



**MIAMI-DADE COUNTY PUBLIC SCHOOLS
DISTRICT PACING GUIDE
2023-2024 YEAR-AT-A-GLANCE**

Grade 4 **Course Code: 5020050 / Access Code: 7720050F1**

Big Idea 1: The Practice of Science, Big Idea 2: The Characteristics of Scientific Knowledge, Big Idea 3: The Role of Theories, Laws, Hypotheses, and Models
Big Ideas 1, 2, and 3 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:

- SC.4.N.1.1 Question, Investigate, Explain
- SC.4.N.1.2 Compare Observations, Explain Differences
- SC.4.N.1.3 Observations and Evidence
- SC.4.N.1.4 Answer Scientific Questions and Cite Evidence
- SC.4.N.1.5 Communication
- SC.4.N.1.6 Keep Records
- SC.4.N.1.7 Empirical Evidence
- SC.4.N.1.8 Use Creativity
- SC.4.N.2.1 Recognize that Science Focuses solely on the Natural World
- SC.4.N.3.1 Different Types of Models can be Used

1 st Nine Weeks	2 nd Nine Weeks	3 rd Nine Weeks	4 th Nine Weeks
<p>Big Idea 1: Practice of Science Big Idea 2: The Characteristics of Scientific Knowledge/Big Big Idea 3: The Role of Theories, Laws, Hypotheses, and Models</p> <p>Ia. Thinking and Working Like a Scientist- (Nature of Science Handbook p. 352) (08/17 - 09/01) 12 days</p> <p>NEW – Science Fair Project Introduction - Science Fair Timeline Begins</p> <p>NASA Climate Kids - Do a science fair project!</p> <p>Ib. Big Idea 5: Earth in Space and Time SC.4.E.5.4 Relationship among Earth, Moon, Sun and Stars (AA)* SC.4.E.5.1 Patterns in the Sky SC.4.E.5.3 Earth's Movement SC.4.E.5.2 Phases of the Moon SC.4.E.5.5 Effects of Space Research on Florida's Economy and Culture (09/05 – 09/22) 14 days</p> <p>NASA Climate Kids - Which Pole is Colder?</p> <p>II. Big Idea 6: Earth Structures SC.4.E.6.2 Properties of Minerals (AA)* SC.4.E.6.1 Types of Rocks SC.4.E.6.5 Tools and Technology (09/26 - 10/06) 9 days</p> <p>SC.4.E.6.4 Weathering and Erosion (AA)* (10/09 – 10/13) 5 days</p> <p>SC.4.E.6.3 Natural Resources SC.4.E.6.6 Florida's Natural Resources (AA)* (10/16 – 10/26) 9 days</p> <p>NASA Climate Kids - Glaciers Environmental Awareness Protecting Our Planet Grades 4 Q1: Florida's Aquifer Adventure</p>	<p>III. Big Idea 8: Properties of Matter SC.4.P.8.1 Measure and compare objects based on their physical properties. SC.4.P.8.4 Investigate Magnetic Properties SC.4.P.8.2 Identify Properties and uses of Water in its Three States SC.4.P.8.3 Explore the Law of Conservation of Mass (10/30 – 11/17) 14 days</p> <p>Big Idea 9: Changes in Matter SC.4.P.9.1 Changes in Matter (11/27 – 12/08) 10 days</p> <p>IV. Big Idea 10: Forms of Energy Big Idea 11: Energy Transfer and Transformation Big Idea 12: Motion of Objects SC.4.P.10.1 Forms of Energy SC.4.P.10.2 Energy SC.4.P.10.3 Sound SC.4.P.11.1 Transfer of Heat Energy SC.4.P.11.2 Materials that Conduct Heat SC.4.P.12.1 Objects in Motion SC.4.P.12.2 Speed (12/11 - 01/18) 17 days</p> <p>Environmental Awareness Protecting Our Planet Grades 4 Q2: What is solar energy?</p>	<p>V. Big Idea 10: Forms of Energy: Human Uses of Energy SC.4.P.10.4 Uses of Energy- moving water and air (01/22 – 02/02) 10 days.</p> <p>Human Uses of Energy Continued Renewable and Nonrenewable Energy (02/05 – 02/16) 10 days</p> <p> Conservation of Natural Resources</p> <p>NASA Climate Kids - Power Up!</p> <p>VI. Big Idea 16: Heredity and Reproduction SC.4.L.16.1 Sexual Reproduction in Flowering Plants -pollination, fertilization, seed dispersal, and germination (AA* as SC.3.L.14.1) SC.4.L.16.4 Major Stages of Life Cycles of Florida Plants (AA)* (02/20 – 03/08) 14 days</p> <p>SC.4.L.16.4 Major Stages of Life Cycles of Florida Animals (AA)* (03/11 - 03/15) 5 days</p> <p>SC.4.L.16.2 Plant and animal characteristics are affected by the environment. SC.4.L.16.3 Animal Behaviors and Characteristics (03/18 – 04/09) 11 days</p> <p> AG Connections (Agricultural Connections)</p> <p>Environmental Awareness Protecting Our Planet Grades 4 Q3: Ways Animals Adapt to their Environments</p>	<p>VII. Big Idea 17: Interdependence SC.4.L.17.1 Seasonal Changes in Florida's Plants and Animals. (04/11 – 04/19) 7 days</p> <p> KTA Connection (Kindness to Animals)</p> <p>NASA Climate Kids - Birds & Climate Change</p> <p>National Geographic - Causes and Effects of Climate Change Climate Change Activities – NASA Climate Kids</p> <p>SC.4.L.17.4 How Living Things Impact the Environment 3 (04/22 – 05/10) 15 days</p> <p>SC.4.L.17.3 Flow of Energy (AA)* SC.4.L.17.2 Transfer of Energy in a Food Chain SC.4.L.17.1 (05/13 – 06/06) 18 days</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>* These Fair Game benchmarks (AA) are assessed on the Grade 5 Statewide Science Assessment. * All benchmarks are prerequisites for the Grade 5 Statewide Science Assessment.</p> </div> <p>Environmental Awareness Protecting Our Planet Grades 4 Q4: Climate change pushes mangroves north</p>