

DOLPHIN RESEARCH CENTER

Florida Grade 11 & 12 Teachers

Dear Florida Eleventh & Twelfth Grade Teachers,

Thank you for considering bringing your students to the Dolphin Research Center. We have a variety of educational opportunities available to you and they are all listed on our website. However, just coming on site allows you to meet a variety of educational standards that are a part of your educational curriculum.

We have narrated sessions and theater presentations all day long. Attending these sessions will meet many of the Language Arts Florida Standards (LAFS) for speaking and listening including:

- **LAFS.1112.SL.1.1** Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 11-12 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively. a. Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas. b. Work with peers to promote civil, democratic discussions and decision-making, set clear goals and deadlines, and establish individual roles as needed. c. Propel conversations by posing and responding to questions that probe reasoning and evidence; ensure a hearing for a full range of positions on a topic or issue; clarify, verify, or challenge ideas and conclusions; and promote divergent and creative perspectives. d. Respond thoughtfully to diverse perspectives; synthesize comments, claims, and evidence made on all sides of an issue; resolve contradictions when possible; and determine what additional information or research is required to deepen the investigation or complete the task.
- **LAFS.1112.SL.2.6** Adapt speech to a variety of contexts and tasks, demonstrating a command of formal English when indicated or appropriate

Second we have educational signs stationed throughout the grounds. These signs alone can meet many of the LAFS related to the reading of informational text. Again, you may choose to expand on the topics with your students back in the classroom to incorporate other LAFS related to writing.

- **LAFS.1112.RI.1.1** Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.
- **LAFS.1112.RI.1.2** Determine two or more central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to provide a complex analysis; provide an objective summary of the text.
- **LAFS.1112.RI.1.3** Analyze a complex set of ideas or sequence of events and explain how specific individuals, ideas, or events interact and develop over the course of the text.



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- **LAFS.1112.RI.2.5** Analyze and evaluate the effectiveness of the structure an author uses in his or her exposition or argument, including whether the structure makes points clear, convincing, and engaging.

In addition to meeting the LAFS our narrations and signs also provide information that is related to the following Next Generation Sunshine State Standards for Science (NGSSS):

- **SC.912.N.1.7** Recognize the role of creativity in constructing scientific questions, methods and explanations.
- **SC.912.N.2.2** Identify which questions can be answered through science and which questions are outside the boundaries of scientific investigation, such as questions addressed by other ways of knowing, such as art, philosophy, and religion.
- **SC.912.L.15.4** Describe how and why organisms are hierarchically classified and based on evolutionary relationships.
- **SC.912.L.15.5** Explain the reasons for changes in how organisms are classified.
- **SC.912.L.15.7** Discuss distinguishing characteristics of vertebrate and representative invertebrate phyla, and chordate classes using typical examples.
- **SC.912.L.16.11** Discuss the technologies associated with forensic medicine and DNA identification, including restriction fragment length polymorphism (RFLP) analysis.
- **SC.912.L.16.2** Discuss observed inheritance patterns caused by various modes of inheritance, including dominant, recessive, codominant, sex-linked, polygenic, and multiple alleles.
- **SC.912.L.17.6** Compare and contrast the relationships among organisms, including predation, parasitism, competition, commensalism, and mutualism.
- **SC.912.L.17.8** Recognize the consequences of the losses of biodiversity due to catastrophic events, climate changes, human activity, and the introduction of invasive, non-native species.
- **SC.912.L.17.9** Use a food web to identify and distinguish producers, consumers, and decomposers. Explain the pathway of energy transfer through trophic levels and the reduction of available energy at successive trophic levels.
- **SC.912.L.17.11** Evaluate the costs and benefits of renewable and nonrenewable resources, such as water, energy, fossil fuels, wildlife, and forests.
- **SC.912.L.17.12** Discuss the political, social, and environmental consequences of sustainable use of land.
- **SC.912.L.17.13** Discuss the need for adequate monitoring of environmental parameters when making policy decisions
- **SC.912.L.17.14** Assess the need for adequate waste management strategies.
- **SC.912.L.17.15** Discuss the effects of technology on environmental quality.
- **SC.912.L.17.16** Discuss the large-scale environmental impacts resulting from human activity, including waste spills, oil spills, runoff, greenhouse gases, ozone depletion, and surface and groundwater pollution.
- **SC.912.L.17.17** Assess the effectiveness of innovative methods of protecting the environment.



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- **SC.912.L.17.18** Describe how human population size and resource use relate to environmental quality.
- **SC.912.L.17.19** Describe how different natural resources are produced and how their rates of use and renewal limit availability.
- **SC.912.L.17.20** Predict the impact of individuals on environmental systems and examine how human lifestyles affect sustainability
- **SC.912.E.7.8** Explain how various atmospheric, oceanic, and hydrologic conditions in Florida have influenced and can influence human behavior, both individually and collectively.

You may opt to have students take what they have learned here and apply it to a research project (informational or persuasive) back at your school, allowing for the integration of additional writing standards. You may find a detailed list of these standards by visiting the grade appropriate standards letter for the state of Florida.

We thank you for your consideration and sincerely hope that you will take the time to bring your students to visit our dolphins in our wonderful natural classroom!

Dolphin Research Center Education Team

