

Curriculum Map - Semester One Subject: GEOMETRY			Grade Level NINTH GRADE
September	October	November	December
<p>A. Essentials of Geometry</p> <ul style="list-style-type: none"> ▪ Points, Lines, Planes ▪ Segments and Congruence ▪ Midpoint and Distance Formula ▪ Measure and Classify Angles ▪ Describe Angle Pair Relationships ▪ Classify Polygons ▪ Find Perimeter, Circumference and Area 	<p>A. Reasoning and Proof</p> <ul style="list-style-type: none"> ▪ Inductive and Deductive Reasoning ▪ Conditional Statements ▪ Law of Detachment and Syllogism ▪ Postulates and Diagrams ▪ Reason Using Properties From Algebra ▪ Prove Statements about Segments and Angles ▪ Prove Angle Pair Relationships ▪ Theorems <p>B. Parallel and Perpendicular Lines</p> <ul style="list-style-type: none"> ▪ Identify pairs of lines and angles ▪ Use parallel lines and transversals ▪ Prove lines are Parallel ▪ Find and Use Slope of Lines ▪ Write and Graph Equations of Lines ▪ Prove Theorem about Perpendicular Lines <p>C. Congruent Triangles</p> <ul style="list-style-type: none"> ▪ Apply Triangle Sum Properties ▪ Apply Congruence and Triangles 	<p>C. Congruent Lines (Cont)</p> <ul style="list-style-type: none"> ▪ Prove Triangles Congruent by SSS, SAS, HL, ASA and AAS ▪ Use Congruent Triangles ▪ Use Isosceles and Equilateral Triangles ▪ Perform Congruence Transformations (slides, flips, etc) <p>D. Relationships Within Triangles</p> <ul style="list-style-type: none"> ▪ Mid-segment Theorem and Coordinate Proof ▪ Use Perpendicular Bisectors ▪ Use Angle Bisectors of Triangles ▪ Use Medians and Altitudes ▪ Use Inequalities in a Triangle ▪ Inequalities in Two Triangles ▪ Indirect Proofs 	<p>A. Similarity</p> <ul style="list-style-type: none"> ▪ Ratios, Proportions and Geometric Mean ▪ Use Proportions to Solve Geometry Problems ▪ Use Similar Polygons ▪ Prove Triangles similar by AA, SSS, SAS ▪ Use proportionality theorems ▪ Perform similarity transformations (dilations, etc) <p>B. Right Triangle and Trigonometry</p> <ul style="list-style-type: none"> ▪ Apply the Pythagorean theorem ▪ Use the Converse of the Pythagorean Theorem ▪ Use Similar Right Triangles ▪ Special Right Triangles ▪ Apply the Tangent Ratio ▪ Apply Sine and Cosine Ratios ▪ Solve Right Triangles



Curriculum Map - Semester One Subject: ALGEBRA			Grade Level NINTH GRADE
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<p>A. Expressions and Equations</p> <ul style="list-style-type: none"> ▪ Evaluate Expressions ▪ Order of operations ▪ Write expression ▪ Writing equation and inequalities ▪ Problem Solving ▪ Graphs and Tables of Functions 	<p>A. Properties of Real Numbers</p> <ul style="list-style-type: none"> ▪ Integers and Rational Number ▪ Add Real Numbers ▪ Subtract Real Numbers ▪ Multiply Real Numbers ▪ Distributive Property ▪ Inverse and Division ▪ Square Roots <p>B. Solving Linear Equations</p> <ul style="list-style-type: none"> ▪ Solve one step equations ▪ Solve two step equations ▪ Solve multi step equations ▪ Solve equations with variables on both sides ▪ Write ratios and proportions ▪ Solve Proportions Using Cross Products ▪ Solve Percentage Problems ▪ Rewrite Equations and Formulas 	<p>A. Graphing Linear Equations and Functions</p> <ul style="list-style-type: none"> ▪ Plot points in a coordinate plane ▪ Graph Linear Equations ▪ Graph Using Intercepts ▪ Find Slope and Rate of Change ▪ Graph using slope intercept form ▪ Model direct variation ▪ Graph Linear Functions <p>B. Writing Linea Equations</p> <ul style="list-style-type: none"> ▪ Write Linear equations in slope intercept form ▪ Use linear equations ▪ Write linear equations in point slope form ▪ Write Linear equations in standard form ▪ Write equations of parallel and perpendicular lines ▪ Fit Line to data ▪ Predict with Linear Models 	<p>A. Solving and Graphing Linear Inequalities</p> <ul style="list-style-type: none"> ▪ Solve inequalities ▪ Solve multi step inequalities ▪ Solve Compound inequalities ▪ Solve Absolute Value Equations ▪ Solve Absolute Value inequalities ▪ Graph linear equations in two variables <p>B. Systems of Equations</p> <ul style="list-style-type: none"> ▪ Solve linear systems by graphing ▪ Solve linear systems by substitution ▪ Solve linear systems by adding or subtracting ▪ Solve special types of linear systems ▪ Solve systems of linear inequalities

