

Curriculum Mapping

Math – 8th Grade

1st Nine Weeks

Tara Kinder

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| Module 1 : Exponents and Scientific Notation | Number of School Days: 6 days instruction, 1 days assessments, total 7 days |
| Chapter Vocabulary: base, evaluate, exponent, order of operations, power, monomial, Product of Powers Property, Quotient of Powers Property, term, Power of a Power Property, Power of a Product Property, negative exponents, Zero Exponent Rule, scientific notation, standard form | |
| Code for Indiana Standards: NS=Number Sense C=Computation AF=Algebra and Functions GM=Geometry and Measurement DSP=Data Analysis, Statistics and Probability | |

| Lesson | Indiana Standard(s) | Learning Targets and “I CAN” Statements | Resources/Activities | Pacing (in school days) | Assessments |
|-----------------------------------|-------------------------|---|---|----------------------------|--|
| 1.1 Powers and Exponents | Foundational for 8.NS.3 | Activate Prior Knowledge | Textbook or e-Book Pages Pages 3-10. -ConnectEd Website | 1 | Page 11-12 |
| 1.2 Multiply and Divide Monomials | 8.NS.3 | Given a numeric expression with common rational number bases and integer exponents, apply the properties of exponents to generate equivalent expressions. | Textbook or e-Book Pages Pages 13-22. -ConnectEd Website | 1 | Page 23-24 Mid-Chapter Quiz Unit 1 Test |
| 1.3 Powers of Monomials | 8.NS.3 | Given a numeric expression with common rational number bases and integer exponents, apply the properties of exponents to generate equivalent expressions | Textbook or e-Book Pages Pages 25-30. -ConnectEd Website | 1 | Pages 31-32 Mid-Chapter Quiz Unit 1 Test |
| 1.4 Zero and Negative Exponents | 8.NS.3 | Given a numeric expression with common rational number bases and integer exponents, apply the properties of exponents to generate equivalent expressions | Textbook or e-Book Pages Pages 33-40. -ConnectEd Website | 1 | Pages 41-42 Mid-Chapter Quiz Unit 1 Test |
| 1.5 Scientific Notation | 8.C.2 | Solve real-world and other mathematical problems involving numbers expressed in scientific notation, including problems where both decimal and scientific notation are used. Interpret scientific notation that has been generated by technology, such as a scientific calculator, graphing calculator, or excel spreadsheet. | Textbook or e-Book Pages Pages 43-52. -ConnectEd Website | 1 | Pages 53-54 Mid-Chapter Quiz Unit 1 Test |
| 1.6 Compute with | 8.C.2 | Solve real-world and other mathematical problems involving numbers expressed in scientific notation, including problems where | Textbook or e-Book Pages Pages 55-60. -ConnectEd Website | | Pages 61-62 Mid-Chapter Quiz Unit 1 Test |

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| Scientific Notation | 8.NS.3 | both decimal and scientific notation are used. Interpret scientific notation that has been generated by technology, such as a scientific calculator, graphing calculator, or excel spreadsheet. Given a numeric expression with common rational number bases and integer exponents, apply the properties of exponents to generate equivalent expressions. | | | |
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| Module 2: Real Numbers | Number of School Days: 5 days instruction, 1 days assessments, total 6 days |
| Chapter Vocabulary: bar notation, integers, natural numbers rational numbers repeating decimal, cube root, inverse operations, perfect cube perfect square, principal root, counterexample, irrational number real number, truncating, | |
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| Lesson | Indiana Standard(s) | Learning Targets and “I CAN” Statements | Resources/Activities | Pacing (in school days) | Assessments |
|--|---------------------|--|---|-------------------------|--|
| 2.1 Terminating and Repeating Decimals | 8.NS.1 | Give examples of rational and irrational numbers and explain the difference between them. Understand that every number has a decimal equivalent. For rational numbers, show that the decimal equivalent terminates or repeats, and convert a repeating decimal into a rational number. | Textbook or e-Book Pages Pages 69-76. -ConnectEd Website | 1 | Page 77-78 Mid-Chapter Quiz Unit 2 Test |
| 2.2 Roots | 8.NS.4 | Use square root symbols to represent solutions to equations of the form $x^2 = p$, where p is a positive rational number. | Textbook or e-Book Pages Pages 79-88. -ConnectEd Website | 1 | Page 89-91 Mid-Chapter Quiz Unit 2 Test |
| 2.3 Real Numbers | 8.NS.3 | Give examples of rational and irrational numbers and explain the difference between them. Understand that every number has a decimal equivalent. For rational numbers, show that the decimal equivalent terminates or repeats, and convert a repeating decimal into a rational number. | Textbook or e-Book Pages Pages 91-98. -ConnectEd Website | 1 | Pages 99-100 Mid-Chapter Quiz Unit 2 Test |
| 2.4 Estimate Irrational Numbers | 8.NS.2 8.NS.4 | Given a numeric expression with common rational number bases and integer exponents, apply the properties of exponents to generate equivalent expressions | Textbook or e-Book Pages Pages 101-108. -ConnectEd Website | 1 | Pages 109-110 Mid-Chapter Quiz Unit 2 Test |

