

Unit Title: Plants and Animals in Habitats/ Lifelong Healthy Eating

INSTRUCTIONAL UNIT AUTHORS

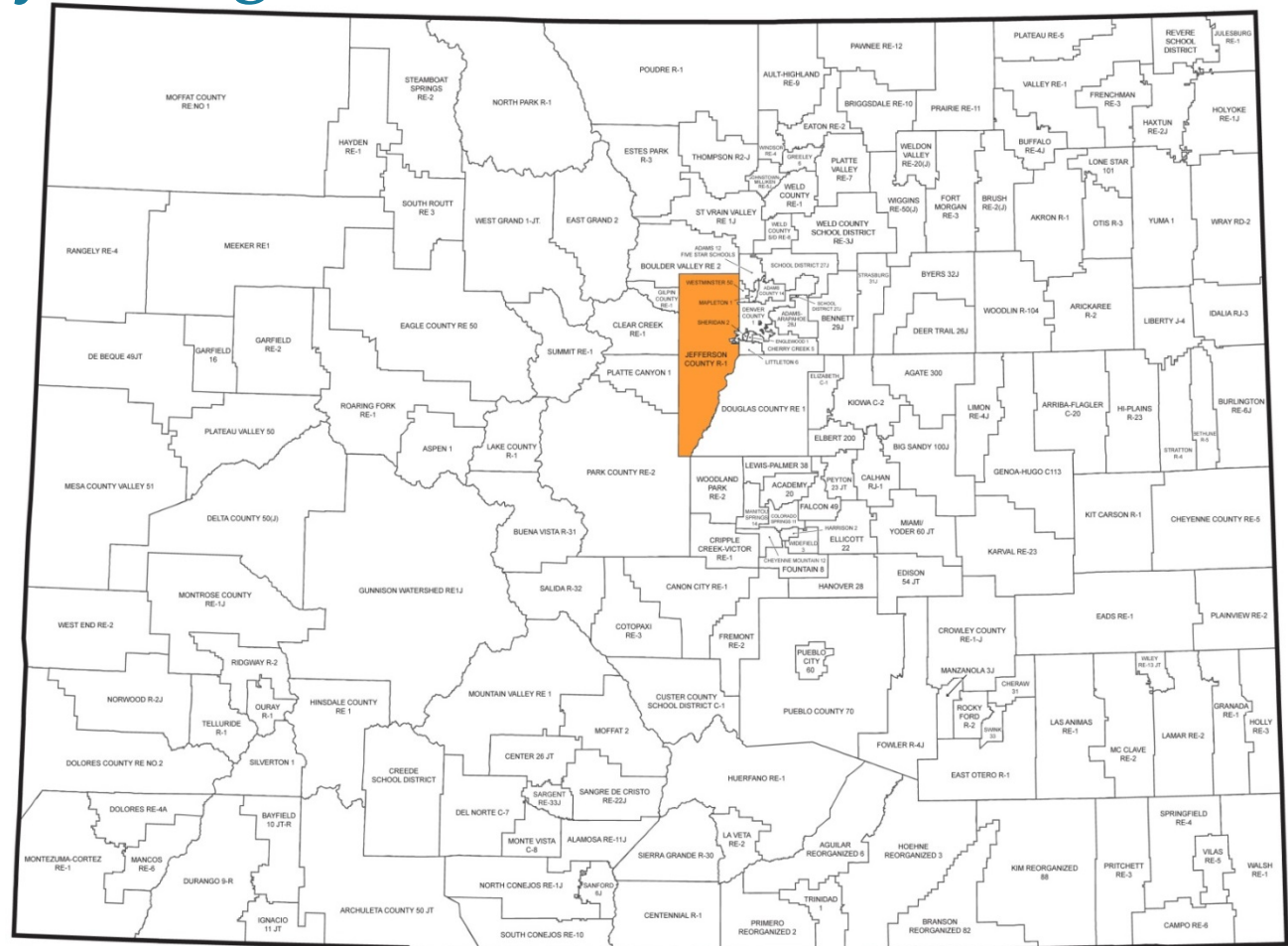
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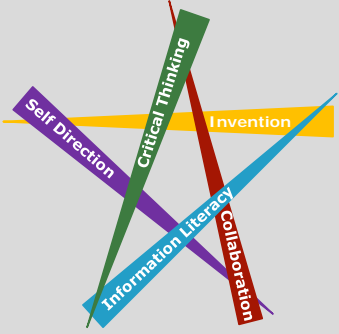
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This unit was authored by a team of Colorado educators. The template provided one example of unit design that enabled teacher-authors to organize possible learning experiences, resources, differentiation, and assessments. The unit is intended to support teachers, schools, and districts as they make their own local decisions around the best instructional plans and practices for all students.

Content Area	Science/Comprehensive Health	Grade Level	2 nd
Course Name/Course Code	Healthy Habits, Healthy Habitats		
Standard	Grade Level Expectations (GLE)	GLE Code	
Life Science	1. Organisms depend on their habitat's nonliving parts to satisfy their needs	SC09-GR.2-S.2-GLE.1	
	2. Each plant or animal has different structures or behaviors that serve different functions	SC09-GR.2-S.2-GLE.2	
Physical and Personal Wellness	1. Identify eating behaviors that contribute to maintaining good health	CH09-GR.2-S.2-GLE.1	

Colorado 21st Century Skills



Critical Thinking and Reasoning: *Thinking Deeply, Thinking Differently*

Information Literacy: *Untangling the Web*

Collaboration: *Working Together, Learning Together*

Self-Direction: *Own Your Learning*

Invention: *Creating Solutions*

Integrated Curriculum Design: This interdisciplinary approach matches basic concepts in science and social studies – interdependence, region, environment, adaptation - forming overlaps in instruction of certain topics in an authentic integrated model.

