

**Instructional Unit Authors**

**Jefferson County Public Schools**

Jaime Rice

Megan Hurley

Rebecca Warner

Jennifer Gutierrez

**Colorado’s District Sample Curriculum Project**

*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.*

date Posted: January 2017

Integrated Health/Life Science

1st Grade

Colorado Teacher-Authored Instructional Unit Sample

**Unit Title: Staying Alive**

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| **Content Area** | Life Science / Comprehensive Health | **Grade Level** | 1st Grade |
| **Course Name/Course Code** | Eat, Drink, and Be Healthy/Survival of the Fittest |
| **Standard** | **Grade Level Expectations (GLE)** | **GLE Code** |
| 1. Life Science
 | 1. An organism is a living thing that has physical characteristics to help survive | SC09-GR.1-S.2-GLE.2 |
| 2. Physical and Personal  Wellness  | 1. Eating a variety of foods from the different food groups is vital to promote good health | CH09-GR.1-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** |
| Staying Alive | Teacher’s Discretion | Teacher’s Discretion |

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| **Unit Title** | Staying Alive | **Length of Unit** | Teacher’s Discretion |
| **Focusing Lens(es)** | Interactions | **Standards and Grade Level Expectations Addressed in this Unit** | CH09-GR.1-S.2-GLE.1SC09-GR.1-S.2-GLE.2 |
| **Inquiry Questions (Engaging- Debatable):**  | * What would happen if a person or other organism did not receive one of its most basic needs such as water, food or shelter?
* How do the needs of plants and other animals differ from humans?
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| **Unit Strands** | Physical and Personal WellnessLife Science |
| **Concepts** | Decision-Making, Positive Effects, Category, Alternative, Variety, Choices, Organism, Survival, Characteristics, Structure/Function, Resources |

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| **Generalizations****My students will Understand that…** | **Guiding Questions** **Factual Conceptual** |
| Survival of organisms can depend on their physical characteristics, and behaviors and choices around food options. (SC09-GR.1-S.2-GLE.2-EO.c) (CH09- GR.1-S.2-GLE.1-EO.b,c;IQ.1,3) | What determines which structures help an organismsurvive?When do you have the option to choose what food to eat? (CH09-GR.1-S.2-GLE.1-EO.b,c;IQ.1,3) | What helps a specific plant or animal survive? (SC09-GR.1-S.2-GLE.2; IQ.2)What would happen if you were never given a choice of what food to eat? (CH09-GR.1-S.2-GLE.1-EO.b,c;IQ.1,3) |
| Organisms have a variety of needs (food, water and other nutrients) which have a positive effect on health and development. (SC09-GR.1-S.2-GLE.2–EO.b) (CH09-GR.1-S.2-GLE.1-EO.b,c;IQ.2) | What do organisms need to survive? (SC09-GR.1-S.2-GLE.2-EO.c)What are the major food groups? (CH09-GR.1-S.2-GLE.1- EO.a,b,c;IQ.1,2,3,4;N.1)   | How do the needs of plants and animals differ? (SC09-GR.1-S.2-GLE.2–EO.a,b; IQ.1)Why is it helpful to know which major food group a food belongs to? (CH09-GR.1-S.2-GLE.1-EO.a,b;IQ.1)How do the needs of plants and animals differ? (SC09-GR.1-S.2-GLE.2–EO.a,b; IQ.1) |
| Strong decision-making skills are necessary in order to make and improve one’s nutritional choices for health and survival. (CH09-GR.1-S.2-GLE.1-EO.b,c;IQ.1,3,4;N.1) | How do animals determine which foods to eat? (SC09-GR.1-S.2-GLE.2–EO.b)What types of food do different types of animals eat? (SC09-GR.1-S.2-GLE.2–EO.b)What are some healthy alternatives for snacks? (CH09- GR.1-S.2-GLE.1-EO.b,c;IQ.1;N.1)  | What would happen if you ate your favorite food every day? (CH09-GR.1-S.2-GLE.1-EO.b,c;IQ.1,2,3;RA.1;N.1)How would your body change if you only ate foods that were high in sugar? (CH09-GR.1-S.2-GLE.1-  EO.b,c;IQ.1,2,3;RA.1;N.1)How would your eating habits be different if you made all of your food choices?Why do foods and beverages that are high in sugar exist? |

