

**Kansas**  
High School

Grades 8-12

**STANDARD 4: EARTH AND SPACE SCIENCE**

**Benchmark 1: The student will develop an understanding of the sources of energy that power the subsystems and cycles of the dynamic Earth: the geosphere, hydrosphere, atmosphere and biosphere.**

1. understands that the ultimate source of atmospheric and oceanic energy comes from the Sun. Energy flow determines global climate and weather which is influenced by geographic features, cloud cover, and the Earth's rotation

**Starry Night Lesson Plans**

In order of relevance

F1 A2

**Benchmark 3: The student will develop an understanding of dynamics of our solar system.**

A1-A5 B1-B2 C1-C4 D1-D3

1. understands gravitational attraction of objects in the solar system keeps solar system objects in orbit.

C2 F3 B1

2. understands the relationship between the Earth, Moon, and Sun explains the seasons, tides, and moon phases.

A2-A5 E3

3. understands the relative sizes and distances of objects in the solar system.

B1-B2 C1-C4 D1-D3

4. understands the Sun, Earth, and other objects in the solar system formed from a nebular cloud of dust and gas.

F3 B1-B2

**Benchmark 4: The student will develop an understanding of the organization of the universe and its development.**

G1-G3 H1-H3 I1-I3

1. understands stellar evolution.

G2 F3 G3

2. understands the current scientific explanation of the origin and structure of the universe.

H1-H3

3. understands how the tools of astronomy have revolutionized the study of the universe.

I1-I3