

Port Edwards School District Curriculum Map
Course: 7th Grade Math
Grade Level: 7
Unit: Expressions and Equations (7.EE)

Essential Questions	• How can you communicate mathematical ideas effectively? ❖ How can you use numbers and symbols to represent mathematical ideas? ❖ What does it mean to say that two quantities are equal?
----------------------------	--

Standard	Learning Targets		Common Assessments	Common Resources & Activities
	Concept / Content	Skills		
M.7.EE.A.1 M.7.EE.A.2 M.7.EE.A.3 M.7.EE.A.4 M.7.EE.A.4a M.7.EE.A.4b	Additive Identity Property Algebra Algebraic expression Arithmetic sequence Associative Property Coefficient Commutative Property Constant Counterexample Define a variable Distributive Property Equivalent expressions Factor Factored form Like terms Linear expressions Monomial Multiplicative Identity Property Multiplicative Property of Zero Property Sequence Simplest form Term Variables Addition Property of Equality	• Evaluate simple algebraic expressions • Describe the relationships and extend terms in arithmetic sequences • Identify and use mathematical properties to simplify algebraic expressions • Apply the Distributive Property to rewrite algebraic expressions • Simplify algebraic expressions • Add linear expressions • Subtract linear expressions • Factor linear expressions • Solve addition and subtraction equations • Solve one-step multiplication and division equations • Solve one-step equations with rational coefficients • Solve two-step equations • Solve two-step equations of the form $p(x + q) = r$ • Solve inequalities by using the Addition and Subtraction Properties of Inequality • Solve inequalities by using the Multiplication or Division Properties of	Glencoe Math—Chapter 5 Test Glencoe Math—Chapter 5 Vocabulary Quiz Glencoe Math—Chapter 6 Test Glencoe Math—Chapter 6 Vocabulary Quiz	Glencoe Math Course 2 , Chapters 5 and 6

	Addition Property of Inequality Division Property of Equality Division Property of Inequality Equation Equivalent equation Inequality Multiplication Property of Equality Multiplication Property of Inequality Solution Subtraction Property of Equality Subtraction Property of Inequality Two-step equation Two-step inequality	Inequality • Model and solve two-step inequalities and represent the solution on the number line • Solve multi-step real-world problems that utilize equations and expressions		
--	--	---	--	--

Port Edwards School District Curriculum Map
Course: 7th Grade Math
Grade Level: 7
Unit: Geometry (7.G)

Essential Questions	• How can you use different measurements to solve real-life problems? ❖ How does geometry help us describe real-world objects? ❖ How do measurements help you describe real-world objects?
----------------------------	--

Standard	Learning Targets		Common Assessments	Common Resources & Activities
	Concept / Content	Skills		
M.7.G.A.1 M.7.G.A.2 M.7.G.A.3 M.7.G.B.4 M.7.G.B.5 M.7.G.B.6	Acute angle Acute triangle Adjacent angles Base Complementary angles Cone Congruent Congruent segments Coplanar Cross section Cylinder Diagonal Edge Equilateral triangle Face Isosceles triangle Obtuse angle Obtuse triangle Plane Pyramid Right angle Right triangle Scale	• Classify angles and identify vertical and adjacent angles • Identify pairs of complementary and supplementary angles • Identify and classify triangles • Find missing angle measures in a triangle • Solve problems involving scale drawings • Draw three-dimensional figures given the top, side and front views • Identify three-dimensional figures and their cross sections • Find the circumference of circles • Find the area of circles • Find the area of composite figures • Find the volume of prisms • Find the volume of pyramids • Find the surface area of prisms • Find the surface area of pyramids • Find the area and volume of composite figures	Glencoe Math—Chapter 7 Test Glencoe Math—Chapter 7 Vocabulary Quiz Glencoe Math—Chapter 8 Test Glencoe Math—Chapter 8 Vocabulary Quiz	Glencoe Math Course 2 , Chapters 7 and 8

	Scale drawing Scale factor Scale model Scalene triangle Straight angle Supplementary angles Triangle Vertex Vertical angles Center Circle Circumference Composite figure Diameter Lateral face Lateral surface area Pi Radius Regular pyramid Semicircle Slant height Surface area Volume			
--	---	--	--	--

Port Edwards School District Curriculum Map
Course: 7th Grade Math
Grade Level: 7
Unit: Ratios and Proportional Relationships (7.RP)

Essential Questions	• How can you use mathematics to describe change and model real-world situations? ❖ How can you show that two objects are proportional? ❖ How can percent help you understand situations involving money?
----------------------------	---

