



Zoo Miami Field Trips

Next Generation State Science Standards



Programs Overview

Grade	Animals Live!			Eco-Investigations	
	Creature Feature	Everglades Expedition	Sensational Senses	Eco-Excursion	Enriching Science
K	SC.K.L.14.3	SC.K.L.14.1	SC.K.L.14.1, SC.K.L.14.3	SC.K.N.1.5	SC.K.N.1.3, SC.K.N.1.5
1	SC.1.L.17.1	SC.1.L.17.1	SC.1.L.14.1	SC.1.L.17.1	SC.1.N.1.3
2	SC.2.L.17.1, SC.2.L.17.2	SC.2.E.7.1, SC.2.L.17.1, SC.2.L.17.2	SC.2.L.17.2	SC.2.N.1.5, SC.2.L.17.1	SC.2.N.1.4
3	SC.3.L.15.1	SC.3.L.17.1	N/A	SC.3.N.1.6, SC.3.N.1.7	SC.3.N.1.3, SC.3.N.1.6
4	SC.4.L.16.2, SC.4.L.17.4	SC.4.L.17.4	SC.4.L.16.2	SC.4.N.1.7	SC.4.N.1.6, SC.4.N.1.7
5	SC.5.L.17.1	SC.5.L.17.1	SC.5.L.17.1	SC.5.N.1.2, SC.5.N.1.6	SC.5.N.1.1, SC.5.N.1.4
6	N/A	SC.6.E.7.6	N/A	SC.6.N.1.3	SC.6.N.1.1
7	SC.7.E.6.6	SC.7.E.6.6	N/A	SC.7.N.1.6	SC.7.N.1.1, SC.7.N.1.4, SC.7.N.1.6
8	N/A	N/A	N/A	SC.8.N.1.6, SC.8.N.4.1	SC.8.N.1.1, SC.8.N.1.6
9-12	SC.912.L.17.8	SC.912.L.17.4, SC.912.L.17.8, SC.912.L.17.16	N/A	SC.912.N.4.1	SC.912.N.1.1



Field Trip Supported NGSS Standards



Animals Live! (Outdoor presentation with up to 6 animals)

Grade	Creature Feature	Everglades Expedition	Sensational Senses	Eco-Excursion	Enriching Science
Kindergarten	<ul style="list-style-type: none"> Observe plants and animals, describe how they are alike and how they are different in the way they look and in the things they do. (SC.K.L.14.3) 	<ul style="list-style-type: none"> Recognize the five senses and related body parts. (SC.K.L.14.1) 	<ul style="list-style-type: none"> Recognize the five senses and related body parts. (SC.K.L.14.1) Observe plants and animals, describe how they are alike and how they are different in the way they look and in the things they do. (SC.K.L.14.3) 	<ul style="list-style-type: none"> Recognize that learning can come from careful observation. (SC.K.N.1.5) 	<ul style="list-style-type: none"> Keep records as appropriate –such as pictorial records—of investigations conducted. (SC.K.N.1.3) Recognize that learning can come from careful observation. (SC.K.N.1.5)
Grade 1	<ul style="list-style-type: none"> Through observation, recognize that all plants and animals, including humans, need the basic necessities of air, water, food, and space. (SC.1.L.17.1) 	<ul style="list-style-type: none"> Through observation, recognize that all plants and animals, including humans, need the basic necessities of air, water, food, and space. (SC.1.L.17.1) 	<ul style="list-style-type: none"> Make observations of living things and their environment using the five senses (SC.1.L.14.1) 	<ul style="list-style-type: none"> Through observation, recognize that all plants and animals, including humans, need the basic necessities of air, water, food, and space. (SC.1.L.17.1) 	<ul style="list-style-type: none"> Keep records as appropriate – such as pictorial and written records – of investigations conducted (SC.1.N.1.3)
Grade 2	<ul style="list-style-type: none"> Compare and contrast the basic needs that all living things, including humans, have for survival. (SC.2.L.17.1) Recognize and explain that living things are found all over Earth, but each is only able to live in habitats that meet its basic needs. (SC.2.L.17.2) 	<ul style="list-style-type: none"> Compare and describe changing patterns in nature that repeat themselves, such as weather conditions including temperature and precipitation, day to day and season to season. (SC.2.E.7.1) Compare and contrast the basic needs that all living things, including humans, have for survival. (SC.2.L.17.1) Recognize and explain that living things are found all over Earth, but each is only able to live in habitats that meet its basic needs. (SC.2.L.17.2) 	<ul style="list-style-type: none"> Recognize and explain that living things are found all over Earth, but each is only able to live in habitats that meet its basic needs. (SC.2.L.17.2) 	<ul style="list-style-type: none"> Distinguish between empirical observation (what you see, hear, feel, smell, or taste) and ideas or inferences (what you think). (SC.2.N.1.5) Compare and contrast the basic needs that all living things, including humans, have for survival. (SC.2.L.17.1) 	<ul style="list-style-type: none"> Explain how particular science investigations should yield similar conclusions when repeated. (SC.2.N.1.4)

