**1st Grade Core Knowledge Unit**

**Science: Oceans and Undersea Life**

**Summary:** Water covers most of Earth and is found mostly in the oceans: Pacific, Atlantic, Indian, and Arctic. The ocean water moves with waves, tides, and currents. The ocean floor has a varied surface with mountains, valleys, trenches, and plains. The oceans are full of a large variety of living creatures.

**The Big Idea:** Living things live in environments where they are best able to survive.

**Colorado State Standards:**

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| |  | | --- | | 1.2.1.d. Distinguish between land and water on a map or globe.  1.2.2.a. Identify organisms and use evidence based scientific explanations for classifying them into groups.  1.2.2.b. Analyze and interpret data about the needs of plants and animals.  1.2.2.c. Use direct observations and other evidence to support ideas concerning physical characteristics that help plants and animals survive.  2.2.1.a. Use evidence to develop a scientific explanation about how organisms depend on their habitat.  2.2.1.b. Identify and locate various physical features on a map.  2.2.1.c. Assess and provide feedback on other scientific explanations regarding why an organism can survive in its habitat.  3.2.1.b. Find oceans and continents, major countries, bodies of water, mountains, and urban areas, the state of Colorado, and neighboring states on maps. |   4.2.3.b. Identify the components that make a habitat type unique.  4.2.3.c. Compare and contrast different habitat types. | |
| 6.3.2.d. Identify the various causes and effects of water pollution in local and world water distributions.  8.3.4.a. Develop, communicate, and justify an evidence-based explanation using relative positions of Earth, Moon, and Sun to explain the following natural phenomenon: Tides |

**Common Core Standards**:

**L1.1** Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

**RI1.1** Ask and answer questions about key details in a text.

**RI1.2** Identify the main topic and retell key details of a text.

**RI1.3** Describe the connection between two individuals, events, ideas, or pieces of information in a text.

**RI1.6** Distinguish between information provided by pictures or other illustrations and information provided by the words in a text.

**RI1.7** Use illustrations and details in a text to describe its key ideas.

**RI1.8** Identify the reasons an author gives to support points in a text.

**RL1.1** Ask and answer questions about key details in a text.

**RL1.2** Retell stories, including key details, and demonstrate understanding of their central message or lesson.

**RL1.3** Describe characters, settings, and major events in a story, using key details.

**RL1.7** Use illustrations and details in a story to describe its characters, setting, or events.

**SL1.1** Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.

**SL1.2** Ask and answer questions about key details in a text read aloud or information presented orally or through other media.

**W1.1** Write opinion pieces in which they introduce the topic or name the book they are writing about, state an opinion, supply a reason for the opinion, and provide some sense of closure.

**Core Knowledge Unit:**

1. Oceans and Undersea Life

* Most of the earth is covered with water
* Locate Oceans
  + Pacific
  + Atlantic
  + Indian
  + Arctic
* Oceans are salt water (unlike freshwater rivers and lakes)
* Coast, shores, waves, high and low tides
* Currents, the Gulf Stream
* Landscape of the ocean floor: mountain peaks and deep valleys (trenches)
* Diversity of ocean life: from organisms too small for the eye to see (plankton), to giant whales
* Dangers to ocean life (overfishing, pollution, oil spills)

**Core Knowledge Language Arts:**

1. Listening and Speaking

A. Classroom Discussion

* Participate in age appropriate activities involving listening and speaking.

1. Presentation of Ideas and Information

* Provide simple explanations.

1. Comprehension and Discussion of Read-Alouds – All Texts

* Use pictures accompanying the read-aloud to check and support understanding of the read-aloud.

1. Comprehension and Discussion of Read-Alouds – Nonfiction and Informational Text

* Answer questions about the details of a nonfiction text.

1. Writing
2. Language Conventions

* Form letters, words, phrases and sentences to communicate thoughts and ideas.

**Prior Knowledge:**

**Kindergarten**

1. Animals and their Needs
2. Taking care of the Earth

**What Students Will Learn in Future Grades:**

**Second Grade:**

1. Cycles in Nature

\*seasonal cycles, life cycles, water cycles

**Third Grade:**

1. Introduction to Classification of Animals
2. Ecology

\*food chains, habitats, and environmental protection

**Sixth Grade:**

1. Oceans

\*surface, land features, ocean bottom, currents, tides, waves, marine life

**Previous Unit:** Animal Habitats

**Next Unit:** N/A (Last science unit of the school year)

**Cross Curricular Links:**

**Sayings and Phrases:**

“Fish out of water”

**History :**

Geography: Location of major oceans

Explorers’ voyages across the oceans