



Cocalico School District
Course Curriculum Details
Course: Science - 04

Area: Life Science

Big Idea: S4.B.1 Structure and Function of Organisms (Reference: 3.3.4.A-B, 4.3.4.A, 4.3.4.C, 4.6.4.A)

PA/Common Core Standards	Assessment Anchors/ Eligible Content	Key Vocabulary	Learning Activities	Materials/ Resources/ Technology Tools	Common Summative Assessments/ Targeted Outcomes
Objective: 1: S4.B.1.1 Identify and describe similarities and differences between living things and their life processes.					
<ul style="list-style-type: none"> • S4.B.1.1.1 • S4.B.1.1.2 • S4.B.1.1.3 • S4.B.1.1.4 • S4.B.1.1.5 	<ul style="list-style-type: none"> • S4.B.1.1.1: Identify life processes of living things (e.g., growth, digestion, respiration). • S4.B.1.1.2: Compare similar functions of external characteristics of organisms (e.g., anatomical characteristics: appendages, type of covering, body segments). • S4.B.1.1.3: Describe basic needs of plants and animals (e.g., air, water, food). • S4.B.1.1.4: Describe how different parts of a living thing work together to provide what the organism needs (e.g., parts of plants: roots, stems, leaves). • S4.B.1.1.5: Describe the life cycles of different organisms (e.g., moth, grasshopper, frog, seed-producing plant). 	<ul style="list-style-type: none"> • Ch. 2: life cycle, metamorphosis, direct development, photosynthesis • Ch. 3: adaptation, natural selection, basic needs, instinct, hibernation, migration, learned behavior • Ch. 1: organism, bacteria, vascular, nonvascular, fungi, vertebrates, invertebrates 	<ul style="list-style-type: none"> • Sprouting Seeds Investigate, Spores on Leaves Insta-lab, Adult Look Insta-Lab • All Thumbs Insta-Lab, Train a fish Investigate, Learn How Insta-Lab, How Animals Meet Basic Needs Focus Skill Graphic Organizer • Eating Like a Bird Investigate, Main Idea of Basic Needs Focus Skill Activity with Graphic Organizer • Make a Model Cell, Plant Stem Investigation, and Backbones Investigates • Animal Life Cycles Investigate, Compare and Contrast Life Cycle Focus Skill Diagram Activity 	<ul style="list-style-type: none"> • radish seeds, water, pie tins, cup, sponges, cardboard box, hand lens, fern frond, paper, colored pencils • masking tape, goldfish, goldfish food, paper, marker, chart paper, overhead, student paper • chopsticks, pliers, clothespins, spoon, forceps, plastic worms, cooked spaghetti and rice, raisins, birdseed, peanuts, water, paper plates, chart paper, overhead, student paper • marker, cups, liquid gelatin, plastic knife, spoon, paper plate, malted milk-balls, raisins, small jelly beans, carnation, containers, food coloring, clothespin, paper towels, hand lens, water, newspaper, ruler, clay, straw • pictures of life cycles, paper, pencil, scissors, paper bags, chart paper, overhead, student paper 	<ul style="list-style-type: none"> • HSP Assessments



Cocalico School District
Course Curriculum Details
Course: Science - 04

Area: Life Science

Big Idea: S4.B.2 Continuity of Life (Reference: 3.3.4.C, 4.7.4.A-C)