Unit Titles	Length of Unit/Contact Hours	Unit Number/Sequence
Plants and Animals in Habitats/ Lifelong Healthy Eating	Teacher's Discretion	Teacher's Discretion

Unit Title	Plants and Animals in Habitats/ Lifelong Healthy Eating		Length of Unit	3 weeks
Focusing Lens(es)	Choices/Habits/Interactions	Standards and Grade Level Expectations Addressed in this Unit	SC09-GR.2-S.2-GLE.1 SC09-GR.2-S.2-GLE.2 CH09-GR.2-S.2-GLE.1	
Inquiry Questions (Engaging-Debatable):	<ul style="list-style-type: none"> • Why is the interaction between organisms and their environment important? (SC09-GR.2-S.2-GLE.1; N.1) • What would happen to organisms or the environment if either one suddenly and/or drastically changed? SC09-GR.2-S.2) • How would your body feel if you made the choice to eat ice cream and cookies for a meal every day? (CH09-GR.2-S.2-GLE.1-EO. d) • Why do many people claim that breakfast is the most important meal of the day? (CH09-GR.2-S.2-GLE.1-EO.a,c;IQ-2) • Why is it important to pay attention to your body when it feels hungry or full? (CH09-GR.2-S.2-GLE.1-EO. c) 			
Unit Strands	Life Science Physical and Personal Wellness			
Concepts	Habitat, Organism, Biotic, Abiotic, Environment, Population, Structure/Function, Behaviors, Interaction, Survival, Habits, Choices, Consequences, Health, Energy, Systems, Awareness, Signals, Consumption			

Generalizations My students will Understand that...	Guiding Questions	
	Factual	Conceptual
An organism's (plants, animals and humans) wellness and survival depends on its environment, habitat, choices and habits. (SC09-GR.2-S.2- GLE.1-EO.c; RA.1) (CH09-GR.2-S.2-GLE.1-EO.a,b,c; RA.2)	<p>What are the characteristics of a healthy environment? (SC09-GR.2-S.2-GLE.1; RA.1)</p> <p>What habits have positive consequences? (CH09-GR.2- S.2-GLE.1-EO. a,c,d)</p> <p>What habits have negative consequences? (CH09-GR.2- S.2-GLE.1-EO.a,c,d)</p> <p>What makes a habitat suitable for a specific organism? (CH09-GR.2- S.2-GLE.1-EO.a,c,d)</p>	<p>How do organisms interact in a habitat to create a healthy environment? (SC09-GR.2-S.2-GLE.1; N.1)</p> <p>How do habits impact your health? (CH09-GR.2- S.2-GLE.1-EO. a,c,d)</p> <p>How are the habitats of two organisms similar and different? (SC09-GR.2-S.2- GLE.1-EO.c; RA.1)</p>
The structure and function of body systems depend on an organism's behavior in relation to food and water consumption. (SC09-GR.2-S.2-GLE.2-EO.b) (CH09-GR.2-S.2-GLE.1-EO.a,b;RA. 1,2)	<p>What body systems require water to function? (CH09-GR.2-S.2-GLE.1-EO.a,b;RA. 1,2)</p> <p>How do body systems use water? (CH09-GR.2-S.2-GLE.1-EO.a,b;RA. 1,2)</p> <p>What food choices are good for body systems? CH09-GR.2-S.2-GLE.1-EO.a,b;RA. 1,2)</p> <p>What are the advantages of an animal or plant having a specific structure? (SC09-GR.2-S.2-GLE.2-EO.b)</p> <p>What are the basic needs of plants and animals? (SC09- GR.2-S.2-GLE.1; IQ.1)</p>	<p>How do you know when your body needs the most water? (CH09-GR.2-S.2-GLE.1-EO.a,b;RA. 1,2)</p> <p>Why do food choices impact our body? (CH09-GR.2-S.2-GLE.1-EO.a,b;RA. 1,2)</p> <p>How are the behaviors of a plant and an animal similar and different?</p> <p>What different structures do plants and animals have that perform the same functions? (For example what different structures do plants and animals have to get water? (CH09-GR.2-S.2-GLE.1-EO.a,b;RA. 1,2)</p>

<p>The consumption of a variety of foods can impact an organism's energy and overall health. (CH09- GR.2-S.2- GLE.1-EO. a) (SC09-GR.2-S.2-GLE.1-EO.b)</p>	<p>What foods make us healthy? (CH09- GR.2-S.2-GLE.1-EO. a) What foods give us more energy? (CH09- GR.2-S.2- GLE.1-EO. a) Why do certain foods give us more energy than others? (CH09- GR.2-S.2-GLE.1-EO. a) What living (biotic) components of an organism's environment impact its overall health? (SC09-GR.2-S.2- GLE.1-EO.b)</p>	<p>How does food impact your learning and behavior? Which foods give you the most energy? How does eating chips and candy everyday affect your body? How can non-living (abiotic) components of an organism's environment impact its overall health?</p>
<p>An organism's behavior, such as awareness of body signals, enhances its ability to function better. (CH09- GR.2-S.2-GLE.1-EO.c,d,e) (SC09-GR.2-S.2-GLE.2-EO.b)</p>	<p>What the advantages of an animal or plant having a specific behavior? (SC09-GR.2-S.2- GLE.2-EO.b) What are body signals? (CH09-GR.2-S.2-GLE.1-EO.c,d,e)</p>	<p>Why is the behavior of plants and animals important? How can being unaware of body signals affect your health?</p>