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| **Critical Content:** **My students will Know…** | **Key Skills:****My students will be able to (Do)…** |
| * The major food groups. (CH09-GR.1-S.2-GLE.1-EO.a;IQ.2)
* Examples of foods that fit into each food group. (CH09-GR.1-S.2-GLE.1- EO.a,b;IQ.2,3)
* Healthy food alternatives. (CH09-GR.1-S.2-GLE.1-EO.b,c;IQ.1;N.1)
* Healthy food options in each of the major food groups. (CH09-GR.1-S.2-GLE.1- EO.a,b,c;IQ.1,2,3,4;RA.1;N.1)
* Beverages that are high in added sugars (CH09-GR.1-S.2-GLE.1-EO.c)
* Foods which are high in added sugars. (CH09-GR.1-S.2-GLE.1-EO.c)
* Healthy alternatives for foods and beverages that are high in sugar. (CH09-GR.1- S.2-GLE.1-EO.b,c;IQ.1,3,4;RA.1;N.1)
* The variety of vitamins and nutrients in foods. (CH09-GR.1-S.2-GLE.1- EO.b;IQ.1;N.1)
* Characteristics of organisms and how to sort by these characteristics (SC09-GR.1-S.2-GLE.2-EO.a)
* The needs of plants and animals (SC09-GR.1-S.2-GLE.2-EO.b)
* The physical characteristics of plants and animals that help them survive (SC09-GR.1-S.2-GLE.2-EO.c; RA.1)
* The consequences, for living things, when resources are scarce (SC09-GR.1-S.2-GLE.2; RA.2)
 | * Identify all of the major foods groups. (CH09-GR.1-S.2-GLE.1-EO.a;IQ.2)
* Determine what food group a variety of foods fit into. (CH09-GR.1-S.2-GLE.1- EO.a,b;IQ.2,3)
* Identify healthy food options when confronted with choices. (CH09-GR.1-S.2- GLE.1-EO.b,c;IQ.1;N.1)
* Categorize healthy foods options in each of the major food groups. (CH09-GR.1- S.2-GLE.1-EO.a,b,c;IQ.1,2,3,4;RA.1;N.1)
* Identify beverages that are high in added sugar. (CH09-GR.1-S.2-GLE.1-EO.c)
* Identify foods that are high in added sugar. (CH09-GR.1-S.2-GLE.1-EO.c)
* Identify healthy food alternatives in a variety of situations. (CH09-GR.1-S.2-GLE.1- EO.b,c;IQ.1,3,4;RA.1;N.1)
* Explain how the foods they eat affect their bodies. (CH09-GR.1-S.2-GLE.1- EO.b;IQ.1;N.1)
* Use evidence based scientific explanations for classifying into groups (SC09-GR.1-S.2-GLE.2-EO.a)
* Analyze and interpret data (SC09-GR.1-S.2-GLE.2-EO.b)
* Use direct observations and other evidence to support ideas(SC09-GR.1-S.2-GLE.2-EO.c)
* Ask testable questions (SC09-GR.1-S.2-GLE.2; N.2)
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| **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: *“Mark Twain exposes the hypocrisy of slavery through the use of satire.”* |
| **A student in \_\_\_\_\_\_\_\_\_\_\_\_\_\_ can demonstrate the ability to apply and comprehend critical language through the following statement(s):**  | *I know how to choose a variety of foods and make decisions to determine food and beverage alternatives in order to maintain a healthy body.**Plants and animals need things to survive.* *There are traits that plants and animals have that help them stay alive.* |
| **Academic Vocabulary:** | Effects, Alternatives, Choices, Category, Variety, Beverages, Sugar, Vegetables, Fruits, Identify, Analyze, Classify, Interpret, Similar, Characteristics  |
| **Technical Vocabulary:** | Health, Nutrition, Nutrients, Decision-Making, Plant, Animal, Shelter, Water, Food, Environment, Survive, Organism |

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| **Unit Description:** | **This unit explores interaction and survival techniques of various organisms in our environment. Students will consider what would happen if a person or other organism did not receive one of its most basic needs such as water, food, or shelter. Through the examination of concepts such as decision making, choices, survival, characteristics, and resources students will also be able to make connections about healthy food choices in their own life. The unit concludes with students creating a playing card that describes a living organism, its environment, nutrients, and physical characteristics.** |
| **Unit Generalizations** |
| **Key Generalization (s):** | Survival of organisms can depend on their physical characteristics, and behaviors and choices around food options.  |
| **Supporting Generalizations:** | * Organisms have a variety of needs (food, water and other nutrients) which have a positive effect on health and development.
* Strong decision-making skills are necessary in order to make and improve one’s nutritional choices for health and survival.
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| **Considerations:** | First grade students should a developing understanding of food groups and healthy food choices. Students should also have a developing an understanding of the physical characteristics and behaviors that help an animal/organism to survive in its environment. |

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| **GREEN** | **Active involvement in developmentally appropriate knowledge production results in work that fuses both disciplines.** |
| **BLUE** | **Equal and significant attention is given to techniques, skills, or concepts in both disciplines. Authentic experiences and media are used.** |
| **PINK** | **Work combines some techniques, skills, and concepts from both 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.** |

