

IAA Curriculum

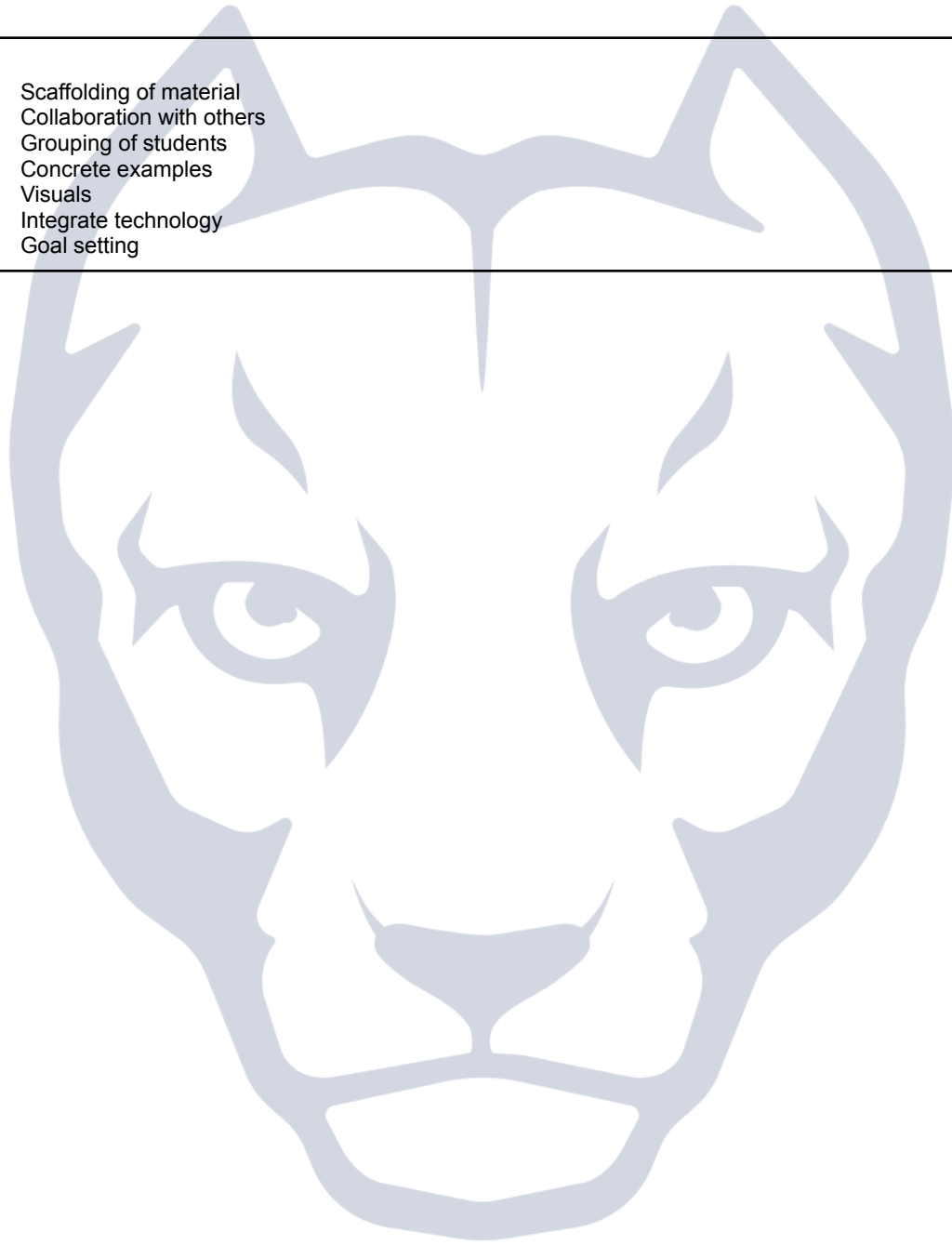
Content Area	Science	Grade	6
Course Name	Physical Science		

