Texas
Beginning with School Year 2010-2011.

| | Starry Night Lesson Plans in Order of Relevance |

Middle School Grades (6, 7, 8)

§112.19. Science, Grade 7

(9) Earth and space. The student knows components of our solar system. The student is expected to:	**A1-A5**	**B1-B2**	**C1-C4**	**D1-D3**	**F1-F3**	**I1-I2**
(A) analyze the characteristics of objects in our solar system that allow life to exist such as the proximity of the Sun, presence of water, and composition of the atmosphere; and	A1-A5	B1-B2	C1-C4	D1-D3	F1-F3	
(B) identify the accommodations, considering the characteristics of our solar system, that enabled manned space exploration.	F1-F3	I1-I2				

§112.20. Science, Grade 8

(7) Earth and space. The student knows the effects resulting from cyclical movements of the Sun, Earth, and Moon. The student is expected to:	**A1-A5**	**E1**	**E3**	
(A) model and illustrate how the tilted Earth rotates on its axis, causing day and night, and revolves around the Sun causing changes in seasons;	A1	A2	E1	E3
(B) demonstrate and predict the sequence of events in the lunar cycle; and	A4	A5		
(C) relate the position of the Moon and Sun to their effect on ocean tides.	A3			

(8) Earth and space. The student knows characteristics of the universe. The student is expected to:	**F1-F3**	**G1-G3**	**H1-H2**
(A) describe components of the universe, including stars, nebulae, and galaxies, and use models such as the Hertzsprung-Russell diagram for classification;	G1-G3	H1-H2	I1-I2
(B) recognize that the Sun is a medium-sized star near the edge of a disc-shaped galaxy of stars and that the Sun is many thousands of times closer to Earth than any other star;	F1-F3	G1	
(C) explore how different wavelengths of the electromagnetic spectrum such as light and radio waves are used to gain information about distances and properties of components in the universe;	H1-H2	G2	I2
(D) model and describe how light years are used to measure distances and sizes in the universe; and	G1	H1-H2	
(E) research how scientific data are used as evidence to develop scientific theories to describe the origin of the universe.	I1-I2	H1-H2	

By the end of grade 8
Science Skills.

(2) Scientific processes. The student uses scientific inquiry methods during field and laboratory investigations. The student is expected to:	**All Starry Night Lessons**

(C) organize, analyze, evaluate, make inferences, and predict trends from direct and indirect evidence;	✓
(D) communicate valid conclusions; and	✓
(E) construct graphs, tables, maps, and charts using tools including computers to organize, examine, and evaluate data.	✓
(3) Scientific processes. The student uses critical thinking and scientific problem solving to make informed decisions. The student is expected to:	**All Starry Night Lessons**
(A) analyze, review, and critique scientific explanations, including hypotheses and theories, as to their strengths and weaknesses using scientific evidence and information;	✓
(B) draw inferences based on data related to promotional materials for products and services;	✓
(C) represent the natural world using models and identify their limitations;	✓
(D) evaluate the impact of research on scientific thought, society, and the environment; and	✓
(E) connect Grade 8 science concepts with the history of science and contributions of scientists.	✓