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| **Performance Assessment:** *The capstone/summative assessment for this unit.***Integration Continuum Color:** GREEN BLUE PINK YELLOWGreen: Active involvement in developmentally appropriate knowledge production results in work that fuses Life Science and Comprehensive Health disciplines. |
| **Claims:** (Key generalization(s) to be mastered and demonstrated through the capstone assessment.) | Survival of organisms can depend on their physical characteristics, and behaviors and choices around food options. |
| **Stimulus Material:**(Engaging scenario that includes role, audience, goal/outcome and explicitly connects the key generalization) | You will become an organism of your choice (e.g. mountain goat, bear, or shark) to participate in a game of survival. In order to play in the game you must create a playing card that describes an organism and its physical characteristics (e.g. fur, paws, wings, or teeth), nutrient choices (e.g. meat, water, or seeds and plants), and the environment (e.g. oceans, mountains, plains, or desert) it needs in order to survive. ( <http://www.timvandevall.com/templates/blank-playing-cards-template/> (Blank playing card template) |
| **Product/Evidence:**(Expected product from students) | Students will create a playing card that names and describes a living organism, its environment, nutrients, and physical characteristics. Students will use their playing card to travel through the classroom to find similar organisms that can be found in their environment. As students move through the classroom, they will ask and answer certain questions (e.g. “Where do you live?” “What do you eat?” or act out characteristics (e.g. hopping, slithering, or flying) of the organism. Once similar organism playing cards have been grouped, the student groups will create a representation of their environment (e.g. oceans, mountains, plains, or desert) including foods they may eat (e.g. plants, bugs, other animals, nuts and seeds). Product choices may include diorama, poster, or multi-media presentation.  |
| **Differentiation:**(Multiple modes for student expression) | Students may:* Write one sentence for the organism’s environment, characteristics and nutrient choices
* Verbally communicate the organism's environment, characteristics, and nutrient choices
* Develop a multimedia presentation
* Create an artistic representation
* Compare and Contrast two organisms
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| **Texts for independent reading or for class read aloud to support the content** |
| **Informational/Non-Fiction** | **Fiction** |
| ***Science Texts:***[*What can live in the mountains?*](http://www.titlewave.com/list?active_filter=&active_tab=books&card6.x=1&duplicates_view=&page=2&search_within_type=&search_within_view=&within_search=&SID=64c8adf423761900e24c6aea036e5b0c) by Sheila Anderson: Lexile 560 *Adaptation*, by Melanie Waldron: Lexile 900[*Creature Features : 25 animals explain why they look the way they do*](http://www.titlewave.com/list?active_filter=&active_tab=books&card2.x=1&duplicates_view=&page=2&search_within_type=&search_within_view=&within_search=&SID=64c8adf423761900e24c6aea036e5b0c), by Steve Jenkins: Lexile 580[*Eye to Eye : How animals see the world*](http://www.titlewave.com/list?active_filter=&active_tab=books&card14.x=1&duplicates_view=&page=2&search_within_type=&search_within_view=&within_search=&SID=64c8adf423761900e24c6aea036e5b0c), by Steve Jenkins: Lexile 1040*What Can Live in the Forest?* by Sheila Anderson: Lexile 620*What Can Live in a Desert?* by Sheila Anderson: Lexile 560 ***Comprehensive Health texts:***[*Good Enough to Eat* : A kid's guide to food and nutritio](http://www.titlewave.com/search?active_filter=&active_tab=allTitles&card2.x=1&duplicates_view=&page=2&search_within_type=&search_within_view=&within_search=1&SID=89687e83d438abcb103975bc6cb58cb2)n, by Lizzy [Rockwell](http://www.titlewave.com/search?author_search=Rockwell%2C+Lizzy&SID=89687e83d438abcb103975bc6cb58cb2): Lexile 570*Junk Food Junkies*, by Clara Mooney: Lexile 680[*Food and Energy* : striking a healthy balance](http://www.titlewave.com/search?active_filter=&active_tab=allTitles&card3.x=1&duplicates_view=&page=3&search_within_type=&search_within_view=&within_search=1&SID=89687e83d438abcb103975bc6cb58cb2), by [Kristin](http://www.titlewave.com/search?author_search=Petrie%2C+Kristin&SID=89687e83d438abcb103975bc6cb58cb2) Petrie: Lexile 750[*Nutrition Basics*](http://www.titlewave.com/search?active_filter=&active_tab=allTitles&card10.x=1&duplicates_view=&page=3&search_within_type=&search_within_view=&within_search=1&SID=89687e83d438abcb103975bc6cb58cb2)*,* by [Beth Bence](http://www.titlewave.com/search?author_search=Reinke%2C+Beth+Bence&SID=89687e83d438abcb103975bc6cb58cb2) Reinke: Lexile 820[*Eat Right : Tips for good nutrition*](http://www.titlewave.com/search?active_filter=&active_tab=allTitles&card22.x=1&duplicates_view=&page=4&search_within_type=&search_within_view=&within_search=1&SID=89687e83d438abcb103975bc6cb58cb2), [Katie](http://www.titlewave.com/search?author_search=Bagley%2C+Katie&SID=89687e83d438abcb103975bc6cb58cb2) Bagley: Lexile 350[*On a Mission for Good Nutrition!*](http://www.titlewave.com/search?active_filter=&active_tab=allTitles&card7.x=1&duplicates_view=&page=7&search_within_type=&search_within_view=&within_search=1&SID=89687e83d438abcb103975bc6cb58cb2) by [Rebecca](http://www.titlewave.com/search?author_search=Sjonger%2C+Rebecca&SID=89687e83d438abcb103975bc6cb58cb2) Sjonger: Lexile 720[*Why We Need Water and Fiber*](http://www.titlewave.com/search?active_filter=&active_tab=allTitles&card10.x=1&duplicates_view=&page=5&search_within_type=&search_within_view=&within_search=1&SID=89687e83d438abcb103975bc6cb58cb2)*,* by [Angela](http://www.titlewave.com/search?author_search=Royston%2C+Angela&SID=89687e83d438abcb103975bc6cb58cb2) Royston: Lexile 980[*Decisions, Decisions : Vegetarianism, breakfasts, and beyond*](http://www.titlewave.com/search?active_filter=&active_tab=allTitles&card18.x=1&duplicates_view=&page=8&search_within_type=&search_within_view=&within_search=1&SID=89687e83d438abcb103975bc6cb58cb2)*,* by [Kim](http://www.titlewave.com/search?author_search=Etingoff%2C+Kim&SID=89687e83d438abcb103975bc6cb58cb2) Etingoff: Lexile 980***For Teacher Use:***[What's to eat? : the food pyramid game show](http://www.titlewave.com/search?active_filter=&active_tab=allTitles&card21.x=1&duplicates_view=&page=1&search_within_type=&search_within_view=&within_search=1&SID=89687e83d438abcb103975bc6cb58cb2) DVDFood Smarts: Food Pyramid for Kids DVD | ***Science Texts:****What do you do with a tail like that?* by Steve Jenkins: Lexile 620 *What if you had Animal Teeth?* by Sandra Markle: Lexile 930*What if you had animal feet?* by Sandra Markle: Lexile 950***Comprehensive Health Texts:****Play With Your Food*, by David Derrick: Lexile 80[*The Shape of Good Nutrition : The food pyramid*](http://www.titlewave.com/search?active_filter=&active_tab=allTitles&card21.x=1&duplicates_view=&page=7&search_within_type=&search_within_view=&within_search=1&SID=89687e83d438abcb103975bc6cb58cb2), by - John Burstein: Lexile 820[*The Monster Health Book: A guide to eating healthy, being active, & feeling great for monsters & kids!*](http://www.titlewave.com/search?active_filter=&active_tab=allTitles&card2.x=1&duplicates_view=&page=1&search_within_type=&search_within_view=&within_search=1&SID=89687e83d438abcb103975bc6cb58cb2) by [Edward](http://www.titlewave.com/search?author_search=Miller%2C+Edward&SID=89687e83d438abcb103975bc6cb58cb2) Miller: Lexile 880[*Showdown at the Food Pyramid*](http://www.titlewave.com/search?active_filter=&active_tab=allTitles&card5.x=1&duplicates_view=&page=1&search_within_type=&search_within_view=&within_search=1&SID=89687e83d438abcb103975bc6cb58cb2), by Rex [Barron](http://www.titlewave.com/search?author_search=Barron%2C+Rex&SID=89687e83d438abcb103975bc6cb58cb2): Lexile 540[*The Food Parade: Healthy eating with the nutritious food groups: A wholesome book about food*](http://www.titlewave.com/search?active_filter=&active_tab=books&card16.x=1&duplicates_view=&page=1&search_within_type=&search_within_view=&within_search=1&SID=89687e83d438abcb103975bc6cb58cb2)*,* by Elicia [Castaldi](http://www.titlewave.com/search?author_search=Castaldi%2C+Elicia&SID=89687e83d438abcb103975bc6cb58cb2): Lexile 540  |