Critical Content: My students will Know...	Key Skills: My students will be able to (Do)...
<ul style="list-style-type: none"> • How organisms depend on their habitat. (SC09-GR.2-S.2- GLE.1-EO.a) • The non-living components of a habitat (SC09-GR.2-S.2- GLE.1-EO.b) • Why an organism can survive in its habitat (SC09-GR.2-S.2- GLE.1-EO.c) • Living things depend on the health of their habitats (SC09- GR.2-S.2-GLE.1; RA.1) • Different organisms have different needs (SC09-GR.2-S.2- GLE.1; RA.2) • Why a habitat is suitable for a specific organism (SC09-GR.2- S.2-GLE.2-EO.a) • Why a habitat is not suitable for a specific organism (SC09- GR.2-S.2-GLE.2-EO.a) • The structures of a population that help that population survive (SC09-GR.2-S.2-GLE.2-EO.b) • The behaviors of a population that help that population survive (SC09-GR.2-S.2-GLE.2-EO.b) • The benefits of healthy food and beverage choices (CH09-GR.2-S.2-GLE.1-EO.a;RA-2;N.1) • The benefits of daily breakfast and water intake (CH09-GR.2-S.2-GLE.1-EO.a,c;IQ.1;RA.1,2) – Example: prevents dehydration and helps the brain to be more alert. • The body signals of being full or hungry (CH09-GR.2-S.2-GLE.1-EO.e;IQ.2) Example: A person may have a low level of energy when hungry. 	<p>Use evidence to develop a scientific explanation about how organisms depend on their habitat (SC09- GR.2-S.2-GLE.1-EO.a)</p> <ul style="list-style-type: none"> • Analyze and interpret data about non-living components of a habitat (SC09-GR.2-S.2-GLE.1-EO.b) • Assess and provide feedback on other scientific explanations regarding why an organism can survive in its habitat (SC09-GR.2-S.2-GLE.1-EO.c) • Use instruments to make observations about habitat components - for example, data can be collected from a fish tank to assess the environmental health (pH). (SC09-GR.2-S.2-GLE.1-EO.d) • Identify the different organisms and their needs • Describe different ways that scientists seek to understand about organisms and their interactions with their environment (SC09-GR.2-S.2-GLE.1; N.1) • Collaborate with other students in developing a scientific explanation about how organisms depend on their habitat (SC09-GR.2-S.2-GLE.1; N.2) • Use evidence to develop an explanation as to why a habitat is suitable for a specific organism (SC09- GR.2-S.2-GLE.2-EO.a) • Use evidence to develop an explanation as to why a habitat is not suitable for a specific organism (SC09- GR.2-S.2-GLE.2-EO.a) • Analyze and interpret data about structures of a population that help that population survive (SC09- GR.2-S.2-GLE.2-EO.b) • Analyze and interpret data about behaviors of a population that help that population survive (SC09-GR.2- S.2-GLE.2-EO.b) • Choose healthy food and beverages (CH09-GR.2-S.2-GLE.1-EO.a,b,c;IQ.1;RA.1, 2;N.1) • Choose a variety of healthy snacks (CH09-GR.2-S.2-GLE.1-EO.a,d;RA.2;N.1) • Recognize when they are full or hungry (CH09-GR.2-S.2-GLE.1-EO.e;IQ.2) • Identify healthy foods and beverages (CH09-GR.2-S.2-GLE.1-EO.a,d;N.1)

<p>Critical Language: includes the Academic and Technical vocabulary, semantics, and discourse which are particular to and necessary for accessing a given discipline. EXAMPLE: A student in Language Arts can demonstrate the ability to apply and comprehend critical language through the following statement: <i>“Mark Twain exposes the hypocrisy of slavery through the use of satire.”</i></p>	
<p>A student in _____ can demonstrate the ability to apply and comprehend critical language through the following statement(s):</p>	<p><i>I use evidence from my observations to tell how organisms depend on where they live.</i> <i>Organisms need a healthy environment to survive.</i> <i>I use data to explain the environmental health of a habitat.</i> <i>A habitat is suitable for a specific organism if its resources help the population survive.</i> <i>A habitat is not suitable for a specific organism if its resources do not help the population survive.</i> <i>A population’s body structure helps them survive.</i> <i>Johnny will be able to identify the benefits of and engage in lifelong healthy eating habits by maintaining a balanced diet.</i></p>
<p>Academic Vocabulary:</p>	<p>Scientific Explanation, Data, Evidence, Interpret, Analyze, Assess, Collaborate, Observation, Feedback, Habit, Healthy, Explain, Describe, Identify, Benefits, Consequences, Awareness, Consumption, Choices</p>
<p>Technical Vocabulary:</p>	<p>Organisms, Habitat, Living Components, Non-Living Components, Environmental Health, Basic Need, Structures, Behaviors, Survive, Organism, Advantages, Unique, Population, Functions, Environment, Resources, Suitable, Body Signals, Balanced Diet, Energy</p>

Unit Description:	This unit explores structures and functions of organisms based on their environment. Students will begin to understand how structures and functions of an organism help it survive within its environment. Students will learn these concepts through exploring different organisms, habitats, and the foods organisms and humans eat to stay healthy. The unit concludes with students creating a comparison model that describes an organism and human habitat, its environment surroundings, and food choices that help it to survive.
Unit Generalizations	
Key Generalization (s):	An organism's (plants, animals and humans) wellness and survival depends on its environment, habitat, choices and habits.
Supporting Generalizations:	<ul style="list-style-type: none"> • The structure and function of body systems depend on an organism's behavior in relation to food and water consumption. • The consumption of a variety of foods can impact an organism's energy and overall health. • An organism's behavior, such as awareness of body signals, enhances its ability to function better.
Considerations:	Teachers could use a variety of different models for this unit. Models can be drawings, illustrations, 3D, as well as any alternative way of organizing concepts.

