Write, read, and evaluate expressions in which letters stand for numbers. 5.AT.8: Define and use up to two variables to write linear expressions that arise from real-world problems, and evaluate them for given values.	Can you write an algebraic expression in one or two variables and evaluate it by substitution?	Sadlier-Oxford Progress in Mathematics textbook	Mathematical expression, variable, algebraic expression, equation, evaluate, like terms	Chapter 14 test
Ch. 14/Les. 1	5.3.3 Distributive property with equations and expressions 5.OA.1 Parentheses, brackets, braces in expressions 6.EE.3 - Apply the properties of operations to generate equivalent expressions.	Can you use the distributive property in numerical expressions and equations?	Sadlier-Oxford Progress in Mathematics textbook	Mathematical expression, variable, algebraic expression, equation, evaluate, like terms	Chapter 14 test

	5.AT.8: Define and use up to two variables to write linear expressions that arise from real-world problems, and evaluate them for given values.				
Ch.14/ Les. 13	5.3.4 Identify, describe, draw, and classify polygons 5.G.1 Axes and coordinate system 5.G.2 Graphing points real world and math problems 6.G.3 - Draw polygons in the coordinate plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems. 5.G.1: Identify, describe, and draw triangles (right, acute, obtuse) and circles using appropriate tools (e.g., ruler or straightedge, compass and technology). Understand the relationship between radius and diameter. 5.G.2: Identify and classify polygons including quadrilaterals, pentagons, hexagons, and triangles (equilateral, isosceles, scalene, right, acute and obtuse) based on angle measures and sides. Classify polygons in a hierarchy based on properties.	How do you identify and graph ordered pairs of positive numbers?	Sadlier-Oxford Progress in Mathematics textbook	Coordinate plane, axes, x-axis, y-axis, ordered pairs, grid, coordinate, origin, quadrant, graph, horizontal scale, vertical scale	Chapter 14 test
Ch. 14/Les. 15	5.3.5 Ordered pairs	How do you find ordered pairs that fit a linear equation, graph	Sadlier-Oxford Progress in	Function, origin, table, coordinate	Chapter 14 test

	5.OA.3 Creating numerical patterns 6.NS.6 - Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates. 5.AT.6: Graph points with whole number coordinates on a coordinate plane. Explain how the coordinates relate the point as the distance from the origin on each axis, with the convention coordinate, y-axis and y-coordinate). 5.AT.7: Represent real-world problems and equations by graphing ordered pairs in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.	ordered pairs and draw a line they determine?	Mathematics textbook	grid, graph, coordinate graph	
Ch.14/ Les.15	5.3.6 X-coordinates and y-coordinates 6.G.3 Polygons and coordinate plane 6.NS.6 - Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates. 5.AT.6: Graph points with whole number	How do you understand length of a horizontal line segment on a coordinate plane equals difference between x-coordinates and the length of a vertical line segment on a coord. Plane equals difference between y-coordinates?	Sadlier-Oxford Progress in Mathematics textbook	Function, origin, table, coordinate grid, graph, coordinate graph	Chapter 14 test

	coordinates on a coordinate plane. Explain how the coordinates relate the point as the distance from the origin on each axis, with the convention coordinate, y-axis and y-coordinate). 5.AT.7: Represent real-world problems and equations by graphing ordered pairs in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.				

Problem solving throughout year(3rd quarter)
Ch. 7/ Les. 11, 12
Ch.10/Les. 13, 14
Ch. 11/Les. 8, 9
Ch.12/Les. 13, 14

Curriculum Mapping

Math – Excel Grade 5

4th Nine Weeks

Unit/ Chapter/ Lesson	Indiana Standard(s)	Key Questions	Resources/Activities	Vocabulary	Assessments
Ch.1/Les. 3	4.1.1 Read and write whole numbers up to 1,000,000 4.1.2 Identify and write whole numbers up to 1,000,000, given a place value model 5.NS.1: Use a number line to compare and order fractions, mixed numbers, and decimals to thousandths. Write the results using >, =, and < symbols.	Can you write in expanded and standard form?	Sadlier-Oxford Progress in Mathematics	Expanded form	Chapter 1 test
Ch. 1/Les. 8	5.OA.3 Properties of operations 6.NS.1 - Apply and extend previous understandings of multiplication and division to divide fractions by fractions. 5.C.9: Evaluate expressions with parentheses or brackets involving	Can you apply properties of addition and rules of subtraction?	Sadlier-Oxford Progress in Mathematics	Commutative property, identity property, associative property, inverse, subtrahend, minuend, difference, missing addend	Chapter 1 test

