

# South Carolina

## Middle School

### Grade 8

#### Standard 8-1:

#### Astronomy: Earth and Space Systems

#### Standard 8-4:

The student will demonstrate an understanding of the characteristics, structure, and predictable motions of celestial bodies. (Earth Science)

#### Indicators

8-4.1 Summarize the characteristics and movements of objects in the solar system (including planets, moons, asteroids, comets, and meteors).

8-4.2 Summarize the characteristics of the surface features of the Sun: photosphere, corona, sunspots, prominences, and solar flares.

8-4.3 Explain how the surface features of the Sun may affect Earth.

8-4.4 Explain the motions of Earth and the Moon and the effects of these motions as they orbit the Sun (including day, year, phases of the Moon, eclipses, and tides).

8-4.5 Explain how the tilt of Earth's axis affects the length of the day and the amount of heating on Earth's surface, thus causing the seasons of the year.

8-4.6 Explain how gravitational forces are influenced by mass and distance.

8-4.7 Explain the effects of gravity on tides and planetary orbits.

8-4.9 Recall the Sun's position in the universe, the shapes and composition of galaxies, and the distance measurement unit (light year) needed to identify star and galaxy locations.

8-4.10 Compare the purposes of the tools and the technology that scientists use to study space (including various types of telescopes, satellites, space probes, and spectroscopes).

## Starry Night Lesson Plans

*In order of relevance*

All Starry Night lesson plans and computer exercises

A1-A5	B1-B2	C1-C4	D1-D3	F3	I2		
F2	F1						
F2							
A1	A2	A3	A4	A5	E3	E4	
A2	E3	E4					
C2	I2						
A3	C2	I2					
G1	H1-H2	F3	E1	E3			
H1-H2	G2	I1-I2	F2				