DOLPHIN RESEARCH CENTER

Outreach Program Overview

Pre-Kindergarten Sea Creature Sea-Fari

Do all "sea" creatures live in the sea? Students investigate whether or not creatures are found in the water, land, air or a mix by participating in a hands on and flannel board activity. After students will participate in a song. Time: Approximately 30 minutes

Kindergarten

Sense-ational Marine Mammals

Dolphins have senses just like people do! Students can learn about their 5 senses and how they are similar to the senses of dolphins through a visit from the puppet avatars of members of our dolphin, sea lion and bird families. Students may also see actual biofacts from marine creatures and if time and if time permits participate in a craft making their very own marine mammal puppets. Time: Approximately 30-45 minutes

- o SC.K.L.14.1 Recognize the five senses and related body parts.
- o SC.K.L.14.2 Recognize that some books and other media portray animals and plants with characteristics and behaviors they do not have in real life.
- o 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.
- o LAFS.K.SL.1.1 Participate in collaborative conversations with diverse partners about *kindergarten topics* and texts with peers and adults in small and larger groups. a. Follow agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and texts under discussion). b. Continue a conversation through multiple exchanges.
- LAFS.K.SL.1.2 Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.
- o LAFS.K.SL.1.3 Ask and answer questions in order to seek help, get information, or clarify something that is not understood.
- o LAFS.K.SL.2.6 Speak audibly and express thoughts, feelings, and ideas clearly.

First Grade

Fintastic Marine Mammals

All living things have basic needs that must be met in order for them to survive. Students can learn about these needs and how they are met for humans and marine mammals such as dolphins through a visit from the puppet avatars of members of our dolphin, sea lion and bird families. Students may also see actual biofacts from marine creatures and if time and if time permits participate in a craft making their very own marine creature and explaining how it makes sure that its needs are met. Time: Approximately 30-45 minutes Florida State Standards addressed or supported by this program:

- o SC.1.L.17.1 Through observation, recognize that all plants and animals, including humans, need the basic necessities of air, water, food, and space.
- o SC.1.L.14.1 Make observations of living things and their environment using the five senses.
- o LAFS.1.SL.1.1 Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups. a. Follow agreed-upon rules for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion). b. Build on others' talk in conversations by responding to the comments of others through multiple exchanges. c. Ask questions to clear up any confusion about the topics and texts under discussion.
- o LAFS.1.SL.1.2 Ask and answer questions about key details in a text read aloud or information presented orally or through other media.
- o LAFS.1.SL.1.3 Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.

Second Grade Staying Alive

Marine animals, such as dolphins, have unique adaptations that allow them to survive in their marine habitats. Students can learn about some of these adaptations and how they enable marine animals to survive in their environments by participating in a powerpoint discussion with DRC staff members. Students may also see actual biofacts from marine creatures and if time and if time permits participate in an "adaptation scavenger hunt" to learn more about the adaptations of marine animals. Time: Approximately 30-45 minutes Florida State Standards addressed or supported by this program:

- o SC.2.L.14.1 Distinguish human body parts (brain, heart, lungs, stomach, muscles, and skeleton) and their basic functions.
- SC.2.L.17.1 Compare and contrast the basic needs that all living things, including humans, have for survival.
- o 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.
- o LAFS.2.SL.1.1 Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups. a. Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion). b. Build on others' talk in conversations by linking their comments to the remarks of others. c. Ask for clarification and further explanation as needed about the topics and texts under discussion.
- LAFS.2.SL.1.2 Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.
- LAFS.2.SL.1.3 Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue.

