

**WEST JEFFERSON HILLS SCHOOL DISTRICT
SCIENCE & TECHNOLOGY CURRICULUM**

GRADE 4

PA Academic Standards Student must be able to do	Objective Content or process student will be able to know and do	Instructional Methods	Materials/ Resources Textbooks, trade books, workbooks, software, hardware, etc.	*Assessment Procedures *Additional adaptations, modifications, accommodations, and enrichment/ acceleration will be provided per IEP	*Additional Learning Opportunities for students who do not meet basic standards *Additional adaptations, modifications, and accommodations will be provided per IEP	*Extended Learning Opportunities for students who can go beyond the basic standards. *Additional enrichment/acceleration will be provided per IEP
3.1 Science & Technology 3.1.4. Unifying Themes						
A. Know that natural and human-made objects are made up of parts. Identify and describe what parts make up a system. <ul style="list-style-type: none"> • Identify system parts that are natural and human-made (e.g., ball point pen, simple electrical circuits, plant anatomy). • Describe the purpose of analyzing systems. • Know that technologies include physical technology systems (e.g., construction, manufacturing, transportation), informational systems and biochemical-related systems. 	<ul style="list-style-type: none"> • Students will know that natural objects and human made objects are made up of parts. • Students record and discuss what they already know about land and water. • Students will discuss what they would like to find out about land and water. • Students know that natural objects and human made objects are made up of parts. 	<ul style="list-style-type: none"> • Brainstorming • Venn Diagram • Learning Centers 	<ul style="list-style-type: none"> • Land and water kit • Human body kit • Physics of sound kit 	<ul style="list-style-type: none"> • Land and water kit • Human body kit • Physics of sound kit 	<ul style="list-style-type: none"> • Multi sensory approach • Review • Re-teach • Individualized instruction • Small group instruction • Pre-teach • Alternative assignments • Extended time • Re-read • Instructional games • Graphic organizer • Structure • Study guides • Support resource kits • Flash cards • Drawings • Provide assistance for students to assemble the models. • Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> • Peer tutoring • Trade Books • Create games • Peer teaching • Debates • Computer software • Real life application • Research projects • Field trips • Guest speakers • Experiment • Projects • Investigations • Aerial drawings • Test soil properties • Students will research the m and a and debate the advantages and disadvantages.

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3.1 Science & Technology 3.1.4. Unifying Themes						
B. Know models as useful simplifications of objects or processes. <ul style="list-style-type: none"> • Identify different types of models. • Identify and apply models as tools for prediction and insight. • Apply appropriate simple modeling tools and techniques. • Identify theories that serve as models (e.g., molecules). 	<ul style="list-style-type: none"> • Students will know models as useful simplifications of objects or processes. • Students will discuss the concept of modeling. • Students will build a model of land and water and use the model to investigate. • Students record and discuss their observations. • Students read and learn more about the water cycle. • Students will identify the following terms: <ul style="list-style-type: none"> >fresh water >hydrologists >glaciers >ground water >surface water >soil 	<ul style="list-style-type: none"> • Brainstorming • Venn Diagram • Learning Centers 	<ul style="list-style-type: none"> • Land and water kit • Human body kit • Physics of sound kit 	<ul style="list-style-type: none"> • Land and water kit • Human body kit • Physics of sound kit 	<ul style="list-style-type: none"> • Multi sensory approach • Review • Re-teach • Individualized instruction • Small group instruction • Pre-teach • Alternative assignments • Extended time • Re-read • Instructional games • Graphic organizer • Structure • Study guides • Support resource kits • Flash cards • Drawings • Provide assistance for students to assemble the models. • Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> • Peer tutoring • Trade Books • Create games • Peer teaching • Debates • Computer software • Real life application • Research projects • Field trips • Guest speakers • Experiment • Projects • Investigations • Aerial drawings • Test soil properties • Students will research the m and a and debate the advantages and disadvantages.

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3.1 Science & Technology 3.1.4. Unifying Themes						
	>land forms >geologists •Students will simulate the effects of rain on land (weathering). •Students investigate what happens to land and to the water on land after it rains. •Students will conduct a stream table investigation. •Students will record their observation in words and drawings. •Students will create aerial drawings of their stream tables. •Groups will share their drawings with the class and discuss similarities and differences among the drawings.				<ul style="list-style-type: none"> •Challenge students to create a model of the water cycle using materials. •Encourage students to write about their observations. •Make a bone museum 	

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<p>3.1 Science & Technology 3.1.4. Unifying Themes</p>						
	<ul style="list-style-type: none"> •Students will create a class drawing of their stream table results and establish a common vocabulary for the parts of a stream system. •Students will prepare their drawings for a “Big Book of Streams”. •Students view and interpret photographs of land and water. •Students conduct a stream table investigation using a stream source cup with three holes. •Students will reflect on their learning through self-assessment (watershed, divide-dendritic, trunk, main stem). 					

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<p>3.1 Science & Technology 3.1.4. Unifying Themes</p>						
	<ul style="list-style-type: none"> •Students will brainstorm ways to model a rushing river and predict ways in which a rushing river might alter the land. •Using their stream tables, students investigate, observe, and discuss the effects of fast flowing water on land. •Students test the effects of flowing water on their stream table landscape. •Students discuss and compare their predictions and results. •Students will read more about a house designed and built with the land and water in mind. 					

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3.1 Science & Technology 3.1.4. Unifying Themes						
	<ul style="list-style-type: none"> •Students know models as useful simplifications of objects or processes. •Students will assemble a human skeleton model. •Students will compare the muscle/bone functions of a model leg to a human leg. •Compare the muscle/bond function of a model thumb to a human thumb. 					

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C. Illustrate patterns that regularly occur and reoccur n nature. • Identify observable patterns (e.g., growth patterns in plants, crystal shapes in minerals, climate, structural patterns in bird feathers). • Use knowledge of natural patterns to predict next occurrences (e.g., seasons, leaf patterns, lunar phases).	•Students will illustrate patterns that occur in nature. •Students will understand that humans can affect erosion and deposition in various ways, including clearing the land, planting vegetation, and building dams. •Students will illustrate patters that occur in nature.	•Brainstorming •Venn Diagram •Learning Centers	•Land and water kit •Human body kit •Physics of sound kit	•Land and water kit •Human body kit •Physics of sound kit	•Multi sensory approach •Review •Re-teach •Individualized instruction •Small group instruction •Pre-teach •Alternative assignments •Extended time •Re-read •Instructional games •Graphic organizer •Structure •Study guides •Support resource kits •Flash cards •Drawings •Provide assistance for students to assemble the models. •Provide auditory and tactile stimulus.	•Peer tutoring •Trade Books •Create games •Peer teaching •Debates •Computer software •Real life application •Research projects •Field trips •Guest speakers •Experiment •Projects •Investigations •Aerial drawings •Test soil properties •Students will research the m and a and debate the advantages and disadvantages.

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<p>3.1 Science & Technology 3.1.4. Unifying Themes</p>						
<p>D. Know that scale is an important attribute of natural and human made objects, events, and phenomena.</p> <ul style="list-style-type: none"> •Identify the use of scale as it relates to the measurement of distance, volume, and mass. •Describe scale as a ration (e.g., map scales). •Explain the importance of scale in producing models and apply it to a model. 	<ul style="list-style-type: none"> •Students will know that scale is an important attribute of natural and human-made objects, events, and phenomena. •Students will understand that hills, rocks, plants and dams may change the direction and flow of water. 	<ul style="list-style-type: none"> •Brainstorming •Venn Diagram •Learning Centers 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Multi sensory approach •Review •Re-teach •Individualized instruction •Small group instruction •Pre-teach •Alternative assignments •Extended time •Re-read •Instructional games •Graphic organizer •Structure •Study guides •Support resource kits •Flash cards •Drawings •Provide assistance for students to assemble the models. •Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> •Peer tutoring •Trade Books •Create games •Peer teaching •Debates •Computer software •Real life application •Research projects •Field trips •Guest speakers •Experiment •Projects •Investigations •Aerial drawings •Test soil properties •Students will research the m and a and debate the advantages and disadvantages.

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<p>3.1 Science & Technology 3.1.4. Unifying Themes</p>						
<p>E. Recognize change in natural and physical systems.</p> <ul style="list-style-type: none"> • Recognize change as fundamental to science and technology concepts. • Examine and explain change by using time and measurement. • Describe relative motion. • Describe the change to objects caused by heat, cold, light, or chemicals. 	<ul style="list-style-type: none"> • Students will recognize change in natural and physical systems. 	<ul style="list-style-type: none"> • Brainstorming • Venn Diagram • Learning Centers 	<ul style="list-style-type: none"> • Land and water kit • Human body kit • Physics of sound kit 	<ul style="list-style-type: none"> • Land and water kit • Human body kit • Physics of sound kit 	<ul style="list-style-type: none"> • Multi sensory approach • Review • Re-teach • Individualized instruction • Small group instruction • Pre-teach • Alternative assignments • Extended time • Re-read • Instructional games • Graphic organizer • Structure • Study guides • Support resource kits • Flash cards • Drawings • Provide assistance for students to assemble the models. • Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> • Peer tutoring • Trade Books • Create games • Peer teaching • Debates • Computer software • Real life application • Research projects • Field trips • Guest speakers • Experiment • Projects • Investigations • Aerial drawings • Test soil properties • Students will research the m and a and debate the advantages and disadvantages.

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<p>3.2 Science & Technology 3.2.4 Inquiry & Design</p>						
<p>A. Identify and use the nature of scientific and technological knowledge.</p> <ul style="list-style-type: none"> •Distinguish between a scientific fact and a belief. •Provide clear explanations that account for observations and results. •Relate how new information can change existing perceptions. 	<ul style="list-style-type: none"> •Students will provide clear explanations for observations. •Students will record and discuss the properties of each soil component. •Students will discuss how soil properties affect the ways in which soil is eroded and deposited by water in their stream tables. •Students will compare land formations caused by fast flowing rivers with those caused by slow moving streams and predict the load each kind of stream will carry. •Students will view and interpret photographs of fast and slow moving water on the basis of concepts of land and water investigation in the unit. 	<ul style="list-style-type: none"> •Brainstorming •Venn Diagram •Learning Centers 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Multi sensory approach •Review •Re-teach •Individualized instruction •Small group instruction •Pre-teach •Alternative assignments •Extended time •Re-read •Instructional games •Graphic organizer •Structure •Study guides •Support resource kits •Flash cards •Drawings •Provide assistance for students to assemble the models. •Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> •Peer tutoring •Trade Books •Create games •Peer teaching •Debates •Computer software •Real life application •Research projects •Field trips •Guest speakers •Experiment •Projects •Investigations •Aerial drawings •Test soil properties •Students will research the m and a and debate the advantages and disadvantages.