Unit / Concepts	Unit 1: Chemistry of Materials	
Big Ideas	<ul style="list-style-type: none"> ● Investigating Elements ● Physical and chemical properties of materials ● Determining Density ● Modeling Molecules ● Energy and Particle movement ● All materials are made from a limited number of elements. ● Substances have specific structures based on what elements they are made of and how those elements bond together. ● Substances mostly exist in one of three different states—solid, liquid, or gas. ● Some large molecules and structures are made of small, repeating subunits (monomers). 	
Key Learning Objectives & Skills	<ul style="list-style-type: none"> ● Analyze data from labs ● Model systems ● Analyze models ● Identify functions ● Identify key vocabulary ● Formulate answers to analysis questions ● Formulate predictions ● Differentiate elements ● Analyze energy and particle movement ● Measure density ● Analyze the format of the periodic table ● Classify elements from the periodic table 	
Essential Questions	<ul style="list-style-type: none"> ● Why Do Materials Have Unique Properties? ● How can scientists use physical properties to identify elements? ● How do the properties of materials determine their uses? ● How can you use the mass and volume of an object to calculate its density? ● How can information be evaluated for bias? ● How do atoms combine to form molecules? ● How do atoms combine to form molecules? ● How do the structures of particles in substances vary? ● How does the particle structure of matter explain the different properties of solids, liquids, and gases? ● What happens when gas particles are heated or cooled? ● What happens to the particles and temperature of a substance as it changes state? ● How are plastics engineered for various uses? ● How do the structures of plastics relate to their varied properties? 	

	<ul style="list-style-type: none"> What are the benefits and trade-offs of different plastics? 					
Dates (estimates only)	Smart Objectives	Instructional Strategies and Activities	PA CC Standards	Keystone or PSSA Anchors	Keystone / PSSA Eligible Content	Vocabulary
(7 weeks)	<p>Investigating Elements</p> <ul style="list-style-type: none"> Recognize that the atom is the basic building block for all matter. How scientists use models to describe the natural world. Identify the differences among elements, compounds, and mixtures. Describe repeating structural patterns in nature. Explain materials are characterized by having a specific amount of mass in each volume (density). Describe the relationship between mass and volume as density. Use ratios to describe change. Describe use of tools to accurately and safely measure matter. <p>Determining Density</p> <ul style="list-style-type: none"> List which materials are best for making a single-use drink container. Summarize how scientists use physical properties to identify elements. Infer how the properties of materials determine their uses. List the mass and volume of an object to calculate its density. Formulate how atoms combine to form molecules. <p>Energy and Particle movement</p>	<p>Investigating Elements</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 Identify items on the periodic table Identifying symbols on the periodic table Periodic table task cards <p>Determining Density</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 Calculate density Identify density formula Use algebra skills to rearrange density formula Webquest to simulate density in different <p>Energy and Particle movement</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 	3.3.6.A1 3.4.6.E7 3.2.6.A1 3.2.6.A2 3.2.6.A3 3.2.6.A4 3.2.6.A5 3.2.6.A6 3.2.6.B1 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	S8.A.2.1 S8.A.2.2	S8.A.2.1.4 S8.A.2.2.1 S8.A.2.2.2 S8.A.2.2.3	Atom Bias Chemical property compound Density element extended structure kinetic energy life cycle mass Material model Molecule physical property polymer scale state thermal energy volume

	<ul style="list-style-type: none"> Define the different properties of solids, liquids, and gases. Interpret what happens when gas particles are heated or cooled. Summarize what happens to the particles and temperature of a substance as it changes state. 	<ul style="list-style-type: none"> Answering analysis questions based on lab activities Modeling particle movement Model gas particles and compare them to other particles Change the temperature of substances and observe particle changes 				
Resources	Materials, texts, videos, internet sites, software, human to support instruction <ul style="list-style-type: none"> SEPUP-Lab aids textbook <ul style="list-style-type: none"> Lab activities Videos Materials to model content 					
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 Project 					
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					