GREEN	Active involvement in developmentally appropriate knowledge production results in work that fuses arts and non-arts disciplines.
BLUE	Equal and significant attention is given to arts and non-arts techniques, skills, or concepts. Authentic experiences and media are used.
PINK	Work combines some techniques, skills, and concepts from arts and non-arts disciplines, but proficiency is uneven.
YELLOW	Peripheral affective goals are met through the work. Learning is demonstrated in one discipline or the other, but not both.

Performance Assessment: <i>The capstone/summative assessment for this unit.</i>	
Integration Continuum Color: GREEN BLUE PINK YELLOW	
Yellow: Peripheral affective goals are met through the work. Learning is demonstrated in one discipline or the other, but not both.	
Claims: (Key generalization(s) to be mastered and demonstrated through the capstone assessment.)	An organism's (plants, animals and humans) wellness and survival depends on its environment, habitat, choices and habits.
Stimulus Material: (Engaging scenario that includes role, audience, goal/outcome and explicitly connects the key generalization)	You will become a museum curator and will design a comparison model of an organism's habitat and how it survives with that of a human's habitat.

<p>Product/Evidence: (Expected product from students)</p>	<p>Within the model students must show the following:</p> <ul style="list-style-type: none"> • Living and non-living features, environmental surroundings of the habitat, and food choices that help the organism and human survive. • 4 choices (e.g. meat, vegetables, fruits, water, and sunlight) typically found in the environment for the organism and healthy choices for the human.
<p>Differentiation: (Multiple modes for student expression)</p>	<p>Students may:</p> <ul style="list-style-type: none"> • Write one sentence for the organism’s habitat and healthy food and beverage choices • Verbally communicate the organism's habitat and healthy food and beverage choices • Develop a multimedia presentation • Create an artistic representation • Create a menu for more than one environment • Work in groups or with a partner

<p>Texts for independent reading or for class read aloud to support the content</p>	
<p>Informational/Non-Fiction</p>	<p>Fiction</p>
<p>Life Science Texts: <i>Living and Non-living Things in the:Mountains</i>, by Rebecca Rissman: (Lexile 380) <i>Living and Non-living Things in the:Grasslands</i>, by Rebecca Rissman: (Lexile 380) <i>Living and Non-living Things in the:Rain Forest</i>, by Rebecca Rissman: (Lexile 380) <i>Living and Non-living Things in the:Polar Regions</i>, by Rebecca Rissman: (Lexile 380) <i>Living and Non-living Things in the Oceans</i>, by Rebecca Rissman: (Lexile 380) <i>Oceans Inside Out</i>, by Robin Johnson: Lexile 980 <i>Handle with Care : An unusual butterfly journey</i>, by Loree Griffin Burns: (Lexile 850) <i>What is a Lifecycle?</i> by Louise Spilsbury : (Lexile 840) <i>What can live in the mountains?</i> by Sheila Anderson: (Lexile 560) <i>Adaptation</i>, by Melanie Waldron: Lexile 900) <i>Creature Features : 25 animals explain why they look the way they do</i>, by Steve Jenkins: (Lexile 580) <i>The Wonder Garden</i>: Wander through 5 habitats to discover 80 amazing animals, by Jenny Bloom: (Lexile 650) <i>Habitats and Biomes</i>, by Nancy Dickmann: (Lexile 740)</p> <p>Comprehensive Health Texts: <i>Good Enough to Eat : A kid's guide to food and nutrition</i>, by Lizzy Rockwell: (Lexile 570) <i>Junk Food Junkies</i>, by Clara Mooney: (Lexile 680) <i>Food and Energy : Striking a healthy balance</i>, by Kristin Petrie: (Lexile 750)</p>	<p>Life Science Texts: <i>Mama Built a Little Nest</i>, by Jennifer Ward: (Lexile 560) <i>Animalogy : Animal analogies</i>, by Marianne Collins Berkes: (Lexile 70) <i>Welcome Home, Bear : A book of animal habitats</i>, by Il Sung Na , (Lexile 650)</p> <p>Comprehensive Health Texts: <i>Play with Your Food</i>, by David Derrick: (Lexile 80) <i>The Shape of Good Nutrition : The food pyramid</i>, by John Burstein: (Lexile 820) <i>The Monster Health Book: A guide to eating healthy, being active, & feeling great for monsters & kids!</i> by Edward Miller: (Lexile 880) <i>Showdown at the Food Pyramid</i>, by Rex Barron: (Lexile 540) <i>The food parade : Healthy eating with the nutritious food groups : a wholesome book about food</i>, by Elicia Castaldi (the 5 food groups and their nutritional benefit) (Lexile 540)</p>

