

Curriculum Report

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Report Type: Lesson vs. Learning Activities
 Subject: Algebra I
 Grade: High School
 Chapter: Introduction to Algebra
 Lesson: All

Date: 8/20/2008
 Report Name: N/A
 Generated by: Jeff Hunt

Chapter - "Introduction to Algebra"-Students will work with algebraic expressions, evaluating them for variable values and combining like terms to simplify them.

Lesson Code	Lesson Title and Description	LA Number
1	Algebraic Expressions-Students will evaluate algebraic expressions.	A1211 A1212
2	Problem Solving Plan-Students will apply a standardized problem solving plan to real world problems.	A1221
3	Adding and Subtracting Algebraic Expressions-Students will add and subtract algebraic expressions.	A1231 A1232

The document's location: http://it.ipisd.org/pdf/cl_ipisd_algebra.pdf

Students: Login to <http://odyssey.ipisd.org>

Use your computer user name (student number) and password (school computer password).

In the school window enter: Still for Still Middle School Students. All other 6-12 students, enter Odyssey.

To view the lesson enter the LA Number in activity feature of Compass Learning.

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Report Type: Lesson vs. Learning Activities
 Subject: Algebra I
 Grade: High School
 Chapter: Real Numbers
 Lesson: All

Date: 8/20/2008
 Report Name: N/A
 Generated by: Jeff Hunt

Chapter - "Real Numbers"-Students will work with the real number system including identifying the subsets of the real numbers and performing arithmetic operations.

Lesson Code	Lesson Title and Description	LA Number
1	Absolute Value-Students will simplify expressions that contain absolute values.	A1111 A1112
2	Operations with Integers-Students will perform arithmetic operations on real numbers.	A1121 A1122 A1123 A1124 A1125 A1126 A1127 A1128
3	Square Roots and Irrational Numbers-Students will identify types of real numbers and apply operations to expressions including powers and roots in the correct order	A1131 A1132 A1133 A1134 A1135 A1136

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Report Type: Lesson vs. Learning Activities
 Subject: Algebra I
 Grade: High School
 Chapter: Proportional Reasoning
 Lesson: All

Date: 8/20/2008
 Report Name: N/A
 Generated by: Jeff Hunt

Chapter - "Proportional Reasoning"-Students will apply the rules of ratio and proportion to a variety of problems including those involving percents and probabilities.

Lesson Code	Lesson Title and Description	LA Number
1	Ratio and Proportion-Students will set up and solve ratios and proportions.	A1411 A1412
2	Percents-Students will work with percents.	A1421 A1422
3	Percent Increase and Decrease-Students will apply the concept of percent to work with numbers that increase and decrease, particularly in problems involving price.	A1431 A1432
4	Experimental and Theoretical Probability-Students will learn the difference between experimental and theoretical probability.	A1441 A1442
5	Probabilities of Ind. and Dep. Events-Students will calculate the probabilities of independent and dependent events and distinguish between the two.	A1451 A1452 A1453 A1454
6	Permutations and Combinations-Students will calculate permutations and combinations and recognize the difference between them and the real world situations that call for their use.	A1461 A1462 A1463 A1464

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Report Type: Lesson vs. Learning Activities
 Subject: Algebra I
 Grade: High School
 Chapter: Graphs and Functions
 Lesson: All

Date: 8/20/2008
 Report Name: N/A
 Generated by: Jeff Hunt

Chapter -"Graphs and Functions"-Students will use a variety of data gathering and interpreting skills useful in statistics. Students will also learn basic function descriptions and rules.