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3.2 Science & Technology 3.2.4 Inquiry & Design						
	<ul style="list-style-type: none"> •Students will understand water has an important role in shaping the land on earth. •Students will provide clear explanations for observations. 					

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<p>3.2 Science & Technology 3.2.4 Inquiry & Design</p>						
<p>B. Describe objects in the world using the five senses. <ul style="list-style-type: none"> • Recognize observational descriptors from each of the five senses (e.g., see-blue, feel-rough). • Use observations to develop a descriptive vocabulary. </p>	<ul style="list-style-type: none"> • Students will describe objects using 5 senses. 	<ul style="list-style-type: none"> • Brainstorming • Venn Diagram • Learning Centers 	<ul style="list-style-type: none"> • Land and water kit • Human body kit • Physics of sound kit 	<ul style="list-style-type: none"> • Land and water kit • Human body kit • Physics of sound kit 	<ul style="list-style-type: none"> • Multi sensory approach • Review • Re-teach • Individualized instruction • Small group instruction • Pre-teach • Alternative assignments • Extended time • Re-read • Instructional games • Graphic organizer • Structure • Study guides • Support resource kits • Flash cards • Drawings • Provide assistance for students to assemble the models. • Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> • Peer tutoring • Trade Books • Create games • Peer teaching • Debates • Computer software • Real life application • Research projects • Field trips • Guest speakers • Experiment • Projects • Investigations • Aerial drawings • Test soil properties • Students will research the m and a and debate the advantages and disadvantages.

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<p>3.2 Science & Technology 3.2.4 Inquiry & Design</p>						
<p>C. Recognize and use the elements of scientific inquiry to solve problems.</p> <ul style="list-style-type: none"> •Generate questions about objects, organisms, an/or events that can be answered through scientific investigations. •Design an investigation. •Conduct an experiment. •State a conclusion that is consistent with the information. 	<ul style="list-style-type: none"> • Students will use elements of scientific inquiry. • Students will conduct their first stream table investigation and record observations. • Students will summarize what happens when water from a single source flows over and through land. • Students discuss similarities and differences among their streams. • Students will observe and compare four soil components. • Students will reflect on their ideas about land and water and brainstorm ways that land can affect the directions and flow of water. 	<ul style="list-style-type: none"> •Brainstorming •Venn Diagram •Learning Centers 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Multi sensory approach •Review •Re-teach •Individualized instruction •Small group instruction •Pre-teach •Alternative assignments •Extended time •Re-read •Instructional games •Graphic organizer •Structure •Study guides •Support resource kits •Flash cards •Drawings •Provide assistance for students to assemble the models. •Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> •Peer tutoring •Trade Books •Create games •Peer teaching •Debates •Computer software •Real life application •Research projects •Field trips •Guest speakers •Experiment •Projects •Investigations •Aerial drawings •Test soil properties •Students will research the m and a and debate the advantages and disadvantages.

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3.2 Science & Technology 3.2.4 Inquiry & Design						
	<ul style="list-style-type: none"> • Groups discuss and compare the results of their investigation. • Students predict how slope might affect the direction and flow of water on land. • Students will use a stream table to explore the effects of sloped land on stream development. • Students compare their results with their predictions. • Students compare the results of this investigation with results collected in previous lessons. • Students predict how slope might affect the direction and flow of water on land. • Students will use a stream table to explore the effects of sloped land on stream development. 					

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3.2 Science & Technology 3.2.4 Inquiry & Design						
	<ul style="list-style-type: none"> • Students compare the results of this investigation with results collected in previous lessons. • Students use elements of scientific inquiry. • Students will observe and describe the movements of the body while jumping rope. • Students will compare their own bodies to skeleton photos and diagrams. • Investigate different kinds of joints in the human skeleton. • Compare human skeletal joints to analogous mechanical structure. • Compare the muscle/bond functions of a model leg to a human leg. 					

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3.2 Science & Technology 3.2.4 Inquiry & Design						
	<ul style="list-style-type: none"> • Students will observe that sounds travels through solids, water, and air. • Students will compare different ways to make sounds louder and travel farther. • Students will record observations of how sounds travel. 					

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3.2 Science & Technology 3.2.4 Inquiry & Design						
D. Recognize and use the technological design process to solve problems. <ul style="list-style-type: none"> •Recognize and explain basic problems. •Identify possible solutions and their course of action. •Try a solution. •Describe the solution, identify its impacts, and modify if necessary. •Show the steps taken and the results. 	<ul style="list-style-type: none"> •Students will recognize and use the technological design process to solve problems. •Students brainstorm why and how humans build dams. •Students predict the effects of dams on the direction and flow of water in their stream tables. •Students design and construct dams in their stream tables. •Students test the effects of dams in their stream tables. •Students read to learn more about dams. •Students recognize and use the technological design process to solve problems. 	<ul style="list-style-type: none"> •Brainstorming •Venn Diagram •Learning Centers 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Multi sensory approach •Review •Re-teach •Individualized instruction •Small group instruction •Pre-teach •Alternative assignments •Extended time •Re-read •Instructional games •Graphic organizer •Structure •Study guides •Support resource kits •Flash cards •Drawings •Provide assistance for students to assemble the models. •Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> •Peer tutoring •Trade Books •Create games •Peer teaching •Debates •Computer software •Real life application •Research projects •Field trips •Guest speakers •Experiment •Projects •Investigations •Aerial drawings •Test soil properties •Students will research the m and a and debate the advantages and disadvantages.

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<p>PA Academic Standards Student must be able to do</p>	<p>Objective Content or process student will be able to know and do</p>	<p>Instructional Methods</p>	<p>Materials/ Resources Textbooks, trade books, workbooks, software, hardware, etc.</p>	<p>*Assessment Procedures *Additional adaptations, modifications, accommodations, and enrichment/ acceleration will be provided per IEP</p>	<p>*Additional Learning Opportunities for students who do not meet basic standards *Additional adaptations, modifications, and accommodations will be provided per IEP</p>	<p>*Extended Learning Opportunities for students who can go beyond the basic standards. *Additional enrichment/acceleration will be provided per IEP</p>
<p>3.3 Science & Technology 3.3.4 Biological Sciences</p>						
<p>A. Know the similarities and differences of living things. <ul style="list-style-type: none"> • Identify life processes of living things (e.g., growth, digestion, react to environment). • Know that some organisms have similar external characteristics (e.g., anatomical characteristics; appendages, type of covering, body segments) and that similarities and differences are related to environmental habitat. • Describe basic needs of plants and animals. </p>	<ul style="list-style-type: none"> • Students will know the similarities and difference of living things. • Students will understand the themes, pattern, structure, and system. 	<ul style="list-style-type: none"> • Brainstorming • Venn Diagram • Learning Centers 	<ul style="list-style-type: none"> • Land and water kit • Human body kit • Physics of sound kit 	<ul style="list-style-type: none"> • Land and water kit • Human body kit • Physics of sound kit 	<ul style="list-style-type: none"> • Multi sensory approach • Review • Re-teach • Individualized instruction • Small group instruction • Pre-teach • Alternative assignments • Extended time • Re-read • Instructional games • Graphic organizer • Structure • Study guides • Support resource kits • Flash cards • Drawings • Provide assistance for students to assemble the models. • Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> • Peer tutoring • Trade Books • Create games • Peer teaching • Debates • Computer software • Real life application • Research projects • Field trips • Guest speakers • Experiment • Projects • Investigations • Aerial drawings • Test soil properties • Students will research the m and a and debate the advantages and disadvantages.

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3.3 Science & Technology 3.3.4 Biological Sciences						
B. Know that living things are made up of parts that have specific functions. <ul style="list-style-type: none"> • Identify examples of unicellular and multi-cellular organisms. • Determine how different parts of a living thing work together to make the organism function. 	<ul style="list-style-type: none"> • Students will know living things are made up of parts that have specific functions. • Students will understand that the human skeleton is made up of about 206 bones, some of which are fused. • Students will understand that the skeleton provides the functions of support, protection, and movement. • Students will understand that bones are living tissues and come in many sizes and forms. 	<ul style="list-style-type: none"> • Brainstorming • Venn Diagram • Learning Centers 	<ul style="list-style-type: none"> • Land and water kit • Human body kit • Physics of sound kit 	<ul style="list-style-type: none"> • Land and water kit • Human body kit • Physics of sound kit 	<ul style="list-style-type: none"> • Multi sensory approach • Review • Re-teach • Individualized instruction • Small group instruction • Pre-teach • Alternative assignments • Extended time • Re-read • Instructional games • Graphic organizer • Structure • Study guides • Support resource kits • Flash cards • Drawings • Provide assistance for students to assemble the models. • Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> • Peer tutoring • Trade Books • Create games • Peer teaching • Debates • Computer software • Real life application • Research projects • Field trips • Guest speakers • Experiment • Projects • Investigations • Aerial drawings • Test soil properties • Students will research the m and a and debate the advantages and disadvantages.

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3.3 Science & Technology 3.3.4 Biological Sciences						
	<ul style="list-style-type: none"> •Students will understand that humans are in a group of animals called vertebrates. •Students will understand that: >the ability of the human body to move in many ways is attributable to complex jointing, or articulations. •Joints are where two bones meet and movement occurs. •Different kinds of joints provide different kinds of movement (hinge joints, ball and socket joints, sliding joints). •Themes: pattern, structure, and interaction. 					

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3.3 Science & Technology 3.3.4 Biological Sciences						
	<ul style="list-style-type: none"> •Students will understand that: <ul style="list-style-type: none"> >muscles power the movement of the human body. >muscles attach across joints to move bones. >muscles attached to bones with tissues called tendons. >ligaments are tissues that connect bone to bone and provide guides for tendons. >pairs of antagonistic muscles contract to provide movement. >learn the name, location, and orientation of the most important bones in the human skeleton. • Themes: Pattern, structure, interaction, and system. 					

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3.3 Science & Technology 3.3.4 Biological Sciences						
	<ul style="list-style-type: none"> ●Students will understand that: <ul style="list-style-type: none"> >A stimulus is something that excites a nervous impulse. >A response is an action that happens as a result of a stimulus. >The smooth, predictable action of bones, muscles, and central nervous system is called coordination. >Practice and concentration can reduce response time. >Themes: Pattern and interaction. 					