<p><i>Nutrition Basics</i>, by Beth Bence Reinke: (Lexile 820) <i>Eat Right : Tips for good nutrition</i>, by Bagley: (Lexile 350) <i>On a Mission for Good Nutrition!</i> by Rebecca Sjonger: (Lexile 720) <i>Why We Need Water and Fiber</i>, by Angela Royston: (Lexile 980) Decisions, Decisions : Vegetarianism, breakfasts, and beyond , by Kim Etingoff: (Lexile 980)</p> <p>For Teacher Use: What's to eat? The food pyramid game show, DVD Food Smarts: Food Pyramid for Kids, DVD</p>	
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Ongoing Discipline-Specific Learning Experiences				
1.	Description:	Think / work like a biologist to observe interactions between organisms and their environment.	Teacher Resources:	http://www.discoveryeducation.com/teachers/free-lesson-plans/habitats-of-the-world.cfm (Habitats of the World lesson plan) http://www.pbslearningmedia.org/resource/tdc02.sci.life.colt.lp_living/living-vs-nonliving/ (Living vs. Nonliving lesson plan) https://www.teachervision.com/ecological-adaptation/animals/6989.html (Animal adaptation resources)
			Student Resources:	https://docs.google.com/document/d/14XQxld_x7GKRfN_T5mR3QB_QrQyEX3GBKVVbXZwyQq_c/edit (Images of animals)
	Skills:	Use evidence based scientific explanations for differentiating structures and functions of various organisms. Use direct observations and other evidence to support ideas.	Assessment:	Students will compare various animals’ habitats and the structure and function of various organisms to make conclusions about their ability to survive within their environment.
2.	Description:	Think / work like a health advocate to identify appropriate food choices.	Teacher Resources:	http://www.fns.usda.gov/multimedia/tn/sump_level1.pdf (Myplate level 1 curriculum) http://www.fns.usda.gov/tn/team-nutrition (USDA Team Nutrition website) http://www.choosemyplate.gov/kids-parents-educators (Myplate parents & educators webpage) https://www.cde.state.co.us/cohealth/nutrition (CDE Nutrition Resources Page)
			Student Resources:	http://www.choosemyplate.gov/kids (Myplate kids place) http://www.superkidsnutrition.com/superkids-nutrition-health-educator-headquarters/ (Super kids nutrition kids headquarters website)

				http://pbskids.org/arthur/health/nutrition/ (Arthur Family Health website)
	Skills:	Determine what food group a variety of foods fit into. Categorize healthy foods options in each of the major food groups.	Assessment:	Students will provide examples of their own food choices and categorize which groups the food belongs.
3.	Description:	Think / work like a student scientist to develop positive decision making skills.	Teacher Resources:	http://www.cpalms.org/Public/PreviewResourceLesson/Preview/60536 (What do you do with a tail like this? Lesson Plan)
			Student Resources:	http://www.kidsdiscover.com/ (Kid Discover Online website)
	Skills:	Analyze and interpret data Use direct observations and other evidence to support ideas.	Assessment:	Students will participate in ongoing observations of various animals and their ability to adapt to survive. This will be done through sorting animals based on structure and function, and collect data about the animal's characteristics.

Prior Knowledge and Experiences

These ongoing learning experiences build upon a presumed student working knowledge of the concepts such as healthy and unhealthy food choices, survival, and living and non-living characteristics. This unit will scaffold from these concepts to allow students to develop a better understanding of the importance of positive decision making and how food choices and structures and functions of the organisms affect its survival in its environment.

Learning Experience # 1

The teacher may introduce the concepts of living and non-living organisms in an environment so students can begin to examine the interactions of the two.

Integration Continuum Color: GREEN BLUE PINK YELLOW

Yellow: Peripheral affective goals are met through the work. Learning is demonstrated in one discipline or the other, but not both.

Generalization Connection(s):	An organism's (plants, animals and humans) wellness and survival depends on its environment, habitat, choices and habits.	
Teacher Resources:	Utah Education Network (Lesson plan ideas) PBS Learning Media (Lesson plan ideas)	
Student Resources:	Graphic Organizers (Samples of graphic organizers)	
Assessment:	Students will identify what non-living and living components exist within different habitats by creating picture cards and then pass to another group for sorting.	
Differentiation:	Access (Resources and/or Process)	Expression (Products and/or Performance)

(Multiple means for students to access content and multiple modes for students to express understanding.)	The teacher may: <ul style="list-style-type: none"> Assign visual or oral demonstrations of content Verbal discussion 	Students may: <ul style="list-style-type: none"> Assign visual or oral demonstrations of content
Extensions for depth and complexity:	Access (Resources and/or Process)	Expression (Products and/or Performance)
	N/A	N/A
Critical Content:	<ul style="list-style-type: none"> The non-living components of an environment. 	
Key Skills:	<ul style="list-style-type: none"> Analyze and interpret data about non-living components of a habitat 	
Critical Language:	Organisms, Habitat, Living Components, Non-Living Components, Environment, Observation, Describe	

Learning Experience # 2

Over a series of days, the teacher may give students the opportunity to explore various habitats (e.g. desert, polar, rain forest, mountain) so students can critique the suitability of the living and non-living (e.g. plants, animals, rocks) components; and their dependence on their habitat.

Integration Continuum Color: GREEN BLUE PINK YELLOW

Yellow: Peripheral affective goals are met through the work. Learning is demonstrated in one discipline or the other, but not both.