PA/Common Core Standards	Assessment Anchors/ Eligible Content	Key Vocabulary	Learning Activities	Materials/ Resources/ Technology Tools	Common Summative Assessments/ Targeted Outcomes
Objective: 1: S4.B.2.1 Identify and explain how adaptations help organisms to survive.					
<ul style="list-style-type: none"> S4.B.2.1.1 S4.B.2.1.2 	<ul style="list-style-type: none"> S4.B.2.1.1 Identify characteristics for plant and animal survival in different environments (e.g., wetland, tundra, desert, prairie, deep ocean, forest). S4.B.2.1.2 Explain how specific adaptations can help a living organism survive (e.g., protective coloration, mimicry, leaf sizes and shapes, ability to catch or retain water) 	<ul style="list-style-type: none"> Ch.7: horizon, humus, bedrock, sand, clay Ch. 3: adaptation, basic needs, instinct, learned behavior 	<ul style="list-style-type: none"> Testing Soil Investigation All Thumbs Train a Fish Learn How Insta-Lab Animal Basic Needs 	<ul style="list-style-type: none"> Testing Soil Investigation - measuring scoops, sand, large jars with wide mouths, lids, potting soil, water, 250 mL measuring cups All Thumbs - masking tape Animal Basic Needs (chart paper, overhead, or student paper) Train a Fish - goldfish, goldfish food Learn How Insta-Lab - paper, marker Animal Basic Needs - chart paper, overhead, or student paper 	<ul style="list-style-type: none"> HSP Assessments
Objective: 2: S4.B.2.2 Identify that characteristics are inherited and, thus, offspring closely resemble their parents.					
<ul style="list-style-type: none"> S4.B.2.2.1 	<ul style="list-style-type: none"> S4.B.2.2.1: Identify physical characteristics (e.g., height, hair color, eye color, attached earlobes, ability to roll tongue) that appear in both parents and could be passed on to offspring. 	<ul style="list-style-type: none"> trait heredity gene life cycle direct development 			<ul style="list-style-type: none"> HSP Assessments



Cocalico School District
Course Curriculum Details
Course: Science - 04

Area: Life Science

Big Idea: S4.B.3. Ecological Behavior and Systems (Reference: 3.1.4.E, 3.8.4.C, 4.2.4.C, 4.3.4.B-C, 4.4.4.B, 4.5.4.C, 4.6.4.C, 4.6.4.A)

PA/Common Core Standards	Assessment Anchors/ Eligible Content	Key Vocabulary	Learning Activities	Materials/ Resources/ Technology Tools	Common Summative Assessments/ Targeted Outcomes
Objective: 1: S4.B.3.2 Describe, explain, and predict change in natural or human-made systems and the possible effects of those changes on the environment.					
<ul style="list-style-type: none"> S4.B.3.1.2 S4.B.3.2.1 	<ul style="list-style-type: none"> S4.B.3.1.2 Describe interactions between living and nonliving components (e. g. plants – water, soil, sunlight, carbon dioxide, temperature; animals – food, water, shelter, oxygen, temperature) of a local ecosystem. S4.B.3.2.1 Describe what happens to a living thing when its habitat is changed. 	<ul style="list-style-type: none"> Ch. 2: life cycle, photosynthesis Ch 7: humus, horizon, sand, clay, soil Ch 3: extinction Ch 8: fossil, fossil record 	<ul style="list-style-type: none"> Shake Things Up Investigate Observe Weathering Lab Fossil Hunt Lab Fossil Record Sequencing Focus Activity 	<ul style="list-style-type: none"> Shake Things Up Investigate - rocks, plastic containers with lids, chalk Observe Weathering Lab - rock salt, bricks Fossil Hunt Lab - cup, soil, hand lens Fossil Record Sequencing Focus Activity - data recording device or paper 	<ul style="list-style-type: none"> HSP Assessments
Objective: 2: S4.B.3.1 Identify and describe living and nonliving things in the environment and their interaction.					
					<ul style="list-style-type: none"> HSP Assessments



Cocalico School District
Course Curriculum Details
Course: Science - 04

Area: Physical Science

Big Idea: S4.C.1 Structure, Properties and Interaction of Matter and Energy (Reference: 3.2.4.B, 3.4.4.A)