	whole numbers using the commutative properties of addition and multiplication, associative properties of addition and multiplication, and distributive property.				
Ch. 1/Les.10	4.2.1 Understand and use standard algorithms for addition and subtraction 5.C.4: Add and subtract fractions with unlike denominators, including mixed numbers.	How do you add three or more addends with regrouping?	Sadlier-Oxford Progress in Mathematics	None	Chapter 1 test
Ch. 1/Les. 11	4.2.1 Understand and use standard algorithms for addition and subtraction 5.C.4: Add and subtract fractions with unlike denominators, including mixed numbers.	How do you subtract whole numbers and money amounts with zeros in minuend?	Sadlier-Oxford Progress in Mathematics	None	Chapter 1 test
Ch. 1/Les. 13		Can you read and write Roman numerals through 1000s?	Sadlier-Oxford Progress in Mathematics	Roman numerals	Chapter 1 test
Ch.2/Les. 6	4.2.5 Use a standard algorithm to multiply numbers up to 100 by numbers up to 10, using relevant properties of the number system 6.NS.1 - Apply and extend previous understandings of multiplication and	How do you multiply with zeros in multiplicand?	Sadlier-Oxford Progress in Mathematics	Multiplicand, multiplier, product	Chapter 2 test

	division to divide fractions by fractions. 5.C.1: Multiply multi-digit whole numbers fluently using a standard algorithmic approach. 5.NS.3: Recognize the relationship that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right, and inversely, a digit in one place represents 1/10 of what it represents in the place to its left. 5.NS.4: Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.				
Chapter 2/ Les. 7, 8	5.2.1 Solving multiplication and division problems 4.NBT.5 Multiply whole numbers of up to four digits by one digit and two digits by two digits 5.NBT.6 Whole number quotients	Can you multiply a whole number by a two digit or three digit multiplier?	Sadlier-Oxford Progress in Mathematics	Partial product	Chapter 2 test

	of whole numbers… 6.NS.1 - Apply and extend previous understandings of multiplication and division to divide fractions by fractions. 5.C.1: Multiply multi-digit whole numbers fluently using a standard algorithmic approach. 5.NS.3: Recognize the relationship that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right, and inversely, a digit in one place represents 1/10 of what it represents in the place to its left. 5.NS.4: Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.				
Ch. 2/ Les. 9	4.2.5 Use a standard algorithm to multiply numbers up to 100 by numbers up to 10, using relevant properties of the number system 6.NS.1 - Apply and extend previous	How do you multiply with zeros in multiplier?	Sadlier-Oxford Progress in Mathematics	None	Chapter 2 test

	understandings of multiplication and division to divide fractions by fractions. 5.C.1: Multiply multi-digit whole numbers fluently using a standard algorithmic approach.				
Ch. 2/Les. 10	5.NBT.7 Compute decimals to hundredths… 6.NS.3 - Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation. 5.C.1: Multiply multi-digit whole numbers fluently using a standard algorithmic approach.	How do you multiply money amounts?	Sadlier-Oxford Progress in Mathematics	Decimal point, dollar sign	Chapter 2 test
Ch. 3/Les. 7, 8	6.NS.1 - Apply and extend previous understandings of multiplication and division to divide fractions by fractions.	Can you explore and use divisibility rules for 2, 3, 4, 5, 6, 9, and 10?	Sadlier-Oxford Progress in Mathematics	Divisibility, rule of divisibility, even numbers, divisibility rules	Chapter 3 test
Ch. 3/Les. 10	3.2.4 Inverse relationships with multiplication and division 3.OA.7 Fluently multiply and divide within 100 6.NS.1 - Apply and extend previous understandings of multiplication and	Can you divide by divisors from 11-19?	Sadlier-Oxford Progress in Mathematics	None	Chapter 3 test

	division to divide fractions by fractions. 5.C.2: Find whole-number quotients and remainders with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Describe the strategy and explain the reasoning used. 5.AT.1: Solve real-world problems involving multiplication and division of whole numbers (e.g. by using equations to represent the problem). In division problems that involve a remainder, explain how the remainder affects the solution to the problem.				
Ch. 3/Les. 11	5.2.1 Solving multiplication and division problems 5.NBT.6 Whole number quotients of whole numbers… 6.NS.1 - Apply and extend previous understandings of multiplication and division to divide fractions by fractions.	How do you divide three and four digit dividends by two digit divisors?	Sadlier-Oxford Progress in Mathematics	None	Chapter 3 test

