**Science Unit Organizer**

**Cycles in Nature: Seasons**

**2nd Grade-Liberty Common School**

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

n/a (First unit of school year) Cycles in Nature: Life Cycles

**Integrated Units:**

Language Arts: Bed in Summer poem

Language Arts: Something Told the Wild Geese poem

Mathematics: Time; calendars

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

**Summary:**  The four seasons are caused by Earth’s orbit around the sun and its axial tilt. There are predictable seasons with corresponding weather and life processes.

**Core Knowledge Content (Knowledge):**

1. Cycles in Nature
2. Seasonal Cycles
3. The four seasons and earth’s orbit around the sun (one year)
4. Seasons and life processes:
5. Spring: sprouting, sap flow in plants, mating and hatching
6. Summer: growth
7. Fall: ripening, migration
8. Winter: plant dormancy, animal hibernation

**Prior Knowledge:**

Kindergarten

* Seasons and weather

Grade 1

* life cycles
* habitats, the food chain

**Future Knowledge:**

Grade 3

* the food chain

Grade 4

* the water cycle and meteorology

Grade 5

* photosynthesis
* the life cycle and reproduction

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

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| **Content Area: Science** |
| **Standard: 2. Earth Science** |
| **Prepared Graduates:**   * Evaluate evidence that Earth’s geosphere, atmosphere, hydrosphere, and biosphere interact as a complex system |
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| **Grade Level Expectation: Second Grade** |
| **Concepts and skills students master:** |
| 1. Weather and the changing seasons impact the environment and organisms such as humans, plants, and other animals |

**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
  + “The Reasons for Seasons” by Gail Gibbons ISBN: 0-82341-238-5
  + “The Wonders of the Seasons” by Keith Brandt ISBN: 0-89375-581-8
  + “Sunshine Makes the Seasons” by Franklyn M. Branley ISBN:978-006-059204-2
  + “How Do You Know It’s Spring?” by Allan Fowler ISBN: 0-516-44914-1
  + “How Do You Know It’s Summer?” by Allan Fowler ISBN: 0-516-44923-0
  + “How Do You Know It’s Fall?” by Allan Fowler ISBN: 978-0516449227