

U. S. Curriculum Correlations by State

Louisiana

Grades 11- 12
Earth and Space Science
Energy in Earth's System

Starry Night Lesson Plans
In order of relevance

(ESS-H-A1) Describe what happens to the solar energy received by Earth every day.

F1

(ESS-H-A2) Describe the relationship between seasonal changes in the angle of incoming solar radiation and its consequences to Earth's temperature (e.g., direct vs. slanted rays)

A2

(ESS-H-A3) Explain how the process of fusion inside the Sun provides the external heat source for Earth.

F1

The Origin and Evolution of the Earth System

(ESS-H-C1) Use the nebular hypothesis to explain the formation of a Solar System.

F3

The Origin and Evolution of the Universe

(ESS-H-D1) Identify the evidence that supports the Big Bang theory.

H3 H2 I1

(ESS-H-D2) Describe the organization of the known Universe.

B1 F3 G1 H1 H2 H3

(ESS-H-D3) Using the surface temperature and absolute magnitude data of a selected stars, locate its placement on the Hertzsprung-Russell diagram and infer its color, size, and life stage

G2

(ESS-H-D4) Identify the elements present in selected stars, given spectrograms of known elements and those of selected stars.

G2

(ESS-H-D5) Trace the movement and behavior of hydrogen atoms during the process of fusion as it occurs in stars like the Sun.

F1 F2

(ESS-H-D6)(PS-H-E2) Identify the relationship between orbital velocity and orbital diameter. Demonstrate the elliptical shape of Earth's orbit and describe how the point of orbital focus changes during the year.

C2 D1 D2 D3 C1

(ESS-H-D7) Summarize how current technology has directly affected our knowledge of the Universe.

I1 I2 H1 H2 H3