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| | <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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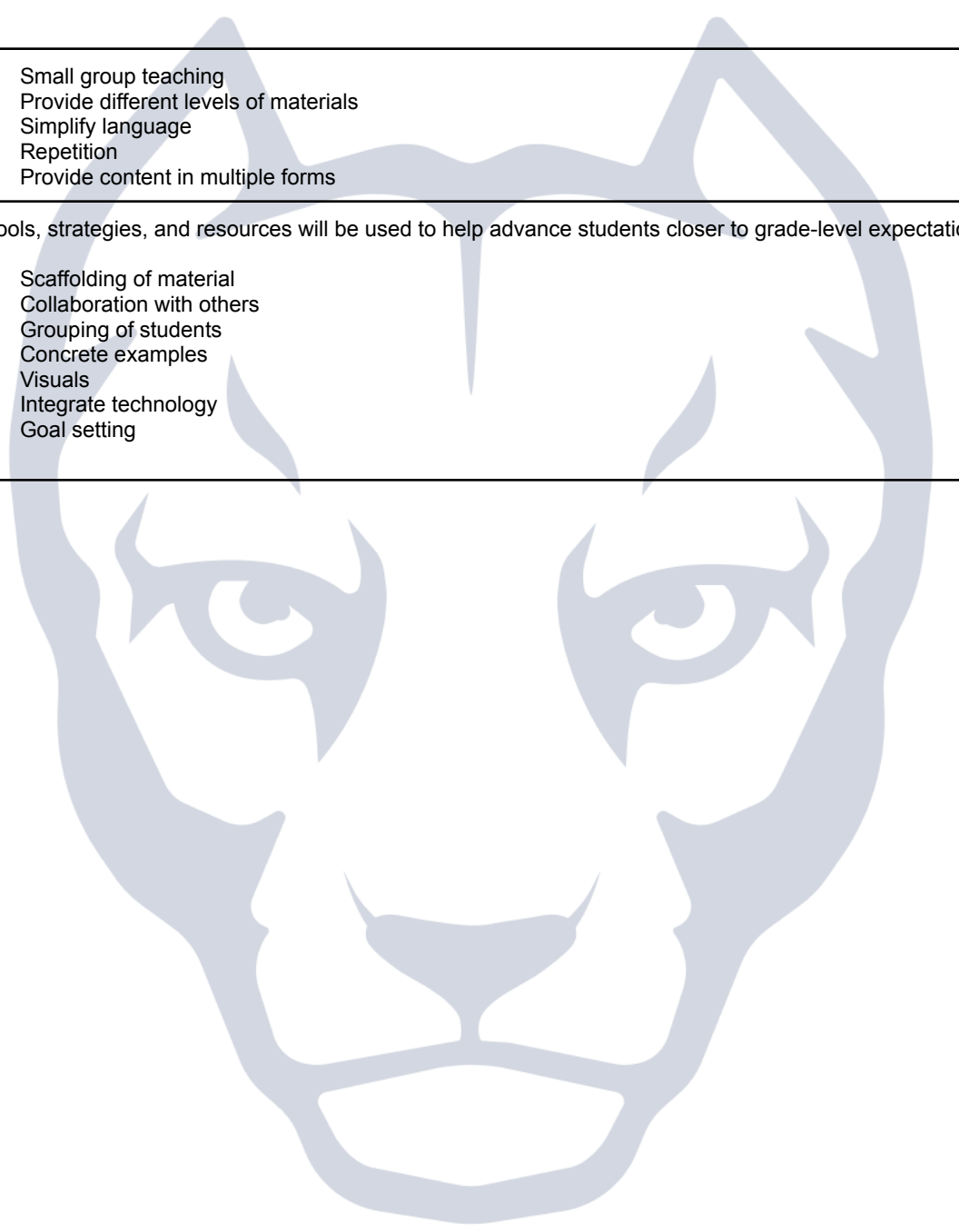
IAA Curriculum

