

# \*\*\*SAMPLE\*\*\*SAMPLE\*\*\*SAMPLE\*\*\*SAMPLE\*\*\*

**SC.1.11.3.B Make observations at different times of the year to relate the amount of daylight to the time of year.** Emphasis is on relative comparisons of the amount of daylight in the winter to the amount in the spring or fall. Assessment is limited to relative amounts of daylight, not quantifying the hours or time of daylight

## Supporting Information from Foundation Boxes

| SEP  | DCI  | CCC   |
|--|--|---|
| Make observations (firsthand or from media) to collect data that can be used to make comparisons. (1.11.3.B) | <b>Earth and the Solar System</b><br>Seasonal patterns of sunrise and sunset can be observed, described, and predicted. (1.11.3.B) | Patterns in the natural world can be observed, used to describe phenomena, and used as evidence. (1.11.3.B) |

## Unwrapping the Standard

| Unwrapped Skills<br>(Verbs) | Unwrapped Concepts<br>(Nouns) | Performance Criteria<br>(Considerations)                               | Level of Rigor<br>for the row |
|-----------------------------|-------------------------------|--|-------------------------------|
| make                        | observations                  | Patterns in the amount of (relative) daylight during different seasons |                               |
| relate                      | observations                  | Patterns in the amount of (relative) daylight during different seasons |                               |
| discover                    | patterns                      | For changes in daylight during different seasons of the year           |                               |
| predict                     | patterns                      | in the amount of (relative) daylight during different seasons          |                               |
| describe                    | patterns                      | in the amount of (relative) daylight during different seasons          |                               |
|                             |                               |  |                               |

**General Performance Conditions (may or may not be used):** consider the assessment boundaries here.

**Content Context:** consider the examples in the clarification statement--refer to the previous grade-band and identify what distinguishes the content at this level--identify why students need to know this content (what real-world phenomena can students use this information to explain and/or what real-world problems can they solve using this content? What uncertainties might students possess related to this content? What conceptions may they have?



- Relative amount of daylight in a particular season
- Daytime in the winter compared to the summer

**Related Practices:** (What other practices can be used to sequence the learning? For example, if carrying out an investigation, there could be data to be analyzed.)

- Ask or identify questions
- Develop and use models
- Analyze and interpret data (compare to images, two videos, ...)
- Engage in argument from evidence

**Additional CCC Lenses:** (What additional lenses can be used to scaffold student thinking? For example, patterns can be used to identify stability and change and that can be used to think about the flow of energy in systems)

- Cause and effect
- Systems and system models
- Stability and change

**Clarify Key Terms:** In your clarification, identify the term and explain why students need to know it. For example, students need to know 'photosynthesis' to explain how matter and energy move in plant systems or students need to know 'decomposer' to describe the organisms responsible for breaking down dead organisms and recycling matter in an ecosystem.

- Daylight
- Seasons
- Observation
- Patterns
- Predict
- Compare
- Sunrise
- Sunset
- 

**3D Learning Performances:** What learning targets will allow students to gather, analyze and communicate information? What SEPs and CCCs will scaffold the learning to deeper thinking?

**Level of Rigor**

- Gather...
  - Make observations to uncover patterns of changes in amount of daylight at different times of year
  - Identify questions that can help explain why there are changes in amount of daylight at different times of year
  - Collect data to figure out the relationship between amount of daylight and different seasons

Analyze...

- Use patterns to make predictions about amount of daylight during different seasons
- Use collected data to describe how amount of daylight changes during different times of the year



Communicate...

- Draw a model to explain how amount of daylight changes during different times of the year
- Use a model to support a claim about the relationship of a season to the amount of daylight during that season