

Pan Canadian Curriculum: Common Framework of Science Learning Outcomes

Grade 6 Earth and Space Science

- 300-23 Physical characteristics of the Solar System: Sun, moons, planets, comets, asteroids, meteors
- 301-19 Earth's rotation causes day and night, Earth's revolution causes seasons
- 301-20 How astronauts meet their basic needs in space
- 301-21 Positions of Earth, Moon and Sun produce Moon phases, eclipses and tides
- 302-13 Identify constellations in the sky

Section	Lesson Plan	300-23	301-19	301-20	301-21	302-13
Earth, Moon, and Sun	A1 Day and Night Cycle	■	■			
	A2 The Year and Seasons	■	■			
	A3 The Moon	■			■	
	A4 Phases of the Moon	■			■	
	A5 Eclipses	■			■	
The Solar System	B1 Overview of the Solar System	■				
	B2 Size and Scale of the Solar System	■				
The Planets	C1 The Inner and Outer Planets of the Solar System	■				
	C2 Motion of the Planets	■				
	C3 The Moons of the Planets	■				
Asteroids, Comets and Meteors	D1 Asteroids and the Main Belt	■				
	D2 Comets and Meteors	■				
	D3 Impact: Near Earth Objects	■				
Star Finding and Constellations	E1 Finding Your Way Around the Sky	■				■
	E2 Constellations and Star Lore	■	■			■
	E3 Seasonal Constellations	■	■			■
The Sun as a Star	F1 The Sun as a Source of Energy	■				
	F2 Solar Weather	■				
	F3 The Formation of the Sun and Solar System	■				
Stars and Galaxies	G1 The Solar Neighborhood					
	G2 The Stars					
	G3 The Milky Way Galaxy					
	G4 The Universe					
Space Exploration and Technology	H1 Artificial Satellites and the Space Environment			■		

Pan Canadian Curriculum: Common Framework of Science Learning Outcomes

Grade 9	Earth and Space Science
312-1	Theories on the formation of the Solar System
312-2	Describe and classify major components of the Universe
312-3	Describe theories on the origin and evolution of the Universe
312-4	Describe and explain the apparent motion of celestial bodies
312-5	Describe the composition and characteristics of the Solar System
312-6	Describe the effects of solar phenomena on Earth

Section	Lesson Plan	312-1	312-2	312-3	312-4	312-5	312-6
Earth, Moon, and Sun	A1 Day and Night Cycle				■		
	A2 The Year and Seasons				■		
	A3 The Moon				■		
	A4 Phases of the Moon				■		
	A5 Eclipses					■	
The Solar System	B1 Overview of the Solar System	■	■		■	■	
	B2 Size and Scale of the Solar System	■				■	
The Planets	C1 The Inner and Outer Planets of the Solar System	■			■	■	
	C2 Motion of the Planets	■			■	■	
	C3 The Moons of the Planets	■			■	■	
Asteroids, Comets and Meteors	D1 Asteroids and the Main Belt	■			■	■	
	D2 Comets and Meteors	■			■	■	
	D3 Impact: Near Earth Objects	■			■	■	
Star Finding and Constellations	E1 Finding Your Way Around the Sky				■		
	E2 Constellations and Star Lore				■		
	E3 Seasonal Constellations				■		
The Sun as a Star	F1 The Sun as a Source of Energy	■	■			■	■
	F2 Solar Weather	■				■	■
	F3 The Formation of the Sun and Solar System	■	■		■	■	
Stars and Galaxies	G1 The Solar Neighborhood		■		■		
	G2 The Stars		■				
	G3 The Milky Way Galaxy		■	■			
	G4 The Universe		■	■			
Space Exploration and Technology	H1 Artificial Satellites and the Space Environment						

Pan Canadian Learning Outcomes

Earth and Space Science

Pan Canadian Grade 6

300-23: Describe the physical characteristics of components of the Solar System; specifically the Sun, planets, moons, comets, asteroids, and meteors.

Starry Night Lesson Plans

In order of relevance

B1 B2 C1 C2 C3 D1 D2 D3

301-19: Demonstrate how Earth's rotation causes the day and night cycle and how Earth's revolution causes the yearly cycle of seasons.

A1 A2

301-21: Describe how astronauts are able to meet their basic needs in space.

H1

301-20: Observe and explain how the relative positions of Earth, the Moon and the Sun are responsible for the Moon phases, eclipses and tides.

A3 A4 A5

302-13: Identify constellations in the night sky.

E1 E2 E3

Pan Canadian Grade 9

312-1: Describe theories on the formation of the Solar System.

F3

312-2: Describe and classify the major components of the Universe.

F1 G1 G2 G3 G4

312-3: Describe theories on the origin and evolution of the Universe.

G4

312-4: Describe and explain the apparent motion of celestial bodies.

A1 A2 A4 C2 D2 E3

312-5: Describe the composition and characteristics of the components of the Solar System.

B1 B2 C1 C2 C3 D1 D2 D3 F3

312-6: Describe the effects of solar phenomena on Earth.

F1 F2