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| | | Use square root symbols to represent solutions to equations of the form $x^2 = p$, where p is a positive rational number. | | | |
| 2.5 Compare and Order | 8.NS.1 | Give examples of rational and irrational numbers and explain the difference between them. Understand that every number has a decimal equivalent. For rational numbers, show that the decimal equivalent terminates or repeats, and convert a repeating decimal into a rational number. Interpret scientific notation that has been generated by technology, such as a scientific calculator, graphing calculator, or excel spreadsheet. | Textbook or e-Book Pages Pages 43-52. -ConnectEd Website | 1 | Pages 53-54 Mid-Chapter Quiz Unit 2 Test |

Curriculum Mapping
Math – 8th Grade
2nd Nine Weeks
Tara Kinder

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| Module 3: Solve Equations with Variables on Each Side | Number of School Days: 5 days instruction, 1 days assessments, total 6 days |
| Chapter Vocabulary: coefficient, expression, like terms, multi-step equation, constant, solution | |
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| Lesson | Indiana Standard(s) | Learning Targets and “I CAN” Statements | Resources/Activities | Pacing (in school days) | Assessments |
|--|---------------------|---|--|----------------------------|---|
| 3.1 Solve Equations with Variables on Each Side | 8.AF.1 | Solve linear equations and inequalities with rational number coefficients fluently, including those whose solutions require expanding expressions using the distributive property and collecting like terms. Represent real-world problems using linear equations and inequalities in one variable and solve such problems. | Textbook or e-Book Pages Pages 129-134. -ConnectEd Website | 1 | Page 135-136 Mid-Chapter Quiz Unit 3 Test |
| 3.2 Write and Solve Equations with Variables on Each Side | 8.AF.2 8.AF.1 | Generate linear equations in one variable with one solution, infinitely many solutions, or no solutions. Justify the classification given. Solve linear equations and inequalities with rational number coefficients fluently, including those whose solutions require expanding expressions using the distributive property and | Textbook or e-Book Pages Pages 137-142. -ConnectEd Website | 1 | Page 143-144 Mid-Chapter Quiz Unit 3 Test |

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| | | collecting like terms. Represent real-world problems using linear equations and inequalities in one variable and solve such problems. | | | |
| 3.3 Solve Multi-Step Equations | 8.AF.1 | Solve linear equations and inequalities with rational number coefficients fluently, including those whose solutions require expanding expressions using the distributive property and collecting like terms. Represent real-world problems using linear equations and inequalities in one variable and solve such problems. | Textbook or e-Book Pages Pages 145-148. -ConnectEd Website | 1 | Pages 149-150 Mid-Chapter Quiz Unit 3 Test |
| 3.4 Write and Solve Multi-Step Equations | 8.AF.1 8.AF.2 | Solve linear equations and inequalities with rational number coefficients fluently, including those whose solutions require expanding expressions using the distributive property and collecting like terms. Represent real-world problems using linear equations and inequalities in one variable and solve such problems. Generate linear equations in one variable with one solution, infinitely many solutions, or no solutions. Justify the classification given. | Textbook or e-Book Pages Pages 151.156 -ConnectEd Website | 1 | Pages 157-158 Mid-Chapter Quiz Unit 3 Test |
| 3.5 Determine the Number of Solutions | 8.AF.2 | Generate linear equations in one variable with one solution, infinitely many solutions, or no solutions. Justify the classification given. | Textbook or e-Book Pages Pages 159-166. -ConnectEd Website | 1 | Pages 167-168 Mid-Chapter Quiz Unit 3 Test |

