

U. S. Curriculum Correlations by State

Massachusetts

Strand 1: Earth and Space Science

1. Matter and Energy in the Earth System

1.1 Identify Earth's principal sources of internal and external energy, such as, radioactive decay, gravity, and solar energy.

Starry Night Lesson Plans

In order of relevance

F1

1.5 Explain how the revolution of Earth around the Sun and the inclination of Earth on its axis cause Earth's seasonal variations (equinoxes and solstices).

A2

1.8 Read, interpret, and analyze a combination of ground-base observations, satellite data, and computer models to demonstrate Earth Systems and their interconnections.

B1-B2 C1-C3 D1-D3 F1-F3 I2

4. The Origin and Evolution of the Universe

4.1 Explain the Big Bang Theory and discuss the evidence that supports it, such as, background radiation, and relativistic Doppler effect- "red shift".

H1 H2 H3 I1

4.2 Describe the influence of gravity and inertia on the rotation and revolution of orbiting bodies. Explain the Sun-Earth-Moon relationships, such as, day, year, solar/lunar eclipses and tides.

C2 F3 A1 A2 A3 A4 A5

4.3 Explain how the Sun, Earth, and Solar System formed from a nebula of dust and gas in a spiral arm of the Milky Way Galaxy about 4.6 billion years ago.

F3