Content Area	Science	Grade	6
Course Name	Physical Science		

Unit / Concepts	Unit 2: Chemical reactions					
Big Ideas	<p>Themes and connections between the Standards that help students to see the purpose and relevance of content.</p> <ul style="list-style-type: none"> • Products and Waste from Chemical Reactions • Evidence of Chemical Reactions • Rearrangement of Atoms in Chemical Reactions • Conservation of Atoms and Mass in Chemical Reactions • Engineering Design • Scientists and engineers use chemical reactions to make a variety of products • Every substance has characteristic properties that can be used to identify that substance • Chemical changes at a scale you can observe are caused by changes at the scale of atoms and molecules • Atoms are conserved in a chemical reaction • Chemical engineers design products that use chemical processes to solve a variety of problems 					
Key Learning Objectives & Skills	<ul style="list-style-type: none"> • Analyze data from labs • Model systems • Analyze models • Identify functions • Identify key vocabulary • Formulate answers to analysis questions • Formulate predictions • Investigating engineering design • Assess evidence of chemical reactions • Use the engineering design 					
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"> • How are chemical processes used to produce circuit boards? • How can you tell if a chemical change has occurred? • What is the difference between a physical and a chemical change? • What happens to atoms and molecules during a chemical reaction? • Is the change observed a physical change or a chemical change (reaction)? • What happens to the mass of the reactants during a chemical reaction? • Why is mass always conserved in chemical reactions? • How can we improve the design of a chemical battery? 					
Dates (estimates only)	Smart Objectives	Instructional Strategies and Activities	PA CC Standards	Keystone or PSSA Anchors	Keystone / PSSA Eligible	Vocabulary

					Content	
(6 weeks)	What do students have to do related to the content?	Used to develop the skills and knowledge				What is the essential vocabulary of the unit or concept?
	<p>Evidence of Chemical Reactions</p> <ul style="list-style-type: none"> Define reactants and products of simple chemical reactions. Distinguish how a system changes over time, and describe variables that might cause the change. Identify differences between chemical and physical changes in matter. Describe and use characteristic physical or chemical properties to distinguish one substance from another Summarize how engineers design and test a prototype hand warmer. Distinguish which metal is best at reclaiming copper from the used copper chloride solution. Summarize how atoms are conserved in a chemical reaction. <p>Rearrangement of Atoms in Chemical Reactions</p> <ul style="list-style-type: none"> Infer what thermal energy has to do with chemical reactions. Formulate graphs based on their lab data. Make observations using real world materials. Infer if a chemical reaction has occurred. Summarize how chemical processes are used to 	<p>Evidence of Chemical Reactions</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 Model simple chemical reactions Reaction task cards Categorizing types of reactions Observing reaction clues <p>Rearrangement of Atoms in Chemical Reactions</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 Model the change in atoms during reactions Discuss the inability of reversing chemical reactions Model the inability of reversing chemical reactions 	3.2.6.B3 3.2.6.A1 3.2.6.A2 3.2.6.A3 3.2.6.A4 3.2.6.A5 3.2.6.A6 3.2.6.B1 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	S8.A.1.3 S8.C.1.1 S8.A.2.2	S8.A.1.3.3 S8.C.1.1.1 S8.C.1.1.2 S8.C.1.1.3 S8.A.2.2.1 S8.A.2.2.2 S8.A.2.2.3	atom chemical change chemical reaction compound conserved, conservation constraint Criteria, Criterion Element engineer engineering design process law of conservation of mass mass Molecule physical change precipitate Product prototype Reactant thermal energy

	<p>produce circuit boards.</p> <ul style="list-style-type: none"> Infer what happens to atoms and molecules during a chemical reaction. <p>Chemical Reactions and Mass</p> <ul style="list-style-type: none"> Distinguish between a physical change or a chemical change (reaction). Summarize what happens to the mass of the reactants during a chemical reaction. Identify how mass is always conserved in chemical reactions. Infer how we can improve the design of a chemical battery. 					
Resources	<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 					
Formative Assessments	<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 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 					



	<ul style="list-style-type: none">● 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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Content Area	Science	Grade	6
Course Name	Physical Science		