	5.C.2: Find whole-number quotients and remainders with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Describe the strategy and explain the reasoning used. 5.AT.1: Solve real-world problems involving multiplication and division of whole numbers (e.g. by using equations to represent the problem). In division problems that involve a remainder, explain how the remainder affects the solution to the problem.				
Ch.3/Les. 12	5.2.1 Solving multiplication and division problems 5.NBT.6 Whole number quotients of whole numbers… 6.NS.1 - Apply and extend previous understandings of multiplication and division to divide fractions by fractions. 5.C.2: Find whole-number quotients and remainders with up to four-digit dividends and two-digit divisors, using strategies based on	How do you divide larger dividends by two digit divisors?	Sadlier-Oxford Progress in Mathematics	None	Chapter 3 test

	place value, the properties of operations, and/or the relationship between multiplication and division. Describe the strategy and explain the reasoning used. 5.AT.1: Solve real-world problems involving multiplication and division of whole numbers (e.g. by using equations to represent the problem). In division problems that involve a remainder, explain how the remainder affects the solution to the problem.				
Ch. 3/Les. 13	5.NBT.7 Compute decimals to hundredths… 6.NS.3 - Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation. 5.C.2: Find whole-number quotients and remainders with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Describe the strategy and explain the reasoning used. 5.AT.1: Solve real-world problems involving multiplication and	Can you divide money amounts by one and two digit divisors?	Sadlier-Oxford Progress in Mathematics	None	Chapter 3 test

	division of whole numbers (e.g. by using equations to represent the problem). In division problems that involve a remainder, explain how the remainder affects the solution to the problem.				
Ch.3/Les. 14	5.3.3 Distributive property equations and expressions 5.OA.1 Parentheses, brackets, braces in expressions 5.C.8: Add, subtract, multiply, and divide decimals to hundredths, using models or drawings and strategies based on place value or the properties of operations. Describe the strategy and explain the reasoning. 5.C.9: Evaluate expressions with parentheses or brackets involving whole numbers using the commutative properties of addition and multiplication, associative properties of addition and multiplication, and distributive property.	Can you use order of operations to evaluate numerical expressions?	Sadlier-Oxford Progress in Mathematics	Order of operations, parentheses	Chapter 3 test
Ch. 4/Les. 3	6.1.7 Least common multiple and	Can you list the common factors and	Sadlier-Oxford	Common factors,	Chapter 4 test

	greatest common factor 6.NS.4 - Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12.	find GCF of two or more numbers?	Progress in Mathematics	greatest common factor (GCF)	
Ch.4/Les. 5, 6	3.1.10 Determining larger or smaller fractions 3.NF.3 Equivalence of fractions 6.NS.4 - Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. 5.AT.2: Solve real-world problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators (e.g., by using visual fraction models and equations to represent the problem). Use benchmark fractions and number sense of fractions to estimate mentally and assess whether the answer is reasonable.	Can you write a fraction in lowest terms? Greater terms?	Sadlier-Oxford Progress in Mathematics	Lowest terms, simplest form, rename fractions, greater terms	Chapter 4 test
Ch.4/Les. 7	6.1.7 Least common multiple and greatest common factor	Can you list common multiples and find LCM of a set of numbers? Can you find the LCD of a set of fractions?	Sadlier-Oxford Progress in Mathematics	Multiples, common multiples, least common multiple	Chapter 4 test

	6.NS.4 - Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12.			(LCM), least common denominator (LCD)	
Ch. 4/ Les. 10	4.NF.2 Comparing fractions with different numerators and denominators 6.NS.1 - Apply and extend previous understandings of multiplication and division to divide fractions by fractions.	How do you compare and order fractions and mixed numbers?	Sadlier-Oxford Progress in Mathematics	None	Chapter 4 test
Ch. 5/Les. 1	4.NF.3c Compute mixed numbers with same denominators 6.NS.1 - Apply and extend previous understandings of multiplication and division to divide fractions by fractions. 5.AT.2: Solve real-world problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators (e.g., by using visual fraction models and equations to represent the problem). Use benchmark fractions and number sense of fractions to estimate mentally and assess whether the answer is reasonable.	Can you rename sums of two fractions with like denominators?	Sadlier-Oxford Progress in Mathematics	Numerator, denominator, like denominators	Chapter 5 test

Ch. 5/Les. 3	5.2.2 Fractions with different denominators 4.NF.3c Compute mixed numbers with same denominators 5.NF.1 Fractions with unlike denominators… 6.NS.1 - Apply and extend previous understandings of multiplication and division to divide fractions by fractions. 5.C.4: Add and subtract fractions with unlike denominators, including mixed numbers.	How do you add three fractions? Can you apply the associative property of addition to fractions?	Sadlier-Oxford Progress in Mathematics	Associative property	Chapter 5 test
Ch. 5/Les. 4, 5	5.2.2 Fractions with different denominators 4.NF.3c Compute mixed numbers with same denominators 5.NF.1 Fractions with unlike denominators… 6.NS.1 - Apply and extend previous understandings of multiplication and division to divide fractions by fractions.	How do you add mixed numbers with like and unlike denominators? How do you add mixed numbers, renaming sums?	Sadlier-Oxford Progress in Mathematics	Mixed number, fraction in greater terms	Chapter 5 test