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<p>3.3 Science & Technology 3.3.4 Biological Sciences</p>						
<p>C. Know that characteristics are inherited and, thus, offspring closely resemble their parents. <ul style="list-style-type: none"> •Identify characteristics for animal and plan survival in different climates. •Identify physical characteristics that appear in both parents and offspring and differ between families, strains, or species. </p>	<ul style="list-style-type: none"> •Students will know that characteristics are inherited and thus, offspring closely resemble their parents. 	<ul style="list-style-type: none"> •Brainstorming •Venn Diagram •Learning Centers 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Multi sensory approach •Review •Re-teach •Individualized instruction •Small group instruction •Pre-teach •Alternative assignments •Extended time •Re-read •Instructional games •Graphic organizer •Structure •Study guides •Support resource kits •Flash cards •Drawings •Provide assistance for students to assemble the models. •Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> •Peer tutoring •Trade Books •Create games •Peer teaching •Debates •Computer software •Real life application •Research projects •Field trips •Guest speakers •Experiment •Projects •Investigations •Aerial drawings •Test soil properties •Students will research the m and a and debate the advantages and disadvantages.

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<p>3.3 Science & Technology 3.3.4 Biological Sciences</p>						
<p>D. Identify changes in living things over time. •Compare extinct life forms with living organisms.</p>	<p>•Students will identify changes in living things over time.</p>	<p>•Brainstorming •Venn Diagram •Learning Centers</p>	<p>•Land and water kit •Human body kit •Physics of sound kit</p>	<p>•Land and water kit •Human body kit •Physics of sound kit</p>	<p>•Multi sensory approach •Review •Re-teach •Individualized instruction •Small group instruction •Pre-teach •Alternative assignments •Extended time •Re-read •Instructional games •Graphic organizer •Structure •Study guides •Support resource kits •Flash cards •Drawings •Provide assistance for students to assemble the models. •Provide auditory and tactile stimulus.</p>	<p>•Peer tutoring •Trade Books •Create games •Peer teaching •Debates •Computer software •Real life application •Research projects •Field trips •Guest speakers •Experiment •Projects •Investigations •Aerial drawings •Test soil properties •Students will research the m and a and debate the advantages and disadvantages.</p>

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3.4 Science & Technology 3.4.4 Physical Science, Chemistry and Physics						
A. Recognize basic concepts about the structure and properties of matter. •Describe properties of matter (e.g., hardness, reactions to simple chemical tests). •Know that combining two or more substances can make new materials with different properties. •Know different material characteristics (e.g., texture, state of matter, solubility).		<ul style="list-style-type: none"> •Brainstorming •Venn Diagram •Learning Centers 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Multi sensory approach •Review •Re-teach •Individualized instruction •Small group instruction •Pre-teach •Alternative assignments •Extended time •Re-read •Instructional games •Graphic organizer •Structure •Study guides •Support resource kits •Flash cards •Drawings •Provide assistance for students to assemble the models. •Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> •Peer tutoring •Trade Books •Create games •Peer teaching •Debates •Computer software •Real life application •Research projects •Field trips •Guest speakers •Experiment •Projects •Investigations •Aerial drawings •Test soil properties •Students will research the m and a and debate the advantages and disadvantages. •Sound challenges

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<p>3.4 Science & Technology 3.4.4 Physical Science, Chemistry and Physics</p>						
<p>B. Know basic energy types, sources, and conversions.</p> <ul style="list-style-type: none"> • Identify energy forms and examples (e.g., sunlight, heat, stored, motion). • Know the concept of the flow of energy by measuring flow through an object or system. • Describe static electricity in terms of attraction, repulsion, and sparks. • Apply knowledge of the basic electrical circuits to design and construct simple direct current circuits. 		<ul style="list-style-type: none"> • Brainstorming • Venn Diagram • Learning Centers 	<ul style="list-style-type: none"> • Land and water kit • Human body kit • Physics of sound kit 	<ul style="list-style-type: none"> • Land and water kit • Human body kit • Physics of sound kit 	<ul style="list-style-type: none"> • Multi sensory approach • Review • Re-teach • Individualized instruction • Small group instruction • Pre-teach • Alternative assignments • Extended time • Re-read • Instructional games • Graphic organizer • Structure • Study guides • Support resource kits • Flash cards • Drawings • Provide assistance for students to assemble the models. • Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> • Peer tutoring • Trade Books • Create games • Peer teaching • Debates • Computer software • Real life application • Research projects • Field trips • Guest speakers • Experiment • Projects • Investigations • Aerial drawings • Test soil properties • Students will research the m and a and debate the advantages and disadvantages.

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<p>3.4 Science & Technology 3.4.4 Physical Science, Chemistry and Physics</p>						
<ul style="list-style-type: none"> • Classify materials as conductors and nonconductors. • Know and demonstrate the basic properties of heat by producing it in a variety of ways. • Know the characteristics of light (e.g., reflection, refraction, absorption) and use them to produce heat, color, or a virtual image. 		<ul style="list-style-type: none"> • Brainstorming • Venn Diagram • Learning Centers 	<ul style="list-style-type: none"> • Land and water kit • Human body kit • Physics of sound kit 	<ul style="list-style-type: none"> • Land and water kit • Human body kit • Physics of sound kit 	<ul style="list-style-type: none"> • Multi sensory approach • Review • Re-teach • Individualized instruction • Small group instruction • Pre-teach • Alternative assignments • Extended time • Re-read • Instructional games • Graphic organizer • Structure • Study guides • Support resource kits • Flash cards • Drawings • Provide assistance for students to assemble the models. • Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> • Peer tutoring • Trade Books • Create games • Peer teaching • Debates • Computer software • Real life application • Research projects • Field trips • Guest speakers • Experiment • Projects • Investigations • Aerial drawings • Test soil properties • Students will research the m and a and debate the advantages and disadvantages.

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3.4 Science & Technology 3.4.4 Physical Science, Chemistry and Physics						
C. Observe and describe different types of force and motion. <ul style="list-style-type: none"> •Identify characteristics of sound (pitch, loudness, and echoes). •Recognize forces that attract or repel other objects and demonstrate them. •Describe various types of motions. •Compare the relative movement of objects and describe types of motion that are evident. •Describe the position of an object by locating it relative to another object or the background (e.g., geographic direction, left, up). 	<ul style="list-style-type: none"> •Students will observe and compare sounds to develop discrimination ability. •Students will communicate with others using a “drop code”. •Students will learn that sound originates from a source that is vibrating and is detected at a receiver such as the human ear. •Students observe and compare how sound travels through solids, liquids, and air. 	<ul style="list-style-type: none"> •Brainstorming •Venn Diagram •Learning Centers 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Multi sensory approach •Review •Re-teach •Individualized instruction •Small group instruction •Pre-teach •Alternative assignments •Extended time •Re-read •Instructional games •Graphic organizer •Structure •Study guides •Support resource kits •Flash cards •Drawings •Provide assistance for students to assemble the models. •Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> •Peer tutoring •Trade Books •Create games •Peer teaching •Debates •Computer software •Real life application •Research projects •Field trips •Guest speakers •Experiment •Projects •Investigations •Aerial drawings •Test soil properties •Students will research the m and a and debate the advantages and disadvantages.

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3.4 Science & Technology 3.4.4 Physical Science, Chemistry and Physics						
	<ul style="list-style-type: none"> •Students will understand the relationship between the pitch of a sound and the physical properties of the sound source (length of vibrating objects, frequency of the vibrations, or tension of vibrating string). •Students will compare methods to amplify sound at the source and at the receiver. •Students will use knowledge of the physics of sound to solve simple sound challenges. 					

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3.4 Science & Technology 3.4.4 Physical Science, Chemistry and Physics						
	<ul style="list-style-type: none"> •Students will acquire the vocabulary associated with the physics of sound. •Students will exercise language and math skills in the context of physics of sound. •Students will develop and refine the manipulative skills required for investigating sound. •Students will collaborate in working on mini-activities. •Students will gain experiences that will contribute to their understanding of several persuasive themes that relate one scientific idea to another (pattern, structure, and interaction). 					

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3.4 Science & Technology 3.4.4 Physical Science, Chemistry and Physics						
	<ul style="list-style-type: none"> •Students will create a code. •Students will understand the behavior of sound: <ul style="list-style-type: none"> >understand that sound travels in waves. >identify characteristics of pitch and loudness. >identify that sound needs a medium to travel 					

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<p>3.4 Science & Technology 3.4.4 Physical Science, Chemistry and Physics</p>						
<p>D. Describe the composition and structure of the universe and the earth's place in it. <ul style="list-style-type: none"> •Recognize earth's place in the solar system. •Explain and illustrate the causes of seasonal changes. •Identify planets in our solar system and their general characteristics. Describe the solar system motions and use them to explain time (e.g., days, seasons), major lunar phases, and eclipses. </p>		<ul style="list-style-type: none"> •Brainstorming •Venn Diagram •Learning Centers 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Multi sensory approach •Review •Re-teach •Individualized instruction •Small group instruction •Pre-teach •Alternative assignments •Extended time •Re-read •Instructional games •Graphic organizer •Structure •Study guides •Support resource kits •Flash cards •Drawings •Provide assistance for students to assemble the models. •Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> •Peer tutoring •Trade Books •Create games •Peer teaching •Debates •Computer software •Real life application •Research projects •Field trips •Guest speakers •Experiment •Projects •Investigations •Aerial drawings •Test soil properties •Students will research the m and a and debate the advantages and disadvantages.

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<p>3.5 Science & Technology 3.5.4 Earth Sciences</p>						
<p>A. Know basic landforms and earth history.</p> <ul style="list-style-type: none"> • Describe earth processes (e.g., rusting, weathering, erosion) that have affected selected physical features in students' neighborhoods. • Identify various earth structures (e.g., mountains, faults, drainage basins) through the use of models. • Identify the composition of soil as weathered rock and decomposed organic remains. • Describe fossils and the type of environment they lived in (e.g., tropical, aquatic, desert). 	<ul style="list-style-type: none"> • Students will identify basic landforms and earth history. • Students will conduct their first stream table investigation and record observations. • Students will summarize what happens when water flows over and through land. • Students will discuss similarities and differences among their streams (river, gullies, rivulets, springs, tributaries). • Students will investigate ground water, the amount of water soil components will hold, and runoff. 	<ul style="list-style-type: none"> • Brainstorming • Venn Diagram • Learning Centers 	<ul style="list-style-type: none"> • Land and water kit • Human body kit • Physics of sound kit 	<ul style="list-style-type: none"> • Land and water kit • Human body kit • Physics of sound kit 	<ul style="list-style-type: none"> • Multi sensory approach • Review • Re-teach • Individualized instruction • Small group instruction • Pre-teach • Alternative assignments • Extended time • Re-read • Instructional games • Graphic organizer • Structure • Study guides • Support resource kits • Flash cards • Drawings • Provide assistance for students to assemble the models. • Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> • Peer tutoring • Trade Books • Create games • Peer teaching • Debates • Computer software • Real life application • Research projects • Field trips • Guest speakers • Experiment • Projects • Investigations • Aerial drawings • Test soil properties • Students will research the m and a and debate the advantages and disadvantages.