Third Grade Under The Sea

The ocean world is full of interesting creatures, each with their own unique characteristics. Students can learn about the characteristics of invertebrates and vertebrates and how they differ from one another by participating in a powerpoint discussion with DRC staff members. Students may also see actual biofacts from marine creatures and if time permits participate in an invertebrate/vertebrate identification activity to reinforce their knowledge of the characteristics. Time: Approximately 30-45 minutes

- SC.3.L.15.1 Classify animals into major groups (mammals, birds, reptiles, amphibians, fish, arthropods, vertebrates and invertebrates, those having live births and those which lay eggs) according to their physical characteristics and behaviors.
- LAFS.3.RI.1.2 Determine the main idea of a text; recount the key details and explain how they support the main idea.
- LAFS.3.RI.1.3 Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.
- LAFS.3.RI.2.4 Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 3 topic or subject area.
- o LAFS.3.RI.3.7 Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur)
- o LAFS.3.SL.1.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. b. Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion). c. Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others. d. Explain their own ideas and understanding in light of the discussion.
- LAFS.3.SL.1.2 Determine the main ideas and supporting details of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.

 LAFS.3.SL.1.3 Ask and answer questions about information from a speaker, offering appropriate elaboration and detail.

Fourth Grade

Plant-astic! The Importance of Plants in the Marine Ecosystem

Plants are a vital part of the marine environment and enable many marine mammals and other creatures to survive. Students will learn all about mangroves and seagrasses and their characteristics as plants by participating in a powerpoint discussion with Dolphin Research Center staff members. If time permits students will then get to participate in a foodweb or food chain game to understand how these plants are the foundation of the marine ecosystem. Time: Approximately 30-45 minutes

- o SC.4.L.17.2 Explain that animals, including humans, cannot make their own food and that when animals eat plants or other animals, the energy stored in the food source is passed to them.
- o SC.4.L.17.3 Trace the flow of energy from the Sun as it is transferred along the food chain through the producers to the consumers.
- o SC.4.L.17.4 Recognize ways plants and animals, including humans, can impact the environment.
- o SC.4.N.1.1 Raise questions about the natural world, use appropriate reference materials that support understanding to obtain information (identifying the source), conduct both individual and team investigations through free exploration and systematic investigations, and generate appropriate explanations based on those explorations.
- o SC.4.N.1.2 Compare the observations made by different groups using multiple tools and seek reasons to explain the differences across groups.
- o SC.4.N.1.3 Explain that science does not always follow a rigidly defined method ("the scientific method") but that science does involve the use of observations and empirical evidence.
- SC.4.N.1.4 Attempt reasonable answers to scientific questions and cite evidence in support.
- o SC.4.N.1.5 Compare the methods and results of investigations done by other classmates.
- o SC.4.N.1.6 Keep records that describe observations made, carefully distinguishing actual observations from ideas and inferences about the observations.
- o SC.4.N.2.1 Explain that science focuses solely on the natural world.
- o LAFS.4.SL.1.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 4 topics and texts, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or studied required material; explicitly draw on

that preparation and other information known about the topic to explore ideas under discussion. b. Follow agreed-upon rules for discussions and carry out assigned roles. c. Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others. d. Review the key ideas expressed and explain their own ideas and understanding in light of the discussion.

 LAFS.4.SL.1.2 Paraphrase portions of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.

Fifth Grade

Real Science: Exploring the Ocean

How do scientists make measurements in the marine environment? What is the difference between a scientific experiment and a scientific investigation? Students will learn the basics on how to tell the difference between an experiment and an investigation by participating in a powerpoint discussion with Dolphin Research Staff members. If time permits students will get to participate in a mock investigation of the "sea floor."

Time: Approximately 60-120 minutes

- o SC.5.N.1.1 Define a problem, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigations of various types such as: systematic observations; experiments requiring the identification of variables, collecting and organizing data; interpreting data in charts, tables, and graphics; analyze information; make predictions; and defend conclusions.
- o SC.5.N.1.2 Explain the difference between an experiment and other types of scientific investigation.
- SC.5.N.1.5 Recognize and explain that authentic scientific investigation frequently does not parallel the steps of "the scientific method."
- o SC.5.N.2.1 Recognize and explain that science is grounded in empirical observations that are testable; explanation must always be linked with evidence.
- o SC.5.N.2.2 Recognize and explain that when scientific investigations are carried out, the evidence produced by those investigations should be replicable by others.
- o LAFS.5.SL.1.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *grade 5 topics and texts*, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. b. Follow agreed-upon rules for discussions and carry out assigned roles. c. Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others. d. Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.