New York
Middle School

Grades 5-8

Standard 4
Key Idea 1 The Earth and celestial phenomena can be described by principles of relative motion and perspective.

Performance Indicator 1.1
Explain complex phenomena, such as tides, variations in day length, solar insolation, apparent motion of the planets, and annual traverse of the constellations.

	Starry Night Lesson Plans *In order of relevance*				
1.1a Earth's Sun is an average-sized star. It is more than a million times greater in volume than Earth.	F1	G2			
1.1b Stars are like the Sun but so far away they look like points of light. Distances between stars are vast compared to distances within the solar system.	G2	G1	B2		
1.1c The Sun and planets are major bodies in the solar system. Other members include comets, moons and asteroids. Earth's orbit is nearly circular.	B1-B2	C1-C4	D1-D3	F3	I2
1.1d Gravity is the force that keeps the planets in orbit around the Sun and the Moon in orbit around Earth.	C2	A3	I2		
1.1e Most objects in the solar system have regular and predictable motion. These motions explain the day, year, month, moon phases, eclipses, tides, meteor showers and comets.	F3	A1-A5	D2	D3	
1.1g Moons are seen by reflected light. Our Moon orbits Earth, while Earth orbits the Sun. The repeating moon phases are a result of seeing different portions of the lighted area of the Moon's surface.	A2	A3	C3		
1.1h The apparent motions of the Sun, Moon, planets and stars across the sky can be explained by the Earth's rotation and revolution.	A1-A5	E3	E4		
1.1i The tilt of Earth's axis of rotation and the revolution of Earth around the Sun cause seasons on Earth. Length of daylight varies depending on latitude and season.	A2				
1.1j The shape of Earth, the other planets, and stars is nearly spherical.	F3	C1	G2		