Curriculum Map - Semester One Subject: BIOLOGY			Grade Level NINTH GRADE
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<p>A. Web of Life</p> <ul style="list-style-type: none"> ▪ Interactions with Living Things ▪ Matter and Energy as Foundations of Life ▪ Individuals, Populations and Environment 	<p>A. Populations and Ecosystems</p> <ul style="list-style-type: none"> ▪ Carrying Capacity ▪ Human Populations ▪ Life in a Community ▪ Ecosystem Structure ▪ Ecosystem Stability and Human Influence <p>B. Matter and Energy in the Web of Life</p> <ul style="list-style-type: none"> ▪ Biochemistry introduction ▪ Sun and Photosynthesis ▪ ATP ▪ Role of Carbon in living things ▪ Carbohydrates, Lipids, Proteins, Enzymes and Nucleic Acids ▪ Carbon Cycle 	<p>A. The Cell</p> <ul style="list-style-type: none"> ▪ Cell Theory ▪ Cell types ▪ Cell Structure ▪ Cell Functions ▪ Mitosis ▪ Meiosis ▪ Reproductive Cells ▪ Human Reproduction 	<p>A. Heredity and Genetics</p> <ul style="list-style-type: none"> ▪ Mendel ▪ Genes ▪ Dihybrid crosses ▪ Phenotype/Genotype ▪ X-Linked Traits ▪ Abnormal chromosomes ▪ DNA ▪ Biosynthesis ▪ mRNA, tRNA and protein production ▪ Technology and Genetic Rsh

Curriculum Map - Semester One Subject: HUMANITIES			Grade Level NINTH GRADE
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<p>What is the study of Humanities?</p> <p>A. Exploring essential questions and common concerns</p> <ul style="list-style-type: none"> ▪ Compiling a class list of basic human questions that hold true across time and place ▪ What do all human beings share regardless of culture or history? <p>Who were the ancient Greeks?</p> <p>A. Exploring the world view of the ancient Greeks</p> <ul style="list-style-type: none"> ▪ Using Greek mythology to deduce values, beliefs, and concerns ▪ Origin myths from a variety of cultures <p>How was early Greek culture unique?</p> <p>A. Exploring differences between Greeks and other cultures</p> <ul style="list-style-type: none"> ▪ Teaching your myth to the class by a puppet show ▪ Analyzing similarities and differences between the Greeks and other early world cultures ▪ compare/contrast essay ▪ History of Archaic Greece: Minoan and Mycenaean civilizations 	<p>Greek epic poetry</p> <p>A. Works of Homer, excerpts from <i>The Odyssey</i></p> <ul style="list-style-type: none"> ▪ Background of Trojan War ▪ Overview of <i>The Iliad</i> ▪ Conventions of epic poetry <p>Introducing the Hero's Journey</p> <p>A. What does it mean to be a hero? What traits should a hero possess?</p> <ul style="list-style-type: none"> ▪ Reading <i>The Odyssey</i> and examining Odysseus as a heroic character <p>B. Joseph Campbell, <i>A Hero's Journey</i> video excerpts</p> <ul style="list-style-type: none"> ▪ Tracing this journey in <i>The Odyssey</i> ▪ Universal archetypes 	<p>Applying the Hero's Journey to a new model</p> <p>A. Mark Twain, <i>The Adventures of Huckleberry Finn</i></p> <ul style="list-style-type: none"> ▪ Identifying common elements between Huck's journey and Odysseus' ▪ Identifying common archetypes <p>B. Greece's early democracy</p> <ul style="list-style-type: none"> ▪ What are the principles and foundations of democracy? ▪ What form did the Greek democracy take and what problems did it encounter? 	<p>Greek culture flourishes</p> <p>A. Greece's essential philosophers</p> <ul style="list-style-type: none"> ▪ Works by Socrates, Plato, Aristotle ▪ What does it mean to view the world as a philosopher? ▪ How can we apply their theories to our own lives? <p>B. Classical Greek art and architecture</p> <ul style="list-style-type: none"> ▪ Structure of classic architecture ▪ Doric, Ionic, Corinthian columns ▪ Greek sculpture, perspective ▪ incorporating movement and lifelike proportions