Generalization Connection(s):	An organism's (plants, animals and humans) wellness and survival depends on its environment, habitat, choices and habits.	
Teacher Resources:	http://goo.gl/kDchgS (Tundra) http://goo.gl/01omjg (Habitats of the world)	
Student Resources:	http://goo.gl/01omjg (Habitats of the world)	
Assessment:	Students will draw a habitat over a series of days, with appropriate plants and animals (living) and non-living components of that habitat.	
Differentiation: (Multiple means for students to access content and multiple modes for students to express understanding.)	Access (Resources and/or Process)	Expression (Products and/or Performance)
	The teacher may: <ul style="list-style-type: none"> Allow students to choose their own animal/habitat Provide a photo that features living and non-living objects 	Students may <ul style="list-style-type: none"> Create a multimedia presentation Work in collaborative groups

Extensions for depth and complexity:	Access (Resources and/or Process)	Expression (Products and/or Performance)
	The teacher may: <ul style="list-style-type: none"> ● Provide opportunities to research and present different components of different habitats 	Students may <ul style="list-style-type: none"> ● Present multiple habitats through drawings or multimedia presentations
Critical Content:	<ul style="list-style-type: none"> ● How organisms depend on their environment ● The non-living components of an environment ● Why an organism can survive in its habitat ● Why a habitat is suitable for a specific habitat ● Why a habitat is not suitable for a specific organism ● Different organisms have different needs 	
Key Skills:	<ul style="list-style-type: none"> ● Use evidence to develop a scientific explanation about how organisms depend on their habitat ● Analyze and interpret data about non-living components of a habitat ● Assess and provide feedback on other scientific explanations regarding why an organism can survive in its habitat ● Identify the different organisms and their needs ● Describe different ways that scientists seek to understand about organisms and their interactions with their environment ● Collaborate with other students in developing a scientific explanation about how organisms depend on their habitat ● Use evidence to develop an explanation as to why a habitat is suitable for a specific organism ● Use evidence to develop an explanation as to why a habitat is not suitable for a specific organism 	
Critical Language:	Scientific Explanation, Evidence, Analyze, Describe, Organism, Advantages, Population, Environment, Suitable, Resources, Unique	

Learning Experience # 3	
<p>The teacher may challenge students to connect ideas about animals and their environment to how humans interact with their environment.</p>	
<p style="text-align: right;">Integration Continuum Color: GREEN BLUE PINK YELLOW</p> <p style="text-align: right;"><small>Pink: Both disciplines work combines some techniques, skills, and concepts from both disciplines, but proficiency is uneven</small></p>	
Generalization Connection(s):	An organism's (plants, animals and humans) wellness and survival depends on its environment, habitat, choices and habits. An organism's behavior, such as awareness of body signals, enhances its ability to function better.
Teacher Resources:	Animal Adaptations (Animal adaption lessons) http://www.animalplanet.com/wild-animals/animal-adaptations/ (Top Ten Animal Adaptations)
Student Resources:	http://www.animalplanet.com/wild-animals/animal-adaptations/ (Top Ten Animal Adaptations)

Assessment:	Students will create two advertisements expressing the adaptations that humans and animals make, that are dependent on the environment in which they live (e.g. someone moving to Colorado for a year from a different environment) (e.g. coyote living in the open space of nearby neighborhood).	
Differentiation: (Multiple means for students to access content and multiple modes for students to express understanding.)	Access (Resources and/or Process)	Expression (Products and/or Performance)
	The teacher may: <ul style="list-style-type: none"> ● Provide illustrations and selections for students ● Provide template to guide students thinking ● Provide sample using prompts from different categories 	Students may: <ul style="list-style-type: none"> ● Work in pairs ● Draw their advertisement
Extensions for depth and complexity:	Access (Resources and/or Process)	Expression (Products and/or Performance)
	The teacher may: <ul style="list-style-type: none"> ● Consider implications from natural disasters 	Students may: <ul style="list-style-type: none"> ● Identify different ways may affect changes in their behavior/habitat
Critical Content:	<ul style="list-style-type: none"> ● How organisms depend on their environment ● Different organisms have different needs ● Why a habitat is suitable for a specific organism ● Why a habitat is not suitable for a specific organism ● The behaviors of a population that help that population survive 	
Key Skills:	<ul style="list-style-type: none"> ● Use evidence to develop a scientific explanation about how organisms depend on their habitat ● Identify the different organisms and their needs ● Analyze and interpret data about behaviors of a population that help that population survive 	
Critical Language:	Analyze, Habit, Healthy, Explain, Describe, Identify, Benefits, Consequences, Awareness, Consumption, Choices, Organism, Habitat, Living Components, Non-Living Components, Environmental Health, Basic Needs, Behaviors, Structures, Survive, Advantages, Unique, Populations, Environments, Resources	

Learning Experience # 4

The teacher may provide examples of healthy vs unhealthy foods, so students can begin to analyze decisions about food choices.

Integration Continuum Color: GREEN BLUE PINK **YELLOW**

Yellow: Peripheral affective goals are met through the work. Learning is demonstrated in one discipline or the other, but not both.

Generalization Connection(s):

The consumption of a variety of foods can impact an organism's energy and overall health.

