

IAA Curriculum

Content Area	Elective/Career Readiness	Grade	8
Course Name	PSSA 8		

Unit/ Concepts	Unit 1 - Earth Science Review					
Big Ideas	<ul style="list-style-type: none"> • Natural processes that change earth • How humans change earth • Earth's water • Weather and climate • Solar system • There are processes taking place right now that continuously change Earth • Earth's air, soil, and water are important resources necessary for organisms to live and grow • Water cycles back and forth between Earth's surface and its atmosphere over and over again • Weather is the condition of the atmosphere at a certain time and place • Climate is the average weather conditions of an area over a very long period of time • Earth is part of a solar system that consists of the sun, planets, and other celestial bodies that revolve around the sun 					
Key Learning Objectives & Skills	<ul style="list-style-type: none"> • Analyze models • Identify structures • Identify key vocabulary • Formulate answers to analysis questions • Model the solar system and water cycle • Infer changes in weather and climate • Find evidence of changes over geological time • Evaluate human effects on Earth 					
Essential Questions	<p>Statements summarizing important ideas and core processes that are central to the unit or concept and have lasting value beyond the classroom.</p> <ul style="list-style-type: none"> • Can a metamorphic rock become a new metamorphic rock? Explain. • What are two steps you can take to help reduce your impact on Earth's resources? • Why is the Sun important to the water cycle? • How are weather and climate alike and different? • Would there be day and night if Earth did not rotate? 					
Dates (estimates only)	Smart Objectives	Instructional Strategies and Activities	PA CC Standards	Keystone or PSSA Anchors	Keystone / PSSA Eligible Content	Vocabulary
12-15 days	<p>What do students have to do related to the content?</p> <p>Natural processes that change earth</p> <ul style="list-style-type: none"> • Identify the components of 	<p>Used to develop the skills and knowledge</p> <p>Natural processes that change earth</p> <ul style="list-style-type: none"> • Developing communication skills 	<p>CC.3.6.6-8.A. CC.3.6.6-8.C CC.3.6.6-8.E CC.3.6.6-8.H CC.3.5.6-8.A</p>	<p>S8.D.1.1 S8.D.1.2 S8.D.1.3 S8.D.2.1 S8.D.3.1</p>	<p>S8.D.3.1.1 S8.D.3.1.2 S8.D.3.1.3 S8.D.2.1.1 S8.D.2.1.2</p>	<p>What is the essential vocabulary of the unit or concept?</p>

	<p>weathering and how it changes Earth</p> <ul style="list-style-type: none"> Identify how mountains, earthquakes, and volcanoes originate <p>How humans change earth</p> <ul style="list-style-type: none"> Identify and describe the greenhouse effect <p>Earth's water</p> <ul style="list-style-type: none"> Analyze the uses of water Analyze the water cycle's causes and effects <p>Weather and climate</p> <ul style="list-style-type: none"> Compare and contrast weather and climate <p>Solar system</p> <ul style="list-style-type: none"> Identify the components of the solar system Compare rotation and revolution 	<ul style="list-style-type: none"> Answering analysis questions based on lab activities Modeling volcanoes and mountains Labeling components of volcanoes and the types Provide examples of natural processes Rock cycle <p>How humans change earth</p> <ul style="list-style-type: none"> Developing communication skills Answering analysis questions based on lab activities Group discussions on human effects Evaluate personal effects on the environment <p>Earth's water</p> <ul style="list-style-type: none"> Developing communication skills Answering analysis questions based on lab activities Model the water cycle Label components of the water cycle <p>Weather and climate</p> <ul style="list-style-type: none"> Developing communication skills Answering analysis questions based on lab activities Graphic organizer of differences between weather and climate Weather and climate sort <p>Solar system</p> <ul style="list-style-type: none"> Developing communication skills Answering analysis questions based on lab activities Model the solar system Label the 8 moon phases Discuss the cause of the changes in the appearance of the moon Solar system simulation 	<p>CC.3.5.6-8.C CC.3.5.6-8.E CC.3.5.6-8.H CC.3.5.6-8.I. CC.3.5.6-8.J 3.3.8.A6 3.3.8.A7 3.3.8.A5 3.3.8.A4 3.3.8.A3 3.3.8.A2</p>	<p>S8.D.3.2</p>	<p>S8.D.2.1.3 S8.D.1.3.1 S8.D.1.3.2 S8.D.1.3.3 S8.D.1.3.4</p>	<p>Rock cycle Igneous rock Weathering Sediment Sedimentary rock Metamorphic rock Magma Erosion Deposition Earthquake Plates Fault Pollution Biodegradable Groundwater Aquifer Watershed Wetland Water cycle Evaporation Humidity Thermometer Barometer Air pressure Climate Solar system Asteroid Meteor Revolution Rotation Orbit Phases</p>
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Resources	Materials, texts, videos, internet sites, software, human to support instruction <ul style="list-style-type: none"> ● Lab materials ● PSSA Preparation Book ● Earth Science Textbooks
Formative Assessments	What evidence (product and/or performance) will be collected to establish that content and skills are being learned? <ul style="list-style-type: none"> ● Exit tickets ● Lab reports ● Models ● Quiz ● Do now ● Discussion ● Stations ● Oral questioning ● Independent practice
Summative Assessments	What evidence (produce and/or performance) will be collected to determine that content and skills have been learned? <ul style="list-style-type: none"> ● Unit Test
Strategies for ELL and IEP Support	What tools, strategies, and resources will be used to provide accommodations and modifications to support students? <ul style="list-style-type: none"> ● Productive pacing ● Incorporate native languages ● Use visuals ● Small group teaching ● Provide different levels of materials ● Simplify language ● Repetition ● Provide content in multiple forms
Acceleration Strategies	What tools, strategies, and resources will be used to help advance students closer to grade-level expectations <ul style="list-style-type: none"> ● Scaffolding of material ● Collaboration with others ● Grouping of students ● Concrete examples ● Visuals ● Integrate technology ● Goal setting