Lesson Code	Lesson Title and Description	LA Number
1	Displaying Data-Students will identify and utilize a number of statistical concepts and methods of displaying data.	A1611 A1612 A1613 A1614 A1615 A1616 A1617 A1618
2	Intro to the Coordinate Plane and Relations-Students will identify the parts of the coordinate plane, plot points and define a relation.	A1621 A1622
3	Identifying Functions-Students will determine if a relation is a function.	A1631 A1632
4	Function Rules, Tables, and Graphs-Students will learn the rules that apply to functions and to determine if a relation is function based on graphs and the data in tables.	A1641 A1642
5	Writing a Function Rule-Students will take data from a table and from there generalize the data into a written function rule.	A1651 A1652
7	Arithmetic Sequences-Students will learn to work with arithmetic sequences	A1661 A1662

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Report Type: Lesson vs. Learning Activities
 Subject: Algebra I
 Grade: High School
 Chapter: Writing and Solving Equations
 Lesson: All

Date: 8/20/2008
 Report Name: N/A
 Generated by: Jeff Hunt

Chapter - "Writing and Solving Equations"-Students will determine the values of variables (solve) in equations that involve varying degrees of complexity.

Lesson Code	Lesson Title and Description	LA Number
1	Equations with Rational Numbers-Students will solve one and two step equations.	A1311 A1312 A1313 A1314
2	Multi-Step Equations-Students will solve equations that require several steps.	A1321 A1322
3	Equations with Variables on Both Sides-Students will solve equations that have variable terms on both sides of the equals sign.	A1331 A1332
4	Solving for a Variable and Formulas-Students will create and solve formulas and equations.	A1341 A1342

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Report Type: Lesson vs. Learning Activities
 Subject: Algebra I
 Grade: High School
 Chapter: Graphing Equations
 Lesson: All

Date: 8/20/2008
 Report Name: N/A
 Generated by: Jeff Hunt

Chapter -"Graphing Equations"-Students will explore linear equations and their characteristics including their graphs.

Lesson Code	Lesson Title and Description	LA Number
1	Slope-Students will determine slopes of lines from ordered pairs and equations and use the slope formula.	A1711 A1712 A1713 A1714 A1715 A1716
2	Using x- and y-intercepts-Students will graph lines using the intercepts of the line.	A1741 A1742
3	Function Forms-Students will identify the various forms of linear functions and write the equations for linear functions in these different forms.	A1751 A1752 A1761 A1762
4	Writing the Equation of a Line-Students will write the equations of lines given certain information about the line.	A1771 A1772
5	Parallel and Perpendicular Lines-Students will know the characteristics of lines that are parallel and perpendicular and write equations of lines parallel or perpendicular to a given line.	A1781 A1782
6	Scatter Plots and Correlations-Students will examine scatter plots to determine the type of correlation that exists, if any. Students will also find lines of best fit.	A1791 A1792

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Report Type: Lesson vs. Learning Activities
 Subject: Algebra I
 Grade: High School
 Chapter: Writing/Solving Inequalities
 Lesson: All

Date: 8/20/2008
 Report Name: N/A
 Generated by: Jeff Hunt

Chapter - "Writing/Solving Inequalities"-Students will use skills for solving equations and apply them to finding solutions to inequalities of varying degrees of complexity.

Lesson Code	Lesson Title and Description	LA Number
1	Writing/Graphing Inequalities: One Variable-Students will learn the basics of inequalities, inequality symbols and graphs.	A1511 A1512
2	One-Step Inequalities-Students will solve and graph one step inequalities.	A1521 A1522 A1523 A1524
3	Two-Step and Multi-Step Inequalities-Students will solve and graph two step inequalities.	A1531 A1532
4	Inequalities with Variables on Both Sides-Students will solve inequalities that have variable terms on both sides of the inequality sign.	A1541 A1542
5	Compound Inequalities-Students will solve compound inequalities.	A1551 A1552
6	Absolute Value Equations and Inequalities-Students will solve equations and inequalities that contain absolute value expressions.	A1561 A1562

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Report Type: Lesson vs. Learning Activities
 Subject: Algebra I
 Grade: High School
 Chapter: Solving Systems of Eq/Ineq
 Lesson: All

Date: 8/20/2008
 Report Name: N/A
 Generated by: Jeff Hunt

Chapter - "Solving Systems of Eq/Ineq"-Students will graph and find the solutions to systems of equations and inequalities.