Teacher Resources:

<http://www.learnnc.org/lp/editions/nutrition/3.0> (Healthy Food Choices)
http://www.fns.usda.gov/multimedia/tn/sump_level1.pdf (Myplate)
<http://www.kidsfoodjournal.com/journal.html> (Food Journal)

Student Resources:	http://www.superkidsnutrition.com/superkids-nutrition-health-educator-headquarters/ (Super kids website) http://pbskids.org/arthur/health/nutrition/ (Arthur's nutrition page)	
Assessment:	Students will draw conclusions about healthy and unhealthy food choices by identifying foods in their daily life and will develop a plan for eating healthier choices over the next week.	
Differentiation: (Multiple means for students to access content and multiple modes for students to express understanding.)	Access (Resources and/or Process)	Expression (Products and/or Performance)
	The teacher may: <ul style="list-style-type: none"> ● Provide examples of healthy or unhealthy food choices ● Provide a sample of their own menu ● Encourage students to keep a journal of their meal choices 	Students may: <ul style="list-style-type: none"> ● Work in pairs ● Verbalize one on one with the teacher ● Utilize a word bank of choices
Extensions for depth and complexity:	Access (Resources and/or Process)	Expression (Products and/or Performance)
	N/A	Students may: <ul style="list-style-type: none"> ● Create visuals to represent additional needs ● Extend the length of the eating plan they develop
Critical Content:	<ul style="list-style-type: none"> ● The benefits of healthy food and beverage choices ● The benefits of daily breakfast and water intake ● The body signals of being full or hungry 	
Key Skills:	<ul style="list-style-type: none"> ● Choose healthy foods and beverages ● Choose a variety of healthy snacks ● Recognize when they are full or hungry ● Identify healthy foods and beverages 	
Critical Language:	Explain, Survive, Healthy, Habit, Basic Need, Behaviors, Suitable, Body Signals, Balanced Diet, Energy	

Learning Experience # 5

The teacher may provide examples of various animal structures so students can begin to have an understanding of how the structures enable a population to survive.

Integration Continuum Color: GREEN BLUE PINK YELLOW

Yellow: Peripheral affective goals are met through the work. Learning is demonstrated in one discipline or the other, but not both.

Generalization Connection(s):	The structures and function of body systems depend on an organism's behavior in relation to food and water consumption.
Teacher Resources:	http://goo.gl/JUUbyV (Using the book <i>What Do You Do With A Tail Like This?</i>) https://goo.gl/JHi6Zw (Book, <i>What Do You Do With A Tail Like This?</i> , by Steve Jenkins) https://goo.gl/eptcTK (<i>What Do You Do With A Tail Like This?</i> Read along)

Student Resources:	https://goo.gl/7xUxPb (Pictures for students to look at for structures of animals)	
Assessment:	With an animal of choice, students pick a structure that helps it survive in that environment and complete the sentence stem, "What do you with a _____ like that?" (e.g. feet, teeth, paws) Then write 2 -3 sentences describing how the structure helps the animal survive.	
Differentiation: (Multiple means for students to access content and multiple modes for students to express understanding.)	Access (Resources and/or Process)	Expression (Products and/or Performance)
	The teacher may: <ul style="list-style-type: none"> ● Provide illustrations and selections for students ● Meet individually with students ● Provide examples of already completed sentence stems 	Students may: <ul style="list-style-type: none"> ● Work in pairs, partners or groups ● Present to the class about their habitat ● Utilize a word bank of choices
Extensions for depth and complexity:	Access (Resources and/or Process)	Expression (Products and/or Performance)
	N/A	Students may: <ul style="list-style-type: none"> ● Choose more than one structure that helps an organism survive ● Write extended sentences
Critical Content:	<ul style="list-style-type: none"> ● The structures of a population that help that population survive ● The behaviors of a population that help that population survive 	
Key Skills:	<ul style="list-style-type: none"> ● Assess and provide feedback on other scientific explanations regarding why an organism can survive in its habitat ● Analyze and interpret data about behaviors of a population that help that population survive ● Analyze and interpret data about structures of a population that help that population survive 	
Critical Language:	Analyze, Habitat, Explain, Describe, Organisms, Survive, Advantages, Unique, Functions	

Learning Experience # 6	
The teacher may utilize examples of animals previously studied so students can begin to make generalizations of how animal behaviors in a population help it to survive.	
Integration Continuum Color: GREEN BLUE PINK YELLOW <small>Yellow: Peripheral affective goals are met through the work Learning is demonstrated in one discipline or the other, but not both.</small>	
Generalization Connection(s):	An organism's (plants, animals and humans) wellness and survival depends on its environment, habitat, choices and habits. The structure and function of body systems depend on an organism's behavior in relation to food and water consumption.
Teacher Resources:	http://goo.gl/n44Hi (Animal adaptation, lesson) http://goo.gl/es5UEQ (Animal science links)
Student Resources:	http://goo.gl/es5UEQ (Animal science links)

Assessment:	Students will act out and describe three characteristics about their animal (e.g. season, fur, walk, food, color) to the class and the class will try to guess their animal and how it survives in its environment.	
Differentiation: (Multiple means for students to access content and multiple modes for students to express understanding.)	Access (Resources and/or Process)	Expression (Products and/or Performance)
	The teacher may: <ul style="list-style-type: none"> Assist a student with verbalization Provide students with scenario examples Use 2 examples 	Students may: <ul style="list-style-type: none"> Work in groups Verbalize to class more detail Given weather conditions for their animal by teacher
Extensions for depth and complexity:	Access (Resources and/or Process)	Expression (Products and/or Performance)
	The teacher may: <ul style="list-style-type: none"> introduce the concepts of migration and/or hibernation 	Students may: <ul style="list-style-type: none"> Write about a year in the life of the animal they chose to act out
Critical Content:	<ul style="list-style-type: none"> Why an organism can survive in its habitat The behaviors of a population that help that population survive 	
Key Skills:	<ul style="list-style-type: none"> Assess and provide feedback on their scientific explanations regarding why an organism can survive in its environment Identify the different organisms and their needs Analyze and interpret data about behaviors of a population that help that population survive 	
Critical Language:	Scientific Explanation, Evidence, Observation, Describe, Organisms, Habitat, Behaviors, Survive, Population, Environment	

Learning Experience # 7

The teacher may utilize examples of an organism's behavior, such as body awareness, or signals, that enhance its ability to function better. (e.g. shivering, thirst, hunger, tiredness)

Integration Continuum Color: GREEN BLUE PINK **YELLOW**

Yellow: Peripheral affective goals are met through the work Learning is demonstrated in one discipline or the other, but not both.