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| **Ongoing Discipline-Specific Learning Experiences** |
| 1. | Description: | Think / work like a student biologist to observe interactions between organisms and their environment. | Teacher Resources: | <https://d43fweuh3sg51.cloudfront.net/media/assets/wgbh/tdc02/tdc02_doc_explorcharac/tdc02_doc_explorcharac.pdf> (Handout that explores the characteristics of living things) <http://www.slideshare.net/bassantnour/how-do-an-organisms-trait-help-it-survive> (Slideshare presentation of animal adaptations)<http://www.slideshare.net/cmcelraft/animal-adaptations-review?next_slideshow=1> (Slideshare or animal adaptations)<http://www.slideshare.net/PinebrookPumas/animal-adaptations-introduction?next_slideshow=2> (Slideshare introduction for animal adaptations) |
| Student Resources: | <https://d43fweuh3sg51.cloudfront.net/media/assets/wgbh/tdc02/tdc02_doc_explorcharac/tdc02_doc_explorcharac.pdf> (Handout that explores the characteristics of living things)<http://www.slideshare.net/bassantnour/how-do-an-organisms-trait-help-it-survive> (Slideshare presentation of animal adaptations)<http://www.slideshare.net/cmcelraft/animal-adaptations-review?next_slideshow=1> (Slideshare or animal adaptations)[http://www.slideshare.net/PinebrookPumas/animal-adaptations](http://www.slideshare.net/PinebrookPumas/animal-adaptationsintroduction?next_slideshow=2)[introduction?next\_slideshow=2](http://www.slideshare.net/PinebrookPumas/animal-adaptationsintroduction?next_slideshow=2) (Slideshare introduction for animal adaptations) |
| Skills: | Use evidence based scientific explanations for classifying into groups. Use direct observations and other evidence to support ideas. | Assessment: | Students will explain one observed interaction between organisms and the environment each day. (e.g. journal, brain wall, ticket out the door) |
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| 2. | Description: | Think / work like a health advocate to identify appropriate nutrients. | Teacher Resources: | <http://www.cyh.com/HealthTopics/HealthTopicDetailsKids.aspx?p=335&np=287&id=2975> (Website related to making good health based decisions)<http://www.nourishinteractive.com/kids/healthy-games/24-my-plate-usda-five-food-groups-healthy-messages> (Interactive/talking my plate) |
| Student Resources: | <http://www.cyh.com/HealthTopics/HealthTopicDetailsKids.aspx?p=335&np=287&id=2975> (Website related to making good health based decisions)<http://www.nourishinteractive.com/kids/healthy-games/24-my-plate-usda-five-food-groups-healthy-messages> (Interactive/talking my plate) |
| 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 do a pair share with a peer each day to discuss appropriate nutrients for an organism. |
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| 3. | Description: | Think / work like a student scientist to develop positive decision making skills  | Teacher Resources: | <https://www.fossweb.com/science-notebooks> (Elementary science notebook/journal)<https://www.parentmap.com/article/helping-kids-learn-to-make-decisions> (Article to help teach adults how to teach kids to make decisions) |
| Student Resources: | <https://www.fossweb.com/science-notebooks> (Elementary science notebook/journal)<http://www.cyh.com/HealthTopics/HealthTopicDetailsKids.aspx?p=335&np=287&id=2975> (Website related to making good health based decisions) |
| Skills: | Analyze and interpret data and use direct observations and other evidence to support ideas. | Assessment: | Students will use a science Journal to record their hypotheses of why certain foods are appropriate for different organisms.  |
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| **Prior Knowledge and Experiences** |
| These ongoing learning experiences build upon a presumed student working knowledge of the concepts such as decision-making choices, survival, characteristics, and resources. This unit will scaffold from these concepts to allow students to develop a better understanding of the importance of positive decision-making and healthy food choices, by making comparisons to other organisms in the environment. |