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Grade 3	<ul style="list-style-type: none"> Classify animals into major groups (mammals, birds, reptiles, amphibians, fish, arthropods, vertebrates and invertebrates, those having live births and those which lay eggs) according to their physical characteristics and behaviors. (SC.3.L.15.1) 	<ul style="list-style-type: none"> Describe how animals and plants respond to changing seasons. (SC.3.L.17.1) 		<ul style="list-style-type: none"> Infer based on observations. (SC.3.N.1.6) Explain that empirical evidence is information, such as observations or measurements, that is used to help validate explanations of natural phenomena (SC.3.N.1.7) 	<ul style="list-style-type: none"> Keep records as appropriate such as pictorial, written, or simple charts and graphs, of investigation conducted. (SC.3.N.1.3) Infer based on observations. (SC.3.N.1.6)
Grade 4	<ul style="list-style-type: none"> Explain that although characteristics of plants and animals are inherited, some characteristics can be affected by the environment. (SC.4.L.16.2) Recognize ways plants and animals, including humans, can impact the environment. (SC.4.L.17.4) 	<ul style="list-style-type: none"> Recognize ways plants and animals, including humans, can impact the environment. (SC.4.L.17.4) 	<ul style="list-style-type: none"> Explain that although characteristics of plants and animals are inherited, some characteristics can be affected by the environment. (SC.4.L.16.2) 	<ul style="list-style-type: none"> Recognize and explain that scientists base their explanation on evidence (SC.4.N.1.7) 	<ul style="list-style-type: none"> Keep records that describe observations made, carefully distinguishing actual observations from ideas and inferences about the observations. (SC.4.N.1.6) Recognize and explain that scientists base their explanation on evidence (SC.4.N.1.7)
Grade 5	<ul style="list-style-type: none"> Compare and contrast adaptations displayed by animals and plants that enable them to survive in different environments such as life cycles variations, animal behaviors and physical characteristics. (SC.5.L.17.1) 	<ul style="list-style-type: none"> Compare and contrast adaptations displayed by animals and plants that enable them to survive in different environments such as life cycles variations, animal behaviors and physical characteristics. (SC.5.L.17.1) 	<ul style="list-style-type: none"> Compare and contrast adaptations displayed by animals and plants that enable them to survive in different environments such as life cycles variations, animal behaviors and physical characteristics. (SC.5.L.17.1) 	<ul style="list-style-type: none"> Explain the difference between an experiment and other types of scientific investigation. (SC.5.N.1.2) Recognize and explain the difference between personal opinion/interpretation and verified observation. (SC.5.N.1.6) 	<ul style="list-style-type: none"> Define a problem, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigations of various types such as: systematic observations, experiments requiring the identification of variables, collecting and organizing data, interpreting data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions. (SC.5.N.1.1) Identify a control group and explain its

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					importance in an experiment. (SC.5.N.1.4)
Grade 6		<ul style="list-style-type: none"> Differentiate between weather and climate. (SC.6.E.7.6) 		<ul style="list-style-type: none"> Explain the difference between an experiment and other types of scientific investigation, and explain the relative benefits and limitations for each. (SC.6.N.1.3) 	<ul style="list-style-type: none"> Define a problem, from the sixth grade curriculum, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigation of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions. (SC.6.N.1.1)
Grade 7	<ul style="list-style-type: none"> Identify the impact that humans have had on Earth, such as deforestation, urbanization, desertification, erosion, air and water quality, changing the flow of water. (SC.7.E.6.6) 	<ul style="list-style-type: none"> Identify the impact that humans have had on Earth, such as deforestation, urbanization, desertification, erosion, air and water quality, changing the flow of water. (SC.7.E.6.6) 		<ul style="list-style-type: none"> Explain that empirical evidence is the cumulative body of observations of a natural phenomenon on which scientific explanations are based. (SC.7.N.1.6) 	<ul style="list-style-type: none"> Define a problem from the seventh grade curriculum, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigation of various types such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions and defend conclusions. (SC.7.N.1.1) Identify test variables (independent variables) and outcome variables

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					<p>(dependent variables) in an experiment. (SC.7.N.1.4)</p> <ul style="list-style-type: none"> Explain that empirical evidence is the cumulative body of observations of a natural phenomenon on which scientific explanations are based. (SC.7.N.1.6)
Grade 8				<ul style="list-style-type: none"> Understand that scientific investigations involve the collection of relevant empirical evidence, the use of logical reasoning, and the application of imagination in devising hypotheses, predictions, explanations, and models to make sense of the collected evidence. (SC.8.N.1.6) Explain that science is one of the processes that can be used to inform decision making at the community, state, national, and international levels. (SC.8.N.4.1) 	<ul style="list-style-type: none"> Define a problem from the eighth grade curriculum using appropriate reference materials to support scientific understanding, plan and carry out scientific investigations of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions. (SC.8.N.1.1) Understand that scientific investigations involve the collection of relevant empirical evidence, the use of logical reasoning, and the application of imagination in devising hypotheses, predictions, explanations, and models to make sense

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<p data-bbox="113 561 264 587">Grades 9-12</p>	<ul data-bbox="310 207 625 459" style="list-style-type: none"> • Recognize the consequences of the losses of biodiversity due to catastrophic events, climate changes, human activity, and the introduction of invasive, non-native species. (SC.912.L.17.8) 	<ul data-bbox="655 207 970 914" style="list-style-type: none"> • Describe changes in ecosystems resulting from seasonal variations, climate change and succession. (SC.912.L.17.4) • Recognize the consequences of the losses of biodiversity due to catastrophic events, climate changes, human activity, and the introduction of invasive, non-native species. (SC.912.L.17.8) • Discuss the large-scale environmental impacts resulting from human activity, including waste spills, oil spills, runoff, greenhouse gases, ozone depletion, and surface and groundwater pollution. (SC.912.L.17.16) 		<ul data-bbox="1344 207 1638 427" style="list-style-type: none"> • Explain how scientific knowledge and reasoning provide an empirically-based perspective to inform society’s decision-making. (SC.912.N.4.1) 	<p data-bbox="1734 142 1976 199">of the collected evidence. (SC.8.N.1.6)</p> <ul data-bbox="1688 207 1982 427" style="list-style-type: none"> • Define problem based on a specific body of knowledge and do following: pose a questions, conduct observations, etc. (SC.912.N.1.1)