	5.C.4: Add and subtract fractions with unlike denominators, including mixed numbers.				
Ch. 5/Les. 6	5.2.2 Fractions with different denominators 5.NF.1 Fractions with unlike denominators… 6.NS.1 - Apply and extend previous understandings of multiplication and division to divide fractions by fractions. 5.C.4: Add and subtract fractions with unlike denominators, including mixed numbers.	Can you rename difference of two fractions with like denominators?	Sadlier-Oxford Progress in Mathematics	None	Chapter 5 test
Ch. 5/Les. 8	5.2.2 Fractions with different denominators 5.NF.1 Fractions with unlike denominators… 6.NS.1 - Apply and extend previous understandings of multiplication and division to divide fractions by fractions. 5.C.4: Add and subtract fractions with unlike denominators, including mixed numbers.	How do you subtract fractions with unlike denominators that aren't compatible?	Sadlier-Oxford Progress in Mathematics	None	Chapter 5 test

Ch. 5/Les. 9, 10	5.2.2 Fractions with different denominators 5.NF.1 Fractions with unlike denominators… 6.NS.1 - Apply and extend previous understandings of multiplication and division to divide fractions by fractions. 5.C.4: Add and subtract fractions with unlike denominators, including mixed numbers.	How do you subtract mixed numbers and mixed numbers from whole numbers?	Sadlier-Oxford Progress in Mathematics	None	Chapter 5 test
Ch. 5/Les. 11	5.2.2 Fractions with different denominators 5.NF.1 Fractions with unlike denominators… 6.NS.1 - Apply and extend previous understandings of multiplication and division to divide fractions by fractions. 5.C.4: Add and subtract fractions with unlike denominators, including mixed numbers.	How do you subtract mixed numbers, renaming minuends?	Sadlier-Oxford Progress in Mathematics	Minuend, subtrahend	Chapter 5 test
Ch. 6/Les.2	5.2.4 Problem solving using multiplication and division of	How do multiply a fraction by a fraction?	Sadlier-Oxford Progress in	Numerator, denominator,	Chapter 6 test

	fractions 5.NF.4 Multiply fractions or whole numbers by fractions 6.NS.1 - Apply and extend previous understandings of multiplication and division to divide fractions by fractions. 5.C.5: Use visual fraction models and numbers to multiply a fraction by a fraction or a whole number. 5.AT.3: Solve real-world problems involving multiplication of fractions, including mixed numbers (e.g., by using visual fraction models and equations to represent the problem).		Mathematics	simplest form, commutative property	
Ch. 6/Les.4	5.2.4 Problem solving using multiplication and division of fractions 5.NF.4 Multiply fractions or whole numbers by fractions 6.NS.1 - Apply and extend previous understandings of multiplication and division to divide fractions by fractions.	How do you multiply fractions using greatest common factor?	Sadlier-Oxford Progress in Mathematics	Greatest common factor (GCF)	Chapter 6 test

	5.C.5: Use visual fraction models and numbers to multiply a fraction by a fraction or a whole number. 5.AT.3: Solve real-world problems involving multiplication of fractions, including mixed numbers (e.g., by using visual fraction models and equations to represent the problem).				
Ch. 6/Les. 5	5.2.4 Problem solving using multiplication and division of fractions 5.NF.4 Multiply fractions or whole numbers by fractions 6.NS.1 - Apply and extend previous understandings of multiplication and division to divide fractions by fractions.	Can you express a mixed number as a fraction greater than one?	Sadlier-Oxford Progress in Mathematics	None	Chapter 6 test
Ch. 6/Les. 6	5.2.4 Problem solving using multiplication and division of fractions 5.NF.4 Multiply fractions or whole numbers by fractions 6.NS.1 - Apply and extend previous understandings of multiplication and	How do you multiply a fraction and mixed number?	Sadlier-Oxford Progress in Mathematics	Distributive property	Chapter 6 test

	division to divide fractions by fractions. 5.C.5: Use visual fraction models and numbers to multiply a fraction by a fraction or a whole number. 5.AT.3: Solve real-world problems involving multiplication of fractions, including mixed numbers (e.g., by using visual fraction models and equations to represent the problem).				
Ch. 6/Les. 7	5.2.4 Problem solving using multiplication and division of fractions 5.NF.4 Multiply fractions or whole numbers by fractions 6.NS.1 - Apply and extend previous understandings of multiplication and division to divide fractions by fractions. 5.C.5: Use visual fraction models and numbers to multiply a fraction by a fraction or a whole number. 5.AT.3: Solve real-world problems involving multiplication of fractions, including mixed numbers (e.g., by using visual fraction	How do you multiply mixed numbers?	Sadlier-Oxford Progress in Mathematics	None	Chapter 6 test