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3.5 Science & Technology 3.5.4 Earth Sciences						
	<ul style="list-style-type: none"> •Students will apply a strategy to track the speed of runoff and the movement of soil. •Groups will compare and discuss their observations and draw conclusions about erosion and deposition. •Students will read to learn more about erosion caused by glaciers (delta, load, sediments, mount suspension, solution). •Students brainstorm possible roles of plants in land and water interactions. •Students will predict and investigate how plants affect water flow and erosion. •Students record, discuss, and compare results. •Students apply their knowledge to real world situations. 					

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3.5 Science & Technology 3.5.4 Earth Sciences						
	<ul style="list-style-type: none"> •Students will design landscapes from their designs. •Students will build landscapes according to their designs. •Students predict how their landscapes will be affected by local runoff and select home sites on the basis of these predictions. •Students will understand that soil is a composite of weathered materials and organic matter at the earth's surface. Soil components include sand, silt, clay, gravel, and humus. Each soil component has unique properties. •Students will understand that the wearing away and moving of soil and rock is erosion. The settling of eroded materials is deposition. •Students will understand that both the flow of water and the slope of the land affect erosion and deposition. 					

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<p>3.4 Science & Technology 3.5.4 Earth Sciences</p>						
<p>B. Know types and uses of earth materials. •Identify uses of various earth materials (e.g., buildings, highways, fuels, growing plants). •Identify and sort earth materials according to a classification key (e.g., soil/rock type).</p>	<p>• Students will know types and uses of earth’s materials.</p>	<p>•Brainstorming •Venn Diagram •Learning Centers</p>	<p>•Land and water kit •Human body kit •Physics of sound kit</p>	<p>•Land and water kit •Human body kit •Physics of sound kit</p>	<p>•Multi sensory approach •Review •Re-teach •Individualized instruction •Small group instruction •Pre-teach •Alternative assignments •Extended time •Re-read •Instructional games •Graphic organizer •Structure •Study guides •Support resource kits •Flash cards •Drawings •Provide assistance for students to assemble the models. •Provide auditory and tactile stimulus.</p>	<p>•Peer tutoring •Trade Books •Create games •Peer teaching •Debates •Computer software •Real life application •Research projects •Field trips •Guest speakers •Experiment •Projects •Investigations •Aerial drawings •Test soil properties •Students will research the m and a and debate the advantages and disadvantages.</p>

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<p>3.4 Science & Technology 3.5.4 Earth Sciences</p>						
<p>C. Know basic weather elements. <ul style="list-style-type: none"> •Identify cloud types. •Identify weather patterns from data charts (including temperature, wind direction, and speed, precipitation) and graphs of the data. •Explain how the different seasons affect plants, animals, food availability, and daily human life. </p>		<ul style="list-style-type: none"> •Brainstorming •Venn Diagram •Learning Centers 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Multi sensory approach •Review •Re-teach •Individualized instruction •Small group instruction •Pre-teach •Alternative assignments •Extended time •Re-read •Instructional games •Graphic organizer •Structure •Study guides •Support resource kits •Flash cards •Drawings •Provide assistance for students to assemble the models. •Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> •Peer tutoring •Trade Books •Create games •Peer teaching •Debates •Computer software •Real life application •Research projects •Field trips •Guest speakers •Experiment •Projects •Investigations •Aerial drawings •Test soil properties •Students will research the m and a and debate the advantages and disadvantages.

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<p>3.4 Science & Technology 3.5.4 Earth Sciences</p>						
<p>D. Recognize the earth's different water resources.</p> <ul style="list-style-type: none"> • Know that approximately three-fourths of the earth is covered by water. • Identify and describe types of fresh and salt-water bodies. • Identify examples of water In the form of solid, liquid, and gas on or near the surface of the earth. • Explain and illustrate evaporation and condensation. • Recognize other resources available form water (e.g., energy, transportation, minerals, food). 	<ul style="list-style-type: none"> •Students will investigate ground water, the amount of water soil components will hold, and runoff. •Students apply their findings from today's investigation to the water and land in their stream tables. •Students read to learn more about where their drinking water comes from (runoff, pore space, zone of saturation). •Students will understand that the water cycle includes the processes of evaporation, condensation, and precipitation and the passage of water over and through land. 	<ul style="list-style-type: none"> •Brainstorming •Venn Diagram •Learning Centers 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Multi sensory approach •Review •Re-teach •Individualized instruction •Small group instruction •Pre-teach •Alternative assignments •Extended time •Re-read •Instructional games •Graphic organizer •Structure •Study guides •Support resource kits •Flash cards •Drawings •Provide assistance for students to assemble the models. •Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> •Peer tutoring •Trade Books •Create games •Peer teaching •Debates •Computer software •Real life application •Research projects •Field trips •Guest speakers •Experiment •Projects •Investigations •Aerial drawings •Test soil properties •Students will research the m and a and debate the advantages and disadvantages.

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<p>3.6 Science & Technology 3.6.4 Technology Education</p>						
<p>A. Know that biotechnologies relate to propagating, growing, maintaining, adapting, treating, and converting.</p> <ul style="list-style-type: none"> • Identify agricultural and industrial production processes that involve plants and animals. • Identify waste management treatment processes. • Describe how knowledge of the human body influences or impacts ergonomic design. • Describe how biotechnology has impacted various aspects of daily life (e.g., health care, agriculture, waste treatment). 	<ul style="list-style-type: none"> •Students will know that biotechnologies relate to propagating growing, maintaining, adapting, treating, and converting. 	<ul style="list-style-type: none"> •Brainstorming •Venn Diagram •Learning Centers 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Multi sensory approach •Review •Re-teach •Individualized instruction •Small group instruction •Pre-teach •Alternative assignments •Extended time •Re-read •Instructional games •Graphic organizer •Structure •Study guides •Support resource kits •Flash cards •Drawings •Provide assistance for students to assemble the models. •Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> •Peer tutoring •Trade Books •Create games •Peer teaching •Debates •Computer software •Real life application •Research projects •Field trips •Guest speakers •Experiment •Projects •Investigations •Aerial drawings •Test soil properties •Students will research the m and a and debate the advantages and disadvantages.

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3.6 Science & Technology 3.6.4 Technology Education						
B. Know that information technologies involve encoding, transmitting, receiving, storing, retrieving, and decoding. •Identify electronic communication methods that exist in the community (e.g., digital cameras, telephone, internet, television, fiber optics). •Identify graphic reproduction methods. •Describe appropriate image generating techniques (e.g., photography, video). •Demonstrate the ability to communicate an idea by applying basic sketching and drawing techniques.		<ul style="list-style-type: none"> •Brainstorming •Venn Diagram •Learning Centers 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Multi sensory approach •Review •Re-teach •Individualized instruction •Small group instruction •Pre-teach •Alternative assignments •Extended time •Re-read •Instructional games •Graphic organizer •Structure •Study guides •Support resource kits •Flash cards •Drawings •Provide assistance for students to assemble the models. •Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> •Peer tutoring •Trade Books •Create games •Peer teaching •Debates •Computer software •Real life application •Research projects •Field trips •Guest speakers •Experiment •Projects •Investigations •Aerial drawings •Test soil properties •Students will research the m and a and debate the advantages and disadvantages.

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<p>3.6 Science & Technology 3.6.4 Technology Education</p>						
<p>C. Know physical technologies of structural design, analysis, and engineering, finance, production, marketing, research, and design.</p> <ul style="list-style-type: none"> •Identify and group a variety of construction tasks. •Identify the major construction systems present in a specific local building. •Identify specific construction systems that depend on a each other in order to complete a project. •Know skills used in construction. •Identify examples of manufactured goods present in the home and school. 		<ul style="list-style-type: none"> •Brainstorming •Venn Diagram •Learning Centers 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Multi sensory approach •Review •Re-teach •Individualized instruction •Small group instruction •Pre-teach •Alternative assignments •Extended time •Re-read •Instructional games •Graphic organizer •Structure •Study guides •Support resource kits •Flash cards •Drawings •Provide assistance for students to assemble the models. •Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> •Peer tutoring •Trade Books •Create games •Peer teaching •Debates •Computer software •Real life application •Research projects •Field trips •Guest speakers •Experiment •Projects •Investigations •Aerial drawings •Test soil properties •Students will research the m and a and debate the advantages and disadvantages.

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<p>3.6 Science & Technology 3.6.4 Technology Education</p>						
<ul style="list-style-type: none"> •Identify basic resources needed to produce a manufactured item. •Identify basic component operations in a specific manufacturing enterprise (e.g., cutting, shaping, attaching). •Identify waste and pollution resulting from a manufacturing enterprise. 		<ul style="list-style-type: none"> •Brainstorming •Venn Diagram •Learning Centers 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Multi sensory approach •Review •Re-teach •Individualized instruction •Small group instruction •Pre-teach •Alternative assignments •Extended time •Re-read •Instructional games •Graphic organizer •Structure •Study guides •Support resource kits •Flash cards •Drawings •Provide assistance for students to assemble the models. •Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> •Peer tutoring •Trade Books •Create games •Peer teaching •Debates •Computer software •Real life application •Research projects •Field trips •Guest speakers •Experiment •Projects •Investigations •Aerial drawings •Test soil properties •Students will research the m and a and debate the advantages and disadvantages.

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<p>3.6 Science & Technology 3.6.4 Technology Education</p>						
<ul style="list-style-type: none"> • Explain and demonstrate the concept of manufacturing (e.g. assemble a set of papers or ball point pens sequentially, mass produce an object). • Identify transportation technologies of propelling, structuring, suspending, guiding, controlling, and supporting. • Identify and experiment with simple machines used in transportation systems. • Explain how improved transportation systems have changed society. 		<ul style="list-style-type: none"> • Brainstorming • Venn Diagram • Learning Centers 	<ul style="list-style-type: none"> • Land and water kit • Human body kit • Physics of sound kit 	<ul style="list-style-type: none"> • Land and water kit • Human body kit • Physics of sound kit 	<ul style="list-style-type: none"> • Multi sensory approach • Review • Re-teach • Individualized instruction • Small group instruction • Pre-teach • Alternative assignments • Extended time • Re-read • Instructional games • Graphic organizer • Structure • Study guides • Support resource kits • Flash cards • Drawings • Provide assistance for students to assemble the models. • Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> • Peer tutoring • Trade Books • Create games • Peer teaching • Debates • Computer software • Real life application • Research projects • Field trips • Guest speakers • Experiment • Projects • Investigations • Aerial drawings • Test soil properties • Students will research the m and a and debate the advantages and disadvantages.

