

## DCI: Earth's Place in the Universe

### 1.ESS1.A: The Universe and Its Stars

Patterns of the motion of the sun, moon, and stars in the sky can be observed, described, and predicted. (1-ESS1-1)

## DCI: Earth's Place in the Universe

### 1.ESS1.B: Earth and the Solar System

Seasonal patterns of sunrise and sunset can be observed, described, and predicted. (1-ESS1-2)

## Performance Expectation

### **1-ESS1-1: Use observations of the sun, moon, and stars to describe patterns that can be predicted.**

**Clarification Statement:** Examples of patterns could include that the sun and moon appear to rise in one part of the sky, move across the sky, and set; and stars other than our sun are visible at night but not during the day.

**Assessment Boundary:** Assessment of star patterns is limited to stars being seen at night and not during the day.

## Performance Expectation

### **1-ESS1-2: Make observations at different times of year to relate the amount of daylight to the time of year.**

**Clarification Statement:** Emphasis is on relative comparisons of the amount of daylight in the winter to the amount in the spring or fall.

**Assessment Boundary:** Assessment is limited to relative amounts of daylight, not quantifying the hours or time of daylight.

## Science and Engineering Practice

### **Planning and Carrying Out Investigations**

Planning and carrying out investigations to answer questions or test solutions to problems in K–2 builds on prior experiences and progresses to simple investigations, based on fair tests, which provide data to support explanations or design solutions.

Make observations (firsthand or from media) to collect data that can be used to make comparisons. (1-ESS1-2)

## Science and Engineering Practice

### **Analyzing and Interpreting Data**

Analyzing data in K–2 builds on prior experiences and progresses to collecting, recording, and sharing observations.

Use observations (firsthand or from media) to describe patterns in the natural world in order to answer scientific questions. (1-ESS1-1)

## Crosscutting Concept

### Patterns

Patterns in the natural and human designed world can be observed, used to describe phenomena, and used as evidence. (1-ESS1-1), (1-ESS1-2)

## Connection to Nature of Science

### Scientific Knowledge Assumes an Order and Consistency in Natural Systems

Science assumes natural events happen today as they happened in the past. (1-ESS1-1)

## Connection to Nature of Science

### Scientific Knowledge Assumes an Order and Consistency in Natural Systems

Many events are repeated. (1-ESS1-1)

## Common Core State Standards for ELA/Literacy

### Card Type name

#### **W.1.7 - Research to Build and Present Knowledge**

Participate in shared research and writing projects (e.g., explore a number of “how-to” books on a given topic and use them to write a sequence of instructions). (1-ESS1-1), (1-ESS1-2)

## Common Core State Standards for ELA/Literacy

### Card Type name

#### **W.1.8 - Research to Build and Present Knowledge**

With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question. (1-ESS1-1), (1-ESS1-2)

## Common Core State Standards for Mathematics

### **Measurement & Data**

#### **1.MD.C.4 - Represent and interpret data.**

Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another. (1-ESS1-2)

## Common Core State Standards for Mathematics

### Operations & Algebraic Thinking

#### 1.OA.A.1 - Represent and solve problems involving addition and subtraction.

Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.

(1-ESS1-2)

## Common Core State Standards for Mathematics

### Mathematical Practices

#### MP.2 - Reason abstractly and quantitatively

CCSS text (1-ESS1-2)

## Common Core State Standards for Mathematics

### Mathematical Practices

#### MP.4 - Model with mathematics

CCSS text (1-ESS1-2)

**Common Core State Standards for Mathematics**

**Mathematical Practices**

**MP.5 - Use appropriate tools strategically**

CCSS text (1-ESS1-2)