	models and equations to represent the problem).				
Ch. 6/Les. 9	5.AT.4: Solve real-world problems involving division of unit fractions by non-zero whole numbers, and division of whole numbers by unit fractions (e.g., by using visual fraction models and equations to represent the problem).	How do you find the reciprocal of a number?	Sadlier-Oxford Progress in Mathematics	Reciprocal	Chapter 6 test
Ch. 6/Les. 11	5.2.2 Fractions with different denominators 5.NF.1 Fractions with unlike denominators… 6.NS.1 - Apply and extend previous understandings of multiplication and division to divide fractions by fractions. 5.C.7: Use visual fraction models and numbers to divide a unit fraction by a non-zero whole number and to divide a whole number by a unit fraction. 5.AT.4: Solve real-world problems involving division of unit fractions by non-zero whole numbers, and division of whole numbers by unit fractions (e.g., by using visual fraction models and equations to	How do you divide fractions by fractions?	Sadlier-Oxford Progress in Mathematics	None	Chapter 6 test

	represent the problem).				
Ch.6/Les. 13	5.2.2 Fractions with different denominators 5.NF.1 Fractions with unlike denominators… 6.NS.1 - Apply and extend previous understandings of multiplication and division to divide fractions by fractions. 5.C.7: Use visual fraction models and numbers to divide a unit fraction by a non-zero whole number and to divide a whole number by a unit fraction. 5.AT.4: Solve real-world problems involving division of unit fractions by non-zero whole numbers, and division of whole numbers by unit fractions (e.g., by using visual fraction models and equations to represent the problem).	How do you divide a mixed number by a fraction?	Sadlier-Oxford Progress in Mathematics	None	Chapter 6 test
Ch.6/Les. 14	5.2.2 Fractions with different denominators 5.NF.1 Fractions with unlike denominators…	How do you divide a mixed or whole number by a mixed or whole number?	Sadlier-Oxford Progress in Mathematics	None	Chapter 6 test

	6.NS.1 - Apply and extend previous understandings of multiplication and division to divide fractions by fractions. 5.C.7: Use visual fraction models and numbers to divide a unit fraction by a non-zero whole number and to divide a whole number by a unit fraction. 5.AT.4: Solve real-world problems involving division of unit fractions by non-zero whole numbers, and division of whole numbers by unit fractions (e.g., by using visual fraction models and equations to represent the problem).				
Ch.7/Les.2	7.SP.8a Compound events 7.SP.8b Sample space for compound events	Can you use a tree diagram to identify outcomes? Can you find the probability of more than one event? **REAL LIFE APPLICATION.** Tracking the probability of the lottery, lightning strikes, making the NFL or NBA, becoming a millionaire, graduating from college, living to be 100, becoming a movie star, becoming a musician, making your own video game.	Sadlier-Oxford Progress in Mathematics	Sample space, tree diagram, probability of more than one event	Chapter 7 test
Ch.8/Les.1	4.NF.7 Comparing decimals to hundredths…	Can you locate decimals on a number line?	Sadlier-Oxford Progress in	Decimals, tenths, hundredths,	Chapter 8 test

	6.NS.3 - Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation. 5.C.8: Add, subtract, multiply, and divide decimals to hundredths, using models or drawings and strategies based on place value or the properties of operations. Describe the strategy and explain the reasoning. 5.AT.5: Solve real-world problems involving addition, subtraction, multiplication, and division with decimals to hundredths, including problems that involve money in decimal notation (e.g. by using equations to represent the problem).		Mathematics	thousandths	
Ch.8/Les. 2	5.1.1 Converting numbers in words to millions and decimals to thousandths 5.NBT.3a Decimals to thousandths 5.NBT.6 Quotients of whole numbers up to four digit dividends… 6.NS.3 - Fluently add, subtract, multiply, and divide multi-digit decimals using the standard	How do you identify place value in decimals? How do you read and write decimals through thousandths in standard and exponential form?	Sadlier-Oxford Progress in Mathematics	Place value, standard form, exponential form	Chapter 8 test

	algorithm for each operation. 5.C.8: Add, subtract, multiply, and divide decimals to hundredths, using models or drawings and strategies based on place value or the properties of operations. Describe the strategy and explain the reasoning. 5.AT.5: Solve real-world problems involving addition, subtraction, multiplication, and division with decimals to hundredths, including problems that involve money in decimal notation (e.g. by using equations to represent the problem).				
Ch.9/Les. 4	5.NBT.7 Compute decimals to hundredths… 6.NS.3 - Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation. 5.C.8: Add, subtract, multiply, and divide decimals to hundredths, using models or drawings and strategies based on place value or the properties of operations. Describe the strategy and explain the reasoning. 5.AT.5: Solve real-world problems	How do you multiply decimals by decimals?	Sadlier-Oxford Progress in Mathematics	None	Chapter 9 test