Unit/Concepts	Unit 3: Body Systems					
Big Ideas	<p>Themes and connections between the Standards that help students to see the purpose and relevance of content</p> <ul style="list-style-type: none"> Describe and identify each human body system Identify how the systems work together The human body has many organs which are structures composed of one or more tissues Body system functions Body system interactions Medicines and body systems 					
Key Learning Objectives & Skills	<ul style="list-style-type: none"> Analyze data from labs Model systems Analyze models Identify functions Identify key vocabulary Formulate answers to analysis questions Formulate predictions 					
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"> How do scientists investigate and gather evidence about the human body? What do you know about structures, such as organs, in the human body? How do structures in the human body interact to perform a specific function? How does your digestive system function and interact with other systems in your body? How does food provide energy and matter for organisms? What observations can tell you about how an organism's nervous system will respond to stimuli? How does your brain gather and synthesize information from sensory receptors in your skin? How does your body gather and synthesize information to respond to stimuli 					
Dates (estimates only)	Smart Objectives	Instructional Strategies and Activities	PA CC Standards	Keystone or PSSA Anchors	Keystone / PSSA Eligible Content	Vocabulary
(4 weeks)	<p>What do students have to do related to the content?</p> <p>Body Systems</p> <ul style="list-style-type: none"> Describe and identify each human body system Identify the human body 	<p>Used to develop the skills and knowledge</p> <p>Body Systems</p> <ul style="list-style-type: none"> Lab based learning Modeling systems Reading scientific procedures 	<p>CC.3.6.6-8.A</p> <p>CC.3.6.6-8.C</p> <p>CC.3.6.6-8.E</p> <p>CC.3.6.6-8.H</p> <p>CC.3.5.6-8.A</p> <p>CC.3.5.6-8.C</p>	<p>S8.B.1.1</p> <p>S8.A.1.2</p> <p>S8.A.1.3</p>	<p>S8.B.1.1.1</p> <p>S8.B.1.1.2</p> <p>S8.B.1.1.3</p> <p>S8.B.1.1.4</p> <p>S8.A.1.1.3</p>	<p>What is the essential vocabulary of the unit or concept?</p> <p>Carbohydrate</p>

	<p>organs and the structures composed of one or more tissues</p> <ul style="list-style-type: none"> Classify systems and organ <p>Body System Functions</p> <ul style="list-style-type: none"> Identify the functions Investigate the functions of each system <p>Body System Interactions</p> <ul style="list-style-type: none"> Identify how the systems work together Make observations about systems working together Compare how different systems interact with one another 	<ul style="list-style-type: none"> Keeping a science notebook Constructing a concept map Developing communication skills Answering analysis questions based on lab activities Label each body system Differentiate systems <p>Body Systems Functions</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 Assess effects of systems not functioning properly <p>Body System Interactions</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 Discuss examples of system interactions Debate necessary interactions for bodily functions 	<p>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.3.5.6-8.G. 3.1.6.A4 3.1.6.A6 3.1.6.A8 3.1.6.A1</p>			<p>Circulatory system Clinical trial Digestion Digestive system Evidence Function Nervous system Neuron Organ Protein Respiratory system Stimuli Structure</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 					