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<p>3.7 Science & Technology 3.7.4 Technology Devices</p>						
<p>A. Explore the use of basic tools, simple materials, and techniques to safely solve problems. •Describe the scientific principles on which various tools are based. •Group tools and machines by their function. •Select and safely apply appropriate tools and materials to solve simple problems.</p>	<ul style="list-style-type: none"> •Students will explore the use of basic tools, simple materials, and techniques to safety and problem solving. •Students will explore sound generators and musical instruments in eight activities instruments in eight activities to find out what causes sounds and what changes in pitch. •Students will compare and record how sound travels through different media. 	<ul style="list-style-type: none"> •Brainstorming •Venn Diagram •Learning Centers 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Multi sensory approach •Review •Re-teach •Individualized instruction •Small group instruction •Pre-teach •Alternative assignments •Extended time •Re-read •Instructional games •Graphic organizer •Structure •Study guides •Support resource kits •Flash cards •Drawings •Provide assistance for students to assemble the models. •Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> •Peer tutoring •Trade Books •Create games •Peer teaching •Debates •Computer software •Real life application •Research projects •Field trips •Guest speakers •Experiment •Projects •Investigations •Aerial drawings •Test soil properties •Students will research the m and a and debate the advantages and disadvantages.

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<p>3.7 Science & Technology 3.7.4 Technology Devices</p>						
<p>B. Select appropriate instruments to study materials. <ul style="list-style-type: none"> • Develop simple skills to measure, record, cut, and fasten. • Explain appropriate instrument selection for specific tasks. </p>	<ul style="list-style-type: none"> • Students will select appropriate instruments to study materials. • Students will learn how to use a tuning fork. 	<ul style="list-style-type: none"> • Brainstorming • Venn Diagram • Learning Centers 	<ul style="list-style-type: none"> • Land and water kit • Human body kit • Physics of sound kit 	<ul style="list-style-type: none"> • Land and water kit • Human body kit • Physics of sound kit 	<ul style="list-style-type: none"> • Multi sensory approach • Review • Re-teach • Individualized instruction • Small group instruction • Pre-teach • Alternative assignments • Extended time • Re-read • Instructional games • Graphic organizer • Structure • Study guides • Support resource kits • Flash cards • Drawings • Provide assistance for students to assemble the models. • Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> • Peer tutoring • Trade Books • Create games • Peer teaching • Debates • Computer software • Real life application • Research projects • Field trips • Guest speakers • Experiment • Projects • Investigations • Aerial drawings • Test soil properties • Students will research the m and a and debate the advantages and disadvantages.

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3.7 Science & Technology 3.7.4 Technology Devices						
C. Identify basic computer operations and concepts. • Identify the major parts necessary for a computer to input and output data. • Explain and demonstrate the basic use of input and output devices (e.g., keyboard, monitor, printer, mouse). • Explain and demonstrate the use of external and internal storage devices (e.g., disk drive, CD drive).		<ul style="list-style-type: none"> •Brainstorming •Venn Diagram •Learning Centers 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Multi sensory approach •Review •Re-teach •Individualized instruction •Small group instruction •Pre-teach •Alternative assignments •Extended time •Re-read •Instructional games •Graphic organizer •Structure •Study guides •Support resource kits •Flash cards •Drawings •Provide assistance for students to assemble the models. •Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> •Peer tutoring •Trade Books •Create games •Peer teaching •Debates •Computer software •Real life application •Research projects •Field trips •Guest speakers •Experiment •Projects •Investigations •Aerial drawings •Test soil properties •Students will research the m and a and debate the advantages and disadvantages.

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3.7 Science & Technology 3.7.4 Technology Devices						
D. Use basic computer software. <ul style="list-style-type: none"> •Apply operating system skills to perform basic computer tasks. •Apply basic word processing skills. •Identify and use simple graphic and presentation graphic materials generated by the computer. •Apply specific instructional software. 		<ul style="list-style-type: none"> •Brainstorming •Venn Diagram •Learning Centers 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Multi sensory approach •Review •Re-teach •Individualized instruction •Small group instruction •Pre-teach •Alternative assignments •Extended time •Re-read •Instructional games •Graphic organizer •Structure •Study guides •Support resource kits •Flash cards •Drawings •Provide assistance for students to assemble the models. •Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> •Peer tutoring •Trade Books •Create games •Peer teaching •Debates •Computer software •Real life application •Research projects •Field trips •Guest speakers •Experiment •Projects •Investigations •Aerial drawings •Test soil properties •Students will research the m and a and debate the advantages and disadvantages.

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<p>3.7 Science & Technology 3.7.4 Technology Devices</p>						
<p>E. Identify basic computer communications systems. <ul style="list-style-type: none"> •Apply a web browser. •Apply basic electronic mail functions. •Use on-line searches to answer age appropriate questions. </p>		<ul style="list-style-type: none"> •Brainstorming •Venn Diagram •Learning Centers 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Multi sensory approach •Review •Re-teach •Individualized instruction •Small group instruction •Pre-teach •Alternative assignments •Extended time •Re-read •Instructional games •Graphic organizer •Structure •Study guides •Support resource kits •Flash cards •Drawings •Provide assistance for students to assemble the models. •Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> •Peer tutoring •Trade Books •Create games •Peer teaching •Debates •Computer software •Real life application •Research projects •Field trips •Guest speakers •Experiment •Projects •Investigations •Aerial drawings •Test soil properties •Students will research the m and a and debate the advantages and disadvantages.

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<p>3.8 Science & Technology 3.8.4. Science, Technology, and Human Endeavors</p>						
<p>A. Know that people select, create, and use science and technology and that they are limited by social and physical restraints. <ul style="list-style-type: none"> Identify and describe positive and negative impacts that influence or result from new tools and techniques. Identify how physical technology (e.g., construction, manufacturing, transportation), informational technology and biotechnology are used to meet human needs. </p>	<ul style="list-style-type: none"> Students will know that people select, create, and use science and technology and that they are limited by social and physical restraints. 	<ul style="list-style-type: none"> Brainstorming Venn Diagram Learning Centers 	<ul style="list-style-type: none"> Land and water kit Human body kit Physics of sound kit 	<ul style="list-style-type: none"> Land and water kit Human body kit Physics of sound kit 	<ul style="list-style-type: none"> Multi sensory approach Review Re-teach Individualized instruction Small group instruction Pre-teach Alternative assignments Extended time Re-read Instructional games Graphic organizer Structure Study guides Support resource kits Flash cards Drawings Provide assistance for students to assemble the models. Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> Peer tutoring Trade Books Create games Peer teaching Debates Computer software Real life application Research projects Field trips Guest speakers Experiment Projects Investigations Aerial drawings Test soil properties Students will research the m and a and debate the advantages and disadvantages.

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<p>3.8 Science & Technology 3.8.4. Science, Technology, and Human Endeavors</p>						
<ul style="list-style-type: none"> •Describe how scientific discoveries and technological advancements are related. •Identify interrelationships among technology, people, and their world. •Apply the technological design process to solve a simple problem. 		<ul style="list-style-type: none"> •Brainstorming •Venn Diagram •Learning Centers 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Multi sensory approach •Review •Re-teach •Individualized instruction •Small group instruction •Pre-teach •Alternative assignments •Extended time •Re-read •Instructional games •Graphic organizer •Structure •Study guides •Support resource kits •Flash cards •Drawings •Provide assistance for students to assemble the models. •Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> •Peer tutoring •Trade Books •Create games •Peer teaching •Debates •Computer software •Real life application •Research projects •Field trips •Guest speakers •Experiment •Projects •Investigations •Aerial drawings •Test soil properties •Students will research the m and a and debate the advantages and disadvantages.

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3.8 Science & Technology 3.8.4. Science, Technology, and Human Endeavors						
B. Know how human ingenuity and technological resources satisfy specific human needs and improve the quality of life. <ul style="list-style-type: none"> • Identify and distinguish between human needs and improving the quality of life. • Identify and distinguish between natural and human-made resources. • Describe a technological invention and the resources that were used to develop it. 	<ul style="list-style-type: none"> • Students will learn how human ingenuity and technological resources satisfy specific human needs and improve the quality of life. 	<ul style="list-style-type: none"> • Brainstorming • Venn Diagram • Learning Centers 	<ul style="list-style-type: none"> • Land and water kit • Human body kit • Physics of sound kit 	<ul style="list-style-type: none"> • Land and water kit • Human body kit • Physics of sound kit 	<ul style="list-style-type: none"> • Multi sensory approach • Review • Re-teach • Individualized instruction • Small group instruction • Pre-teach • Alternative assignments • Extended time • Re-read • Instructional games • Graphic organizer • Structure • Study guides • Support resource kits • Flash cards • Drawings • Provide assistance for students to assemble the models. • Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> • Peer tutoring • Trade Books • Create games • Peer teaching • Debates • Computer software • Real life application • Research projects • Field trips • Guest speakers • Experiment • Projects • Investigations • Aerial drawings • Test soil properties • Students will research the m and a and debate the advantages and disadvantages.

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<p>3.8 Science & Technology 3.8.4. Science, Technology, and Human Endeavors</p>						
<p>C. Know the pros and cons of possible solutions to scientific and technological problems in society. • Compare the positive and negative expected and unexpected impacts of technological change. • Identify and discuss examples of technological change I the community that have both positive and negative impacts.</p>	<p>•Students will know the pros and cons of possible solutions to scientific and technological problems in society.</p>	<p>•Brainstorming •Venn Diagram •Learning Centers</p>	<p>•Land and water kit •Human body kit •Physics of sound kit</p>	<p>•Land and water kit •Human body kit •Physics of sound kit</p>	<p>•Multi sensory approach •Review •Re-teach •Individualized instruction •Small group instruction •Pre-teach •Alternative assignments •Extended time •Re-read •Instructional games •Graphic organizer •Structure •Study guides •Support resource kits •Flash cards •Drawings •Provide assistance for students to assemble the models. •Provide auditory and tactile stimulus.</p>	<p>•Peer tutoring •Trade Books •Create games •Peer teaching •Debates •Computer software •Real life application •Research projects •Field trips •Guest speakers •Experiment •Projects •Investigations •Aerial drawings •Test soil properties •Students will research the m and a and debate the advantages and disadvantages.</p>

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<p>4.1 Watersheds and Wetlands 4.1.4 Environment & Ecology Grade 4</p>						
<p>A. Identify various types of water environments. <ul style="list-style-type: none"> •Identify the lotic system (e.g., creeks, rivers, streams). •Identify the lentic system (e.g., ponds, lakes, swamps). </p>		<ul style="list-style-type: none"> •Brainstorming •Venn Diagram •Learning Centers 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Multi sensory approach •Review •Re-teach •Individualized instruction •Small group instruction •Pre-teach •Alternative assignments •Extended time •Re-read •Instructional games •Graphic organizer •Structure •Study guides •Support resource kits •Flash cards •Drawings •Provide assistance for students to assemble the models. •Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> •Peer tutoring •Trade Books •Create games •Peer teaching •Debates •Computer software •Real life application •Research projects •Field trips •Guest speakers •Experiment •Projects •Investigations •Aerial drawings •Test soil properties •Students will research the m and a and debate the advantages and disadvantages.