Curriculum Map - Semester One Subject: SPANISH	Grade Level NINTH GRADE		
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<p>How comfortable are we at expressing ourselves? Are we able to write and speak in the target language?</p> <p>A. Culture</p> <ul style="list-style-type: none"> Initial research of Day of the Dead in Mexico <p>B. Function and Vocabulary</p> <ul style="list-style-type: none"> Discussing accidents Discussing various jobs <p>C. Learning Strategies</p> <ul style="list-style-type: none"> Listening skills Comprehension strategies through reading Conversation skits <p>D. Journaling</p> <p>E. Grammar</p> <ul style="list-style-type: none"> Extensive introduction of the present tense of regular, irregular, and stem changing verbs Brief exposure to the preterite tense 	<p>Who is the Hispanic/Latino living in the United States?</p> <p>A. Culture</p> <ul style="list-style-type: none"> How does the Hispanic/Latino person feel? Extensive research on the social-historical interpretation of Day of the Dead dating back to the Aztecs to contemporary Mexico and Hispanic communities in the United States Introduction to the art of Jose Guadalupe Posada <p>B. Altar creations</p> <p>C. Function and Vocabulary</p> <ul style="list-style-type: none"> Descriptive adjectives Job preferences (continuation) Describing people <p>D. Learning Strategies</p> <ul style="list-style-type: none"> Listening skills Comprehension strategies through reading Conversation skits <p>E. Journaling</p> <p>F. Grammar</p> <ul style="list-style-type: none"> Explain the uses of the verb 'ser' Review noun/verb agreement Review gender/number agreement Review the use of the verb 'querer' Introduction of the possessive adjectives and 'de' <p>G. Review of stem changing verbs in the present</p>	<p>How do we tell our story?</p> <p>A. Culture</p> <ul style="list-style-type: none"> Showing gratitude through cards and conversation <p>B. Deciphering between the truth and a lie</p> <p>C. Function and Vocabulary</p> <ul style="list-style-type: none"> Describing a place of employment Define job related skills <p>D. Learning Strategies</p> <ul style="list-style-type: none"> Listening skills Comprehension strategies through reading Conversation skits <p>E. Journaling</p> <p>F. Grammar</p> <ul style="list-style-type: none"> Introduction of the preterite conjugation <p>G. Review noun-adjective agreement</p>	<p>Why are certain dishes prepared during a particular holiday? How does homelessness affect children? How is your life compared to those less fortunate?</p> <p>A. Culture</p> <ul style="list-style-type: none"> Prepare Puerto Rican cuisine for the holidays Exposure to Puerto Rican salsa music and dance <p>B. Columbia and child homelessness</p> <p>C. Function and Vocabulary</p> <ul style="list-style-type: none"> Frequency of activities Shared activities A typical holiday weekend or extend vacation Defining homelessness <p>D. Learning Strategies</p> <ul style="list-style-type: none"> Listening skills Comprehension strategies through reading Conversation skits <p>E. Journaling</p> <p>F. Grammar</p> <ul style="list-style-type: none"> Regular conjugations of the past tense : review of preterit of regular verbs Introduction of the irregular verbs in the preterit Introduction of the imperfect tense conjugation of regular verbs <p>G. Introduction to the uses of the preterit and imperfect tense</p>