	<ul style="list-style-type: none"> • Quiz • Do now • Discussion • Stations • 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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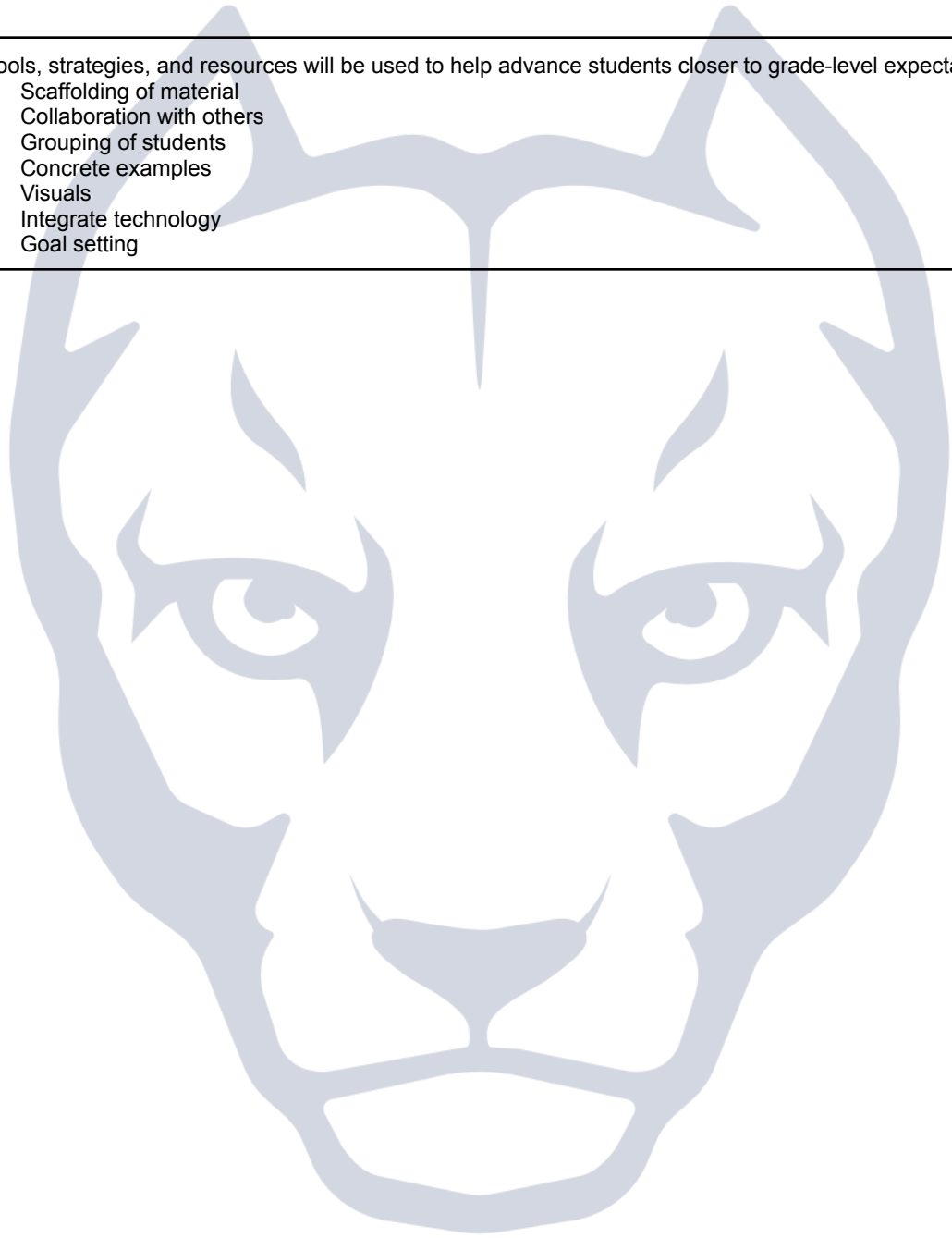
Content Area	Science	Grade	6
Course Name	Physical Science		

Unit/ Concepts	Unit 4: Ecology					
Big Ideas	<ul style="list-style-type: none"> • Resource availability • Population ecology • Cycling of matter • Flow of energy • Interactions in ecosystems • Disruptions • Design solutions • Ecology is the study of organisms and their interactions with other organisms and the physical environment • Ecologists use many methods to determine population size • All ecosystems have producers that use energy from the sun and matter in the form of water and carbon dioxide to make their own food • Energy cannot be recycled in an ecosystem • Biotic interactions follow predictable patterns across all ecosystems • Disruptions to ecosystems happen naturally due to small and large events • Scientists and engineers are working to design solutions to ecological problems 					
Key Learning Objectives & Skills	<ul style="list-style-type: none"> • Analyze data from labs • Model flow of energy • Analyze models • Identify structures • Identify key vocabulary • Formulate answers to analysis questions • Formulate predictions of 					
Essential Understandings	<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"> • What effect can an introduced species have on an environment? • What, if anything, can or should be done to control introduced species? • What patterns do you observe when you investigate your own environment, and what might be causing these patterns? • How do the habitat requirements of individual organisms determine where a species will be found in nature? • How do matter and energy move in an ecosystem? • How does the ability of food affect a population? • How do interactions with living or nonliving factors in ecosystems affect population? 					
Dates (estimates only)	Smart Objectives	Instructional Strategies and Activities	PA CC Standards	Keystone or PSSA Anchors	Keystone / PSSA Eligible Content	Vocabulary