Lesson Code	Lesson Title and Description	LA Number
1	Solving Systems by Graphing-Student will solve linear systems of equations by graphing.	A1811 A1812
2	Solving Systems Using Substitution-Students will use the substitution method to solve systems of linear equations.	A1821 A1822
3	Solving Systems Using Elimination-Students will use the elimination method to solve systems of linear equations.	A1831 A1832
4	Linear Inequalities-Students will graph linear inequalities and graph and solve systems of linear inequalities.	A1841 A1842 A1843 A1844
5	Parent Functions-Students will identify the parent functions for various function families. Students will also transform parent functions by changing values and terms in their equations.	A1851 A1852

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Report Type: Lesson vs. Learning Activities
 Subject: Algebra I
 Grade: High School
 Chapter: Exponents and Polynomials
 Lesson: All

Date: 8/20/2008
 Report Name: N/A
 Generated by: Jeff Hunt

Chapter -"Exponents and Polynomials"-Students will learn the rules for working with algebraic expressions that contain exponents and polynomials.

Lesson Code	Lesson Title and Description	LA Number
1	Exponents-Students will apply the rules of exponents to perform basic operations on terms that contain powers.	A1911 A1912 A1913 A1914 A1915 A1916 A1917 A1918
2	Operations with Polynomials-Students will perform arithmetic operations on polynomials.	A1921 A1922 A1923 A1924
3	Operations with Binomials-Students will find and use patterns to help find the products of binomials.	A1931 A1932

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Report Type: Lesson vs. Learning Activities
Subject: Algebra I
Grade: High School
Chapter: Factoring Polynomials
Lesson: All

Date: 8/20/2008
Report Name: N/A
Generated by: Jeff Hunt

Chapter - "Factoring Polynomials"-Students will learn techniques for factoring polynomials.

Lesson Code	Lesson Title and Description	LA Number
1	Introduction to Factoring-Students will learn the basics of factoring polynomials including factoring by grouping and factoring out the greatest common factor.	A11011 A11012
2	Factoring-Students will factor quadratics.	A11021 A11022
3	Factoring Special Products-Students will factor perfect square trinomials and differences of perfect squares.	A11031 A11032

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Report Type: Lesson vs. Learning Activities
 Subject: Algebra I
 Grade: High School
 Chapter: Quadratic Equations/Functions
 Lesson: All

Date: 8/20/2008
 Report Name: N/A
 Generated by: Jeff Hunt

Chapter - "Quadratic Equations/Functions"-Students will identify and graph quadratic functions and solve quadratic equations with real and complex solutions.

Lesson Code	Lesson Title and Description	LA Number
1	Examining Graphs of Quadratic Functions-Students will graph quadratic equations by making tables of values. Students will recognize the orientation of parabolas by examining the equation.	A11111 A11112
2	Solving Quadratic Equations by Graphing-Students will find solutions to quadratic equations by factoring. Students will identify the solutions (if real ones exist) of the equation by examining the graph of the equation.	A11121 A11122
3	Simplifying Radicals and Complex Numbers-Students will apply product properties of radicals to simplify square roots. Students will identify square roots of negative numbers as imaginary and simplify them using properties of complex and imaginary numbers.	A11131 A11132
4	Solving Quadratic Equations-Students will find solutions to quadratic equations by taking square roots and checking for extraneous solutions.	A11141 A11142
5	Completing the Square-Students will solve quadratic equations by completing the square.	A11151 A11152 A11153 A11154
6	The Quadratic Formula and the Discriminant-Students will solve quadratic equations by using the quadratic formula. Students will examine the discriminant of the quadratic formula to determine the number of real and complex solutions.	A11161 A11162 A11163 A11164

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Report Type: Lesson vs. Learning Activities
Subject: Algebra I
Grade: High School
Chapter: Exponential Equation/Function
Lesson: All

Date: 8/20/2008
Report Name: N/A
Generated by: Jeff Hunt

Chapter - "Exponential Equation/Function"-Students will solve problems involving exponential functions.