IAA Curriculum

Content Area	Elective/Career Readiness	Grade	8
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Unit/ Concepts	Unit 2 - Physical Science Review					
Big Ideas	<ul style="list-style-type: none"> • Structure and properties of matter • Forms and conversions of energy • Energy sources and their environmental impact • Force and motion • A property is a characteristic that can be used to identify and describe matter • Properties are helpful for deciding the uses of different materials • Energy exists in different forms • Differences between kinetic and potential energy • Energy resources in nature are usually classified as either nonrenewable or renewable • A force is a push or pull that acts on an object • Types of forces 					
Key Learning Objectives & Skills	<ul style="list-style-type: none"> • Analyze models of force and motion • Identify structures and reactions with other structures • Identify key vocabulary • Formulate answers to analysis questions • Model Newton's laws • Identify the properties of matter • Use basic math skills to convert energy • Identify different forms of energy • Identify different types of forces 					
Essential Questions	<p>Statements summarizing important ideas and core processes that are central to the unit or concept and have lasting value beyond the classroom.</p> <ul style="list-style-type: none"> • Insulation is used in the walls of homes to prevent the flow of unwanted heat into or out of the home. Why would aluminum not be a good choice for insulating the walls of a house? • As a pendulum swings, its energy is constantly converted between kinetic and potential energy. At which point does a pendulum have the least potential energy and the greatest kinetic energy? Explain. • What are an advantage and a disadvantage of using nuclear energy as a power source? • Explain why balanced forces cannot cause an object to start moving or change an object's direction or speed. 					
Dates (estimates only)	Smart Objectives	Instructional Strategies and Activities	PA CC Standards	Keystone or PSSA Anchors	Keystone / PSSA Eligible Content	Vocabulary
12-15 Days	What do students have to do related to the content? Structure and properties of matter	Used to develop the skills and knowledge Structure and properties of matter	CC.3.6.6-8.A. CC.3.6.6-8.C CC.3.6.6-8.E	S8.C.1.1 S8.C.2.1 S8.C.2.2	S8.A.2.2.1 S8.A.2.2.2 S8.C.1.1.1	What is the essential vocabulary of the

	<ul style="list-style-type: none"> Identify a property Describe how properties can help to decide the differences of materials Analyze properties of matter and how they relate to the periodic table placement <p>Forms and conversions of energy</p> <ul style="list-style-type: none"> identify 5 forms that energy exists Compare kinetic and potential energy Convert one energy form to another through mathematical calculations <p>Energy sources and their environmental impact</p> <ul style="list-style-type: none"> Compare renewable and nonrenewable energy sources Identify 3 renewable and 3 nonrenewable energy sources Cite evidence of environmental impact by energy sources <p>Force and motion</p> <ul style="list-style-type: none"> Identify force and give one example of it Compare contact and noncontact force Compare balanced and unbalanced forces 	<ul style="list-style-type: none"> Modeling systems Developing communication skills Answering analysis questions based on activities Cite properties of different types of substances Task cards of properties (physical vs. chemical) <p>Forms and conversions of energy</p> <ul style="list-style-type: none"> Modeling systems Developing communication skills Answering analysis questions based on activities Energy conversion formulas Examples of forms of energy Acting out energy forms <p>Energy sources and their environmental impact</p> <ul style="list-style-type: none"> Modeling systems Developing communication skills Answering analysis questions based on activities Research environmental impacts of energy sources <p>Force and motion</p> <ul style="list-style-type: none"> Modeling systems Developing communication skills Answering analysis questions based on activities Modeling force and motion examples Compare balanced and unbalanced forces 	<p>CC.3.6.6-8.H CC.3.5.6-8.A CC.3.5.6-8.C CC.3.5.6-8.E CC.3.5.6-8.H CC.3.5.6-8.I. CC.3.5.6-8.J 3.3.8.B2 3.2.8.B6 3.2.8.B4 3.2.8.B1 3.3.8.B1 3.3.8.B2</p>	<p>S8.C.3.1</p>	<p>S8.B.1.1.2 S8.C.2.2.1 S8.C.2.2.2 S8.C.2.2.3 S8.C.3.1.1 S8.C.3.1.2 S8.C.3.1.3</p>	<p>unit or concept?</p> <p>Physical property Chemical property Element Compound Reactant Product Mixture Density Solubility Energy Work Kinetic energy Potential energy Nonrenewable energy Renewable energy Fossil fuels Force Contact force Noncontact force Friction Gravity Speed</p>
<p>Resources</p>	<p>Materials, texts, videos, internet sites, software, human to support instruction</p> <ul style="list-style-type: none"> Lab materials PSSA Preparation Book Physical Science Textbook 					
<p>Formative Assessments</p>	<p>What evidence (product and/or performance) will be collected to establish that content and skills are being learned?</p> <ul style="list-style-type: none"> Exit tickets Lab reports 					