PA/Common Core Standards	Assessment Anchors/ Eligible Content	Key Vocabulary	Learning Activities	Materials/ Resources/ Technology Tools	Common Summative Assessments/ Targeted Outcomes
Objective: 1: S4.C.1.1 Describe observable physical properties of matter.					
<ul style="list-style-type: none"> S4.C.1.1.1 S4.C.1.1.2 	<ul style="list-style-type: none"> S4.C.1.1.1: Use physical properties [(e.g., mass, shape, size, volume, color, texture, magnetism, state (i.e., solid, liquid, or gas), conductivity (i.e., electrical or heat))] to describe matter. S4.C.1.1.2: Categorize/group objects using physical characteristics. 	<ul style="list-style-type: none"> Ch. 7: mineral, rock, igneous/sedimentary/metamorphic rocks Ch. 11: matter, mass, volume, density, state of matter, solid, liquid, gas Ch. 1: vascular, nonvascular, vertebrates, invertebrates 	<ul style="list-style-type: none"> Making Sedimentary Rock Investigation Making Layered Rock Lab Melt/Boil/Evaporate Investigation What Kinds of Animals? Insta-Lab Rock Type Focus Skill Graphic Organizer Activity Measuring Densities of Liquids Which Solids Will Dissolve? Investigation 	<ul style="list-style-type: none"> Making Sedimentary Rock Investigation - plastic cups, sand, measuring cups, glue, water, stirrer, pushpin, scissors, large plastic cup, hand lens Making Layered Rock Lab - different colored clay Melt/Boil/Evaporate Investigation - safety goggles, ice cubes, pan, hot plate, pot holders, graduate What Kinds of Animals? Insta-Lab - hands lens, science journals Rock Type Focus Skill Graphic Organizer Activity - student journals Measuring Densities of Liquids - graduate, balance, water, corn syrup, vegetable oil Which Solids Will Dissolve? Investigation - water, teaspoon, sand, clear containers, stirrer, salt, sugar, baking soda 	<ul style="list-style-type: none"> HSP Assessments



Cocalico School District
Course Curriculum Details
Course: Science - 04

Area: Physical Science

Big Idea: S4.C.2 Forms, Sources, Conversion, and Transfer of Energy (Reference: 3.4.4.B-C)

PA/Common Core Standards	Assessment Anchors/ Eligible Content	Key Vocabulary	Learning Activities	Materials/ Resources/ Technology Tools	Common Summative Assessments/ Targeted Outcomes	
<p>Objective: 1: S4.C.2.1 Recognize basic energy types and sources, or describe how energy can be changed from one form to another.</p>	<ul style="list-style-type: none"> • S4.C.2.1.1 • S4.C.2.1.2 • S4.C.2.1.3 • S4.C.2.1.4 	<ul style="list-style-type: none"> • S4.C.2.1.1: Identify energy forms, energy transfer, and energy examples (e.g., light, heat, electrical). • S4.C.2.1.2 : Describe the flow of energy through an object or system (e.g., feeling radiant heat from a light bulb, eating food to get energy, using a battery to light a bulb or run a fan). • S4.C.2.1.3: Recognize or illustrate simple direct current series and parallel circuits composed of batteries, light bulbs (or other common loads), wire, and on/off- switches. • S4.C.2.1.4: Identify characteristics of sound (e.g., pitch, loudness, reflection). 	<ul style="list-style-type: none"> • Ch. 15: potential energy, kinetic energy, geothermal energy, solar energy, chemical energy, mechanical energy, hydroelectric power, static electricity, current electricity, series circuit, parallel circuit, conductor, insulator, magnet, magnetic pole, magnetic field, electromagnet, generator, electric motor • Ch. 13: vibration, pitch, intensity, wavelength, frequency, amplitude, reflection, absorption, transmission 	<ul style="list-style-type: none"> • The Ups and Downs of Energy Investigation • Light a Bulb Experiment • Can Electricity Make a Magnet? Investigation • Needle Dance Insta-Lab • Feel the Vibes Investigation • Hands-On Vibrations Insta-Lab • Feel the Vibes II Experiment 	<ul style="list-style-type: none"> • The Ups and Downs of Energy Investigation - lightweight poster board, ballpoint pens, masking tape, books, marbles, rulers • Light a Bulb Experiment - D-cell battery, insulated electric wire, flashlight bulbs, masking tape • Can Electricity Make a Magnet? Investigation - bar magnet, small compass, cardboard, tape, D-cell battery, insulated wire with stripped ends • Needle Dance Insta-Lab - compass, bar magnet • Feel the Vibes Investigation - plastic ruler • Feel the Vibes II Experiment - safety goggles, pencil, foam cup, thin rubber bands, paper clips, ruler, tape, thick rubber bands 	<ul style="list-style-type: none"> • HSP Assessments



