

Minnesota
Middle School

Grade 8

III. EARTH AND SPACE SCIENCE

The Universe

The student will compare objects in the solar system and explain their interactions with the Earth.

A1-A5 B1-B2 C1-C4 D1-D3 F1-F3 E3 E4 I2

1. The student will recognize that the sun is the principal energy source for the solar system and that this energy is transferred in the form of radiation.

F1 F2 G2

2. The student will explain how the combination of the Earth's tilted axis and revolution around the sun causes the progression of seasons and weather patterns.

A2 E3

3. The student will compare and contrast the planets, taking into account their composition, mass and distance from the sun and recognize the conditions that have allowed life to flourish on Earth.

B1-B2 C1-C4 D1-D3 I2

4. The student will use the predictability of the motions of the Earth, and sun to explain the length of day, length of year, phases of the moon, eclipses, tides and shadows.

A1-A5 E2 E3 E4

The student will describe the composition and structure of the universe.

G1-G3 H1-H2 F1-F3

1. The student will recognize that the universe consists of many billions of galaxies, each containing many billions of stars and that there are vast distances that separate these galaxies and stars from one another.

G1-G3 H1-H2

2. The student will recognize that the sun is a medium-sized star and is the closest star to Earth. It is the central and largest body in the solar system and is one of billions of stars in the Milky Way Galaxy.

F1-F3

Starry Night Lesson Plans

In order of relevance