

# Northwest Territories

## Middle School

### Grade 6 - Space

#### Earth And Space Systems

### Starry Night Lesson Plans

*In order of relevance*

Describe the physical characteristics of components of the solar system, the sun, planets, natural satellites, comets, asteroids, and meteoroids (e.g., relative size, surface, colour and temperature)	B1-B2	C1-C4	D1-D3	F1-F3
Identify the bodies in space that emit light (stars) and those that reflect light (e.g., planets, moons, comets)	F1	G1-G3	B1	
Describe, using models or simulations, the features of the moon's surface (e.g., craters, Maria, rills)	A3			
Identify cycles in nature (e.g., cycles of day and night and seasons) and describe the changes within the cycles (e.g., observe the phases of the moon over several months to determine the pattern of change, and record these observations)	A1-A5	E1-E4	F2	
Describe, using models or simulations, how the Earth's rotation causes the cycle of day and night and how the Earth's revolution around the sun causes the cycle of the seasons	A1	A2	E1-E4	
Recognize major constellations visible at night and describe the origins of their names (e.g., such as Orion, Leo, Polaris)	E1-E4			
Describe, using models or simulations, the effects of the relative motion and positions of the Earth, moon and sun (e.g., solar and lunar eclipses, tides, phases of the moon)	A3	A4	A5	
Explain how astronauts meet their basic needs in space (e.g., through the use of dehydrated food, backpacks with an oxygen supply, a hermetically sealed cabin with temperature and air controls)	I1	I2		
Identify the technological tools and devices needed for space exploration (e.g., telescopes, spectrometers, spacecraft, life support systems and sources of energy)	I1-I2	C1-C4	F2	
Recognize problems arising from space exploration (e.g., space junk, satellites burning in the atmosphere upon reentry, collisions, micro meteors, radiation)	I1			
Identify and describe past and present day contributions to astronomy to the quality of human life (e.g., development of the calendar; prediction of events such as eclipses and seasons; provision of information about space and time, understanding of the universe)	A1-A5	F2	I1	D1-D3