	<ul style="list-style-type: none"> ● Models ● Quiz ● Do now ● Discussion ● Stations ● Oral questioning ● Independent practice
Summative Assessments	What evidence (produce and/or performance) will be collected to determine that content and skills have been learned? <ul style="list-style-type: none"> ● Unit Test
Strategies for ELL and IEP Support	What tools, strategies, and resources will be used to provide accommodations and modifications to support students? <ul style="list-style-type: none"> ● Productive pacing ● Incorporate native languages ● Use visuals ● Small group teaching ● Provide different levels of materials ● Simplify language ● Repetition ● Provide content in multiple forms
Acceleration Strategies	What tools, strategies, and resources will be used to help advance students closer to grade-level expectations <ul style="list-style-type: none"> ● Scaffolding of material ● Collaboration with others ● Grouping of students ● Concrete examples ● Visuals ● Integrate technology ● Goal setting

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Unit	Unit 3 - Life Science Review					
Concepts	<ul style="list-style-type: none"> Cells to Organisms Reproduction 					
Big Ideas & Competencies	Themes and connections between the Standards that help students to see the purpose and relevance of content. <ul style="list-style-type: none"> Levels of organization Animal and plant cell structure and function Cell theory Heredity and genes The genotype of an organism is the combination of alleles that the organism has The phenotype is the physical appearance or other characteristics produced by the genes 					
Essential Understandings	Statements summarizing important ideas and core processes that are central to the unit or concept and have lasting value beyond the classroom. <ul style="list-style-type: none"> How do the structures in animal and plant cells relate to their functions? What is the function of a cell membrane? How do the parts of a cell work together? What do cells have to do with sexual and asexual reproduction? What causes variation between offspring of the same parents? How does a gene produce a trait? 					
Dates (estimates only)	Smart Objectives	Instructional Strategies and Activities	PA CC Standards	Keystone or PSSA Anchors	Keystone / PSSA Eligible Content	Vocabulary
12-15 days	Levels of Organization <ul style="list-style-type: none"> Identify the levels of organization in order Identify the functions that a cell carries out Relate cell functions with sustaining life Heredity and Genes <ul style="list-style-type: none"> Compare the differences of phenotype and genotype Identify dominant and recessive traits Describe what happens on 	Levels of Organization <ul style="list-style-type: none"> Lab based learning Modeling systems Reading scientific procedures Keeping a science notebook Constructing a concept map Developing communication skills Answering analysis questions based on lab activities Graph the levels of organization Discuss bodily functions and 	CC.3.6.6-8.A. CC.3.6.6-8.C CC.3.6.6-8.E CC.3.6.6-8.H CC.3.5.6-8.C CC.3.5.6-8.E CC.3.5.6-8.H CC.3.5.6-8.I. CC.3.5.6-8.J CC.3.6.6-8.D. CC.3.6.6-8.G 3.1.8.A8 3.1.8.A9	S8.A.2.2 S8.A.2.1 S8.A.3.1	S8.A.1.3.2 S8.A.1.3.3 S8.A.1.3.4 S8.A.2.1.4 S8.A.2.2.3 S8.A.3.1.1 S8.A.3.1.2 S8.A.3.1.3	Cell Cell Theory Cellular respiration Energy Infectious disease Organelle Levels of organization Matter Multicellular Nucleus

	<p>the cellular level when organisms reproduce</p> <p>Inheritance</p> <ul style="list-style-type: none"> • Compare the differences of phenotype and genotype • Identify how offspring inherit characteristics • Graph affects over time of genetic diseases 	<p>how they relate to levels of organization</p> <p>Heredity and Genes</p> <ul style="list-style-type: none"> • Lab based learning • Modeling systems • Reading scientific procedures • Keeping a science notebook • Constructing a concept map • Developing communication skills • Answering analysis questions based on lab activities (4 sentences) • Provide examples of phenotypes and genotypes • Reproductive cell simulations • Observing under the microscope <p>Inheritance</p> <ul style="list-style-type: none"> • Lab based learning • Modeling systems • Reading scientific procedures • Keeping a science notebook • Constructing a concept map • Developing communication skills • Answering analysis questions based on lab activities (4 sentences) • Practice Punnett Squares • Graphing on paper and excel 	<p>3.1.8.C1 3.1.8.C4</p>			<p>Photosynthesis Unicellular</p>
<p>Resources</p>	<p>Materials, texts, videos, internet sites, software, human to support instruction</p> <ul style="list-style-type: none"> • SEPUP-Lab aids textbook <ul style="list-style-type: none"> ◦ Lab activities ◦ Videos • Materials to model content 					
<p>Formative Assessments</p>	<p>What evidence (product and/or performance) will be collected to establish that content and skills are being learned?</p> <ul style="list-style-type: none"> • Exit tickets • Lab reports • Models • Quiz • Do now • Discussion • Stations 					