Cocalico School District
Course Curriculum Details
Course: Science - 04

Area: Physical Science

Big Idea: S4.C.3 Principles of Motion and Force (Reference: 3.2.4.B, 3.4.4.C, 3.6.4.C)

PA/Common Core Standards	Assessment Anchors/ Eligible Content	Key Vocabulary	Learning Activities	Materials/ Resources/ Technology Tools	Common Summative Assessments/ Targeted Outcomes
<p>Objective: 1: S4.C.3.1 Identify and describe different types of force and motion, resulting from these forces, or the effect of the interaction between force and motion.</p>					
<ul style="list-style-type: none"> S4.C.3.1.1 S4.C.3.1.2 S4.C.3.1.3 	<ul style="list-style-type: none"> S4.C.3.1.1 Describe changes in motion caused by forces (e.g., magnetic, pushes or pulls, gravity, friction). S4.C.3.1.2 Compare the relative movement of objects or describe types of motion that are evident (e.g., bouncing ball, moving in a straight line, back and forth, merry-go-round). S4.C.3.1.3 Describe the position of an object by locating it relative to another object or a stationary background (e.g., geographic direction, left, up) 	<ul style="list-style-type: none"> Ch. 15: magnet, magnetic pole, magnetic field, electromagnet Ch. 16: position, motion, speed, velocity, acceleration, force, inertia, gravity, gravitation, weight, friction 	<ul style="list-style-type: none"> Can Electricity Make A Magnet? Investigation Walk This Way Investigation Which Way the Ball Blows Experiment Making Circular Motion Experiment Get the Feel of Friction Lab Fast Walk/Slow Walk Lab Spring-Scale Follow the Leader Insta-lab 	<ul style="list-style-type: none"> Can Electricity Make A Magnet? Investigation - bar magnet, small compass, cardboard, tape, batteries, insulated wire Walk This Way Investigation - paper, pencil, stopwatch Which Way the Ball Blows Experiment - ruler, masking tape, tennis ball, straw Making Circular Motion Experiment - safety goggles, rubber stopper, tape, string, cardboard tube Get the Feel of Friction Lab - hand lotion, baby oil, latex gloves Fast Walk/Slow Walk Lab - stopwatch, measuring tape Spring-Scale Follow the Leader Insta-lab - spring scale box 	<ul style="list-style-type: none"> HSP Assessments



Cocalico School District
Course Curriculum Details
Course: Science - 04

Area: Physical Science

Big Idea: S4.D.1 Earth Features and Processes that Change Earth and Its Resources (Reference: 3.5.4.A-B, 3.5.4.D, 4.1.4.A, 4.1.4.D-E, 4.2.4.B, 4.8.4.D)