Module 4: Linear Relationships and Slope

Number of School Days: 6 days instruction, 1 days assessments, total 7 days

Chapter Vocabulary: constant rate of change, linear equation, linear relationship, rate of change, slope, rise, run, corresponding parts, similar figures, slope triangles, constant of proportionality, constant of variation direct variation, initial value, slope-intercept form, y-intercept

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| Lesson | Indiana Standard(s) | Learning Targets and “I CAN” Statements | Resources/Activities | Pacing (in school days) | Assessments |
|--------|---------------------|---|---|-------------------------|----------------------------------|
| 4.1 | 8.AF.7 | Compare properties of two linear functions given in different forms, such as a table of | Textbook or e-Book Pages Pages 175-188. | 1 | Page 189-190 Mid-Chapter Quiz |

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| Proportional Relationships and Slope | | values, equation, verbal description, and graph (e.g., compare a distance-time graph to a distance-time equation to determine which of two moving objects has greater speed). | -ConnectEd Website | | Unit 4 Test |
| 4.2 Slope of a Line | 8.AF.7 | Compare properties of two linear functions given in different forms, such as a table of values, equation, verbal description, and graph (e.g., compare a distance-time graph to a distance-time equation to determine which of two moving objects has greater speed). | Textbook or e-Book Pages Pages 191-202. -ConnectEd Website | 1 | Page 203-204 Mid-Chapter Quiz Unit 4 Test |
| 4.3 Similar Triangles and Slope | 8.AF.7 | Compare properties of two linear functions given in different forms, such as a table of values, equation, verbal description, and graph (e.g., compare a distance-time graph to a distance-time equation to determine which of two moving objects has greater speed). | Textbook or e-Book Pages Pages 205-210. -ConnectEd Website | 1 | Pages 211-212 Mid-Chapter Quiz Unit 4 Test |
| 4.4 Direct Variation | 8.AF.7 | Compare properties of two linear functions given in different forms, such as a table of values, equation, verbal description, and graph (e.g., compare a distance-time graph to a distance-time equation to determine which of two moving objects has greater speed). | Textbook or e-Book Pages Pages 213-222. -ConnectEd Website | 1 | Pages 223-224 Mid-Chapter Quiz Unit 4 Test |
| 4.5 Slope Intercept Form | 8.AF.7 | Compare properties of two linear functions given in different forms, such as a table of values, equation, verbal description, and graph (e.g., compare a distance-time graph to a distance-time equation to determine which of two moving objects has greater speed). | Textbook or e-Book Pages Pages 225-234 -ConnectEd Website | 1 | Pages 235-236 Mid-Chapter Quiz Unit 4 Test |
| 4.6 Graph Linear Equations | 8.AF.7 | Compare properties of two linear functions given in different forms, such as a table of values, equation, verbal description, and graph (e.g., compare a distance-time graph to a distance-time equation to determine which of two moving objects has greater speed). | Textbook or e-Book Pages Pages 237-244 -ConnectEd Website | | Pages 245-246 Mid-Chapter Quiz Unit 4 Test |

