DOLPHIN RESEARCH CENTER

Distance Learning: Food for Thought

Explore the world of dolphins by comparing and contrasting food, nutrient and health care needs between humans and dolphins.

Grade Levels: 3-5

Program Description:
Students will participate in an interactive studio based program with Dolphin Research Center Staff to learn about their nutrition and health needs and see how those match up with those of bottlenose dolphins. At the end students have the opportunity to ask a dolphin expert questions about dolphins while also learning how they can lessen their impact on the marine environment. All webinars include a live instructor interaction with video clips from all around our beautiful Florida Keys facility.

Concepts Addressed:
- The participant will:
  - Be able to explain what nutrition is and why it is important.
  - Be able to explain how the foods that we eat provide nutrition for the human body.
  - Be able to explain what comprises a dolphin’s diet and how vitamins and minerals fit in.
  - Develop an understanding that food provides chemical energy.
  - Compare how dolphins receive their nutrition versus humans.
  - Provide an overview of how dolphins forage to get their food.
  - Examine how a dolphin’s habitat can actually be a limiting factor for finding food.
  - Discuss of how dolphins fit into the food web and the concept of interdependence.
  - Talk about things that keep a human and dolphin body happy.
  - Identify conservation issues facing marine life:
    - Toxins, over-fishing and pollution
  - Ideas for the conservation of marine life:
    - Practicing the 3Rs
    - Using natural products
    - Being informed of the foods that you eat
  - Ask a dolphin expert questions.

Program Format:
- This is a studio based program. Students will be able to interact with an educator in our studio as well as see pre-recorded video from around our facility.
- The program will begin with introduction of the instructor and an explanation of where Dolphin Research Center is located.
- We will provide a brief overview of the Dolphin Research Center family (dolphins and sea lions)
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- The instructor will discuss how food is a form of chemical energy.
- The students and instructor will compare and contrast what is in a human’s diet versus a dolphin’s diet.
- The instructor will introduce the concepts of vitamins and minerals.
- The students and instructor will compare and contrast the vitamin and mineral needs of dolphins versus humans.
- The students and instructor will discuss how good nutrition is important for both dolphins and humans before discussing the differences in how both get their food.
- Students will brainstorm about herbivores and carnivores in the marine environment.
- Students will discuss how dolphins fit into the food web and how all of the creatures on Earth are interdependent.
- The instructor and students will discuss some of the threats that wild dolphins face and how humans can help to save them.

Program Logistics

Program Length: 45-60 minutes

Minimum # of participants: 1

Maximum # of participants: For groups over 100 please contact us

Program Cost: $95.00 (CILC premium members: $85)

- Discounts may be available for bulk programming

Program Fee Notes: Payment of associated fees must be received 72 hours before the program date. If payment is not received by this time the program is subject to cancellation.

Cancellation Policy: We will not charge for programs canceled due to nature i.e. snow days. The full fee will be charged to sites which cancel with less than 48 hours notice. Payment is due 72 hours before the program. If payment is not received by this time the program is subject to cancellation. Dolphin Research Center reserves the right to cancel programs at anytime. If Dolphin Research Center cancels a program than it will contact the requester to discuss rescheduling options. If a program does not occur because of an error in communication between the requester and Dolphin Research Center, requesters will still be charged the full price of the programs. Sites need to participate in a tech run with Dolphin Research Center staff members. This will be scheduled to occur prior to your program date. If the tech run does not occur the full fee will be charged to sites that cannot connect at program time.
Program Delivery Mode: Google Hangouts, ZOOM, CILC One-Click-Connect (for H323)

Recording of any type during a Dolphin Research Center distance learning program is prohibited.

Standards

Florida

Florida Next Generation Science Standards met or supported:

- **SC.3.L.17.2** Recognize that plants use energy from the Sun, air, and water to make their own food.
- **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.
- **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.
- **SC.4.L.17.4** Recognize ways plants and animals, including humans, can impact the environment.
- **SC.5.P.10.1** Investigate and describe some basic forms of energy, including light, heat, sound, electrical, chemical, and mechanical.

Florida Health Standards met or supported:

- **HE.3.C.1.1** Describe healthy behaviors that affect personal health.
- **HE.3.P.7.1** Practice responsible personal health behaviors.
- **HE.4.C.1.1** Identify the relationship between healthy behaviors and personal health.
- **HE.4.P.7.2** Discuss a variety of healthy practices and behaviors to maintain or improve personal health and reduce health risks.
- **HE.5.C.1.1** Describe the relationship between healthy behaviors and personal health.
- **HE.5.C.1.6** Recognize how appropriate health care can promote personal health.
- **HE.5.P.7.1** Model responsible personal health behaviors.

Language Arts Florida Standards met or supported:

- **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.

- **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.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.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.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.

*National*

Next Generation Science Standards met or supported:
3-LS3-2. Use evidence to support the explanation that traits can be influenced by the environment.
5-PS3-1. Use models to describe that energy in animals' food (used for body repair, growth, motion, and to maintain body warmth) was once energy from the sun.

Common Core for English Language Arts met or supported:

- **CCSS.ELA-Literacy.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.

- **CCSS.ELA-Literacy.SL.2.1** 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.

- **CCSS.ELA-Literacy.SL.3.1** 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.

- **CCSS.ELA-Literacy.SL.5.1** 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.

Ocean Literacy Principles
Ocean life ranges in size from the smallest living things, microbes, to the largest animal on Earth, blue whales.

Ocean biology provides many unique examples of life cycles, adaptations, and important relationships among organisms (symbiosis, predator-prey dynamics, and energy transfer) that do not occur on land.

Humans affect the ocean in a variety of ways. Laws, regulations, and resource management affect what is taken out and put into the ocean. Human development and activity leads to pollution (point source, nonpoint source, and noise pollution), changes to ocean chemistry (ocean acidification), and physical modifications (changes to beaches, shores, and rivers). In addition, humans have removed most of the large vertebrates from the ocean.

Everyone is responsible for caring for the ocean. The ocean sustains life on Earth and humans must live in ways that sustain the ocean. Individual and collective actions are needed to effectively manage ocean resources for all.

**Recommended Materials and Preparation**