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| **Learning Experience # 1** |
| The teacher may introduce the concept of organisms so students can begin to examine how various organisms interact in their environment. **Integration Continuum Color:** Green Blue Pink YellowYellow: Peripheral affective goals are met through the work. Learning is demonstrated in one discipline or the other, but not both.  |
| **Generalization Connection(s):** | Survival of organisms can depend on their physical characteristics, and behaviors and choices around food options. |
| **Teacher Resources:** |  <http://goo.gl/bWZt9k> (Images of animals) |
| **Student Resources:** | <https://goo.gl/atvwid> (Google images)  |
| **Assessment:** | Students will use visuals (e.g. google images, magazines) to sort similar organisms that may be found in various environments. |
| **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) |
| N/A | Students may:* Work with a partner to sort images of organisms
 |
| **Extensions for depth and complexity:** | **Access** (Resources and/or Process) | **Expression** (Products and/or Performance) |
| The teacher may:* Provide additional images
 | Students may:* Identify differing and similar characteristics of the various groups of organisms
 |
| **Critical Content:** | * Characteristics of organisms and how to sort by these characteristics
 |
| **Key Skills:** | * Use direct observations and other evidence to support ideas
* Use evidence based scientific explanations for classifying into groups
 |
| **Critical Language:** | Organisms, Environment |

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| **Learning Experience # 2** |
| The teacher may provide various examples of organisms (e.g. humans, animals, plants) and non-living objects (e.g. rocks, buildings, playground) so students can begin to make distinctions between living and non-living organisms  **Integration Continuum Color:**  GREEN BLUE PINK YELLOW ellow: Peripheral affective goals are met through the work. Learning is demonstrated in one discipline or the other, but not both. |
| **Generalization Connection(s):** | Survival of organisms can depend on their physical characteristics, and behaviors and choices around food options. |
| **Teacher Resources:** | <http://www.everythingesl.net/downloads/tchart.pdf> (Example of a T chart)<http://www.pbslearningmedia.org/resource/tdc02.sci.life.colt.alive/is-it-alive/> (Is it Alive? video)<https://www.youtube.com/watch?v=SZEUWTUi1YI> (Video that explains the differences between living and nonliving)<https://d43fweuh3sg51.cloudfront.net/media/assets/wgbh/tdc02/tdc02_doc_explorcharac/tdc02_doc_explorcharac.pdf>(Worksheet to explore the characteristics of living things - can be used to accompany the above video) |
| **Student Resources:** | <http://www.everythingesl.net/downloads/tchart.pdf> (Example of a T-chart)<https://www.youtube.com/watch?v=SZEUWTUi1YI> (Video that explains the differences between living and nonliving)<https://d43fweuh3sg51.cloudfront.net/media/assets/wgbh/tdc02/tdc02_doc_explorcharac/tdc02_doc_explorcharac.pdf>(Worksheet to explore the characteristics of living things - can be used to accompany the above video) |
| **Assessment:** | Students will go on a walking field trip outside their classroom and use a T-Chart graphic organizer to develop a list of living vs non-living objects. Students will debrief their findings (e.g. whole group, pair share, quick writes). (<http://www.everythingesl.net/downloads/tchart.pdf> (Example of a T-chart) |

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| **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: * Utilize a virtual adventure
* Provide a photo that features living and non-living objects
* Allow students to draw objects they observe
 | Students may:* Work with a partner
 |
| **Extensions for depth and complexity:** |  | **Expression** (Products and/or Performance) |
| N/A | N/A |
| **Critical Content:** | * Characteristics of organisms and how to sort by these characteristics
 |
| **Key Skills:** | * Use evidence based scientific explanations for classifying into groups
* Use direct observations and other evidence to support ideas
 |
| **Critical Language:** | Identify, Classify, Category, Similar, Characteristics, Organism |