PA/Common Core Standards	Assessment Anchors/ Eligible Content	Key Vocabulary	Learning Activities	Materials/ Resources/ Technology Tools	Common Summative Assessments/ Targeted Outcomes
Objective: 1: S4.D.1.1 Describe basic landforms in Pennsylvania.					
<ul style="list-style-type: none"> • S4.D.1.1.1 • S4.D.1.1.2 • S4.D.1.1.3 	<ul style="list-style-type: none"> • S4.D.1.1.1 Describe how prominent Earth features in Pennsylvania (e.g., mountains, valleys, caves, sinkholes, lakes, rivers) were formed. • S4.D.1.1.2 Identify various Earth structures (e.g., mountains, watersheds, peninsulas, lakes, rivers, valleys) through the use of models. • S4.D.1.1.3 Describe the composition of soil as weathered rock and decomposed organic remains. 	<ul style="list-style-type: none"> • Ch. 8: landform, mountain, topography, volcano, earthquake, deposition, glaciers, hills, valleys, canyons, plains, plateaus, delta, dune, island • Ch. 7: weathering, erosion, humus, horizon, bedrock, sand, clay 	<ul style="list-style-type: none"> • Make a Landform Model Investigate • Volcanic Eruptions Experiment • How Mountains Grow Insta-Lab • Testing Soil Experiment • How Much Water? 	<ul style="list-style-type: none"> • Make a Landform Model Investigate - paper, pencil, clay, heavy cardboard • Volcanic Eruptions Experiment - 2-liter bottle, modeling clay, pie plates, funnels, puffed rice cereal, air pump, safety goggles • How Mountains Grow Insta-Lab - table • Testing Soil Experiment - measuring scoop, large jars, lids, potting soil, measuring cups, water • How Much Water? - dropper, water, spoon, soil 	<ul style="list-style-type: none"> • HSP Assessments



Cocalico School District
Course Curriculum Details
Course: Science - 04

Area: Earth Science

Big Idea: S4.A.1 Reasoning and Analysis (Reference: 3.1.4.C, 3.1.4.E, 3.2.4.A, 3.2.4.C, 3.8.4.C, 4.7.4.B, 4.8.4.A, 4.8.4.C)

PA/Common Core Standards	Assessment Anchors/ Eligible Content	Key Vocabulary	Learning Activities	Materials/ Resources/ Technology Tools	Common Summative Assessments/ Targeted Outcomes
<p>Objective: 1: S4.A.1.1 Identify and explain the application of scientific, environmental, or technological knowledge to possible solutions to problems.</p> <ul style="list-style-type: none"> • S4.A.1.1.1 • S4.A.1.1.2 	<ul style="list-style-type: none"> • S4.A.1.1.1: Distinguish between a scientific fact and an opinion, providing clear explanations that connect observations and results (e. g., a scientific fact can be supported by making observations). • S4.A.1.1.2: Identify and describe examples of common technological changes past to present in the community (e.g., energy production, transportation, communications, agriculture, packaging materials) that have either positive or negative impacts on society or the environment. 	<ul style="list-style-type: none"> • scientific method • observation • inference • hypothesis • experiment • hydroelectric power • geothermal energy • solar energy • chemical energy • mechanical energy 	<ul style="list-style-type: none"> • HSP Lesson Investigates • Units A1-3, C.7, E11, 15, 16 • End of chapter • Science Spin from Weekly Reader • People in Science articles 	<ul style="list-style-type: none"> • Lesson Investigates materials 	<ul style="list-style-type: none"> • Notes • Observations • Discussions • Lab pages



Cocalico School District
Course Curriculum Details
Course: Science - 04

Area: Earth Science

Big Idea: S4.A.1 Reasoning and Analysis (Reference: 3.1.4.C, 3.1.4.E, 3.2.4.A, 3.2.4.C, 3.8.4.C, 4.7.4.B, 4.8.4.A, 4.8.4.C)