	<ul style="list-style-type: none"> • Oral questioning • Independent practice
Summative Assessments	<p>What evidence (produce and/or performance) will be collected to determine that content and skills have been learned?</p> <ul style="list-style-type: none"> • Unit Test • Project
Strategies for ELL and IEP Support	<p>What tools, strategies, and resources will be used to provide accommodations and modifications to support students?</p> <ul style="list-style-type: none"> • Productive pacing • Incorporate native languages • Use visuals • Small group teaching • Provide different levels of materials • Simplify language • Repetition • Provide content in multiple forms
Acceleration Strategies	<p>What tools, strategies, and resources will be used to help advance students closer to grade-level expectations</p> <ul style="list-style-type: none"> • Scaffolding of material • Collaboration with others • Grouping of students • Concrete examples • Visuals • Integrate technology • Goal setting

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Unit	Unit 4 - Expressions - Radicals, Exponents, and Scientific Notation
Concept / Big Idea	Demonstrate an understanding of expressions and equations with radicals and integer exponents.
Essential Understandings	<ul style="list-style-type: none"> Understand the Purpose of Scientific Notation Recognize Integer Exponent Relationships Represent Integer Exponent Properties
Competencies	<ul style="list-style-type: none"> Apply properties of integer exponents to generate answers without a calculator. Use square and cube root symbols to represent solutions to equations of the form $x^2 = p$ and $x^3 = p$ (p is a positive rational number). Estimate very large or very small quantities by using numbers expressed in scientific notation. Perform operations with numbers expressed in scientific notation.

Dates (estimates only)	Smart Objectives	Instructional Strategies and Activities	PA CC Standards	Keystone or PSSA Anchors	Keystone / PSSA Eligible Content	Vocabulary
12-15 Days	Apply one or more properties of integer exponents to generate equivalent numerical expressions without a calculator (with answers expressed in exponential form with positive exponents), properties provided.	<ul style="list-style-type: none"> Do Now / Warm-Up Lesson video Direct instruction Practice exercises Practice activities: <ul style="list-style-type: none"> Rational Numbers and Repeating Decimals <ul style="list-style-type: none"> Rational numbers: Live Worksheets Classify numbers: Khan Academy Ordering real numbers: Interactive Worksheet Exponents and Roots <ul style="list-style-type: none"> Negative Exp.s - lesson Exp.s: SoftSchools Quiz Multiply exponents: Quia Laws of Exp - Pirate Game Laws of Exp - Otter Rush Math Interactives: Laws of Exponents - Pirate Dig Exponents - Jeopardy 	MA.CC.2.2.8.B.1	M08.B-E.1.1	M08.B-E.1.1.1	power base exponent radical sign square / square root cube / cube root monomial term scientific notation Laws of Exponents
	Use square root and cube root symbols to represent solutions to equations of the form $x^2 = p$ and $x^3 = p$, where p is a positive rational number. Evaluate square roots of perfect squares (up to and including 122) and cube roots of perfect cubes (up to and including 53) without a calculator.		MA.CC.2.2.8.B.1	M08.B-E.1.1	M08.B-E.1.1.2	
	Estimate very large or very small quantities by using numbers expressed in the form of a single digit times an integer power of		MA.CC.2.2.8.B.1	M08.B-E.1.1	M08.B-E.1.1.3	

	10, and express how many times larger or smaller one number is than another.	<ul style="list-style-type: none"> ● Scientific Notation <ul style="list-style-type: none"> ○ AAAMath - lesson ○ CA Test Prep - CA Test Prep ○ Janus Astro - Astronomy Club 				
Resources	<ul style="list-style-type: none"> ● McGraw Hill / Glencoe Math Course 3, Volumes 1 & 2 (student workbooks) (Lessons 1.3 - 1.9) ● McGraw Hill / Glencoe Math Course 3 Teacher Guide, Assessment Masters, 21st Century Assessments, and Practice Masters & Perform. Tasks ● PSSA Performance Coach 8 ● MathGames.com and IXL.com - practice activities ● Virtual math manipulatives here ● Vocabulary flashcards - Quizlet ● Math Notes - Math Notes ● Helpful videos: <ul style="list-style-type: none"> ○ Math Antics: Intro to Exponents - video ○ Math Antics: Zero Power - video ○ Math Antics: Laws of Exponents - video ○ Chemistry Text Online: Scientific Notation - video ○ Math Antics: Scientific Notation - video ○ Chemistry Text Online: Multiply & Divide Scientific Notation - video ○ Chemistry Text Online: Add & Subtract Scientific Notation - video 					
Formative Assessments	<ul style="list-style-type: none"> ● Various do-nows, classwork, homework, and exit tickets 					
Summative Assessments	<ul style="list-style-type: none"> ● Midpoint Quiz ● Chapter Test 					
Strategies for ELL and IEP Support	<ul style="list-style-type: none"> ● Textbook has vocabulary available in Spanish ● Clean copy notes ● Online flashcards ● Use of calculator ● Simplified directions ● Translation tools available 					