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<p>4.1 Watersheds and Wetlands 4.1.4 Environment & Ecology Grade 4</p>						
<p>B. Explain the differences between moving and still water. •Explain why water moves or does not move. •Identify types of precipitation.</p>		<ul style="list-style-type: none"> •Brainstorming •Venn Diagram •Learning Centers 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Multi sensory approach •Review •Re-teach •Individualized instruction •Small group instruction •Pre-teach •Alternative assignments •Extended time •Re-read •Instructional games •Graphic organizer •Structure •Study guides •Support resource kits •Flash cards •Drawings •Provide assistance for students to assemble the models. •Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> •Peer tutoring •Trade Books •Create games •Peer teaching •Debates •Computer software •Real life application •Research projects •Field trips •Guest speakers •Experiment •Projects •Investigations •Aerial drawings •Test soil properties •Students will research the m and a and debate the advantages and disadvantages.

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<p>4.1 Watersheds and Wetlands 4.1.4 Environment & Ecology Grade 4</p>						
<p>C. Identify living things found in water environments. •Identify fish, insects, and amphibians that are found in fresh water. •Identify plants found in fresh water.</p>		<ul style="list-style-type: none"> •Brainstorming •Venn Diagram •Learning Centers 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Multi sensory approach •Review •Re-teach •Individualized instruction •Small group instruction •Pre-teach •Alternative assignments •Extended time •Re-read •Instructional games •Graphic organizer •Structure •Study guides •Support resource kits •Flash cards •Drawings •Provide assistance for students to assemble the models. •Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> •Peer tutoring •Trade Books •Create games •Peer teaching •Debates •Computer software •Real life application •Research projects •Field trips •Guest speakers •Experiment •Projects •Investigations •Aerial drawings •Test soil properties •Students will research the m and a and debate the advantages and disadvantages.

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<p>4.1 Watersheds and Wetlands 4.1.4 Environment & Ecology Grade 4</p>						
<p>D. Identify a wetland and the plants and animals found there.</p> <ul style="list-style-type: none"> • Identify different kinds of wetlands. • Identify plants and animals found in wetlands. • Explain wetlands as habitats for plants and animals. 		<ul style="list-style-type: none"> •Brainstorming •Venn Diagram •Learning Centers 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Multi sensory approach •Review •Re-teach •Individualized instruction •Small group instruction •Pre-teach •Alternative assignments •Extended time •Re-read •Instructional games •Graphic organizer •Structure •Study guides •Support resource kits •Flash cards •Drawings •Provide assistance for students to assemble the models. •Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> •Peer tutoring •Trade Books •Create games •Peer teaching •Debates •Computer software •Real life application •Research projects •Field trips •Guest speakers •Experiment •Projects •Investigations •Aerial drawings •Test soil properties •Students will research the m and a and debate the advantages and disadvantages.

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<p>4.1 Watersheds and Wetlands 4.1.4 Environment & Ecology Grade 4</p>						
<p>E. Recognize the impact of watersheds and wetlands on animals and plants. •Explain the role of watersheds in everyday life. •Identify the role of watersheds and wetlands for plants and animals.</p>		<ul style="list-style-type: none"> •Brainstorming •Venn Diagram •Learning Centers 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Multi sensory approach •Review •Re-teach •Individualized instruction •Small group instruction •Pre-teach •Alternative assignments •Extended time •Re-read •Instructional games •Graphic organizer •Structure •Study guides •Support resource kits •Flash cards •Drawings •Provide assistance for students to assemble the models. •Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> •Peer tutoring •Trade Books •Create games •Peer teaching •Debates •Computer software •Real life application •Research projects •Field trips •Guest speakers •Experiment •Projects •Investigations •Aerial drawings •Test soil properties •Students will research the m and a and debate the advantages and disadvantages.

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<p>4.2 Renewable and Nonrenewable Resources 4.2.4. Environment & Ecology Grade 4</p>						
<p>A. Identify needs of people. <ul style="list-style-type: none"> •Identify plants, animals, water, air, minerals, and fossil fuels as natural resources. •Explain air, water, and nutrient cycles. •Identify how the environment provides for the needs of people. </p>	<ul style="list-style-type: none"> •Students will identify the needs of people. 	<ul style="list-style-type: none"> •Brainstorming •Venn Diagram •Learning Centers 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Multi sensory approach •Review •Re-teach •Individualized instruction •Small group instruction •Pre-teach •Alternative assignments •Extended time •Re-read •Instructional games •Graphic organizer •Structure •Study guides •Support resource kits •Flash cards •Drawings •Provide assistance for students to assemble the models. •Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> •Peer tutoring •Trade Books •Create games •Peer teaching •Debates •Computer software •Real life application •Research projects •Field trips •Guest speakers •Experiment •Projects •Investigations •Aerial drawings •Test soil properties •Students will research the m and a and debate the advantages and disadvantages.

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<p>4.2 Renewable and Nonrenewable Resources 4.2.4 Environment & Ecology Grade 4</p>						
<p>B. Identify products derived from natural resources.</p> <ul style="list-style-type: none"> •Identify products made from trees. •Identify by-products of plants and animals. •Identify the sources of manmade products (e.g., plastics, metal, aluminum, fabrics, paper, cardboard). 		<ul style="list-style-type: none"> •Brainstorming •Venn Diagram •Learning Centers 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Multi sensory approach •Review •Re-teach •Individualized instruction •Small group instruction •Pre-teach •Alternative assignments •Extended time •Re-read •Instructional games •Graphic organizer •Structure •Study guides •Support resource kits •Flash cards •Drawings •Provide assistance for students to assemble the models. •Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> •Peer tutoring •Trade Books •Create games •Peer teaching •Debates •Computer software •Real life application •Research projects •Field trips •Guest speakers •Experiment •Projects •Investigations •Aerial drawings •Test soil properties •Students will research the m and a and debate the advantages and disadvantages.

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<p>4.2 Renewable and Nonrenewable Resources 4.2.4. Environment & Ecology Grade 4</p>						
<p>C. Know that some natural resources have limited life spans.</p> <ul style="list-style-type: none"> • Identify renewable and nonrenewable resources used in the local community. • Identify various means of conserving natural resources. • Know that natural resources have varying life spans. 	<ul style="list-style-type: none"> • Students will know that some natural resources have limited life spans. 	<ul style="list-style-type: none"> • Brainstorming • Venn Diagram • Learning Centers 	<ul style="list-style-type: none"> • Land and water kit • Human body kit • Physics of sound kit 	<ul style="list-style-type: none"> • Land and water kit • Human body kit • Physics of sound kit 	<ul style="list-style-type: none"> • Multi sensory approach • Review • Re-teach • Individualized instruction • Small group instruction • Pre-teach • Alternative assignments • Extended time • Re-read • Instructional games • Graphic organizer • Structure • Study guides • Support resource kits • Flash cards • Drawings • Provide assistance for students to assemble the models. • Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> • Peer tutoring • Trade Books • Create games • Peer teaching • Debates • Computer software • Real life application • Research projects • Field trips • Guest speakers • Experiment • Projects • Investigations • Aerial drawings • Test soil properties • Students will research the m and a and debate the advantages and disadvantages.

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<p>4.2 Renewable and Nonrenewable Resources 4.2.4. Environment & Ecology Grade 4</p>						
<p>D. Identify by-products and their use of natural resources.</p> <ul style="list-style-type: none"> • Understand the waste stream. • Identify those items that can be recycled and those that cannot. • Identify use of reusable products. • Identify the use of compost, landfills, and incinerators. 		<ul style="list-style-type: none"> •Brainstorming •Venn Diagram •Learning Centers 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Multi sensory approach •Review •Re-teach •Individualized instruction •Small group instruction •Pre-teach •Alternative assignments •Extended time •Re-read •Instructional games •Graphic organizer •Structure •Study guides •Support resource kits •Flash cards •Drawings •Provide assistance for students to assemble the models. •Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> •Peer tutoring •Trade Books •Create games •Peer teaching •Debates •Computer software •Real life application •Research projects •Field trips •Guest speakers •Experiment •Projects •Investigations •Aerial drawings •Test soil properties •Students will research the m and a and debate the advantages and disadvantages.

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<p>4.3 Environmental Health 4.3.4. Environment & Ecology Grade 4</p>						
<p>A. Know that plants, animals, and humans are dependent on air and water.</p> <ul style="list-style-type: none"> • Know that all living things need air and water to survive. • Describe potentially dangerous pest controls used in the home. • Identify things that cause sickness when put into the air, water, or soil. • Identify different areas where health can be affected by air, water, or land pollution. • Identify actions that can prevent or reduce waste pollution. 		<ul style="list-style-type: none"> • Brainstorming • Venn Diagram • Learning Centers 	<ul style="list-style-type: none"> • Land and water kit • Human body kit • Physics of sound kit 	<ul style="list-style-type: none"> • Land and water kit • Human body kit • Physics of sound kit 	<ul style="list-style-type: none"> • Multi sensory approach • Review • Re-teach • Individualized instruction • Small group instruction • Pre-teach • Alternative assignments • Extended time • Re-read • Instructional games • Graphic organizer • Structure • Study guides • Support resource kits • Flash cards • Drawings • Provide assistance for students to assemble the models. • Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> • Peer tutoring • Trade Books • Create games • Peer teaching • Debates • Computer software • Real life application • Research projects • Field trips • Guest speakers • Experiment • Projects • Investigations • Aerial drawings • Test soil properties • Students will research the m and a and debate the advantages and disadvantages.