	involving addition, subtraction, multiplication, and division with decimals to hundredths, including problems that involve money in decimal notation (e.g. by using equations to represent the problem).				
Ch.9/Les. 3, 7	5.NBT.7 Compute decimals to hundredths… 6.NS.3 - Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation. 5.C.8: Add, subtract, multiply, and divide decimals to hundredths, using models or drawings and strategies based on place value or the properties of operations. Describe the strategy and explain the reasoning. 5.AT.5: Solve real-world problems involving addition, subtraction, multiplication, and division with decimals to hundredths, including problems that involve money in decimal notation (e.g. by using equations to represent the problem).	How can you add, subtract, multiply, and divide decimals to hundredths, using models/drawings/strategies…?	Sadlier-Oxford Progress in Mathematics	Arithmetic sequence, geometric sequence	Chapter 9 test
Ch.9/Les. 1, 6	5.NBT.2 Patterns in number of zeros 6.NS.3 - Fluently add, subtract,	Can you explain patterns in number of zeros of product when multiply a number by powers of 10, and explain patterns in placement of decimal	Sadlier-Oxford Progress in Mathematics	None	Chapter 9 test

	multiply, and divide multi-digit decimals using the standard algorithm for each operation. 5.C.8: Add, subtract, multiply, and divide decimals to hundredths, using models or drawings and strategies based on place value or the properties of operations. Describe the strategy and explain the reasoning. 5.AT.5: Solve real-world problems involving addition, subtraction, multiplication, and division with decimals to hundredths, including problems that involve money in decimal notation (e.g. by using equations to represent the problem).	point…?			
Ch.9/Les. 2, 9, 10	5.2.6 Estimation and reasonable answers CCSS Math Practice 6.NS.3 - Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.	How do you use rounding to estimate decimal products? How do you use clustering to estimate decimal sums? How do you estimate decimal quotients? How do you estimate quotients of money amounts and round quotients to the nearest cent?	Sadlier-Oxford Progress in Mathematics	Clustering, compatible numbers, unit price	Chapter 9 test
Ch.9/Les. 5	5.NBT.2 Patterns in number of zeros 6.NS.3 - Fluently add, subtract, multiply, and divide multi-digit decimals using the standard	How do you write zeros as placeholders in decimal products?	Sadlier-Oxford Progress in Mathematics	None	Chapter 9 test

	algorithm for each operation.				
Ch.9/Les. 8	5.NBT.7 Compute decimals to hundredths… 6.NS.3 - Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation. 5.C.8: Add, subtract, multiply, and divide decimals to hundredths, using models or drawings and strategies based on place value or the properties of operations. Describe the strategy and explain the reasoning. 5.AT.5: Solve real-world problems involving addition, subtraction, multiplication, and division with decimals to hundredths, including problems that involve money in decimal notation (e.g. by using equations to represent the problem).	How do you divide decimals by one digit whole numbers, using zeros as placeholders in quotient or dividend?	Sadlier-Oxford Progress in Mathematics	None	Chapter 9 test
Ch.10/Les. 4	7.G.2 Construct geometric shapes with given conditions	How do you identify congruent and similar figures? Can you construct congruent line segments with a compass and straightedge?	Sadlier-Oxford Progress in Mathematics	Congruent, congruent polygons, corresponding parts, corresponding sides, corresponding angles, is congruent to, similar polygons, is similar to, compass	Chapter 10 test
Ch.10/Les.	4.4.5 Lines of symmetry in	Can you identify and draw symmetric	Sadlier-Oxford	Line symmetry, line	Chapter 10 test

10	polygons 4.G.3 Line of symmetry for two-dimensional figures	figures?	Progress in Mathematics	of symmetry, half turn symmetry	
Ch. 10/Les. 12		Can you explore and determine which polygons can tessellate?	Sadlier-Oxford Progress in Mathematics	Tessellation	Chapter 10 test
Ch. 11/Les. 1	5.MD.1 Convert standard measurement units with given measurement system 6.RP.d - Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities.	Can you estimate and measure using customary units of length to nearest inch, half inch, quarter inch, and eighth of an inch? How do you rename customary units of length?	Sadlier-Oxford Progress in Mathematics	Customary units, inches, feet, yards, miles, nearest inch	Chapter 11 test
Ch.11/Les.2	5.MD.1 Convert standard measurement units with given measurement system 6.RP.d - Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities. 5.M.1: Convert among different-sized standard measurement units within a given measurement system, and use these conversions in solving multi-step real-world problems.	How do you rename and compare customary units of capacity?	Sadlier-Oxford Progress in Mathematics	Fluid ounce, cup, pint, quart, gallon	Chapter 11 test
Ch.11/Les. 3	5.MD.1 Convert standard measurement units with given	How do you estimate, measure, rename, and compare customary units	Sadlier-Oxford Progress in	Ounce, pound, Ton	Chapter 11 test