<p>(4 weeks)</p>	<p>What do students have to do related to the content?</p> <p>Population ecology</p> <ul style="list-style-type: none"> Identify 3 methods to determine population size Graph population size over time periods Scatter plot population size in different locations on earth <p>Cycling of matter</p> <ul style="list-style-type: none"> Evaluate the role of producers in the ecosystem Formulate a matter web Create a model of cycling matter <p>Flow of energy</p> <ul style="list-style-type: none"> Compare the different of recycling energy and matter in an ecosystem Model a food web with given organisms in an ecosystem Connect the web and how energy is transferred <p>Interactions in ecosystems</p> <ul style="list-style-type: none"> Describe patterns of biotic interactions in ecosystems Identify 5 disruptions in an ecosystem due to a small or large event Describe actions that scientists and engineers are making to solve ecological problem Formulate a model and 3 paragraph paper of a solution to one ecological problem 	<p>Used to develop the skills and knowledgeLab based learning</p> <p>Population ecology</p> <ul style="list-style-type: none"> Modeling systems Reading scientific procedures Keeping a science notebook Constructing a concept map Developing communication skills Answering analysis questions based on lab activities Scatter plot on paper and excel Make 3 models of population size Analyze population data devices <p>Cycling of matter</p> <ul style="list-style-type: none"> Modeling systems Reading scientific procedures Keeping a science notebook Constructing a concept map Developing communication skills Answering analysis questions based on lab activities Identify roles of organisms in the ecosystem Analyzing and creating matter and food webs <p>Flow of energy</p> <ul style="list-style-type: none"> Modeling systems Reading scientific procedures Keeping a science notebook Constructing a concept map Developing communication skills Answering analysis questions based on lab activities Analyze and create food webs Cite examples of recycling energy Discuss how energy is transferred in the environment <p>Interactions in ecosystems</p>	<p>3.1.6.A2 3.1.6.A4 3.1.6.A5 3.1.6.A6 3.1.6.A9 3.1.6.C1 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</p>	<p>S8.A.3.1 S8.A.3.3 S8.B.1.1 S8.B.2.1</p>	<p>S8.B.1.1.1 S8.B.1.1.2 S8.B.1.1.3 S8.B.1.1.4 S8.A.3.3.1 S8.A.3.3.2 S8.A.3.2.3 S8.A.3.2.2 S8.A.3.2.1</p>	<p>What is the essential vocabulary of the unit or concept?</p> <p>Abiotic component Biotic component Competitor Constraint Criteria Disruption Ecology Ecosystem Energy Food web Interaction Matter Mutualism Parasitism Population Predator Prey Resource Stability</p>
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		<ul style="list-style-type: none"> • Modeling systems • Reading scientific procedures • Keeping a science notebook • Constructing a concept map • Developing communication skills • Answering analysis questions based on lab activities • Discuss differences of biotic and abiotic • Cite examples of disruptions in an ecosystem • Build a model to solve one ecological problem 				
Resources	Materials, texts, videos, internet sites, software, human to support instruction <ul style="list-style-type: none"> • SEPUP-Lab aids textbook <ul style="list-style-type: none"> ◦ Lab activities ◦ Videos • Materials to model content 					
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 • Project 					
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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Content Area	Science	Grade	6
Course Name	Physical Science		