PA/Common Core Standards	Assessment Anchors/ Eligible Content	Key Vocabulary	Learning Activities	Materials/ Resources/ Technology Tools	Common Summative Assessments/ Targeted Outcomes
Objective: 2: S4.A.1.3 Recognize and describe change in natural or human-made systems and the possible effects of those changes.					
<ul style="list-style-type: none">• S4.A.1.3.1• S4.A.1.3.2• S4.A.1.3.3• S4.A.1.3.4• S4.A.1.3.5	<ul style="list-style-type: none">• S4.A.1.3.1: Observe and record change by using time and measurement.• S4.A.1.3.2: Describe relative size, distance, or motion.• S4.A.1.3.3: Observe and describe the change to objects caused by temperature change or light.• S4.A.1.3.4: Explain what happens to a living organism when its food supply, access to water, shelter, or space is changed (e.g., it might die, migrate, change behavior, eat something else).• S4.A.1.3.5 Provide examples, predict, or describe how everyday human activities (e.g., solid waste production, food production and consumption, transportation, water consumption, energy production and use) may change the environment.	<ul style="list-style-type: none">• Ch. 16: position, motion, speed, velocity, acceleration, force, inertia, gravity, gravitation, weight, friction• Ch. 2: life cycle, photosynthesis• Ch. 3: basic needs, adaptation, natural selection, instinct, hibernation, migration, extinction, learned behavior• Ch. 15: energy conservation			



Cocalico School District
Course Curriculum Details
Course: Science - 04

Area: Earth Science

Big Idea: S4.A.2 Processes, Procedures, and Tools of Scientific Investigations (Reference: 3.2.4.C-D, 3.7.4.A-B)

PA/Common Core Standards	Assessment Anchors/ Eligible Content	Key Vocabulary	Learning Activities	Materials/ Resources/ Technology Tools	Common Summative Assessments/ Targeted Outcomes
Objective: 1: S4.A.2.1 Apply skills necessary to conduct an experiment or design a solution to solve a problem.					
<ul style="list-style-type: none"> S4.A.2.1.1 S4.A.2.1.3 S4.A.2.1.4 	<ul style="list-style-type: none"> S4.A.2.1.1 Generate questions about objects, organisms, or events that can be answered through scientific investigations. S4.A.2.1.3 Observe a natural phenomenon (e.g., weather changes, length of daylight/night, movement of shadows, animal migrations, growth of plants), record observations, and then make a prediction based on those observations. S4.A.2.1.4 State a conclusion that is consistent with the information/data. 	<ul style="list-style-type: none"> hypothesis question scientific method prediction inference life cycle photosynthesis direct development metamorphosis conclusion 			<ul style="list-style-type: none"> HSP Assessments
Objective: 2: S4.A.2.2 Identify appropriate instruments for a specific task and describe the information the instrument can provide.					
<ul style="list-style-type: none"> S4.A.2.2.1 	<ul style="list-style-type: none"> S4.A.2.2.1: Identify appropriate tools or instruments for specific tasks and describe the information they can provide (e.g., measuring: length-ruler, mass-balance scale, volume-beaker, temperature-thermometer; making observations: hand lens, binoculars, telescope). 	<ul style="list-style-type: none"> pan balance eye dropper rulers measuring tape microscope spring scale magnifying glass graduated cylinders measuring spoons 			



Cocalico School District
Course Curriculum Details
Course: Science - 04

Area: Earth Science

Big Idea: S4.A.3 Systems, Models and Patterns (Reference: 3.1.4.A-C, 3.2.4.B, 3.6.4.A-C, 4.3.4.C, 4.4.4.C, 4.6.4.A-B)