Standard	Learning Targets		Common Assessments	Common Resources & Activities
	Concept / Content	Skills		
M.7.RP.A.1 M.7.RP.A.2 M.7.RP.A.2a M.7.RP.A.2b M.7.RP.A.2c M.7.RP.A.2d M.7.RP.A.3	Complex fraction Constant of proportionality Constant rate of change Constant of variation Coordinate plane Cross products Dimensional analysis Direct variation Equivalent ratios Nonproportional Proportional Ordered pair Origin Quadrants Rate Rate of change Slope Unit rate Unit ratio X-axis	• Find unit rates • Simplify complex fractions • Convert rates using unit rates and dimensional analysis • Identify proportional and nonproportional relationships by using tables • Identify proportional and nonproportional relationships by graphing on the coordinate plane • Use proportions to solve problems • Represent and identify constant rate of change • Identify slope using tables and graphs • Use direct variation to solve problems • Find the percent of a number • Estimate the percent of a number • Solve problems involving percents by using the percent proportion • Solve problems involving percents by using the percent equation	Glencoe Math—Chapter 1 Test Glencoe Math—Chapter 1 Vocabulary Quiz Glencoe Math—Chapter 2 Test Glencoe Math—Chapter 2 Vocabulary Quiz	Glencoe Math Course 2 , Chapters 1 and 2

	X-coordinate Y-axis Y-coordinate Discount Gratuity Markdown Markup Percent equation Percent error Percent of change Percent of decrease Percent of increase Percent proportion Principal Sales tax Selling price Simple interest Tip	• Solve problems involving percent increase and percent decrease • Solve problems involving financial literacy such as sales tax, tips, and markup • Solve problems involving discount • Solve problems involving simple interest		
--	---	--	--	--

Port Edwards School District Curriculum Map
Course: 7th Grade Math
Grade Level: 7
Unit: Statistics and Probability (7.SP)

Essential Questions	• Why is learning mathematics important? ❖ How can you predict the outcome of future events? ❖ How do you know which graph to use when displaying data?
----------------------------	---

Standard	Learning Targets		Common Assessments	Common Resources & Activities
	Concept / Content	Skills		
M.7.SP.A.1 M.7.SP.A.2 M.7.SP.B.3 M.7.SP.B.4 M.7.SP.C.5 M.7.SP.C.6 M.7.SP.C.7 M.7.SP.C.7a M.7.SP.C.7b M.7.SP.C.8 M.7.SP.C.8a M.7.SP.C.8b M.7.SP.C.8c	Complementary events Compound event Dependent events Experimental probability Fair Fundamental Counting Principle Independent events Outcome Permutation Probability Random Relative frequency Sample space Simple event Simulation Theoretical probability Tree diagram	• Find the probability of a simple event and its complement • Find and compare experimental and theoretical probabilities • Find probabilities of compound events • Perform probability simulations to model real-world situations involving uncertainty • Use multiplication to count the number of outcomes and find probabilities • Find the number of permutations of a set of objects and find probabilities • Find the probability of independent and dependent events • Predict actions of a larger group by using a sample • Determine whether sampling methods are valid	Glencoe Math—Chapter 9 Test Glencoe Math—Chapter 9 Vocabulary Quiz Glencoe Math—Chapter 10 Test Glencoe Math—Chapter 10 Vocabulary Quiz	Glencoe Math Course 2 , Chapters 9 and 10

	Uniform probability model Unfair Biased sample Convenience sample Double box plot Double dot plot Population Sample Simple random sample Statistics Survey Systematic random sample Unbiased sample Voluntary response sample	• Identify misleading graphs and statistics • Compare two populations • Select, organize, and construct appropriate data displays		
--	--	---	--	--

Port Edwards School District Curriculum Map
Course: 7th Grade Math
Grade Level: 7
Unit: The Number System (7.NS)

Essential Questions	• How can mathematical ideas be represented? ❖ What happens when you add, subtract, multiply, and divide integers ❖ What happens when you add, subtract, multiply, and divide fractions?
----------------------------	--

Standard	Learning Targets		Common Assessments	Common Resources & Activities
	Concept / Content	Skills		

M.7.NS.A.1 M.7.NS.A.1a M.7.NS.A.1b M.7.NS.A.1c M.7.NS.A.1d M.7.NS.A.2 M.7.NS.A.2a M.7.NS.A.2b M.7.NS.A.2c M.7.NS.A.2d M.7.NS.A.3	Absolute value Additive inverse Graph Integer Negative integer Opposites Positive integer Zero pair Bar notation Common denominator Least common denominator Like fractions Rational numbers Repeating decimal Terminating decimal Unlike fractions	• Read and write integers • Find the absolute value of an integer • Add integers • Subtract integers • Multiply integers • Divide integers • Write fractions as terminating or repeating decimals and write decimals as fractions • Compare and order rational numbers • Add and subtract rational numbers expressed as like fractions • Add and subtract fractions with unlike denominators • Add and subtract mixed numbers • Multiply fractions and mixed numbers • Convert units of measure between the customary and metric systems • Divide fractions and mixed numbers • Solve real-world and mathematical problems involving the four operations with rational numbers	Glencoe Math—Chapter 3 Test Glencoe Math—Chapter 3 Vocabulary Quiz Glencoe Math—Chapter 4 Test Glencoe Math—Chapter 4 Vocabulary Quiz	<u>Glencoe Math Course 2</u>, Chapters 3 and 4
---	---	--	---	---