

<u>Unit Premier:</u> How the World Works

In this unit, your child will be challenged to explore natural resources such as the ocean and the interdependence of people. As we explore, your child will gain further knowledge of how to become an inquirer through a plethora of hands on Science labs, the study of Florida's Geography, and the contributions of significant people to Florida.



18 Instructional Elements

Theme-

Six transdisciplinary units that: have global significance and offer students the opportunity to explore the communities of human experience.

- <u>How the World Works</u> an inquiry into the natural world and its laws, the interaction between the natural world (physical and biological) and human societies; how humans use their understanding of scientific principles; the impact of scientific and technological advances on society and on the environment.
- <u>Lincoln Curriculum Connection</u>— Developing informative and opinion writing and speaking skills in non-fiction text, conducting Science investigations and understanding scientific knowledge, and learning the Geography of Florida and those who contributed to early Florida exploration.

Learner Profile

A set of attributes that, taken as a whole, lay the foundation upon which international-mindedness will develop and flourish

- <u>Inquirer-</u>They develop their natural curiosity. They acquire the skills necessary to conduct inquiry and research and show independence in learning. They actively enjoy learning and this love of learning will be sustained throughout their lives.
- <u>LCC-</u> Students will continue research to have their questions answered.
- <u>Courageous</u> They approach unfamiliar situations and uncertainty with courage and forethought, and have the independence of spirit to explore new roles, ideas and strategies. They are brave and articulate in defending their belief.

<u>LCC-</u> They will search for solutions to real world problems while taking action.

- <u>Knowledgeable</u> They explore concepts, ideas and issues that have local and global significance. In so doing, they acquire in-depth knowledge and develop understanding across a broad and balanced range of disciplines.
- <u>LCC</u> They will learn about significant global issues.

<u>Attitudes</u>

Expressions of fundamental values, beliefs and feelings about learning, the environment and people.

- <u>Appreciation</u> Appreciating the wonder and beauty of the world and its people.
 - <u>LCC</u>—They will recognize our dependence upon the ocean and working to protect it. **Curiosity**—Being curious about the nature of learning, about the world, its people and cultures.
 - <u>LCC</u> They will observe laws of nature and experiment with them.
- <u>Creativity</u>— Being creative and imaginative in their thinking and in their approach to problems and dilemmas.
- LCC— They will design a submarine and a coral reef for sustainability.

Key Concepts

Powerful ideas that have relevance within the subject areas but also transcend them and that students must explore and re-explore in order to develop a coherent, in-depth understanding.

- Function— The understanding that everything has a purpose, a role or a way of behaving that can be investigated.
- <u>LCC-</u> Students will be applying knowledge from the ocean to develop a functioning submarine prototype that would operate under water.
- <u>Connection-</u>The understanding that knowledge is moderated by perspectives; different perspectives lead to different interpretations, understandings and findings; perspectives may be individual, group, cultural or disciplinary.
- **LCC** Students will learn how the ocean and human life are interconnected.
- <u>Reflection-</u> The understanding that there are different ways of knowing, and that it is important to reflect on our conclusions, to consider our methods of reasoning, and the quality and the reliability of the evidence we have consider.
 - <u>LCC-</u> Students will reflect and adjust their prototype to accommodate the constraints and the newly acquired knowledge that was gained from the hands on Science labs.

Transdisciplinary Skills

Those capabilities that the students need to demonstrate to succeed in a changing, challenging world, which may be disciplinary or transdisciplinary in nature.

- <u>Thinking</u>—Gaining specific facts, ideas, vocabulary, remembering in a similar form.
 - <u>LCC-</u> Students will analyze interdependency and human effects on environments.
- Research skills Formulating questions, observing, planning, collecting data, recording data, organizing data, interpreting data, presenting research findings
- <u>LCC</u>—Students will collect data through various experiments and stations.