

St. Lucie County Public Schools Scope and Sequence 2012-2013

Course: 2nd Grade Science

Course Code: 5020010

Quarter: 2

Topic of Study: Life Around Us
Standards: Nature of Science
Big Ideas: 14. Organization and Development of Living Organisms 16. Heredity and Reproduction 17. Interdependence
Essential Questions: What makes up the human body? What changes your heart rate? What are some animal life cycles? How does a bean plant grow? What are some plant life cycles? What are plant needs? What are animal needs? Can plants survive in different environments? Where do plants and animals live?

RESOURCES

SCIENCE CENTER

Vocabulary: brain, stomach, skeleton, muscles, lungs, heart, reproduce, life cycle, metamorphosis, tadpole, larva, pupa, seed, germinate, seedling, cone, basic needs, nutrients, survive, lungs, gills, shelter, environment, habitat

Common Labs:

- Science Fusion Inquiry Flipchart "Bones at Work" & "Full of Air" p.26
- Science Fusion Inquiry Flipchart "What Changes Your Heart Rate?" p.27
- Science Fusion Inquiry Flipchart "Where's the Caterpillar?" & "What's My Life Cycle" p.28
- Science Fusion Inquiry Flipchart "How Does a Bean Plant Grow" p.29
- Science Fusion Inquiry Flipchart "Bud a Spud!" & "Speedy Seed Race" p.30
- Science Fusion Inquiry Flipchart "Block the Light" & "Airtight Seal" p.31
- Science Fusion Inquiry Flipchart "Raising Crickets" & "An Animal I Know" p.32
- Science Fusion Inquiry Flipchart "Can Plants Survive in Different Environments" p.33
- Science Fusion Inquiry Flipchart "Keeping Warm" & "Waxy Leaves" p.34

[Graphic Organizers](#)
[Daily Activities](#)
[Fusion Teacher Resources](#)
[Inquiry Logs](#)
[Health Activities](#)

NGSSS	Content	Targets
<p>SC.2.L.14.1 Distinguish human body parts (brain, heart, lungs, stomach, muscles, and skeleton) and their basic functions. Cognitive Complexity: Moderate</p>	<p>What makes up the human body?</p> <ul style="list-style-type: none"> ▪ Brain ▪ Stomach ▪ Skeleton ▪ Muscles ▪ Lungs ▪ Heart <p>What changes your heart rate?</p> <ul style="list-style-type: none"> ▪ Resting ▪ After an activity 	<ul style="list-style-type: none"> ▪ Identify where major human body parts are located in the body. ▪ Describe the functions of the brain (controlling the body), the heart (pumping blood through the body), the lungs (obtaining oxygen for the body), the stomach (breaking down food), the muscles (moving the body), and the skeleton, (supporting the body and protecting vital organs). ▪ Identify and compare your heart rate while resting and after an activity. ▪ Communicate the results of an investigation.
<p>SC.2.L.16.1 Observe and describe major stages in the life cycles of plants and animals, including beans and butterflies. Cognitive Complexity: Moderate</p>	<p>What are some animal life cycles?</p> <ul style="list-style-type: none"> ▪ Caterpillar ▪ Frog ▪ Chicken ▪ Turtle ▪ Fish <p>How does a bean plant grow?</p> <ul style="list-style-type: none"> ▪ Seed ▪ Seedling 	<ul style="list-style-type: none"> ▪ Define the term life cycle and explain that different animals have different life cycles. ▪ Explain that all life cycles include birth/hatching, growth and development, maturity, and reproduction. ▪ Identify some animals, including frogs and butterflies, that undergo complete

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	<ul style="list-style-type: none"> ▪ Young Plant ▪ Adult Plant <p>What are some plant life cycles?</p> <ul style="list-style-type: none"> ▪ Seed ▪ Germinate ▪ Seedling ▪ Cone 	<p>metamorphosis during their life cycles.</p> <ul style="list-style-type: none"> ▪ Describe the sequence of the stages of the frog, butterfly, fish, and mammal life cycles. ▪ Describe the scientific contributions made by Salim Ali. ▪ Understand that scientists are always investigating new ways to solve problems. ▪ Recognize that scientists come from diverse backgrounds. ▪ Observe and describe the life cycle of a bean plant. ▪ Examine a bean seeds using a hand lens. ▪ Compare observations made over time. ▪ Communicate the results of an investigation. ▪ Recognize that all plants have life cycles. ▪ Explain that many plants begin life as a seed. ▪ Compare the rates at which different plants grow and mature. ▪ Distinguish between plants that make seeds in flowers and plants that make seeds in cones.
<p>SC.2.L.17.1 Compare and contrast the basic needs that all living things, including humans, have for survival. Cognitive Complexity: Moderate</p> <p>SC.2.L.17.2 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. Cognitive Complexity: Moderate</p>	<p>What are plant needs?</p> <ul style="list-style-type: none"> ▪ Sun ▪ Air ▪ Water ▪ Nutrients ▪ Space <p>What are animal needs?</p> <ul style="list-style-type: none"> ▪ Air ▪ Water ▪ Food ▪ Shelter ▪ Space <p>Can plants survive in different environments?</p> <ul style="list-style-type: none"> ▪ Basic needs ▪ Surroundings 	<ul style="list-style-type: none"> ▪ Identify sunlight, air, water, nutrients, and space as the basic needs of plants. ▪ Explain that a living thing must meet its basic needs in order to survive. ▪ Identify air, water, food, shelter, and space as the basic needs of animals and humans. ▪ Explain that a living thing will die if its basic needs are not met. ▪ Describe some ways in which animals depend on plants to meet their basic needs. ▪ Compare and contrast the basic needs of plants and animals. ▪ Demonstrate that plants live where their needs are met. ▪ Recognize that repeating an investigation should result in similar conclusions. ▪ Communicate the results of an investigation. ▪ Recognize and explain that living things are found just about everywhere on Earth. ▪ Define an environment as everything that surrounds a living thing, including other

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	<p>Where do plants and animals live?</p> <ul style="list-style-type: none">▪ Environment▪ Habitat	<p>living and nonliving things.</p> <ul style="list-style-type: none">▪ Recognize and explain that living things are best suited to live in certain habitats.▪ Explain that different kinds of living things are found in different places on Earth.
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