**1st Grade Core Knowledge**

**Science**

**Matter and Properties of Matter**

**Summary:** In this domain, students will learn that matter is all around us, and it is the material that makes up the universe. They will learn to identify the three states of matter as solids, liquids, and gases, and know the unique characteristics of each. The students will know that matter is measurable, and identify ways to measure length, volume, and temperature.

**The Big Idea:** Everything around you is made of matter that exists in one of three states – solid, liquid, or gas. Measurements, such as length, volume, and temperature, are physical properties of matter that can be used to describe and classify objects.

**Colorado State Standards:**

|  |
| --- |
| 1.1.1.a. Analyze and interpret observations about solids and liquids and their unique properties  1.1.1.b. Identify the similarities and differences of two or more groups of solids or liquids  1.1.1.c. Classify solids and liquids based on their properties, and justify your choice based on evidence |

2.4.2.c. (Math) Use standard linear measuring tools to measure to the nearest whole unit

2.4.2.d. (Math) Identify common units of time, weight, and temperature and their appropriate use

6.1.1.a. Identify evidence that suggests there is a fundamental building block of matter

**Common Core Standards**:

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

**L1.6** Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using frequently occurring conjunctions to signal simple relationships (e.g., I named my hamster Nibblet because she nibbles too much because she likes that).

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

**Core Knowledge Unit:**

1. Matter
2. Basic concept of atoms
3. Names and common examples of three states of matter:

Solid (for example, wood, rocks)

Liquid (for example, water)

Gas (for example, air, steam)

1. Water as an example of changing states of matter of a single substance
2. Properties of Matter: Measurement
3. Units of measurement:

Length: centimeter, inch, foot

Volume: gallon, quart

1. Temperature: degrees Fahrenheit

**Core Knowledge Language Arts:**

I. Listening and Speaking

A. Classroom Discussion

* Ask questions to clarify conversations, directions, exercises, and/or classroom routines.

B. Comprehension and Discussion of Read-Alouds

* Describe illustrations.
* Prior to listening to a read-aloud, identify what they know and have learned that may be related to the specific story or topic to be read aloud.
* Use pictures accompanying the read-aloud to check and support understanding of the read-aloud.
* Make predictions prior to and during a read-aloud, based on the title, pictures, and/or text heard thus far and then compare the actual outcomes to predictions.
* With assistance, categorize facts and information within a given topic.

**Previous Unit:** The Human Body

**Prior Knowledge:**

Kindergarten

* Introduction to Magnetism (a property of matter)

**Next Unit:** Introduction to Electricity

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

Fourth Grade

* Chemistry (atoms, properties of matter, elements, solutions)

Fifth Grade

* Chemistry (molecules and compounds, chemical and physical change)

**Cross Curricular Links:**

Math: Units of Measurement with length and weight

**Additional Resources:**

For teachers and students:

* *Kids Discover Magazines,* published by Kids Discover