

BLACKHAWK SCHOOL DISTRICT

Course Title: Math 6 Developmental

Grade Level(s): 6th

Length of Course: One Year

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Math 6 Developmental CURRICULUM

Unit Breakdown	Objectives	Common Core Standards	Resources
Numbers	- Understand that positive and negative numbers are used together to describe quantities having opposite directions or values. - Write, interpret, and explain statements of order for rational numbers in real-world contexts. - Understand the absolute value of a rational number as its distance from 0 on the number line; interpret absolute value as a magnitude for a positive or negative quantity in a real-world situation.	- CC.6.NS.5 - CC.6.NS.7b - CC.6.NS.7c	Go Math Lesson 1.1, 1.2 Go Math Differentiated Instruction Book 1.1, 1.2, Worksheet D
Factors and Multiples	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. Use the distributive	CC.6.NS.4	Go Math Lesson 2.1, 2.2

	property to express a sum of two whole numbers 1-100 with a common factor as a multiple of a sum of two whole numbers with no common factor.		Go Math Differentiated Instruction Book 2.1, 2.2, Worksheet D
Rational Numbers	- Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent point on the line and in the plane with negative number coordinates. - Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane. - Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram.	- CC.6.NS.6 - CC.NS.6c - CC.6.NS.7a	Go Math Lesson 3.1, 3.2, 3.3 Go Math Differentiated Instruction Book 3.1, 3.2, 3.3 Worksheet D
Fraction Operations	- 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. Use the distributive property to express a sum of two whole numbers 1-100 with a common factor as a multiple of a sum of two whole numbers with no common factor. - Interpret and compute quotient of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem.	- CC.6.NS.4 - CC.6.NS.1	Go Math Lesson 4.1, 4.2, 4.3 Go Math Differentiated Instruction Book 4.1, 4.2, 4.3 Worksheet D

Decimal Operations	- Fluently divide multi-digit numbers using the standard algorithm. - Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.	- CC.6.NS.2 - CC.6.NS.3	Go Math Lesson 5.1, 5.2, 5.3, 5.4 Go Math Differentiated Instruction Book 5.1, 5.2, 5.3, 5.4 Worksheet D
Rates & Ratios	- Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. - Understand the concept of a unit rate a/b associated with a ratio $a:b$ with b not equal to 0, and use rate language in the context of a ratio relationship. - Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.	- CC.6.RP.1 - CC.6.RP.2 - CC.6.RP.3	Go Math Lesson 6.1, 6.2 Go Math Differentiated Instruction Book 6.1, 6.2 Worksheet D
Percent	- Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity mean 30/100 times the quantity); solve problems involving finding whole, given a part and the percent. - Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning	- CC.6.RP.3c - CC.6.RP.3	Go Math Lesson 8.1, 8.2, 8.3 Go Math Differentiated Instruction Book 8.1, 8.2, 8.3 Worksheet D

	about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.		
Exponents	Write and evaluate numerical expressions involving whole number-exponents.	CC.6.EE.1	Go Math Lesson 9.1 Go Math Differentiated Instruction Book 9.1 Worksheet D
Prime Factorization	Write and evaluate numerical expressions involving whole number-exponents.	CC.6.EE.1	Go Math Lesson 9.2 Go Math Differentiated Instruction Book 9.2 Worksheet D
Order of Operations	Write and evaluate numerical expressions involving whole number-exponents.	CC.6.EE.1	Go Math Lesson 9.3 Go Math Differentiated Instruction Book 9.3 Worksheet D
Algebra	- Solve real-world and mathematical problems by writing and solving equations of the form $x+p=q$ and $px=q$ for cases in which p, q, and x are all non-negative rational numbers - Understand solving an equation or inequality as a process of answering a question; which values from a specific set. If any, make the equation	- CC.EE.7 - CC.EE.5 - CC.EE.8	Go Math Lesson 11.1, 11.2, 11.3, 11.4 Go Math Differentiated Instruction Book 11.1, 11.2, 11.3, 11.4 Worksheet D

	or inequality true? Use substitution to determine whether a given number in a specified set makes an equation or inequality true. Write an inequality of the form $x > c$ or $x < c$ to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of the form $x > c$ or $x < c$ have infinitely many solutions; represent solutions of such inequalities on number line diagrams.		
Coordinate Planes	Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane.	6.NS.6c	Go Math Lesson 12.1 Go Math Differentiated Instruction Book 12.1 Worksheet D
Area & Perimeter	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.	6.G.1	Go Math Lesson 13.1 Go Math Differentiated Instruction Book 13.1 Worksheet D
Displaying, Analyzing, and Summarizing Data	Display numerical data in plots on a number line, including dot plots, histograms, and box plots.	6.SP.4	Go Math Lesson 16.4 Go Math Differentiated Instruction Book 16.5 Worksheet D

