

Texas

Beginning with School Year 2010-2011.

Elementary Grades

§112.11. Science, Kindergarten

(8) Earth and space. The student knows that there are recognizable patterns in the natural world and among objects in the sky. The student is expected to:

- (A) observe and describe weather changes from day to day and over seasons;
- (B) identify events that have repeating patterns, including seasons of the year and day and night; and
- (C) observe, describe, and illustrate objects in the sky such as the clouds, Moon, and stars, including the Sun.
- (D) Observe, measure, and record changes in weather, the night sky, and seasons.

§112.12. Science, Grade 1

(8) Earth and space. The student knows that the natural world includes the air around us and objects in the sky. The student is expected to:

- (A) record weather information, including relative temperature, such as hot or cold, clear or cloudy, calm or windy, and rainy or snow;
- (B) observe and record changes in the appearance of objects in the sky such as clouds, the Moon, and stars, including the Sun;
- (C) identify characteristics of the seasons of the year and day and night; and

§112.13. Science, Grade 2

(8) Earth and space. The student knows that there are recognizable patterns in the natural world and among objects in the sky. The student is expected to:

- (A) measure, record, and graph weather information, including temperature, wind conditions, precipitation, and cloud coverage, in order to identify patterns in the data;
- (B) identify the importance of weather and seasonal information to make choices in clothing, activities, and transportation;
- (D) observe, describe, and record patterns of objects in the sky, including the appearance of the Moon.

§112.14. Science, Grade 3

(8) Earth and space. The student knows there are recognizable patterns in the natural world and among objects in the sky. The student is expected to:

Starry Night Lesson Plans in Order of Relevance

K-2 Lessons 3-4 Lessons

1, 2, 3, 4 1, 2, 3

1, 3 2

1, 3, 4 2, 3

1, 2, 3, 4 1, 3

1, 3, 4 2, 3

1, 3, 4 1, 2, 3

2

1, 3, 4 2, 3

1, 3 2, 3

1, 3, 4 2, 3

2

2

1, 3, 4 2, 3

1, 3, 4 1, 2

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| (B) describe and illustrate the Sun as a star composed of gases that provides light and heat energy for the water cycle; | | 1 |
| (C) construct models that demonstrate the relationship of the Sun, Earth, and Moon, including orbits and positions; and | 1, 3, 4 | 1 |
| (D) identify the planets in Earth's solar system and their position in relation to the Sun. | | 1 |

§112.15. Science, Grade 4

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| (8) Earth and space. The student knows that there are recognizable patterns in the natural world and among the Sun, Earth, and Moon system. The student is expected to: | 1,2, 3, 4 | 1, 2, 3 |
| (A) measure and record changes in weather and make predictions using weather maps, weather symbols, and a map key; | | 2 |
| (C) collect and analyze data to identify sequences and predict patterns of change in shadows, tides, seasons, and the observable appearance of the Moon over time. | 1, 3, 4 | 2, 3 |

By the end of grade 4:

Science Skills

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|---|-----------|---------|
| (2) Scientific investigation and reasoning. The student uses scientific inquiry methods during laboratory and outdoor investigations. The student is expected to: | 1,2, 3, 4 | 1, 2, 3 |
| (A) plan and implement descriptive investigations, including asking well-defined questions, making inferences, and selecting and using appropriate equipment or technology to answer his/her questions; | ✓ | ✓ |
| (B) collect and record data by observing and measuring, using the metric system, and using descriptive words and numerals such as labeled drawings, writing, and concept maps; | ✓ | ✓ |
| (C) construct simple tables, charts, bar graphs, and maps using tools and current technology to organize, examine, and evaluate data; | ✓ | ✓ |
| (D) analyze data and interpret patterns to construct reasonable explanations from data that can be observed and measured; | ✓ | ✓ |
| (E) perform repeated investigations to increase the reliability of results; and | ✓ | ✓ |
| (F) communicate valid, oral, and written results supported by data. | ✓ | ✓ |

**Starry Night Middle School Lesson Plans
in Order of Relevance**

§112.16. Science, Grade 5

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| (8) Earth and space. The student knows that there are recognizable patterns in the natural world and among the Sun, Earth, and Moon system. The student is expected to: | A1 - A5 | C1 - C3 | E1 | E3 | F1 |
|---|---------|---------|----|----|----|