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Unit	Unit 5 - Solve Linear Equations					
Concept / Big Idea	Analyze and solve linear equations and pairs of simultaneous linear equations.					
Essential Understandings	<ul style="list-style-type: none"> Identify the number of solutions of a system of equations Solve systems algebraically 					
Competencies	<ul style="list-style-type: none"> Write and identify linear equations in one variable with one solution, infinitely many solutions, or no solutions. Solve linear equations. Interpret solutions to a system of two linear equations in two variables as points of intersection of their graphs. Solve systems of two linear equations in two variables algebraically, and estimate solutions by graphing the equations. Use two linear equations in two variables to solve real world mathematical problems. 					
Dates (estimates only)	Smart Objectives	Instructional Strategies and Activities	PA CC Standards	Keystone or PSSA Anchors	Keystone / PSSA Eligible Content	Vocabulary
12-15 Days	Write and identify linear equations in one variable with one solution, infinitely many solutions, or no solutions.	<ul style="list-style-type: none"> Do Now / Warm-Up Lesson video Direct instruction Practice exercises Practice activities 	MA.CC.2.2.8.B.3	M08.B-E.3.1	M08.B-E.3.1.1	reciprocal multiplicative inverse coefficient null set substitution properties distribute
	Solve linear equations that have rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms.		MA.CC.2.2.8.B.3	M08.B-E.3.1	M08.B-E.3.1.2	
	Interpret solutions to a system of two linear equations in two variables as points of intersection of their graphs, because points of intersection satisfy both equations simultaneously.		MA.CC.2.2.8.B.3	M08.B-E.3.1	M08.B-E.3.1.3	
	Solve systems of two linear equations in two variables algebraically, and estimate solutions by graphing the equations. Solve simple cases by inspection.		MA.CC.2.2.8.B.3	M08.B-E.3.1	M08.B-E.3.1.4	

	Solve real-world and mathematical problems leading to two linear equations in two variables.		MA.CC.2.2.8.B.3	M08.B-E.3.1	M08.B-E.3.1.5	
Resources	<ul style="list-style-type: none"> ● McGraw Hill / Glencoe Math Course 3, Volumes 1 & 2 (student workbooks) (Lessons 2.1 - 2.5, 3.8) ● McGraw Hill / Glencoe Math Course 3 Teacher Guide, Assessment Masters, 21st Century Assessments, and Practice Masters & Perform. Tasks ● PSSA Performance Coach 8 ● MathGames.com and IXL.com - practice activities ● Virtual math manipulatives here ● Vocabulary flashcards - Quizlet ● Math Notes (Quizlet flashcards in .pdf format) - Math Notes 					
Formative Assessments	<ul style="list-style-type: none"> ● Various do-nows, classwork, homework, and exit tickets 					
Summative Assessments	<ul style="list-style-type: none"> ● Midpoint Quiz - write, identify and solve linear equations ● Midpoint Quiz - interpret systems of linear equations and solve graphically ● Chapter Test - 2.1-2.5, 3.6-3.8, 4.2-4.4 					
Strategies for ELL and IEP Support	<ul style="list-style-type: none"> ● Textbook has vocabulary available in Spanish ● Clean copy notes ● Online flashcards ● Use of calculator ● Simplified directions ● Translation tools available 					

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Unit	Unit 6 - Functions
Concept / Big Idea	Analyze and interpret functions, and use functions to model relationships between quantities.
Essential Understandings	<ul style="list-style-type: none"> • Explore relations and functions • Study the properties of functions • Represent linear functions • Understand qualitative graphs
Competencies	<ul style="list-style-type: none"> • Determine whether a relation is a function. • Compare properties of two functions. • Interpret the equation $y = mx + b$ as defining a linear function whose graph is a straight line. • Give examples of functions that are not linear. • Construct a function to model a linear relationship between two quantities. • Determine and interpret the rate of change. • Describe qualitatively the functional relationship between two quantities by analyzing a graph. • Sketch the graph of a function that has been described verbally.

Dates (estimates only)	Smart Objectives	Instructional Strategies and Activities	PA CC Standards	Keystone or PSSA Anchors	Keystone / PSSA Eligible Content	Vocabulary
12-15 Days	Determine whether a relation is a function.	<ul style="list-style-type: none"> - Do Now / Warm-Up - Lesson video - Direct instruction - Practice exercises - Practice activities 	MA.CC.2.2.8.C.1	M08.B-F.1.1	M08.B-F.1.1.1	linear equation relation domain / range initial value function linear function nonlinear function quadratic function independent variable dependent variable variable system of equations solution continuous data discrete data
	Compare properties of two functions represented in different ways (i.e., algebraically, graphically, numerically in tables, or by verbal descriptions).		MA.CC.2.2.8.C.1	M08.B-F.1.1	M08.B-F.1.1.2	
	Interpret the equation $y = mx + b$ as defining a linear function whose graph is a straight line; give examples of functions that are not linear.		MA.CC.2.2.8.C.1	M08.B-F.1.1	M08.B-F.1.1.3	
	Describe qualitatively the functional relationship between two quantities by analyzing a graph (increasing or decreasing, linear or nonlinear).		MA.CC.2.2.8.C.2	M08.B-F.2.1	M08.B-F.2.1.2	