	measurement system 6.RP.d - Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities. 5.M.1: Convert among different-sized standard measurement units within a given measurement system, and use these conversions in solving multi-step real-world problems.	of weight?	Mathematics		
Ch.11/Les. 5	4.MD.2 Four operations to solve word problems	How do you rename units of time? How do you find elapsed time by counting?	Sadlier-Oxford Progress in Mathematics	Second, minute, hour, day, week, month, year, century, elapsed time	Chapter 11 test
Ch.11/Les.6		Can you name time zone in a given city? How do you find the time, given a time zone or city?	Sadlier-Oxford Progress in Mathematics	Time zones: Pacific, Mountain, Central, Eastern	Chapter 11 test
Ch.11/Les.7	4.MD.2 Four operations to solve word problems 5.M.1: Convert among different-sized standard measurement units within a given measurement system, and use these conversions in solving multi-step real-world problems.	How do you add or subtract customary units of measure and units of time?	Sadlier-Oxford Progress in Mathematics	Customary units	Chapter 11 test
Ch.12/Les.2	4.5.2 Subtracting length renaming feet to inches or meters to centimeters	Can you relate and choose the appropriate metric units of length? How do you measure to the nearest	Sadlier-Oxford Progress in Mathematics	Precise measurements, millimeter,	Chapter 12 test

	4.MD.1 Measurement units within one system 5.M.1: Convert among different-sized standard measurement units within a given measurement system, and use these conversions in solving multi-step real-world problems.	mm, cm, dm?		centimeter, decimeter, meter, kilometer	
Ch.12/Les. 5	6.3.5 Variables in expressions with geometric quantities 6.G.1 Area of triangles, polygons and quadrilaterals 5.M.2: Find the area of a rectangle with fractional side lengths by modeling with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.	How do you find area of a plane figure by counting square units? How do you use a grid to estimate the area of a plane figure?	Sadlier-Oxford Progress in Mathematics	Area, square unit, square measure, square cm, square in, square mm, square dm, square m, square km, square ft, square yd, square mi.	Chapter 12 test
Ch.12/Les. 12	5.5.4 Surface area and volume 5.MD.3 Volume as attribute of solid figures 6.G.2 - Find the volume of a right	Can you explore and estimate what volume cube shaped container is needed to hold objects of various sizes? How do you rename units of volume?	Sadlier-Oxford Progress in Mathematics	Dm cube, m cube, dimensions, cubic feet, rectangular prism	Chapter 12 test

	rectangular prism 5.M.4: Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths or multiplying the height by the area of the base.				
Ch. 13/Les. 1	6.2.6 Ratios and relative size 6.RP.1 Ratio and ratio language 6.AF.9: Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. 6.NS.10: Use reasoning involving rates and ratios to model real-world and other mathematical problems (e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations).	Can you write ratios in three forms and equal ratios?	Sadlier-Oxford Progress in Mathematics	Ratio, simplest form, not equal, equal ratios	Chapter 13 test
Ch.13/Les. 2	7.3.9 Functions as linear or nonlinear 7.RP.2a Proportional relationships	How do you determine if two ratios form a proportion? How do you solve proportions?	Sadlier-Oxford Progress in Mathematics	Proportions, cross-products rule	Chapter 13 test

	6.AF.9: Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. 6.NS.10: Use reasoning involving rates and ratios to model real-world and other mathematical problems (e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations).				
Ch. 13/Les. 3	7.RP.3 Proportional relationships to solve problems 6.AF.9: Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. 6.NS.10: Use reasoning involving rates and ratios to model real-world and other mathematical problems (e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations).	How do you measure scale distance to find actual distance? How do you find actual distance given a scale distance? **REAL LIFE APPLICATION.** Use a map to plan a vacation. Using only the scale, calculate the distances travelled. Also calculate the cost to travel based upon cost of fuel and fuel efficiency. Add in cost of meals and lodging. Divide by number of people and days. Determine if the enjoyment is worth the cost, writing a persuasive essay detailing your position.	Sadlier-Oxford Progress in Mathematics	Scale drawing, scale, scale measure, scale distance, actual measure, actual distance	Chapter 13 test
Ch. 13/Les.	6.1.4 Convert between two	What's the relationship between	Sadlier-Oxford	Percent	Chapter 13 test