Unit/ Concepts	Unit 5: Land, Water, and Human Interactions					
Big Ideas	<ul style="list-style-type: none"> • Human Impact of Building • Nutrient Pollution • The Water Cycle • Erosion and Deposition • Humans have impacted the environment in many ways • Land is eroded by rainwater when the water picks up sediments as it flows • Sunlight and gravity drive the water cycle, where water moves around the planet in a complex but predictable manner • The surfaces of rocks and soil are weathered by wind, water, or ice 					
Key Learning Objectives & Skills	<ul style="list-style-type: none"> • Analyze data from labs • Model cycles • Analyze models • Identify functions • Identify key vocabulary • Formulate answers to analysis questions • Formulate predictions • Calculate formulas • Create technology 					
Essential Understandings	<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"> • What is the human impact of constructing buildings? • What can water-quality indicators show? • How can organisms living in a stream indicate water quality? • Can using fertilizers have harmful effects on the environment? • How does nutrient runoff affect the environment? • How does moving water affect the areas through which it flows? • How does water move around the planet? • How can we mitigate modern society's harmful effects on earth's water? • How does a topographic map show landforms? • How can we reduce the effects of ocean waves on coastal areas? 					
Dates (estimates only)	Smart Objectives	Instructional Strategies and Activities	PA CC Standards	Keystone or PSSA Anchors	Keystone / PSSA Eligible Content	Vocabulary
	What do students have to do related	Used to develop the skills and	3.3.6.A5	S8.A.3.1	S.7.A.1.1.1	What is the

<p>(4 weeks)</p>	<p>to the content?</p> <p>Human Impact of Building</p> <ul style="list-style-type: none"> Identify the ways that humans have impacted the environment Debate changes that could be made by humans to lessen the impact on the environment Develop an argument about lessening the human impact on the environment <p>Nutrient Pollution</p> <ul style="list-style-type: none"> Identify the ways that land and water interact with one another Formulate a 3 paragraph paper citing evidence on nutrient pollution Debate on the effects of nutrient pollution <p>The Water Cycle</p> <ul style="list-style-type: none"> Analyze how sunlight, gravity, and water interact with one another in the water cycle Create a model of the water cycle with each process labeled Analyze each process, and its effects, of the water cycle <p>Erosion and Deposition</p> <ul style="list-style-type: none"> Identify ways that earth materials are weathered Observe evidence of erosion that has occurred over time Observe deposition in different locations Model effects of erosion and deposition 	<p>knowledge</p> <p>Human Impact of Building</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 Debate impacts Observe human impacts <p>Nutrient Pollution</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 Writing process review Research nutrient pollution in different locations Observe nutrient pollution <p>The Water Cycle</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 Model the water cycle Observe phases of the water cycle <p>Erosion and Deposition</p> <ul style="list-style-type: none"> Lab based learning Modeling systems Reading scientific procedures Keeping a science notebook Constructing a concept map 	<p>3.3.6.A6 3.4.6.B2 3.4.6.B3 3.4.6.B4 3.4.6.C1 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</p>	<p>S8.A.3.3 S8.B.1.1 S8.B.2.1</p>	<p>S.7.A.1.1.2 S.7.A.1.3.2 S.7.A.2.1.1 S.7.A.2.1.2 S.7.A.2.2.1 S.7.A.2.2.2 S.7.A.2.2.3 S.7.A.3.1.3 S.7.A.3.3.1</p>	<p>essential vocabulary of the unit or concept?</p> <p>Casual relationship Constraint Correlation Criterion Dead zone Delta Deposition Erosion Evidence Geologic processes Human impact Indicators Mitigate Monitor Nutrients Sediments Trade-off Topographic map Topography Water cycle Water quality Weathering</p>
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		<ul style="list-style-type: none"> • Developing communication skills • Answering analysis questions based on lab activities • Model erosion and deposition • Observe evidence of erosion and deposition 				
Resources	Materials, texts, videos, internet sites, software, human to support instruction <ul style="list-style-type: none"> • SEPUP-Lab aids textbook <ul style="list-style-type: none"> ○ Lab activities ○ Videos • Materials to model content 					
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 • Project 					
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 					

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| | <ul style="list-style-type: none">• Visuals• Integrate technology• Goal setting |
|--|---|