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<p>4.3 Environmental Health 4.3.4. Environment & Ecology Grade 4</p>						
<p>B. Identify how human actions affect environmental health.</p> <ul style="list-style-type: none"> • Identify pollutants. • Identify sources of pollution. • Identify litter and its effect on the environment. • Describe how people can reduce pollution. 		<ul style="list-style-type: none"> •Brainstorming •Venn Diagram •Learning Centers 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Multi sensory approach •Review •Re-teach •Individualized instruction •Small group instruction •Pre-teach •Alternative assignments •Extended time •Re-read •Instructional games •Graphic organizer •Structure •Study guides •Support resource kits •Flash cards •Drawings •Provide assistance for students to assemble the models. •Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> •Peer tutoring •Trade Books •Create games •Peer teaching •Debates •Computer software •Real life application •Research projects •Field trips •Guest speakers •Experiment •Projects •Investigations •Aerial drawings •Test soil properties •Students will research the m and a and debate the advantages and disadvantages.

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<p>4.3 Environmental Health 4.3.4. Environment & Ecology Grade 4</p>						
<p>C. Understand that the elements of natural systems are interdependent.</p> <ul style="list-style-type: none"> •Identify some of the organisms that live together in an ecosystem. •Understand that the components of a system all play a part in a healthy natural system. •Identify the effects of a healthy environment on the ecosystem. 		<ul style="list-style-type: none"> •Brainstorming •Venn Diagram •Learning Centers 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Multi sensory approach •Review •Re-teach •Individualized instruction •Small group instruction •Pre-teach •Alternative assignments •Extended time •Re-read •Instructional games •Graphic organizer •Structure •Study guides •Support resource kits •Flash cards •Drawings •Provide assistance for students to assemble the models. •Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> •Peer tutoring •Trade Books •Create games •Peer teaching •Debates •Computer software •Real life application •Research projects •Field trips •Guest speakers •Experiment •Projects •Investigations •Aerial drawings •Test soil properties •Students will research the m and a and debate the advantages and disadvantages.

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4.4 Agriculture and Society 4.4.4. Environment & Ecology Grade 4						
A. Know the importance of agriculture to humans. <ul style="list-style-type: none"> •Identify people’s basic needs. •Explain the influence of agriculture on food, clothing, shelter, and culture form one area to another. •Know how people depend on agriculture. 		<ul style="list-style-type: none"> •Brainstorming •Venn Diagram •Learning Centers 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Multi sensory approach •Review •Re-teach •Individualized instruction •Small group instruction •Pre-teach •Alternative assignments •Extended time •Re-read •Instructional games •Graphic organizer •Structure •Study guides •Support resource kits •Flash cards •Drawings •Provide assistance for students to assemble the models. •Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> •Peer tutoring •Trade Books •Create games •Peer teaching •Debates •Computer software •Real life application •Research projects •Field trips •Guest speakers •Experiment •Projects •Investigations •Aerial drawings •Test soil properties •Students will research the m and a and debate the advantages and disadvantages.

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<p>4.4 Agriculture and Society 4.4.4. Environment & Ecology Grade 4</p>						
<p>B. Identify the role of the sciences in Pennsylvania agriculture. <ul style="list-style-type: none"> • Identify common animals found on Pennsylvania farms. • Identify common plants found on Pennsylvania farms. • Identify the parts of important agriculture related plants. </p>		<ul style="list-style-type: none"> •Brainstorming •Venn Diagram •Learning Centers 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Multi sensory approach •Review •Re-teach •Individualized instruction •Small group instruction •Pre-teach •Alternative assignments •Extended time •Re-read •Instructional games •Graphic organizer •Structure •Study guides •Support resource kits •Flash cards •Drawings •Provide assistance for students to assemble the models. •Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> •Peer tutoring •Trade Books •Create games •Peer teaching •Debates •Computer software •Real life application •Research projects •Field trips •Guest speakers •Experiment •Projects •Investigations •Aerial drawings •Test soil properties •Students will research the m and a and debate the advantages and disadvantages.

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<p>4.4 Agriculture and Society 4.4.4. Environment & Ecology Grade 4</p>						
<p>C. Know that food and fiber originate from plants and animals. <ul style="list-style-type: none"> •Define and identify food and fiber. •Identify agriculture products that are local and regional. •Identify an agricultural product based on its origin. </p>		<ul style="list-style-type: none"> •Brainstorming •Venn Diagram •Learning Centers 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Multi sensory approach •Review •Re-teach •Individualized instruction •Small group instruction •Pre-teach •Alternative assignments •Extended time •Re-read •Instructional games •Graphic organizer •Structure •Study guides •Support resource kits •Flash cards •Drawings •Provide assistance for students to assemble the models. •Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> •Peer tutoring •Trade Books •Create games •Peer teaching •Debates •Computer software •Real life application •Research projects •Field trips •Guest speakers •Experiment •Projects •Investigations •Aerial drawings •Test soil properties •Students will research the m and a and debate the advantages and disadvantages.

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<p>4.4 Agriculture and Society 4.4.4. Environment & Ecology Grade 4</p>						
<p>D. Identify technology and energy use associated with agriculture. <ul style="list-style-type: none"> •Identify the various tools and machinery necessary for farming. •Identify the types of energy used in producing food and fiber. •Identify tools and machinery used in the production of agricultural products. </p>		<ul style="list-style-type: none"> •Brainstorming •Venn Diagram •Learning Centers 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Multi sensory approach •Review •Re-teach •Individualized instruction •Small group instruction •Pre-teach •Alternative assignments •Extended time •Re-read •Instructional games •Graphic organizer •Structure •Study guides •Support resource kits •Flash cards •Drawings •Provide assistance for students to assemble the models. •Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> •Peer tutoring •Trade Books •Create games •Peer teaching •Debates •Computer software •Real life application •Research projects •Field trips •Guest speakers •Experiment •Projects •Investigations •Aerial drawings •Test soil properties •Students will research the m and a and debate the advantages and disadvantages.

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<p>4.5 Integrated Pest Management 4.5.4. Environment & Ecology Grade 4</p>						
<p>A. Know types of pests. • Identify classifications of pests. • Identify and categorize pests. • Know how pests fit into a food chain.</p>		<ul style="list-style-type: none"> •Brainstorming •Venn Diagram •Learning Centers 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Multi sensory approach •Review •Re-teach •Individualized instruction •Small group instruction •Pre-teach •Alternative assignments •Extended time •Re-read •Instructional games •Graphic organizer •Structure •Study guides •Support resource kits •Flash cards •Drawings •Provide assistance for students to assemble the models. •Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> •Peer tutoring •Trade Books •Create games •Peer teaching •Debates •Computer software •Real life application •Research projects •Field trips •Guest speakers •Experiment •Projects •Investigations •Aerial drawings •Test soil properties •Students will research the m and a and debate the advantages and disadvantages.

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<p>4.5 Integrated Pest Management 4.5.4. Environment & Ecology Grade 4</p>						
<p>B. Explain pest control.</p> <ul style="list-style-type: none"> • Know reasons why people control pests. • Identify different methods for controlling specific pests in the home, school, and community. 		<ul style="list-style-type: none"> •Brainstorming •Venn Diagram •Learning Centers 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Multi sensory approach •Review •Re-teach •Individualized instruction •Small group instruction •Pre-teach •Alternative assignments •Extended time •Re-read •Instructional games •Graphic organizer •Structure •Study guides •Support resource kits •Flash cards •Drawings •Provide assistance for students to assemble the models. •Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> •Peer tutoring •Trade Books •Create games •Peer teaching •Debates •Computer software •Real life application •Research projects •Field trips •Guest speakers •Experiment •Projects •Investigations •Aerial drawings •Test soil properties •Students will research the m and a and debate the advantages and disadvantages.

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4.5 Integrated Pest Management 4.5.4. Environment & Ecology Grade 4						
C. Understand society's need for integrated pest management. <ul style="list-style-type: none"> • Identify integrated pest management practices in the home. • Identify integrated pest management practices outside the home. 		<ul style="list-style-type: none"> • Brainstorming • Venn Diagram • Learning Centers 	<ul style="list-style-type: none"> • Land and water kit • Human body kit • Physics of sound kit 	<ul style="list-style-type: none"> • Land and water kit • Human body kit • Physics of sound kit 	<ul style="list-style-type: none"> • Multi sensory approach • Review • Re-teach • Individualized instruction • Small group instruction • Pre-teach • Alternative assignments • Extended time • Re-read • Instructional games • Graphic organizer • Structure • Study guides • Support resource kits • Flash cards • Drawings • Provide assistance for students to assemble the models. • Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> • Peer tutoring • Trade Books • Create games • Peer teaching • Debates • Computer software • Real life application • Research projects • Field trips • Guest speakers • Experiment • Projects • Investigations • Aerial drawings • Test soil properties • Students will research the m and a and debate the advantages and disadvantages.

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<p>4.6 Ecosystems and their Interactions 4.6.4. Environment & Ecology Grade 4</p>						
<p>A. Understand that living things are dependent on nonliving things in the environment for survival. Identify and categorize living and nonliving things.</p> <ul style="list-style-type: none"> • Describe the basic needs of an organism. • Identify basic needs of a plant and an animal and explain how their needs are met. • Identify plants and animals with their habitat and food sources. • Identify environmental variables that affect plant growth. • Describe how animals interact with plants to meet their needs for shelter. 	<ul style="list-style-type: none"> • Students will understand that living things are dependent on non-living things in the environment for survival. 	<ul style="list-style-type: none"> • Brainstorming • Venn Diagram • Learning Centers 	<ul style="list-style-type: none"> • Land and water kit • Human body kit • Physics of sound kit 	<ul style="list-style-type: none"> • Land and water kit • Human body kit • Physics of sound kit 	<ul style="list-style-type: none"> • Multi sensory approach • Review • Re-teach • Individualized instruction • Small group instruction • Pre-teach • Alternative assignments • Extended time • Re-read • Instructional games • Graphic organizer • Structure • Study guides • Support resource kits • Flash cards • Drawings • Provide assistance for students to assemble the models. • Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> • Peer tutoring • Trade Books • Create games • Peer teaching • Debates • Computer software • Real life application • Research projects • Field trips • Guest speakers • Experiment • Projects • Investigations • Aerial drawings • Test soil properties • Students will research the m and a and debate the advantages and disadvantages.

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<p>4.6 Ecosystems and their Interactions 4.6.4. Environment & Ecology Grade 4</p>						
<ul style="list-style-type: none"> •Describe how certain insects interact with soil for their needs. •Understand the components of a food chain. •Identify a local ecosystem and its living and nonliving components. •Identify a simple ecosystem and its living and nonliving components. •Identify common soil textures. •Identify animals that live underground. 		<ul style="list-style-type: none"> •Brainstorming •Venn Diagram •Learning Centers 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Multi sensory approach •Review •Re-teach •Individualized instruction •Small group instruction •Pre-teach •Alternative assignments •Extended time •Re-read •Instructional games •Graphic organizer •Structure •Study guides •Support resource kits •Flash cards •Drawings •Provide assistance for students to assemble the models. •Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> •Peer tutoring •Trade Books •Create games •Peer teaching •Debates •Computer software •Real life application •Research projects •Field trips •Guest speakers •Experiment •Projects •Investigations •Aerial drawings •Test soil properties •Students will research the m and a and debate the advantages and disadvantages.

