

RESOURCES

SCIENCE CENTER

Topic of Study: Motion, Living Things

Big Ideas: 12. Motion of Objects 13. Forces and Changes in Motion

Essential Questions: How do objects move? How can we move a ball? How can we change the way objects move? How can we change motion?

Optional Teacher Background: ScienceSaurus- Physical Science

Vocabulary: motion, speed, push, pull, force

Common Inquiry Labs:

- *Science Fusion* Inquiry Flipchart “Marble Race” & “Testing Toys” p. 18
- *Science Fusion* Inquiry Flipchart “How Can We Move a Ball?” p. 19
- *Science Fusion* Inquiry Flipchart “Change Motion” & “Motion Maze” p. 20
- *Science Fusion* Inquiry Flipchart “How Can We Change Motion” p. 21

	Technology Links:	
<u>Lab Assistance:</u>	<u>Science Links:</u>	<u>Online Guides:</u>
<u>Daily Inquiries</u> <u>Experiment Logs and Mini Lessons</u> <u>Health Activities</u>	<u>www.Thinkcentral.com</u> <u>Fusion Teacher Resources</u> <u>Graphic Organizers and Body Systems</u>	<u>Above Level</u> <u>On Level</u> <u>Below Level</u>

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

Course: 1st Grade

Course Code: 5020010

Quarter 3

NGSSS	Content	Targets
<p>SC.1.P.12.1 Demonstrate and describe the various ways that objects can move, such as in a straight line, zigzag, back-and-forth, round-and-round, fast and slow. Cognitive Complexity: Moderate</p> <p>SC.1.P.13.1 Demonstrate that the way to change the motion of an object is by applying a push or a pull. Cognitive Complexity: Moderate</p>	<p>How do objects move?</p> <ul style="list-style-type: none"> ▪ Straight line ▪ Zigzag ▪ Back and forth ▪ Round and round <p>How can we move a ball?</p> <ul style="list-style-type: none"> ▪ Straight line ▪ Zigzag ▪ Back and forth ▪ Round and round <p>How can we change the way objects move?</p> <ul style="list-style-type: none"> ▪ A push or a pull <p>How can we change motion?</p> <ul style="list-style-type: none"> ▪ A push or a pull 	<ul style="list-style-type: none"> ▪ Describe how objects move. ▪ Demonstrate different ways that objects move. ▪ Compare the relative speeds of objects. ▪ Identify ways things move. ▪ Use objects to demonstrate types of motion. ▪ Compare observations of motion with other children. ▪ Investigate ways to push or pull objects. ▪ Identify and describe forces used to move or stop objects. ▪ Describe how force can be used to change an object's speed, direction, and position. ▪ Investigate by pushing or pulling objects to see how they respond. ▪ Demonstrate that applying a push or a pull changes the motion of an object.

Topic of Study: Living Things

Big Ideas: 14. Organization and Development of Living Organisms

Essential Questions: What are living and nonliving things? How are plants different? How are animals different? What can your senses tell you about living things? What are some parts of plants?

Optional Teacher Background: ScienceSaurus- Life Science Section

Vocabulary: living, nonliving, environment, reproduce, flower, cone, mammal, bird, fish, reptile, amphibian, insect, stem, root, leaf, flower, seed, fruit

Common Inquiry Labs:

- *Science Fusion* Inquiry Flipchart “Modeling You” & “Neighborhood Search” p. 22
- *Science Fusion* Inquiry Flipchart “Rubbed Leaf Collection” & “Fantastic Flowers” p. 23
- *Science Fusion* Inquiry Flipchart “Animal Sort” & “Picture Walk Safari” p. 24
- *Science Fusion* Inquiry Flipchart “What Can Your Senses Tell You About Living Things?” p. 25
- *Science Fusion* Inquiry Flipchart “Are All Seeds Alike?” & “What Parts Do You See?” p. 26

Optional Teacher Background: ScienceSaurus- Life Science

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

NGSS	Content	Targets
<p>SC.1.L.14.1 Make observations of living things and their environment using the five senses. Cognitive Complexity:Low</p> <p>SC.1.L.14.2 Identify the major parts of plants, including stem, roots, leaves, and flowers. Cognitive Complexity:Low</p> <p>SC.1.L.14.3 Differentiate between living and nonliving things. Cognitive Complexity: High</p>	<p>What are living and nonliving things?</p> <ul style="list-style-type: none"> ▪ Grows/does not grow ▪ Moves/does not move ▪ Changes/life cycle/none ▪ Reproduces/no reproduction ▪ Needs food and water/none ▪ Dies <p>How are plants different?</p> <ul style="list-style-type: none"> ▪ Trees ▪ Shrubs ▪ Grasses <p>How are animals different?</p> <ul style="list-style-type: none"> ▪ Shapes ▪ Sizes ▪ Movement ▪ Coverings <p>What can your senses tell you about living things?</p> <p>What are some parts of plants?</p> <ul style="list-style-type: none"> ▪ Roots ▪ Stem ▪ Leaf ▪ Flower ▪ Seed ▪ Fruit 	<ul style="list-style-type: none"> ▪ Differentiate between living things and nonliving things. ▪ Identify some examples of nonliving things that are commonly mistaken for living things, such as fire, clouds, and water. ▪ Recognize that an environment contains both living things and nonliving things. ▪ Observe and classify living things and nonliving things in an environment. ▪ Distinguish between plants and animals. ▪ Explain that there are many kinds of plants on Earth. ▪ Classify plants into groups based on observable characteristics. ▪ Explain that there are many kinds of animals on Earth. ▪ Identify physical characteristics of animals. ▪ Classify animals into groups based on observable characteristics. ▪ Understand what can be learned about plants and animals by observing them. ▪ Use the five senses to make observations of living things and their environment. ▪ Record observations. ▪ Identify and compare the major parts of a flowering plants, including stems, leaves, roots, flowers, and seeds. ▪ Describe the function of each of the major parts of a flowering plant.