Lesson Code	Lesson Title and Description	LA Number
1	Exponential Growth and Decay-Students will solve problems involving exponential growth and decay.	A11211 A11212 A11213 A11214
2	Graphs of Exponential Functions-Students will solve problems involving exponential functions and compound interest.	A11221 A11222
3	Geometric Sequences-Students will solve a variety of problems that involve geometric sequences.	A11231 A11232

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Report Type: Lesson vs. Learning Activities
 Subject: Algebra I
 Grade: High School
 Chapter: Rational Expressions/Equations
 Lesson: All

Date: 8/20/2008
 Report Name: N/A
 Generated by: Jeff Hunt

Chapter - "Rational Expressions/Equations"-Students will perform a variety of operations on rational expressions including simplifying quotients and solving equations.

Lesson Code	Lesson Title and Description	LA Number
1	Inverse Variation-Students will recognize relationships between data and solve problems using data that vary inversely.	A11411 A11412
2	Graphing Rational Functions-Students will define rational functions and recognize the graphs of specific rational functions. Students will find solutions to rational functions using tables of values and create their graphs.	A11421 A11422
3	Simplifying Rational Expressions-Students will simplify rational expressions by factoring and eliminating common factors.	A11431 A11432
4	Dividing Polynomials-Students will divide polynomials using factoring and long division.	A11441 A11442
5	Multiplying and Dividing Rational Expressions-Students will simplify products and quotients of rational expressions.	A11451 A11452
6	Adding and Subtracting Rational Expressions-Students will add and subtract rational expressions.	A11461 A11462
7	Mixed Expressions and Complex Fractions-Students will simplify mixed expressions and complex fractions, i.e. fractions that contain fractions.	A11471 A11472
8	Solving Rational Equations-Students will solve rational equations that contain variables in both numerators and denominators of the expressions. Students will determine if any solutions are extraneous.	A11481 A11482

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Report Type: Lesson vs. Learning Activities
 Subject: Algebra I
 Grade: High School
 Chapter: Radical Expressions/Equations
 Lesson: All

Date: 8/20/2008
 Report Name: N/A
 Generated by: Jeff Hunt

Chapter - "Radical Expressions/Equations"-Students will simplify radicals and solve radical equations and work with trigonometry.

Lesson Code	Lesson Title and Description	LA Number
1	Solving Radical Equations-Students will solve equations that contain expressions in radicals.	A11311 A11312
2	Graphing Square Root Functions-Students will identify square root functions by their graphs. Students will graph square root functions using tables of values.	A11321 A11322
3	The Pythagorean Theorem and Trig. Ratios-Students will use the Pythagorean Theorem to find missing lengths of right triangles. Students will learn and apply the trigonometric ratios.	A11331 A11332 A11333 A11334
4	The Midpoint and Distance Formula-Students will use formulas to find the midpoint of a segment and the distance between two points in the coordinate plane.	A11341 A11342

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Report Type: Lesson vs. Learning Activities
 Subject: Algebra I
 Grade: High School
 Chapter: Extensions
 Lesson: All

Date: 8/20/2008
 Report Name: N/A
 Generated by: Jeff Hunt

Chapter - "Extensions"-Students will apply their learning to a variety of extension exercises.		
Lesson Code	Lesson Title and Description	LA Number
1	The Neighborhood-Students will apply the problem solving process to a project requiring the redrawing a property lines in a neighborhood.	A11511
2	The Paddleboat Trip-Students will apply the problem solving process to a project that determines sales and profits for a small business.	A11521
3	The Architect-Students will apply the problem solving process to a project that requires them to determine the area and volume of a composite figure.	A11531
4	DRD Enterprise-Students will apply the problem solving process to a project that requires them to determine the factors necessary to help a small business expand.	A11541

Lesson Code	Lesson Title and Description	LA Number
1	The Neighborhood-Students will apply the problem solving process to a project requiring the redrawing a property lines in a neighborhood.	A11511
2	The Paddleboat Trip-Students will apply the problem solving process to a project that determines sales and profits for a small business.	A11521
3	The Architect-Students will apply the problem solving process to a project that requires them to determine the area and volume of a composite figure.	A11531
4	DRD Enterprise-Students will apply the problem solving process to a project that requires them to determine the factors necessary to help a small business expand.	A11541