

**KINDERGARTEN
SCIENCE ORDER OF INSTRUCTION**

1st Nine Weeks	2nd Nine Weeks	3rd Nine Weeks	4th Nine Weeks
<u>Body of Knowledge:</u> <u>Life Science</u> (2 benchmarks)	<u>Body of Knowledge:</u> <u>Earth and Space Science</u> (6 benchmarks)	<u>Body of Knowledge:</u> <u>Physical Science</u> (5 benchmarks)	<u>Body of Knowledge:</u> <u>Life Science</u> (1 benchmark)
Big Idea 14: Organization and Development of Living Organisms (SC.K.L.14.1, SC.K.L.14.2)	Big Idea 5: Earth in Space and Time	Big Idea 8: Properties of Matter Big Idea 9: Changes in Matter Big Idea 10: Forms of Energy Big Idea 12: Motion of Objects Big Idea 13: Forces and Changes in Motion	Big Idea 14: Organization and Development of Living Organisms (SC.K.L.14.3)

Big Idea 1: The Practice of Science

The Practice of Science benchmarks should be introduced during the first nine weeks and then embedded in all science lessons throughout the year as they blend easily with teaching inquiry and are the basis of an activity/lab-based science classroom. It is vital that kindergarten students be given multiple opportunities to collaborate with partners, make observations of the natural world using their five senses, keep records of investigations, observe and create visual representations, and recognize that learning comes from careful observation. Lab safety and the use of scientific tools should also be introduced at the beginning of the year and re-addressed throughout the year.

Rationale for Kindergarten Order of Instruction:

1st Nine Weeks

Life Science benchmarks 14.1 and 14.2 (Big Idea 14) are taught in the first grading period because brain-based research shows that kindergarteners are still developmentally “All about Me.” This leads to beginning the school year with the five senses.

2nd Nine Weeks

Earth and Space Science benchmarks are taught during the second grading period because the Sun sets earlier at this time of year which allows students the opportunity to make night time observations.

3rd Nine Weeks

Physical Science benchmarks are taught during the third grading period because force and motion concepts are abstract and students are better able to grasp these concepts later in the school year.

4th Nine Weeks



KINDERGARTEN	
BODY OF KNOWLEDGE: LIFE SCIENCE	
BIG IDEA 14: ORGANIZATION AND DEVELOPMENT OF LIVING ORGANISMS	
<p>A. All plants and animals, including humans, are alike in some ways and different in others.</p> <p>B. All plants and animals, including humans, have internal parts and external structures that function to keep them alive and help them grow and reproduce.</p> <p>C. Humans can better understand the natural world through careful observation.</p>	
ESSENTIAL QUESTIONS	
How are plants and animals alike and different?	
BENCHMARKS AND TASK ANALYSES	
<p>SC.K.L.14.3 Observe plants and animals, describe how they are alike and how they are different in the way they look and in the things they do.</p> <p>The student:</p> <ul style="list-style-type: none"> • observes various plants and animals. • discusses how plants and animals are alike and different in the things they do (e.g., plants and animals both need food, but animals generally eat with their mouths and plants make their own food). • discusses how plants and animals are alike and different in the way they look (e.g., color, size). 	
OCPS ESSENTIAL LABS	
www.science.ocps.net	
Plant and Animal Comparisons Seed and Plant Comparisons Touching Earthworms Fair Tests with Earthworms Touching Pill Bugs Fair Tests with Pill Bugs Observing Ladybugs Paper Ladybug Model	
VOCABULARY	
plant, animal, alike, different	
The textbook is NOT the curriculum. The Next Generation Sunshine State Standards for Science are the mandated curriculum.	
SUPPORTING RESOURCES	
Scott Foresman	SC.K.L.14.3 14-15, 26E, 32-33, 36-37, 38-39, 45d, 54-55, 56-57, 58-59, 60-61, 65d, FCAT Test Prep: 10, 13, 14, 15, 16, 17, 18, 22, 23, 24, 86, 87
AIMS www.aimsedu.org	SC.K.L.14.3 <i>Sensational Springtime: Who's My Mom?</i> <i>E-activity: Marvelous Me!</i>
Literature	<i>Swing, Slither, or Swim</i> , Patricia M. Stockland <i>America's Seashores: Guide to Plants and Animals</i> , Marianne Wallace (series) <i>Animal Babies on the Move</i> , Susan Stockdale <i>What Is an Insect?</i> Robert Snedden <i>Diary of a Worm</i> , Doreen Cronin, series



	<p><i>An Earthworm's Life</i>, John Himmelman <i>A Ladybug's Life</i>, John Himmelman <i>A Pill Bug's Life</i>, John Himmelman <i>The Tiny Seed</i>, Eric Carle</p>
Web Links	<p>http://www.bbc.co.uk/cbeebies/comeoutside/fun/farm.shtml plants (above and below ground) http://animaldiversity.ummz.umich.edu/site/topics/frogCalls.html pictures of different frogs (to see that animals within the same type have similarities and differences) http://urbanext.illinois.edu/worms/ earthworms http://yucky.discovery.com/flash/worm/ earthworms http://www.pestworldforkids.org/pillbugs.html pill bugs http://www.geocities.com/sseagraves/schoolyardscience.htm ladybugs http://members.cox.net/tunias_travels/Ladybugs.htm ladybug observations</p>
Field Experiences	<p>Mayor Carl T. Langford Park (407-246-2150): Worms, City Critters, Snake Sense, Tree-mendous</p>
Other	<p><i>GEMS</i>: Ladybugs <i>Science & Children</i>, Sept. 2006, Vol. 44, No. 1, Unlocking the Power of Observation <i>Science & Children</i>, Oct. 2008, Vol. 46, No. 2, Worms Out of This World!</p>

