

Centerville Jr. High School Curriculum Mapping

Pre-Algebra

1st Nine Weeks

Kristen Agee

Unit/ Chapter/ Lesson	Indiana Standard(s)	Key Questions	Resources/Activities	Vocabulary	Assessments
1.1.1		How do you evaluate an algebraic expression?	1. Textbooks 2. Graphing Calculators 3. Workbooks	Variable, coefficient, expression, constant, evaluate	1. Homework 2. In Class Activities 3. Tests
1.1.2		How do you write algebraic expressions?			
1.1.3 & 1.1.4		How do you solve one step equations?		Equation, solve, solution, inverse	
1.1.5		How do you solve and graph inequalities?		Inequality, solution set	
1.1.7		How do you write solutions as ordered pairs?		Ordered pair	
1.1.8	3	How do you graph on a coordinate plane?		Coordinate plane, x-axis, y-axis, x- coordinate, y- coordinate, origin	
1.1.9	3	How do you interpret graphs and/or tables to solve problems?			
1.2.1 & 1.2.2		How do you add and subtract integers?	1. Textbooks 2. Workbooks	Integer, absolute value	1. Homework 2. In Class Activities 3. Tests
1.2.3		How do you multiply and divide integers?			
1.2.4		How do you solve equations with integers?			

1.2.5		How do you solve inequalities with integers?		
1.2.6 & 1.2.7		How do you evaluate expressions with exponents?		Power, exponent, base Scientific notation
1.2.8	1	How do you evaluate negative exponents?		
1.2.9	1	How do you express large and small numbers in scientific notation?		

Curriculum Mapping
Pre-Algebra
 2nd Nine Weeks

Unit/ Chapter/ Lesson	Indiana Standard(s)	Key Questions	Resources/Activities	Vocabulary	Assessments		
2.3.1		How do you simplify rational numbers?	1. Textbooks 2. Workbooks	Rational number, relatively prime	1. Homework 2. In Class Activities 3. Tests		
2.3.2 & 2.3.5		How do you add and subtract rational numbers?					
2.3.3 & 2.3.4		How do you multiply and divide rational numbers?					
2.3.6		How do you solve equations with rational numbers?					
2.3.7		How do you solve inequalities with rational numbers?					
2.3.8	1	How do you find square roots?					
2.3.9	1	How do you solve problems with square roots?					
2.3.10	1	How do you determine if a number is rational or irrational?					
2.7.1		How do you find equivalent ratios?		1. Textbooks 2. Workbooks		Ratio, proportion	1. Homework 2. In Class Activities 3. Tests
2.7.2 & 2.7.3	2	How do you use ratios and rates to solve problems?				Rate, unit rate, unit price, conversion unit	

2.7.4		How do you use ratios and proportions to solve story problems?		Cross product	
2.5.7 & 2.7.5		How do you complete transformations on a coordinate plane?		Translation, rotation, reflection, dilation	
2.7.6	2	How do you determine if figures are similar?		Similar	
2.7.7 & 2.7.8	2	How do you use proportions to solve problems with scales?		Scale, scale drawing, scale model	
2.8.1		How do you convert decimals, fractions and percents?		Percent	
2.8.2 & 2.8.3		How do you use proportions to solve problems with percents?			
2.8.4 – 2.8.7		How do you solve problems using percents?		Percent of increase, percent of decrease, commission, sales tax, interest, principal	

Curriculum Mapping

Pre-Algebra 3rd Nine Weeks

Unit/ Chapter/ Lesson	Indiana Standard(s)	Key Questions	Resources/Activities	Vocabulary	Assessments
3.10.1	3	How do you solve two-step equations?	1. Textbooks 2. Workbooks	Additive inverse, multiplicative inverse, opposite	1. Homework 2. In Class Activities 3. Tests
3.10.2	3	How do you solve multi-step equations?			
3.10.3	3	How do you solve equations with variables on both sides?			
3.10.4	3	How do you solve and graph multi-step inequalities?			
3.10.5	3	How do you solve an equation for a specified variable?		Formula	
3.10.6	3	How do you solve a system of equations?		System of equations	
3.11.1	3	How do you solve and graph a linear equation?	1. Textbooks 2. Graphing Calculators 3. Workbooks	Linear equation	1. Homework 2. In Class Activities 3. Tests
3.11.2	3	What is slope and how do you find it?		Slope	
3.11.3	3	How do you graph lines using slope and slope-intercept?		X-intercept, y-intercept, slope-intercept form	
3.11.4	3	How do you find a linear equation given a point and slope?		Point-slope form	

3.11.5	3	How do you recognize direct variation?		Direct variation	
3.11.7	3	How do best-fit lines make predictions about data?		Line of best fit	
3.12.1		How do you identify and find terms in an arithmetic sequence?		Sequence, term arithmetic sequence	
3.12.4	3	How do you represent functions as tables, graphs, or equations?		Function, input, output, domain, range	
3.12.5	3	How do you identify linear functions?		Linear function	

Curriculum Mapping
Pre-Algebra
 4th Nine Weeks

Unit/ Chapter/ Lesson	Indiana Standard(s)	Key Questions	Resources/Activities	Vocabulary	Assessments
4.6.1 & 4.6.2		How do you find perimeter and area of polygons?	1. Textbooks 2. Workbooks	Polygon, perimeter, area	1. Homework 2. In Class Activities 3. Tests
4.6.3	2	How do you use the Pythagorean Theorem to solve problems?		Pythagorean Theorem, hypotenuse, leg	
4.6.4		How do you find area and circumference of circles?		Radius, diameter, circumference	
4.6.6	2	How do you find volume of prisms and cylinders?		Prism, cylinder, volume	
4.6.7	2	How do you find volume of pyramids and cones?		Pyramid, cone	
4.6.8	2	How do you find surface area of prisms and cylinders?		Surface area	
4.6.9	2	How do you find surface area of pyramids and cones?		Slant height	
4.9.1	4	How do you find the probability of an event?		1. Textbooks 2. Workbooks	

4.9.2 & 4.9.4	4	How do you estimate probability using experiments or theories?		Experimental probability, theoretical probability, mutually exclusive	
4.9.5	4	How do you find the number of possible outcomes in an experiment?		Fundamental Counting Principle, tree diagram	
4.9.6	4	How do you find permutations and combinations?		Factorial, permutation, combination	
4.9.7	4	How do you find the probabilities of independent and dependent events?		Independent event, dependent event	
4.9.8		How do you find the odds of an event?		Odds	
4.4.2	4	How do you organize data in a stem-and-leaf plot?		Stem-and-leaf plot	
4.4.3	4	How do you find measures of central tendency?		Mean, median, mode, outlier	