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| Module 5: Functions | Number of School Days: 6 days instruction, 1 days assessments, total 7 days |
| Chapter Vocabulary: function, input, output, relation, vertical line test, function table, linear function, initial value, rate of change, slope, nonlinear function, qualitative graph | |
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| Lesson | Indiana Standard(s) | Learning Targets and “I CAN” Statements | Resources/Activities | Pacing (in school days) | Assessments |
|-----------------------------------|---------------------|---|---|----------------------------|--|
| 5.1 Identify Functions | 8.AF.3 | Understand that a function assigns to each x-value (independent variable) exactly one y-value (dependent variable), and that the graph of a function is the set of ordered pairs (x,y). | Textbook or e-Book Pages 253-260. -ConnectEd Website | 1 | Page 261-262 Mid-Chapter Quiz Unit 5 Test |
| 5.2 Function Tables | 8.AF.3 | Understand that a function assigns to each x-value (independent variable) exactly one y-value (dependent variable), and that the graph of a function is the set of ordered pairs (x,y). | Textbook or e-Book Pages 263-270. -ConnectEd Website | 1 | Page 271-272 Mid-Chapter Quiz Unit 5 Test |
| 5.3 Construct Linear Functions | 8.AF.6 | Construct a function to model a linear relationship between two quantities given a verbal description, table of values, or graph. Recognize in $y = mx + b$ that m is the slope (rate of change) and b is the y-intercept of the graph, and describe the meaning of each in the context of a problem. | Textbook or e-Book Pages 273-282 -ConnectEd Website | 1 | Pages 283-284 Mid-Chapter Quiz Unit 5 Test |
| 5.4 Compare Functions | 8.AF.7 | Compare properties of two linear functions given in different forms, such as a table of values, equation, verbal description, and graph (e.g., compare a distance-time graph to a distance-time equation to determine which of two moving objects has greater speed). | Textbook or e-Book Pages 285-290. -ConnectEd Website | 1 | Pages 291-292 Mid-Chapter Quiz Unit 5 Test |
| 5.5 Nonlinear Functions | 8.AF.5 | Interpret the equation $y = mx + b$ as defining a linear function, whose graph is a straight line; give examples of functions that are not linear. **Describe similarities and differences between linear and nonlinear functions from tables, graphs, verbal descriptions, and equation | Textbook or e-Book Pages 293-302 -ConnectEd Website Supplemental Material | 1 | Pages 303-304 Mid-Chapter Quiz Unit 5 Test |
| 5.6 Qualitative Graphs | 8.AF.4 | Describe qualitatively the functional relationship between two quantities by analyzing a graph (e.g., where the function is increasing or decreasing, linear or nonlinear, has a maximum or minimum value). Sketch a graph that exhibits the qualitative features of a function that has been verbally described. | Textbook or e-Book Pages 305-310 -ConnectEd Website | | Pages 311-312 Mid-Chapter Quiz Unit 5 Test |

Curriculum Mapping
Math – 8th Grade
3rd Nine Weeks
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Module 6: Systems of Linear Equations

Number of School Days: 5 days instruction, 1 days assessments, total 6 days

Chapter Vocabulary: solution, system of equations, slope, slope-intercept form, y-intercept, substitution, elimination

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| Lesson | Indiana Standard(s) | Learning Targets and "I CAN" Statements | Resources/Activities | Pacing (in school days) | Assessments |
|---|---------------------|--|--|----------------------------|--|
| 6.1 Write and Solve One-Step Equations | 8.AF.8 | Understand that solutions to a system of two linear equations correspond to points of intersection of their graphs because points of intersection satisfy both equations simultaneously. Approximate the solution of a system of equations by graphing and interpreting the reasonableness of the approximation. | Textbook or e-Book Pages Pages 319-328. -ConnectEd Website | 1 | Page 329-330 Mid-Chapter Quiz Unit 6 Test |
| 6.2 Determine Number of Solutions | 8.AF.8 | Understand that solutions to a system of two linear equations correspond to points of intersection of their graphs because points of intersection satisfy both equations simultaneously. Approximate the solution of a system of equations by graphing and interpreting the reasonableness of the approximation. | Textbook or e-Book Pages Pages 331-338. -ConnectEd Website | 1 | Page 339-340 Mid-Chapter Quiz Unit 6 Test |
| 6.3 Solve Systems of Equations by Substitution | 8.AF.8 | Understand that solutions to a system of two linear equations correspond to points of intersection of their graphs because points of intersection satisfy both equations simultaneously. Approximate the solution of a system of equations by graphing and interpreting the reasonableness of the approximation. | Textbook or e-Book Pages Pages 341-348 -ConnectEd Website | 1 | Pages 349-350 Mid-Chapter Quiz Unit 6 Test |
| 6.4 Solve Systems of Equations by Substitution | 8.AF.8 | Understand that solutions to a system of two linear equations correspond to points of intersection of their graphs because points of intersection satisfy both equations simultaneously. Approximate the solution of a system of equations by graphing and interpreting the reasonableness of the approximation. | Textbook or e-Book Pages Pages 351-360. -ConnectEd Website | 1 | Pages 361-362 Mid-Chapter Quiz Unit 6 Test |
| 6.5 Write and Solve | 8.AF.8 | Understand that solutions to a system of two linear equations correspond to points of intersection of their graphs because points of intersection satisfy both equations | Textbook or e-Book Pages Pages 363-372 -ConnectEd Website | 1 | Pages 373-374 Mid-Chapter Quiz Unit 6 Test |

