**Science Unit Organizer**

**Cycles in Nature: Water Cycle**

**2nd Grade: Liberty Common School**

**Previous Unit:**  **Next Unit:**

Cycles in Nature: Life Cycles Cycles in Nature: Insects

**Integrated Units:**

None at this level

**The Big Idea**: There are many natural cycles that occur on Earth that make life on Earth possible.

**Summary:** The water cycle is responsible for the redistribution of water between Earth’s surface and the atmosphere.

**Core Knowledge Content (Knowledge):**

1. Cycles in Nature
   1. The Water Cycle
      1. Most of the earth’s surface is covered by water.
      2. The water cycle
         1. Evaporation and condensation
         2. Water vapor in the air, humidity
         3. Clouds: cirrus, cumulus, stratus
         4. Precipitation, groundwater

**Prior Knowledge:**

Kindergarten

* Seasons and Weather

Grade 1

* Life cycles

**Future Knowledge:**

Grade 4

* The water cycle and meteorology

**Colorado State Standards for Science – 2nd Grade**

**Content Area: Science**

**Standard: 3. Earth Science**

Prepared Graduates:

* 10. Students can use the full range of science and engineering practices to make sense of natural phenomena and solve problems that require understanding how and why Earth is constantly changing.

Grade Level Expectation:

2. Wind and water can change the shape of the land; models can show the shape and these changes to the land

*Students Can:*

1. Compare multiple solutions designed to slow or prevent wind or water from changing the shape of the land. (2-ESS2-1) *(Clarification Statement: Examples of solutions could include different designs of dikes and windbreaks to hold back wind and water, and different designs for using shrubs, grass, and trees to hold back the land.)*
2. Develop a model to represent the shapes and kinds of land and bodies of water in an area. (2-ESS2-2) *(Boundary Statement: Does not include quantitative scaling in models.)*
3. Obtain information to identify where water is found on Earth and that it can be solid or liquid. (ESS2-3)

**Additional Resources:**

* For Teachers:
  + Core Knowledge Teacher Handbook, Grade 2, Core Knowledge Foundation, ISBN: 1-890517-74-7
  + “What Your Second Grader Needs to Know” Edited by E.D. Hirsch, Jr.
* For Students:
  + “What Your 2nd Grader Needs to Know; Fundamentals of a Good Second-Grade Education,” by E.D. Hirsch, Dell Publishing, ISBN: 0-385-31027-7
  + Kids Discover Weather
  + “The Cloud Book” by Tomie de Paola ISBN: 0-590-08531-x,
  + “Clouds” by Anne Rockwell ISBN: 978-0-06-445220-5
  + Kids Discover Rain and Snow Volume 12, Issue 12
  + “One Well: The Story of Water on Earth” by Rochelle Strauss ISBN: 978-1-55337-954-6
  + “Follow a Raindrop” by Elsie Ward ISBN; 0-590-66167-1