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| **Learning Experience # 3** |
| The teacher may pose the question, “What do organisms need to survive?” so students can begin to hypothesize what physical characteristics (e.g. fur, claws, beaks, fins, teeth) and behaviors (e.g. camouflage, running, hopping, flying, hunting) are necessary for survival.**Integration Continuum Color**: GREEN BLUE PINK YELLOWPink: Work combines some techniques, skills, and concepts from both disciplines, but proficiency is uneven. |
| **Generalization Connection(s):** | Survival of organisms can depend on their physical characteristics, and behaviors and choices around food options. Organisms have a variety of needs (food, water and other nutrients) which have a positive effect on health and development. |
| **Teacher Resources:** | <https://d43fweuh3sg51.cloudfront.net/media/assets/wgbh/tdc02/tdc02_doc_explorcharac/tdc02_doc_explorcharac.pdf>(Handout that explores the characteristics of living things) <http://www.slideshare.net/bassantnour/how-do-an-organisms-trait-help-it-survive> (Slideshare presentation of animal adaptations)<http://www.slideshare.net/cmcelraft/animal-adaptations-review?next_slideshow=1> (Slideshare or animal adaptations)<http://www.slideshare.net/PinebrookPumas/animal-adaptations-introduction?next_slideshow=2> (Slideshare introduction for animal adaptations) |
| **Student Resources:** |  <http://www.slideshare.net/bassantnour/how-do-an-organisms-trait-help-it-survive> (Slideshare presentation of animal adaptations)<http://www.slideshare.net/cmcelraft/animal-adaptations-review?next_slideshow=1> (Slideshare or animal adaptations)<http://www.slideshare.net/PinebrookPumas/animal-adaptations-introduction?next_slideshow=2> (Slideshare introduction for animal adaptations) |
| **Assessment:** | Students will analyze visual representations of organisms and draw conclusions about what behaviors and characteristics help the organism to 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: * Provide a model home with animals to discuss how they will live
* Provide a photo that features living and non-living objects within an environment
 | Students may:* Use a model home with animals to discuss how they will live
* Work with a partner
* Verbally communicate the organisms’ physical characteristics and behaviors to the teacher
 |
| **Extensions for depth and complexity:** | **Access** (Resources and/or Process) | **Expression** (Products and/or Performance) |
| The teacher may: * Provide examples of various survival behaviors/techniques with different organisms
 | Students may:* Create a visual of a survival scenario of various organisms within an environment
 |
| **Critical Content:** | * Healthy food alternatives.
* Characteristics of organisms and how to sort by these characteristics
* The physical characteristics of plants and animals that help them survive
 |
| **Key Skills:** | * Identify healthy food options when confronted with choices
* Use direct observations and other evidence to support ideas
 |
| **Critical Language:** | Identify, Category, Variety, Analyze, Classify, Similar, Characteristics, Organism, Nutrients, Animal, Shelter, Water, Food, Environment |

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| **Learning Experience # 4** |
| The teacher may discuss why needs (e.g. food, water, shelter) are important for survival so students can explore the most common types of needs of organisms (e.g. humans, plants and animals).**Integration Continuum Color:** GREEN BLUE PINK YELLOW Blue: Work combines some techniques, skills, and concepts from both disciplines.  |
| **Generalization Connection(s):** | Organisms have a variety of needs (food, water and other nutrients) which have a positive effect on health and development. |
| **Teacher Resources:** | <http://eschooltoday.com/science/needs-of-living-organisms/five-things-living-things-need-to-survive.html> (Website that describes the needs of organisms)<http://schools.sd42.ca/conway/files/2012/09/1.21.pdf> (Document that describes the needs of living things)<https://www.eduplace.com/graphicorganizer/pdf/tchart_eng.pdf> (Example of a T-chart) |
| **Student Resources:** | <https://www.eduplace.com/graphicorganizer/pdf/tchart_eng.pdf> (Example of a T-chart)<http://eschooltoday.com/science/needs-of-living-organisms/five-things-living-things-need-to-survive.html> (Website that describes the needs of organisms) |
| **Assessment:** | Students will select three different types of organisms (e.g. human, rocky mountain bighorn sheep, eagle) and use a graphic organizer to describe the differences in the needs for survival (e.g. trees, caves, burrow, water, berries and plants).  |
| **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: * Provide a word bank of choices
* Provide an example of an organism’s needs
 | Students may: * Work with a partner
* Verbalize one on one with a teacher
* Utilize a word bank of choices
 |
| **Extensions for depth and complexity:** | **Access** (Resources and/or Process) | **Expression** (Products and/or Performance) |
| The teacher may:N/A | Students may:N/A |
| **Critical Content:** | * The variety of vitamins and nutrients in foods
* The needs of plants and animals
* Healthy food alternatives
 |
| **Key Skills:** | * Explain how the foods they eat affect their bodies
* Identify healthy food alternatives in a variety of situations
 |
| **Critical Language:** | Choices, Variety, Beverage, Classify, Animal, Food, Water, Shelter, Environment, Survive, Organisms |

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| **Learning Experience # 5** |
| The teacher may provide examples of human needs so students can make connections to their own essential needs.**Integration Continuum Color:** GREEN BLUE PINK YELLOWGreen: Active involvement in developmentally appropriate knowledge production results in work that fuses both disciplines. |
| **Generalization Connection(s):** | Organisms have a variety of needs (food, water and other nutrients) which have a positive effect on health and development.Strong decision-making skills are necessary in order to make and improve one’s nutritional choices for health and survival |
| **Teacher Resources:** | <http://eschooltoday.com/science/needs-of-living-organisms/five-things-living-things-need-to-survive.html> (Website that describes the needs of organisms)<http://schools.sd42.ca/conway/files/2012/09/1.21.pdf> (Document that describes the needs of living things) |
| **Student Resources:** | <http://eschooltoday.com/science/needs-of-living-organisms/five-things-living-things-need-to-survive.html> (Website that describes the needs of organisms) |
| **Assessment:** | Each student will work with a peer to role play shopping in a grocery store to find three essentials needs for survival. |
| **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:* Provide an example of human needs vs. animal or plant needs
* Increase or decrease the number of needs
 | Students may:* Draw pictures of three essential human needs
* Do this project at home with their family member
 |
| **Extensions for depth and complexity:** | **Access** (Resources and/or Process) | **Expression** (Products and/or Performance) |
| The teacher may:N/A | Students may:* Create visuals to represent additional needs
 |
| **Critical Content:** | * Healthy food alternatives
* The needs of plants and animals
* The physical characteristics of plants and animals that help them survive
 |
| **Key Skills:** | * Identify healthy food options when confronted with choices
* Analyze and interpret data
* Identify healthy food alternatives in a variety of situations
 |
| **Critical Language:** | Choices, Alternatives, Variety, Analyze, Characteristics, Food, Water, Shelter, Organism, Nutrient |