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| Systems of Equations | | simultaneously. Approximate the solution of a system of equations by graphing and interpreting the reasonableness of the approximation. | | | |
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| Module 7: Triangles and the Pythagorean Theorem | Number of School Days: 3 days instruction, 1 days assessments, total 4 days |
| Chapter Vocabulary: hypotenuse, legs, Pythagorean Theorem, converse, converse of the Pythagorean Theorem, coordinate plane, distance | |
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| Lesson | Indiana Standard(s) | Learning Targets and “I CAN” Statements | Resources/Activities | Pacing (in school days) | Assessments |
|--|--|---|---|-------------------------|--|
| 7.3 The Pythagorean Theorem | 8.NS.2 8.NS.4 8.GM.7 8.GM.8 | Use rational approximations of irrational numbers to compare the size of irrational numbers, plot them approximately on a number line, and estimate the value of expressions involving irrational numbers. Use square root symbols to represent solutions to equations of the form $x^2 = p$, where p is a positive rational number. Use inductive reasoning to explain the Pythagorean relationship. Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and other mathematical problems in two dimensions. | Textbook or e-Book Pages 405-414 -ConnectEd Website | 1 | Page 415-416 Mid-Chapter Quiz Unit 7 Test |
| 7.4 Converse of the Pythagorean Theorem | 8.GM.7 | Use inductive reasoning to explain the Pythagorean relationship. | Textbook or e-Book Pages 417-420. -ConnectEd Website | 1 | Page 421-422 Mid-Chapter Quiz Unit 7 Test |
| 7.5 The Pythagorean Theorem | 8.GM.9 | Apply the Pythagorean Theorem to find the distance between two points in a coordinate plane. | Textbook or e-Book Pages 423-426 -ConnectEd Website | 1 | Pages 427-428 Mid-Chapter Quiz Unit 7 Test |

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| Module 8: Transformations | Number of School Days: 4 days instruction, 1 days assessments, total 5 days |
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Chapter Vocabulary: image, preimage, transformation, translation, reflection, line of reflection, center of rotation, rotation, center of dilation, dilation, scale factor

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| Lesson | Indiana Standard(s) | Learning Targets and “I CAN” Statements | Resources/Activities | Pacing (in school days) | Assessments |
|---------------------|----------------------|---|--|----------------------------|--|
| 8.1 Translations | 8.GM.3 8.GM.6 | Verify experimentally the properties of rotations, reflections, and translations, including: lines are mapped to lines, and line segments to line segments of the same length; angles are mapped to angles of the same measure; and parallel lines are mapped to parallel lines. Explore dilations, translations, rotations, and reflections on two-dimensional figures in the coordinate plane. | Textbook or e-Book Pages Pages 435-442 -ConnectEd Website | 1 | Page 443-444 Mid-Chapter Quiz Unit 8 Test |
| 8.2 Reflections | 8.GM.3 8.GM.6 | Verify experimentally the properties of rotations, reflections, and translations, including: lines are mapped to lines, and line segments to line segments of the same length; angles are mapped to angles of the same measure; and parallel lines are mapped to parallel lines. Explore dilations, translations, rotations, and reflections on two-dimensional figures in the coordinate plane. | Textbook or e-Book Pages Pages 445-452. -ConnectEd Website | 1 | Page 453-454 Mid-Chapter Quiz Unit 8 Test |
| 8.3 Rotations | 8.GM.3 8.GM.6 | Verify experimentally the properties of rotations, reflections, and translations, including: lines are mapped to lines, and line segments to line segments of the same length; angles are mapped to angles of the same measure; and parallel lines are mapped to parallel lines. Explore dilations, translations, rotations, and reflections on two-dimensional figures in the coordinate plane. | Textbook or e-Book Pages Pages 455-462 -ConnectEd Website | 1 | Pages 463-464 Mid-Chapter Quiz Unit 8 Test |
| 8.4 Dilations | 8.GM.6 | Explore dilations, translations, rotations, and reflections on two-dimensional figures in the coordinate plane. | Textbook or e-Book Pages Pages 465-472 -ConnectEd Website | 1 | Pages 473-474 Mid-Chapter Quiz Unit 8 Test |