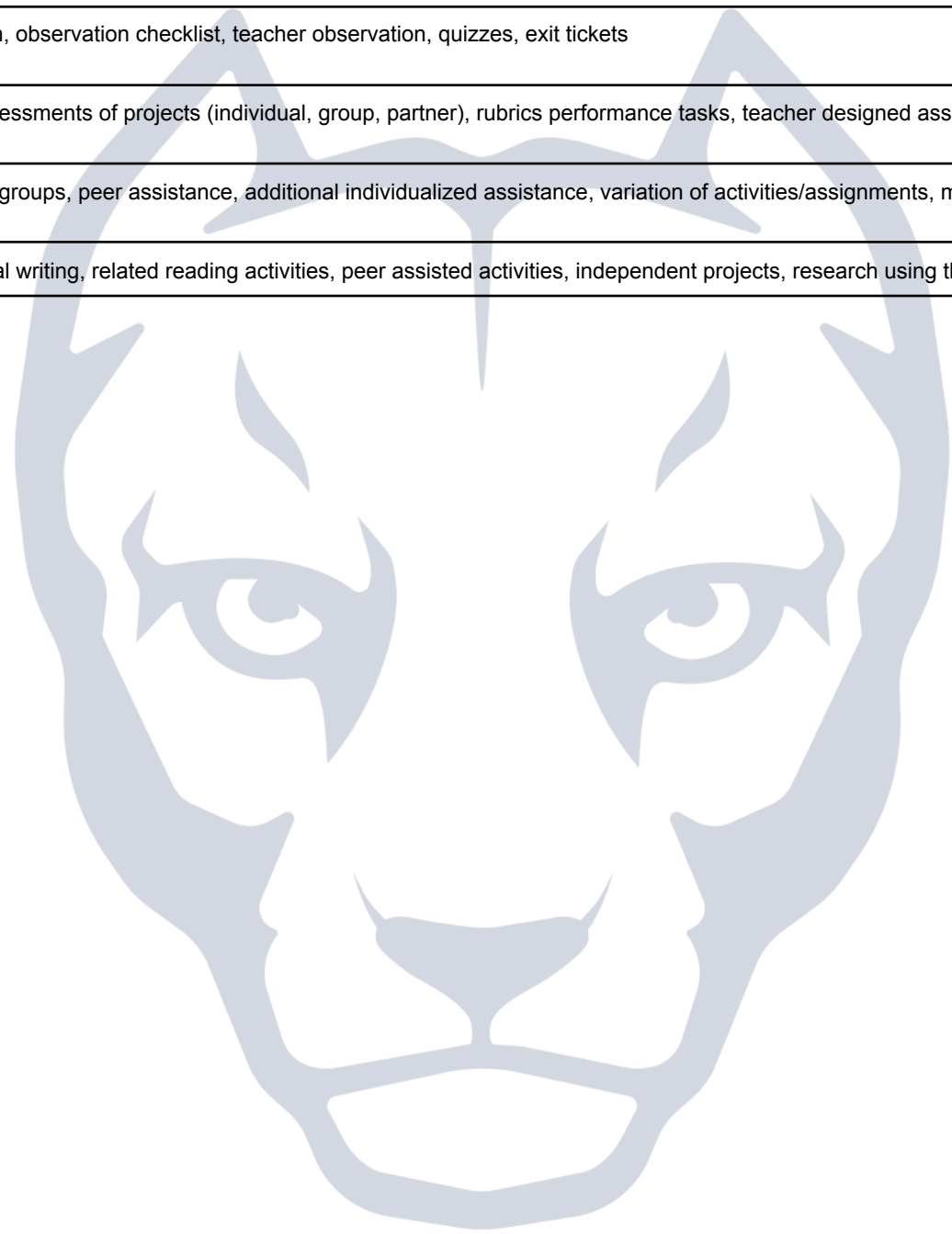
	<p>Sketch or determine a graph that exhibits the qualitative features of a function that has been described.</p>					<p>qualitative graph</p>
	<p>Construct a function to model a linear relationship between two quantities. Determine the rate of change and initial value of the function from a description of a relationship or from two (x, y) values, including reading these from a table or from a graph. Interpret the rate of change and initial value of a linear function in terms of the situation it models and in terms of its graph or a table of values.</p>		<p>MA.CC.2.2.8.C.2</p>	<p>M08.B-F.2.1</p>	<p>M08.B-F.2.1.1</p>	
<p>Resources</p>	<ul style="list-style-type: none"> ● McGraw Hill / Glencoe Math Course 3, Volumes 1 & 2 (student workbooks) (Lessons 3.6 - 3.7, 4.1 - 4.7, 4.9) ● McGraw Hill / Glencoe Math Course 3 Teacher Guide, Assessment Masters, 21st Century Assessments, and Practice Masters & Perform. Tasks ● PSSA Performance Coach 8 ● MathGames.com and IXL.com - practice activities ● Virtual math manipulatives here ● Vocabulary flashcards - Quizlet ● Math Notes - Math Notes 					
<p>Formative Assessments</p>	<ul style="list-style-type: none"> ● Various do-nows, classwork, homework, and exit tickets 					
<p>Summative Assessments</p>	<ul style="list-style-type: none"> ● Chapter Test - 2.1-2.5, 3.6-3.8, 4.2-4.4 ● Chapter Test - 4.1, 4.5-4.7, 4.9 ● Quarter 2 Exam ● Chapter 4 Project - document 					
<p>Strategies for ELL and IEP Support</p>	<ul style="list-style-type: none"> ● Textbook has vocabulary available in Spanish ● Clean copy notes ● Online flashcards ● Use of calculator ● Simplified directions ● Translation tools available 					