PA/Common Core Standards	Assessment Anchors/ Eligible Content	Key Vocabulary	Learning Activities	Materials/ Resources/ Technology Tools	Common Summative Assessments/ Targeted Outcomes
Objective: 1: S4.A.3.1 Identify systems and describe relationships among parts of a familiar system (e.g., digestive system, simple machines, water cycle).					
<ul style="list-style-type: none"> S4.A.3.1.1 	<ul style="list-style-type: none"> S4.A.3.1.1 Categorize systems as either natural or human-made (e.g., ballpoint pens, simple electrical circuits, plant anatomy, water cycle). S4.A.3.2.1 Use models to illustrate simple concepts and compare the models to what they represent. 	<ul style="list-style-type: none"> Ch. 1: vascular, nonvascular, fungi, vertebrates, invertebrates Ch. 15: series circuit, parallel circuit, electromagnet, generator, electric motor 	<ul style="list-style-type: none"> Ch. 1 Focus Skill Graphic Organizer Activity on Classification Make a Cell Model Backbone Models Rock Cycle Model Observing Weather Get the Feel of Friction 	<ul style="list-style-type: none"> Ch. 1 Focus Skill Graphic Organizer Activity on Classification - chart, marker, paper, pencils Make a Cell Model - marker, plastic cup, plastic knife, paper plates, raisins, gelatin, milk balls, jelly beans Backbone Models - newspaper, ruler, modeling clay, drinking straw Rock Cycle Model - plastic pencil sharpener, crayons, metal cookie sheet, waxed paper, iron, aluminum pie pan, toaster oven Observing Weather - rock salt, rocks, bricks Get the Feel of Friction - hand lotion, latex gloves, baby oil 	<ul style="list-style-type: none"> HSP Assessments



Cocalico School District
Course Curriculum Details
Course: Science - 04

Area: Earth Science

Big Idea: S4.A.3 Systems, Models and Patterns (Reference: 3.1.4.A-C, 3.2.4.B, 3.6.4.A-C, 4.3.4.C, 4.4.4.C, 4.6.4.A-B)

PA/Common Core Standards	Assessment Anchors/ Eligible Content	Key Vocabulary	Learning Activities	Materials/ Resources/ Technology Tools	Common Summative Assessments/ Targeted Outcomes
Objective: 2: S4.A.3.2 Use models to illustrate simple concepts and compare the models to what they represent.					
<ul style="list-style-type: none"> S4.A.3.2.1 S4.A.3.2.2 S4.A.3.2.3 	<ul style="list-style-type: none"> S4.A.3.2.1: Identify what different models represent (e.g., maps show physical features, directions, distances; globes represent Earth; drawings of watersheds depict terrain; dioramas show ecosystems; concept maps show relationships of ideas). S4.A.3.2.2: Use models to make observations to explain how systems work (e.g., water cycle, Sun-Earth-Moon system). S4.A.3.2.3: Use appropriate, simple modeling tools and techniques to describe or illustrate a system (e.g., two cans and string to model a communications system, terrarium to model an ecosystem). 	<ul style="list-style-type: none"> Ch. 1: vascular, nonvascular Ch. 2: life cycle, metamorphosis Ch. 7: rock cycle Ch. 8: landform, mountain, topography, volcano, earthquake, glacier, deposition Ch. 15: series circuit, parallel circuit 			<ul style="list-style-type: none"> HSP Assessments



Cocalico School District
Course Curriculum Details
Course: Science - 04

Area: Earth Science

Big Idea: S4.A.3 Systems, Models and Patterns (Reference: 3.1.4.A-C, 3.2.4.B, 3.6.4.A-C, 4.3.4.C, 4.4.4.C, 4.6.4.A-B)

PA/Common Core Standards	Assessment Anchors/ Eligible Content	Key Vocabulary	Learning Activities	Materials/ Resources/ Technology Tools	Common Summative Assessments/ Targeted Outcomes
Objective: 3: S4.A.3.3 Identify and make observations about patterns that regularly occur and reoccur in nature.					
<ul style="list-style-type: none"> S4.A.3.3.1 S4.A.3.3.2 	<ul style="list-style-type: none"> S4.A.3.3.1: Identify and describe observable patterns (e.g., growth patterns in plants, weather, water cycle). S4.A.3.3.2: Predict future conditions/events based on observable patterns (e.g. day/night, seasons, sunrise/sunset, lunar phases). 	<ul style="list-style-type: none"> Ch. 2: trait, heredity, gene, growth pattern, life cycle, direct development, metamorphosis Ch. 3: migration, hibernation Ch. 7: weathering, erosion, igneous/metamorphic/sedimentary rocks 			<ul style="list-style-type: none"> HSP Assessments