| Lesson | Indiana Standard(s) | Learning Targets and “I CAN” Statements | Resources/Activities | Pacing (in school days) | Assessments |
|--|----------------------|--|--|----------------------------|--|
| 9.1 Congruence and Transformations | 8.GM.3 8.GM.4 | Verify experimentally the properties of rotations, reflections, and translations, including: lines are mapped to lines, and line segments to line segments of the same length; angles are mapped to angles of the same measure; and parallel lines are mapped to parallel lines. Understand that a two-dimensional figure is congruent to another if the second can be obtained from the first by a sequence of rotations, reflections, and translations. Describe a sequence that exhibits the congruence between two given congruent figures. | Textbook or e-Book Pages Pages 481-490 -ConnectEd Website | 1 | Page 491-492 Mid-Chapter Quiz Unit 9 Test |
| 9.2 Congruence and Corresponding Parts | 8.GM.3 | Verify experimentally the properties of rotations, reflections, and translations, including: lines are mapped to lines, and line segments to line segments of the same length; angles are mapped to angles of the same measure; and parallel lines are mapped to parallel lines. | Textbook or e-Book Pages Pages 493-498. -ConnectEd Website | 1 | Page 499-500 Mid-Chapter Quiz Unit 9 Test |
| 9.3 Similarity and Transformations | 8.GM.5 | Understand that a two-dimensional figure is similar to another if the second can be obtained from the first by a sequence of rotations, reflections, translations, and dilations. Describe a sequence that exhibits the similarity between two given similar figures. | Textbook or e-Book Pages Pages 501-510 -ConnectEd Website | 1 | Pages 511-512 Mid-Chapter Quiz Unit 9 Test |
| 9.4 Similarity and Corresponding Parts | 8.GM.5 | Understand that a two-dimensional figure is similar to another if the second can be obtained from the first by a sequence of rotations, reflections, translations, and dilations. Describe a sequence that exhibits the similarity between two given similar figures. | Textbook or e-Book Pages Pages 513-520 -ConnectEd Website | 1 | Pages 521-522 Mid-Chapter Quiz Unit 9 Test |

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| 9.5 Indirect Measurement | 8.AF.5 | Understand that a two-dimensional figure is similar to another if the second can be obtained from the first by a sequence of rotations, reflections, translations, and dilations. Describe a sequence that exhibits the similarity between two given similar figures. | Textbook or e-Book Pages Pages 523-526 -ConnectEd Website | 1 | Pages 527-528 Mid-Chapter Quiz Unit 9 Test |
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Curriculum Mapping Math – 8th Grade