IAA Curriculum

Content Area	Elective/Career Readiness	Grade	8
Course Name	PSSA 8		

Unit	Unit 7 - Test Taking Strategies					
Concepts	Test-Taking Strategies Open-Ended Responses Study Habits					
Big Ideas	Preparation prior to assessments and strategies for during assessments can aid student success.					
Essential Understandings	How can strategies be utilized to ease anxieties and improve student success? How should open-ended responses be written to ensure complete answering of the question? What role does time-management play in test-taking? What study habits are important for preparing for assessments?					
Competencies	Test-taking strategies Responses for open-ended questions Study preparation Time management					
Dates (estimates only)	Smart Objectives	Instructional Strategies and Activities	PA CC Standards	Keystone or PSSA Anchors	Keystone / PSSA Eligible Content	Vocabulary
10-12 days	Students will be able to... Identify and utilize appropriate test-taking strategies. Identify the components of an open-ended response to craft a complete answer to a question. Develop a student study timeline to prepare for an assessment. Describe time management techniques used to assist in good study habits.	Guided notes Small group Checks for understanding Personal timetable Open-ended responses	CC.1.2.9.A CC.1.2.9.B CC.1.2.9.J L.N.1.2.3			Open-Ended Response Critical Thinking Time Management Study Habits
Resources	Materials, texts, videos, internet sites, software, human to support instruction					

Formative Assessments	Class participation, observation checklist, teacher observation, quizzes, exit tickets
Summative Assessments	Tests, various assessments of projects (individual, group, partner), rubrics performance tasks, teacher designed assessments
Strategies for ELL and IEP Support	Small groups, peer assistance, additional individualized assistance, variation of activities/assignments, modifications and accommodations.
Acceleration Strategies	Journal writing, related reading activities, peer assisted activities, independent projects, research using the library, internet, etc.