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| **Learning Experience # 6** |
| The teacher may introduce the essential food groups for human needs (USDA My Plate) so students can explore a variety of foods they consume from each food group.**Integration Continuum Color:** GREEN BLUE PINK YELLOWYellow: Peripheral affective goals are met through the work Learning is demonstrated in one discipline or the other, but not both. |
| **Generalization Connection(s):** | Organisms have a variety of needs (food, water and other nutrients) which have a positive effect on health and development. |
| **Teacher Resources:** | <http://www.fns.usda.gov/multimedia/tn/sump_level1.pdf> (Example of My Plate diagram/template)<http://www.nourishinteractive.com/kids/healthy-games/24-my-plate-usda-five-food-groups-healthy-messages> (Interactive/talking my plate)<http://www.choosemyplate.gov/games> (Different games for teaching about my plate) |
| **Student Resources:** | <http://www.fns.usda.gov/multimedia/tn/sump_level1.pdf> (Example of My Plate diagram/template)<http://www.nourishinteractive.com/kids/healthy-games/24-my-plate-usda-five-food-groups-healthy-messages> (Interactive/talking my plate)<http://www.choosemyplate.gov/games> (Different games for teaching about my plate) |
| **Assessment:** | Students will create a representation (e.g. drawing, magazine cut outs, words) of the USDA My Plate visual with two examples from each food group. |
| **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:* Have the students include more or less food choices
 | Students may: * Work in pairs
* Verbalize one on one with the teacher
* Using a lunch box drawn on a sheet, draw and color a healthy lunch box using one food/drink from each of the five groups
 |
| **Extensions for depth and complexity:** | **Access** (Resources and/or Process) | **Expression** (Products and/or Performance) |
| The teacher may:N/A | Students may:* Include more than two examples
* May explore compound (e.g. pizza, lasagna) foods
 |
| **Critical Content:** | * The major food groups
* Examples of foods that fit into each food group
* Healthy food alternatives
* Healthy food options in each of the major food groups
 |
| **Key Skills:** | * Identify all of the major food groups
* Determine what food group a variety of foods fit into
* Identify healthy food choices when confronted with choices
* Categorize healthy food options in each of the major food groups
 |
| **Critical Language:** | Identify, Alternatives, Choices, Variety, Vegetables, Fruits, Health, Nutrition, Nutrient |

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| **Learning Experience # 7** |
| The teacher may provide examples of healthy vs unhealthy foods, so students can begin to make decisions about their own eating habits. **Integration Continuum Color:** GREEN BLUE PINK YELLOWYellow: Peripheral affective goals are met through the work. Learning is demonstrated in one discipline or the other, but not both. |
| **Generalization Connection(s):** | Strong decision-making skills are necessary in order to make and improve one’s nutritional choices for health and survival. |
| **Teacher Resources:** | <http://tiki.oneworld.org/food/food6.html> (Website that explores healthy foods, includes a quiz)<https://www.youtube.com/watch?v=u1sh_XGKJ-Q> (Video - benefits of eating fruits and vegetables)<http://www.nourishinteractive.com/kids/healthy-games/24-my-plate-usda-five-food-groups-healthy-messages> (Interactive/talking My Plate)<http://www.choosemyplate.gov/games> (Different games for teaching about My Plate)<http://tinyurl.com/p3nmub9> (Examples of food journals) |
| **Student Resources:** | <http://www.fns.usda.gov/multimedia/tn/sump_level1.pdf> (My Plate template)<http://tiki.oneworld.org/food/food6.html> (Website that explores healthy foods, includes a quiz)<https://www.youtube.com/watch?v=u1sh_XGKJ-Q> (Video - benefits of eating fruits and vegetables)<https://www.youtube.com/watch?v=O0T3EP4NEpI> (Video and interactive game about healthy foods)<http://www.nourishinteractive.com/kids/healthy-games/24-my-plate-usda-five-food-groups-healthy-messages> (Interactive/talking My Plate)<http://www.choosemyplate.gov/games> (Different games for teaching about My Plate)<http://tinyurl.com/p3nmub9> (Examples of food journals) |
| **Assessment:** | Using their knowledge of healthy and unhealthy food and beverage options, students will draw conclusions about food choices in their daily life. Students will use a food journal to track food for two to three days and place the food choices into either a healthy or unhealthy food column. |
| **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:* Provide examples of healthy or unhealthy food choices
 | Students may: * 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:Create visuals to represent additional needs |
| **Critical Content:** | * Examples of foods that fit into each food group
* Healthy food alternatives
* Healthy food options in each of the major food groups
 |
| **Key Skills:** | * Determine what food group a variety of foods fit into
* Identify healthy food options when confronted with choices
* Categorize healthy foods options in each of the major food groups
* Identify healthy food alternatives in a variety of situations
 |
| **Critical Language:** | Decision-making, Alternatives, Choices, Variety, Resources, Health, Nutrition, Nutrient, Category, Classify |