4th Nine Weeks

Tara Kinder

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| Module 10: Volume | Number of School Days: 5 days instruction, 1 days assessments, total 6 days |
| Chapter Vocabulary: cylinder, volume, cone, sphere, pyramid, prism, solid, face, edge, vertex, surface area | |
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| Lesson | Indiana Standard(s) | Learning Targets and “I CAN” Statements | Resources/Activities | Pacing (in school days) | Assessments |
|------------------------------------|------------------------------------|--|--|----------------------------|---|
| 10.1 Volume of Cylinders | 8.GM.2 | Solve real-world and other mathematical problems involving volume of cones, spheres, and pyramids and surface area of spheres. | Textbook or e-Book Pages Pages 535-540 -ConnectEd Website | 1 | Page 541-542 Mid-Chapter Quiz Unit 10 Test |
| 10.2 Volume of Cones | 8.GM.2 | Solve real-world and other mathematical problems involving volume of cones, spheres, and pyramids and surface area of spheres. | Textbook or e-Book Pages Pages 543-548. -ConnectEd Website | 1 | Page 549-550 Mid-Chapter Quiz Unit 10 Test |
| 10.3 Volume of Spheres | 8.GM.2 | Solve real-world and other mathematical problems involving volume of cones, spheres, and pyramids and surface area of spheres. | Textbook or e-Book Pages Pages 551-556 -ConnectEd Website | 1 | Pages 557-558 Mid-Chapter Quiz Unit 10 Test |
| 10.4 Find Missing Dimensions | 8.GM.2 8.NS.4 8.NS.2 | Solve real-world and other mathematical problems involving volume of cones, spheres, and pyramids and surface area of spheres. Use square root symbols to represent solutions to equations of the form $x^2 = p$, where p is a positive rational number. Use rational approximations of irrational numbers to compare the size of irrational numbers, plot them approximately on a number line, and estimate the value of expressions involving irrational numbers. | Textbook or e-Book Pages Pages 559-564 -ConnectEd Website | 1 | Pages 565-566 Mid-Chapter Quiz Unit 10 Test |

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| 10.5 Volume of Composite Solids | 8.GM.2 | Solve real-world and other mathematical problems involving volume of cones, spheres, and pyramids and surface area of spheres. | Textbook or e-Book Pages Pages 567-572 -ConnectEd Website Supplemental Material | 1 | Pages 573-574 Mid-Chapter Quiz Unit 10 Test |
| | 8.GM.1 | Identify, define, and describe attributes of three-dimensional geometric objects (right rectangular prisms, cylinders, cones, spheres, and pyramids). Explore the effects of slicing these objects using appropriate technology and describe the two-dimensional figure that results. | | | |

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| Module 11: Scatter Plots and Two-Way Tables | Number of School Days: 3 days instruction, 1 days assessments, total 4 days |
| Chapter Vocabulary: bivariate data, clusters, outlier, scatter plot, line of fit | |
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| Lesson | Indiana Standard(s) | Learning Targets and “I CAN” Statements | Resources/Activities | Pacing (in school days) | Assessments |
|--|-----------------------|--|--|----------------------------|---|
| 11.1 Scatter Plots | 8.DSP.1 | Construct and interpret scatter plots for bivariate measurement data to investigate patterns of association between two quantitative variables. Describe patterns such as clustering, outliers, positive or negative association, linear association, and nonlinear association. | Textbook or e-Book Pages Pages 581-588 -ConnectEd Website | 1 | Page 589-590 Mid-Chapter Quiz Unit 11 Test |
| 11.2 Draw Lines of Fit | 8.DSP.2 | Know that straight lines are widely used to model relationships between two quantitative variables. For scatter plots that suggest a linear association, informally fit a straight line, and describe the model fit by judging the closeness of the data points to the line. | Textbook or e-Book Pages Pages 591-596. -ConnectEd Website | 1 | Page 597-598 Mid-Chapter Quiz Unit 11 Test |
| 11.3 Equations for Lines of Fit | 8.DSP.3 8.AF.6 | Write and use equations that model linear relationships to make predictions, including interpolation and extrapolation, in real-world situations involving bivariate measurement data. Interpret the slope and y-intercept in context. | Textbook or e-Book Pages Pages 599-606 -ConnectEd Website | 1 | Pages 607-608 Mid-Chapter Quiz Unit 11 Test |

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| | | Construct a function to model a linear relationship between two quantities given a verbal description, table of values, or graph. Recognize in $y = mx + b$ that m is the slope (rate of change) and b is the y -intercept of the graph, and describe the meaning of each in the context of a problem. | | | |
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