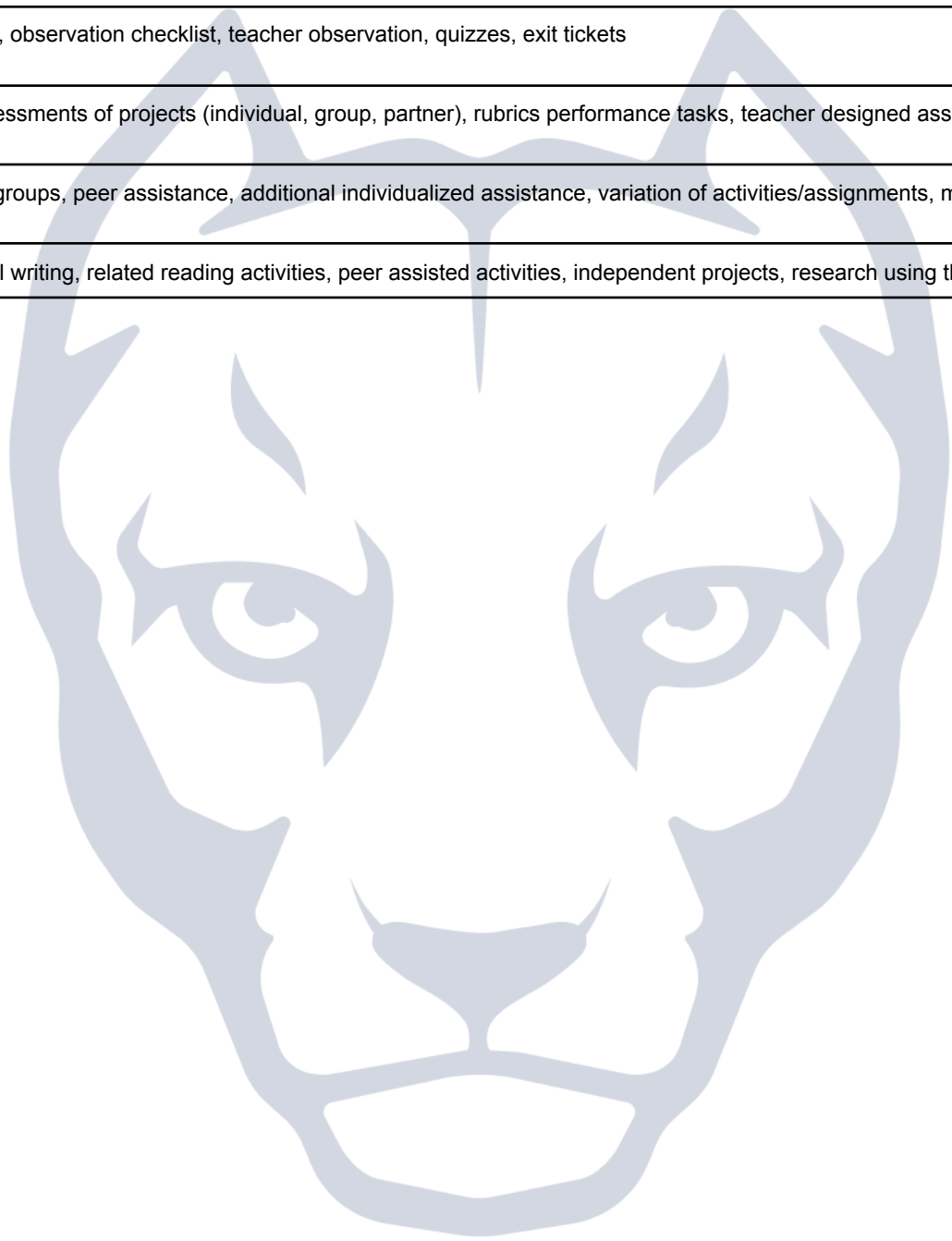


IAA Curriculum

Content Area	Elective/Career Readiness	Grade	8
Course Name	PSSA 8		

Unit	Unit 8 - PSSA Preparation					
Concepts	Physical Science Earth Science Life Science Rational Numbers Linear Equations					
Big Ideas	Preparation prior to assessments and strategies for during assessments can aid student success.					
Essential Understandings	How can strategies be utilized to ease anxieties and improve student success? How should open-ended responses be written to ensure complete answering of the question? What role does time-management play in test-taking? What study habits are important for preparing for assessments?					
Competencies	Test-taking strategies Responses for open-ended questions Study preparation Time management					
Dates (estimates only)	Smart Objectives	Instructional Strategies and Activities	PA CC Standards	Keystone or PSSA Anchors	Keystone / PSSA Eligible Content	Vocabulary
10-12 days	Students will be able to... Identify and utilize appropriate test-taking strategies. Complete practice PSSA test questions. Reflect on test-taking strategies. Implement a study timeline prior to PSSA based on individual needs.	Guided notes Small group Checks for understanding Personal timetable Open-ended responses Sample PSSA questions	CC.1.2.9.A CC.1.2.9.B CC.1.2.9.J L.N.1.2.3			Open-Ended Response Critical Thinking Time Management Study Habits
Resources	Materials, texts, videos, internet sites, software, human to support instruction					

Formative Assessments	Class participation, observation checklist, teacher observation, quizzes, exit tickets
Summative Assessments	Tests, various assessments of projects (individual, group, partner), rubrics performance tasks, teacher designed assessments
Strategies for ELL and IEP Support	Small groups, peer assistance, additional individualized assistance, variation of activities/assignments, modifications and accommodations.
Acceleration Strategies	Journal writing, related reading activities, peer assisted activities, independent projects, research using the library, internet, etc.



IAA Curriculum

Content Area	Elective/Career Readiness	Grade	8
Course Name	PSSA 8		

Unit	Unit 9 - Preparation Reflection					
Concepts	Physical Science Earth Science Life Science Rational Numbers Linear Equations					
Big Ideas	Reflection on study habits, test-taking strategies as well as strengths and areas for improvement allow for the development of a targeted plan for growth.					
Essential Understandings	What strategies were able to be implemented? What supports are needed in the future for academic success?					
Competencies	Test-taking strategies Responses for open-ended questions Study preparation Time management					
Dates (estimates only)	Smart Objectives	Instructional Strategies and Activities	PA CC Standards	Keystone or PSSA Anchors	Keystone / PSSA Eligible Content	Vocabulary
10-12 days	Students will be able to... Reflect on what has gone well for them this year. Reflect on what support they would need moving forward. Determine how they will measure successes moving forward.	Guided notes Small group Checks for understanding Journal Entries	CC.1.2.9.A CC.1.2.9.B CC.1.2.9.J L.N.1.2.3			Open-Ended Response Critical Thinking Time Management Study Habits
Resources	Materials, texts, videos, internet sites, software, human to support instruction					
Formative Assessments	Class participation, observation checklist, teacher observation, quizzes, exit tickets					

Summative Assessments	Tests, various assessments of projects (individual, group, partner), rubrics performance tasks, teacher designed assessments
Strategies for ELL and IEP Support	Small groups, peer assistance, additional individualized assistance, variation of activities/assignments, modifications and accommodations.
Acceleration Strategies	Journal writing, related reading activities, peer assisted activities, independent projects, research using the library, internet, etc.