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<p>4.6 Ecosystems and their Interactions 4.6.4. Environment & Ecology Grade 4</p>						
<p>B. Understand the concept of cycles.</p> <ul style="list-style-type: none"> • Explain the water cycle. • Explain the carbon dioxide/oxygen cycle (photosynthesis). 		<ul style="list-style-type: none"> •Brainstorming •Venn Diagram •Learning Centers 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Multi sensory approach •Review •Re-teach •Individualized instruction •Small group instruction •Pre-teach •Alternative assignments •Extended time •Re-read •Instructional games •Graphic organizer •Structure •Study guides •Support resource kits •Flash cards •Drawings •Provide assistance for students to assemble the models. •Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> •Peer tutoring •Trade Books •Create games •Peer teaching •Debates •Computer software •Real life application •Research projects •Field trips •Guest speakers •Experiment •Projects •Investigations •Aerial drawings •Test soil properties •Students will research the m and a and debate the advantages and disadvantages.

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<p>4.6 Ecosystems and their Interactions 4.6.4. Environment & Ecology Grade 4</p>						
<p>C. Identify how ecosystems change over time.</p>		<ul style="list-style-type: none"> •Brainstorming •Venn Diagram •Learning Centers 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Multi sensory approach •Review •Re-teach •Individualized instruction •Small group instruction •Pre-teach •Alternative assignments •Extended time •Re-read •Instructional games •Graphic organizer •Structure •Study guides •Support resource kits •Flash cards •Drawings •Provide assistance for students to assemble the models. •Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> •Peer tutoring •Trade Books •Create games •Peer teaching •Debates •Computer software •Real life application •Research projects •Field trips •Guest speakers •Experiment •Projects •Investigations •Aerial drawings •Test soil properties •Students will research the m and a and debate the advantages and disadvantages.

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4.7 Threatened, Endangered and Extinct Species 4.7.4. Environment & Ecology Grade 4						
A. Identify differences in living things. <ul style="list-style-type: none"> • Explain why plants and animals are different colors, shapes, and sizes and how these differences relate to their survival. • Identify characteristics that living things inherit from their parents. • Explain why each of the four elements in a habitat is essential for survival. • Identify local plants or animals and describe their habitats. 		<ul style="list-style-type: none"> •Brainstorming •Venn Diagram •Learning Centers 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Multi sensory approach •Review •Re-teach •Individualized instruction •Small group instruction •Pre-teach •Alternative assignments •Extended time •Re-read •Instructional games •Graphic organizer •Structure •Study guides •Support resource kits •Flash cards •Drawings •Provide assistance for students to assemble the models. •Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> •Peer tutoring •Trade Books •Create games •Peer teaching •Debates •Computer software •Real life application •Research projects •Field trips •Guest speakers •Experiment •Projects •Investigations •Aerial drawings •Test soil properties •Students will research the m and a and debate the advantages and disadvantages.

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<p>4.7 Threatened, Endangered and Extinct Species 4.7.4. Environment & Ecology Grade 4</p>						
<p>B. Know that adaptations are important for survival.</p> <ul style="list-style-type: none"> • Explain how specific adaptations can help a living organism to survive. • Explain what happens to a living thing when its food, water, shelter, or space is changed. 		<ul style="list-style-type: none"> •Brainstorming •Venn Diagram •Learning Centers 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Multi sensory approach •Review •Re-teach •Individualized instruction •Small group instruction •Pre-teach •Alternative assignments •Extended time •Re-read •Instructional games •Graphic organizer •Structure •Study guides •Support resource kits •Flash cards •Drawings •Provide assistance for students to assemble the models. •Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> •Peer tutoring •Trade Books •Create games •Peer teaching •Debates •Computer software •Real life application •Research projects •Field trips •Guest speakers •Experiment •Projects •Investigations •Aerial drawings •Test soil properties •Students will research the m and a and debate the advantages and disadvantages.

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<p>4.7 Threatened, Endangered and Extinct Species 4.7.4. Environment & Ecology Grade 4</p>						
<p>C. Define and understand extinction.</p> <ul style="list-style-type: none"> • Identify plants and animals that are extinct. • Explain why some plants and animals are extinct. • Know that there are local and state laws regarding plants and animals. 		<ul style="list-style-type: none"> • Brainstorming • Venn Diagram • Learning Centers 	<ul style="list-style-type: none"> • Land and water kit • Human body kit • Physics of sound kit 	<ul style="list-style-type: none"> • Land and water kit • Human body kit • Physics of sound kit 	<ul style="list-style-type: none"> • Multi sensory approach • Review • Re-teach • Individualized instruction • Small group instruction • Pre-teach • Alternative assignments • Extended time • Re-read • Instructional games • Graphic organizer • Structure • Study guides • Support resource kits • Flash cards • Drawings • Provide assistance for students to assemble the models. • Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> • Peer tutoring • Trade Books • Create games • Peer teaching • Debates • Computer software • Real life application • Research projects • Field trips • Guest speakers • Experiment • Projects • Investigations • Aerial drawings • Test soil properties • Students will research the m and a and debate the advantages and disadvantages.

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<p>4.8 Humans and the Environment 4.8.4. Environment & Ecology Grade 4</p>						
<p>A. Identify the biological requirements of humans. •Explain how a dynamically changing environment provides for sustainability of living systems. •Identify several ways that people use natural resources.</p>		<ul style="list-style-type: none"> •Brainstorming •Venn Diagram •Learning Centers 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Multi sensory approach •Review •Re-teach •Individualized instruction •Small group instruction •Pre-teach •Alternative assignments •Extended time •Re-read •Instructional games •Graphic organizer •Structure •Study guides •Support resource kits •Flash cards •Drawings •Provide assistance for students to assemble the models. •Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> •Peer tutoring •Trade Books •Create games •Peer teaching •Debates •Computer software •Real life application •Research projects •Field trips •Guest speakers •Experiment •Projects •Investigations •Aerial drawings •Test soil properties •Students will research the m and a and debate the advantages and disadvantages.

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<p>4.8 Humans and the Environment 4.8.4. Environment & Ecology Grade 4</p>						
<p>B. Know that environmental conditions influence where and how people live. <ul style="list-style-type: none"> • Identify how regional natural resources influence what people use. • Explain the influence of climate on how and where people live. </p>	<ul style="list-style-type: none"> • Students will know that environmental conditions influence where and how people live. 	<ul style="list-style-type: none"> • Brainstorming • Venn Diagram • Learning Centers 	<ul style="list-style-type: none"> • Land and water kit • Human body kit • Physics of sound kit 	<ul style="list-style-type: none"> • Land and water kit • Human body kit • Physics of sound kit 	<ul style="list-style-type: none"> • Multi sensory approach • Review • Re-teach • Individualized instruction • Small group instruction • Pre-teach • Alternative assignments • Extended time • Re-read • Instructional games • Graphic organizer • Structure • Study guides • Support resource kits • Flash cards • Drawings • Provide assistance for students to assemble the models. • Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> • Peer tutoring • Trade Books • Create games • Peer teaching • Debates • Computer software • Real life application • Research projects • Field trips • Guest speakers • Experiment • Projects • Investigations • Aerial drawings • Test soil properties • Students will research the m and a and debate the advantages and disadvantages.

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<p>4.8 Humans and the Environment 4.8.4. Environment & Ecology Grade 4</p>						
<p>C. Explain how human activities may change the environment.</p> <ul style="list-style-type: none"> • Identify everyday human activities and how they affect the environment. • Identify examples of how human activities within a community affect the natural environment. 		<ul style="list-style-type: none"> • Brainstorming • Venn Diagram • Learning Centers 	<ul style="list-style-type: none"> • Land and water kit • Human body kit • Physics of sound kit 	<ul style="list-style-type: none"> • Land and water kit • Human body kit • Physics of sound kit 	<ul style="list-style-type: none"> • Multi sensory approach • Review • Re-teach • Individualized instruction • Small group instruction • Pre-teach • Alternative assignments • Extended time • Re-read • Instructional games • Graphic organizer • Structure • Study guides • Support resource kits • Flash cards • Drawings • Provide assistance for students to assemble the models. • Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> • Peer tutoring • Trade Books • Create games • Peer teaching • Debates • Computer software • Real life application • Research projects • Field trips • Guest speakers • Experiment • Projects • Investigations • Aerial drawings • Test soil properties • Students will research the m and a and debate the advantages and disadvantages.

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<p>4.8 Humans and the Environment 4.8.4. Environment & Ecology Grade 4</p>						
<p>D. Know the importance of natural resources in daily life.</p> <ul style="list-style-type: none"> •Identify items used in daily life that come from natural resources. •Identify ways to conserve our natural resources. •Identify major land uses in the community. 		<ul style="list-style-type: none"> •Brainstorming •Venn Diagram •Learning Centers 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Multi sensory approach •Review •Re-teach •Individualized instruction •Small group instruction •Pre-teach •Alternative assignments •Extended time •Re-read •Instructional games •Graphic organizer •Structure •Study guides •Support resource kits •Flash cards •Drawings •Provide assistance for students to assemble the models. •Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> •Peer tutoring •Trade Books •Create games •Peer teaching •Debates •Computer software •Real life application •Research projects •Field trips •Guest speakers •Experiment •Projects •Investigations •Aerial drawings •Test soil properties •Students will research the m and a and debate the advantages and disadvantages.

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<p>4.9 Environmental Laws and Regulations 4.9.4. Environment & Ecology Grade 4</p>						
<p>A. Know that there are laws and regulations for the environment. •Explain how the recycling law impacts the school and home. •Identify and describe the role of a local or state agency that deals with environmental laws and regulations.</p>		<ul style="list-style-type: none"> •Brainstorming •Venn Diagram •Learning Centers 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Land and water kit •Human body kit •Physics of sound kit 	<ul style="list-style-type: none"> •Multi sensory approach •Review •Re-teach •Individualized instruction •Small group instruction •Pre-teach •Alternative assignments •Extended time •Re-read •Instructional games •Graphic organizer •Structure •Study guides •Support resource kits •Flash cards •Drawings •Provide assistance for students to assemble the models. •Provide auditory and tactile stimulus. 	<ul style="list-style-type: none"> •Peer tutoring •Trade Books •Create games •Peer teaching •Debates •Computer software •Real life application •Research projects •Field trips •Guest speakers •Experiment •Projects •Investigations •Aerial drawings •Test soil properties •Students will research the m and a and debate the advantages and disadvantages.