Generalization Connection(s):	An organism's behavior, such as awareness of body signals, enhances its ability to function better.
Teacher Resources:	https://www.cde.state.co.us/cohealth/toolsforteaching (CDE's Tools for teaching) http://teachingtools.ophea.net/activities/level-up/ages-6-to-10/hunger-and-thirst-cues (Lesson idea) http://www.learnnc.org/lp/editions/nutrition/6642 (Lesson idea)
Student Resources:	http://www.kidssciencechallenge.com (organisms' behaviors)
Assessment:	Students will describe in complete sentences, 2 different ways their body signals when they are thirsty, hungry and tired etc. and will hypothesize why and how to remedy the situation.

Differentiation: (Multiple means for students to access content and multiple modes for students to express understanding.)	Access (Resources and/or Process) The teacher may: <ul style="list-style-type: none"> Meet with one student at a time 	Expression (Products and/or Performance) Students may: <ul style="list-style-type: none"> Provide the location you might be located in (e.g. dessert, Antarctica) Work in pairs, partners or groups Present to the class about their awareness Utilize a symptom bank of choices
Extensions for depth and complexity:	Access (Resources and/or Process) N/A	Expression (Products and/or Performance) Students may: N/A
Critical Content:	<ul style="list-style-type: none"> The body signals of being full or hungry The behaviors of a population that help that population survive 	
Key Skills:	<ul style="list-style-type: none"> Analyze and interpret data about behaviors of a population that help that population to survive Recognize when they are full or hungry 	
Critical Language:	Explain, Describe, Identify, Awareness, Body Signals	

Learning Experience # 8

The teacher may ask the students to assume the role of zoologist so that students can describe different ways scientists study animals and their environments.

Integration Continuum Color: Green Blue Pink Yellow

Yellow: Peripheral affective goals are met through the work. Learning is demonstrated in one discipline or the other, but not both

Generalization Connection(s):	An organism's (plant, animals and humans) wellness and survival depends on its environment, habitat, choices and habits.
Teacher Resources:	Habitats of the world (Habitats) CDE's Tools for Teachers (Teaching tools for teachers)
Student Resources:	Habitats of the world (Habitats)
Assessment:	Students will research an animal of their choice and present their findings about their animals environment to the class as if they were a Zoologist.

Differentiation: (Multiple means for students to access content and multiple modes for students to express understanding.)	Access (Resources and/or Process) The teacher may: <ul style="list-style-type: none"> ● Provide the location you might be located in ● Have students work in pairs, partners or groups ● Utilize a symptom bank of choices 	Expression (Products and/or Performance) Students may: <ul style="list-style-type: none"> ● Work in pairs ● Present to the class about their habitat ● Utilize a word bank of choices
Extensions for depth and complexity:	Access (Resources and/or Process) N/A	Expression (Products and/or Performance) N/A
Critical Content:	<ul style="list-style-type: none"> ● Why a habitat is suitable for a specific organism 	
Key Skills:	<ul style="list-style-type: none"> ● Describe different ways that scientists seek to understand about organisms and their interactions with their environment 	
Critical Language:	Scientific Explanation, Observation, Habitat, Explain, Describe, Organisms, Environment	

Learning Experience # 9

The teacher may ask students to make observations about a habitat so that the students can use the evidence gathered to determine the health of that environment.

Integration Continuum Color: GREEN BLUE PINK YELLOW

Yellow: Peripheral affective goals are met through the work. Learning is demonstrated in one discipline or the other, but not both.

Generalization Connection(s):	An organism's (plants, animals and humans) wellness and survival depends on its environment, habitat, choices and habits.	
Teacher Resources:	http://goo.gl/yS8of (How to conduct research graphic organizers, book recommendations, magazines for kids)	
Student Resources:	http://goo.gl/yS8of (How to conduct research graphic organizers, book recommendations, magazines for kids)	
Assessment:	Students may research an animal and will create a representation of what a healthy environment will look like. (e.g. movie, diorama, research paper, report)	
Differentiation: (Multiple means for students to access content and multiple modes for students to express understanding.)	Access (Resources and/or Process) The teacher may: <ul style="list-style-type: none"> ● Use photos on a computer/iPad/smart board ● Utilize note catcher 	Expression (Products and/or Performance) Students may: <ul style="list-style-type: none"> ● Work in pairs ● Work collaboratively in groups ● Parent support
Extensions for depth and complexity:	Access (Resources and/or Process) The teacher may: <ul style="list-style-type: none"> ● Provide opportunities to research and present different components of a variety of habitats 	Expression (Products and/or Performance) Students may: <ul style="list-style-type: none"> ● Present multiple habitats

Critical Content:	<ul style="list-style-type: none"> • How organisms depend on their environment • Living things depend on the health of their habitats
Key Skills:	<ul style="list-style-type: none"> • Use instruments to make observations about habitat components - for example, data can be collected from a fish tank to assess the environmental health • Use evidence to develop an explanation about how organisms depend on their habitat
Critical Language:	Scientific Explanation, Data, Evidence, Observation, Healthy, Organisms, Habitat, Environmental Health, Environment