

U. S. Curriculum Correlations by State

South Dakota

Indicator 2: Analyze essential principles and ideas about the composition and structure of the Universe.

9-12.E.2.1 Students are able to recognize how Newtonian mechanics can be applied to the study of the motions of the Solar System.

Given a set of possible explanations of orbital motion (revolution), identify those that make use of gravitational forces and inertia.

**Grades 9, 10, 11, 12
Earth/Space Science Standards (1999)**

Describe the Newtonian mechanics that can be applied to the study of motion of the Solar System.

Explain the position and motion of our Solar System in the Universe.

Know how to describe astronomical distance and time.

Explain the formation of stars from interstellar matter.

Describe the physical and nuclear dynamics involved in the formation, evolution, and death of a star.

Analyze and compare various scientific theories on how the Universe was formed. (Example: Big Bang Theory)

Identify the arrangement of bodies within and outside our galaxy.

Describe various ways data about the Universe is collected. (Example: optical, radio, and x-ray telescopes, spectrometers, space probes).

Starry Night Lesson Plans

In order of relevance

C2 D1 D2 D3 B1

C2

F3 G1 H1 H2 H3

B2 G1 G2 H1 H2 H3 I1

F2 G2

F3 F1 G2

H1 H2 H3 I1 I2 I3

B1 B2 G1 H1 H2 H3

E1-E3 F1-F3 G1-G2 H1-H3 I1-I2