4, 5	representations of numbers 5.NS.5: Use place value understanding to round decimal numbers up to thousandths to any given place value. 5.NS.6: Understand, interpret, and model percents as part of a hundred (e.g. by using pictures, diagrams, and other visual models).	fractions and percents? How do you write fractions as percents and vice versa? How do you write percents as decimals and vice versa? How do you write money amounts less than $1 as a percent of a dollar?	Progress in Mathematics		
Ch.13/Les. 6	6.RP.3c Percent of quantity 5.NS.5: Use place value understanding to round decimal numbers up to thousandths to any given place value. 5.NS.6: Understand, interpret, and model percents as part of a hundred (e.g. by using pictures, diagrams, and other visual models).	How do you find percent of a number?	Sadlier-Oxford Progress in Mathematics	Percent of a number	Chapter 13 test
Ch.13/Les.7	6.RP.3c Percent of quantity 5.NS.5: Use place value understanding to round decimal numbers up to thousandths to any given place value. 5.NS.6: Understand, interpret, and model percents as part of a hundred (e.g. by using pictures, diagrams, and other visual models).	How do you find percent of a number by reading a circle graph? How do you find amount of discount?	Sadlier-Oxford Progress in Mathematics	Circle graph, discount, rate of discount	Chapter 13 test
Ch. 14/Les. 2		Do you understand and can you apply the properties of equality?	Sadlier-Oxford Progress in	Properties of equality, addition	Chapter 14 test

			Mathematics	property of equality, subtraction property of equality, multiplication property of equality, division property of equality, inverse operations	
Ch. 14/Les. 5	6.3.6 Order of operations and properties of real numbers 6.EE.2c Evaluate expressions	How do you solve equations involving fractions using properties of addition and multiplication, or inverse operations and properties of equality?	Sadlier-Oxford Progress in Mathematics	Property of addition, property of multiplication	Chapter 14 test
Ch.14/Les. 6	6.1.1 Negative numbers 6.1.2 Absolute value and distance from zero 6.2.1 Add/Subtract positive and negative numbers 6.2.2 Multiply/ divide positive and negative numbers 6.NS.1: Understand that positive and negative numbers are used to describe quantities having opposite directions or values (e.g.,temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge). Use positive and negative numbers to represent and compare quantities in real-world contexts, explaining the meaning of 0 in each situation.	How do you express numerical situations using integers, locate integers on a number line, and name the opposite of an integer?	Sadlier-Oxford Progress in Mathematics	Integer, positive integers, negative integers, opposite	Chapter 14 test

	6.NS.2: Understand the integer number system. Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line; recognize that the opposite of the opposite of a number is the number itself (e.g., –(–3) = 3), and that 0 is its own opposite.				
Ch.14/Les. 7	6.1.3 Positive/negative numbers, fractions, decimals, mixed numbers on number line 6.NS.1: Understand that positive and negative numbers are used to describe quantities having opposite directions or values (e.g.,temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge). Use positive and negative numbers to represent and compare quantities in real-world contexts, explaining the meaning of 0 in each situation. 6.NS.2: Understand the integer number system. Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line; recognize that the opposite of the opposite of a	How do you compare and order integers?	Sadlier-Oxford Progress in Mathematics	None	Chapter 14 test

	number is the number itself (e.g., –(–3) = 3), and that 0 is its own opposite.				
Ch.14/Les. 8, 9	6.2.1 Add/Subtract positive and negative numbers	How do you add integers with like and unlike signs?	Sadlier-Oxford Progress in Mathematics	Integers with like signs, integers with unlike signs	Chapter 14 test
Ch.14/Les. 10	6.2.1 Add/Subtract positive and negative numbers	How do you subtract integers?	Sadlier-Oxford Progress in Mathematics	Zero pair	Chapter 14 test
Ch.14/Les. 11	6.2.2 Multiply/ divide positive and negative numbers	How do you multiply integers?	Sadlier-Oxford Progress in Mathematics	None	Chapter 14 test
Ch.14/Les.12	6.2.2 Multiply/ divide positive and negative numbers	How do you divide integers?	Sadlier-Oxford Progress in Mathematics	None	Chapter 14 test
Ch.14/Les.14	6.NS.10: Use reasoning involving rates and ratios to model real-world and other mathematical problems (e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations). 6.AF.9: Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane.	How do you complete and find the rule given a function table?	Sadlier-Oxford Progress in Mathematics	Function, function table, rule	Chapter 14 test

Problem solving throughout year
Ch.9/Les. 11, 12

Problem Solving standards done on almost every lesson, with modeled strategies, problems of the day, Daily Oral Math, discussion of the textbook, and the homework from the workbook.

- **PS.1: Make sense of problems and persevere in solving them.**
- **PS.2: Reason abstractly and quantitatively.**
- **PS.3: Construct viable arguments and critique the reasoning of others.**
- **PS.4: Model with mathematics.**
- **PS.5: Use appropriate tools strategically.**
- **PS.6: Attend to precision.**
- **PS.7: Look for and make use of structure.**
- **PS.8: Look for and express regularity in repeated reasoning.**

Old Standards Site:

https://learningconnection.doe.in.gov/Standards/About.aspx?art=11

https://learningconnection.doe.in.gov/Standards/Standards.aspx

New Standards Site:

http://www.doe.in.gov/standards/mathematics