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| **Learning Experience # 8** |
| The teacher may provide examples of decision making models, so students can begin to make decisions about the content of sugar in the foods and beverages they consume. **Integration Continuum Color:** GREEN BLUE PINK YELLOWPink: Work combines some techniques, skills, and concepts from both disciplines, but proficiency is uneven. |
| **Generalization Connection(s):** | Strong decision-making skills are necessary in order to make and improve one’s nutritional choices for health and survival. |
| **Teacher Resources:** | <http://www.cyh.com/HealthTopics/HealthTopicDetailsKids.aspx?p=335&np=287&id=2975> (Website related to making good health based decisions)<https://www.parentmap.com/article/helping-kids-learn-to-make-decisions> (Article to help teach adults how to teach kids to make decisions)<http://www.kickthecan.info/educational-material> (Educational materials relating to sugary beverages)<http://www.sfgov3.org/ftp/uploadedfiles/shapeupsf/projects/UpdatedSugarSavvy.pdf> (Ideas and activities to teach about sugary beverages)<https://www.youtube.com/watch?v=O0T3EP4NEpI> (Video and interactive game about healthy foods)<http://www.enchantedlearning.com/graphicorganizers/> (Examples of graphic organizers) |
| **Student Resources:** | <http://www.cyh.com/HealthTopics/HealthTopicDetailsKids.aspx?p=335&np=287&id=2975> (Website related to making good health based decisions)<https://www.youtube.com/watch?v=O0T3EP4NEpI> (Video and interactive game about healthy foods)<http://www.enchantedlearning.com/graphicorganizers/> (Examples of graphic organizers) |
| **Assessment:** | Students will use a decision making process and graphic organizer to differentiate between a food or beverage high in sugar content and a healthy alternative. e.g. ( T-chart, Bubble map, Venn diagram)  |
| **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:* Provide examples and/or models of foods and beverages that are high in added sugar. (e.g. colas, fruit drink, sports drinks)
 | Students may:* Verbalize one on one with teacher
* Bring example from home to describe high or low sugar content
 |
| **Extensions for depth and complexity:** | **Access** (Resources and/or Process) | **Expression** (Products and/or Performance) |
| The teacher may:* Provide an extended learning opportunity where students apply this learning in their family situation
 | Students may:* Express the families learning (e.g.) menu, drawing, journal entry)
 |
| **Critical Content:** | * Healthy food alternatives
* Healthy food options in each of the major food groups
* Beverages that are high in added sugars
* Foods which are high in added sugars
* Healthy alternatives for foods and beverages that are high in sugar
* The variety of vitamins and nutrients in
 |
| **Key Skills:** | * Identify beverages that are high in added sugar
* Identify foods that are high in added sugar
* Identify healthy food alternatives in a variety of situations
* Explain how the foods they eat affect their bodies
 |
| **Critical Language:** | Alternatives, Sugar, Health, Decision Making, Beverages |

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| **Learning Experience # 9** |
| The teacher may provide opportunities for the students to examine animals and humans in optimal and non-optimal environmental situations so students can draw conclusions about the impact if resources were scarce.**Integration Continuum Color:** GREEN BLUE PINK YELLOWPink: Work combines some techniques, skills, and concepts from both disciplines, but proficiency is uneven. |
| **Generalization Connection(s):** | Survival of organisms can depend on their physical characteristics and behaviors and choices around food and options.Organisms have a variety of needs (food, water and other nutrients) which have a positive effect on health and development.Strong decision-making skills are necessary in order to make and improve one’s nutritional choices for health and survival.  |
| **Teacher Resources:** | <http://www.activewild.com/what-is-deforestation-for-kids-information-and-facts/> (Facts for kids on deforestation)<http://www.ducksters.com/animals/endangered_animals.php> (Website featuring endangered animals)<https://www.youtube.com/watch?v=hROIwULP914&feature=youtu.be> (Ordinary family speaks to the issue of not having enough food)<http://bitsofpositivity.com/2015/09/11/hunger-awareness-activities-for-kids/> (Activities for teaching kids about hunger) |
| **Student Resources:** | <http://www.ducksters.com/animals/endangered_animals.php> (Website featuring endangered animals)<http://kids.nationalgeographic.com/animals/> (Website with facts on various animals) |
| **Assessment:** | Students will generate “what if” questions (e.g. What if a bear couldn’t find enough berries before hibernation?) and predict what would be other alternatives if resources were scarce in the environment, (e.g. a bear might eat grass instead of the berries). |
| **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:* Provide visuals of animals in different environment
 | Students may:* Work in groups
* Use example of a living organism that you may find in your home
 |
| **Extensions for depth and complexity:** | **Access** (Resources and/or Process) | **Expression** (Products and/or Performance) |
| N/A | Students may:* Use a variety of media to represent their ideas
 |
| **Critical Content:** | * The consequences, for living things, when resources are scarce
* The needs of plants and animals
* The physical characteristics of plants and animals that help them survive
 |
| **Key Skills:** | * Identify healthy food alternatives in a variety of situations
* Analyze and interpret data
* Ask testable questions
 |
| **Critical Language:** | Effects, Choices, Variety, Analyze, Interpret, Environment, Survive, Decision-Making, Health |