U.S. Curriculum Correlations by State

New Mexico

	Starry Night Lesson Plans *In order of relevance*
Strand II: Content of Science **Standard III (Earth and Space Science): Understand the structure of the Earth, the Solar System, and the Universe, the interconnections among them, and the processes and interactions of Earth's systems.**	
Grade 5 **Describe how the concepts of energy, matter and force can be used to explain the observed behavior of the Solar System, the Universe, and their structures.**	
1. Know that many objects in the Universe are huge and are separated from one another by vast distances (e.g., many stars are larger than the Sun, but so distant that they look like points of light).	F1 G1 G2 B2 D1
2. Understand that Earth is part of a larger Solar System, which is part of an even larger galaxy (Milky Way), which is one of many galaxies.	B1 B2 G3 G4
3. Know that there have been manned and unmanned journeys to space and to the Moon.	H1
Describe the structure of Earth and its atmosphere and explain how energy, matter, and forces shape Earth's systems.	
4. Recognize that the seasons are caused by Earth's motion around the Sun and the tilt of Earth's axis of rotation.	A2
Grade 6 **Describe how the concepts of energy, matter, and force can be used to explain the observed behavior of the Solar System, the Universe, and their structures.**	
1. Describe the objects in the Universe, including: - Billions of galaxies, each containing billions of stars - Different sizes, temperatures, and colors of stars in the Milky Way Galaxy.	G4 G3 G2
2. Locate the Solar System in the Milky Way Galaxy.	G3
3. Identify the components of the Solar System, and describe their defining characteristics and motions in space, including: - Sun as a medium sized star. - Sun's composition (i.e., hydrogen, helium) and energy production - Nine planets, their moons, asteroids	B1 B2 C1 C2 C3 D1 D2 D3 F1
4. Know that the regular and predictable motions of the Earth-Moon-Sun System explain phenomena on Earth, including: - Earth's motion in relation to a year, a day, the seasons, the phases of the Moon, eclipses, tides, and shadows. - Moon's orbit around Earth one in 28 days in relation to the phases of the Moon.	A1 A2 A4 A5 A3 C2

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New Mexico Continued

	Starry Night Lesson Plans *In order of relevance*
Describe the structure of Earth and its atmosphere and explain how energy, matter, and forces shape Earth's Systems.	
4. Describe the composition (i.e., nitrogen, oxygen, water vapor) and strata of Earth's atmosphere, and differences between the atmosphere of Earth and those other planets.	C1
Grade 7 **Describe how the concepts of energy, matter, and force can be used to explain the observed behavior of the Solar System, the Universe, and their structures.**	
1. Explain why Earth is unique in our Solar System in its ability to support life.	C1 B1 B2
2. Explain how energy from the Sun supports life on Earth.	F1
Grade 8 **Describe how the concepts of energy, matter, and force can be used to explain the observed behavior of the Solar System, the Universe, and their structures.**	
1. Understand how energy from the Sun and other stars, in the form of light, travels long distances to reach Earth.	F2 G1 G2
2. Explain how the properties of light (e.g., emission, reflection, refraction) emitted from the Sun and stars are used to learn about the Universe, including: - Distances in the Solar System and the Universe. - Temperatures of different stars.	G2
3. Understand how gravitational force acts on objects in the Solar System and the Universe, including: - Similar action on masses on Earth and on other objects in the Solar System. - Explanation of the orbits of planets around the Sun.	C2 D1 D2 G3 G4 G2 F3