Curriculum Map - Semester One Subject: ART			Grade Level NINTH GRADE
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<p>What influences us, encourages us to communicate visually?</p> <ul style="list-style-type: none"> A. Art room procedures B. Coming in and using the studio C. Working on projects D. Returning supplies E. Storing supplies in tables F. Marc Chagall and painting the glass wall in the art room G. Basics in printing, prepping for printing and looking to Cowboys Show <p>So what are the problems that working on glass presents?</p> <ul style="list-style-type: none"> A. Working the design B. Working with different paints C. Working together in the same space D. Group assessment 	<p>Cowboys – what are they?</p> <ul style="list-style-type: none"> A. Cowboy focus and research 	<p>What is a block Print? Why are the Japanese experts?</p> <ul style="list-style-type: none"> A. Video presentation on method of block printing B. Learning the skills to carve and print C. Presentation by Mary Way on Japanese block printing. D. Mythology project introduced for researching. 	<p>Art creates construction problem solving....yes?</p> <ul style="list-style-type: none"> A. Final designs for Mythology B. Construction considerations for final C. Introduce Louise Nevelson project

Curriculum Map - Semester One Subject: PHYSICAL EDUCATION			Grade Level NINTH GRADE
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<p>Flag Football (BOYS)</p> <p>A. Review skills (K-3)</p> <ul style="list-style-type: none"> • Running strategies • Passing strategies • Blocking strategies • Kicking <p>B. Team Play</p> <ul style="list-style-type: none"> • Squad assignments • Intramural play • Tournament <p>Volleyball (GIRLS)</p> <p>A. Individual/Partner Skills</p> <ul style="list-style-type: none"> • Setting • Bumping • Serving <p>B. Team preparation</p> <ul style="list-style-type: none"> • Rotating • Court awareness • Game rules <p>C. Competition</p> <ul style="list-style-type: none"> • Squad selection • Intramural play • Tournament <p>Boys/Girls Fitness Training – Yearly on Fridays</p>	<p>Flag Football (BOYS)</p> <p>A. Review skills (K-3)</p> <ul style="list-style-type: none"> • Running strategies • Passing strategies • Blocking strategies • Kicking <p>B. Team Play</p> <ul style="list-style-type: none"> • Squad assignments • Intramural play • Tournament <p>Volleyball (GIRLS)</p> <p>A. Individual/Partner Skills</p> <ul style="list-style-type: none"> • Setting • Bumping • Serving <p>B. Team preparation</p> <ul style="list-style-type: none"> • Rotating • Court awareness • Game rules <p>C. Competition</p> <ul style="list-style-type: none"> • Squad selection • Intramural play • Tournament 	<p>Basketball (BOYS)</p> <p>A. Individual/Partner Skills</p> <ul style="list-style-type: none"> • Dribbling • Shooting • Lay-ups • Free-throws • Passing <p>B. Competition</p> <ul style="list-style-type: none"> • Intramural play • Tournament <p>Soccer (GIRLS)</p> <p>A. Review skills (K-3)</p> <ul style="list-style-type: none"> • Kicking-rt and lft • Punting • Dribbling • Shooting • Passing • Game Rules <p>B. Team Play</p> <ul style="list-style-type: none"> • Squad selection • Team play strategies • Intramural Play • Tournament 	<p>Basketball (BOYS)</p> <p>A. Individual/Partner Skills</p> <ul style="list-style-type: none"> • Dribbling • Shooting • Lay-ups • Free-throws • Passing <p>B. Competition</p> <ul style="list-style-type: none"> • Intramural play • Tournament <p>Soccer (GIRLS)</p> <p>A. Review skills (K-3)</p> <ul style="list-style-type: none"> • Kicking-rt and lft • Punting • Dribbling • Shooting • Passing • Game Rules <p>B. Team Play</p> <ul style="list-style-type: none"> • Squad selection • Team play strategies • Intramural Play • Tournament