

Canadian Provincial Correlated Learning Outcomes

Manitoba

Senior 1 Science: The Universe

S1-4-01 Use a coordinate system to locate visible celestial objects, and construct an astrolabe to determine the position of these objects.

Starry Night Lesson Plans

In order of relevance

E1 G1

S1-4-02 Observe the motion of visible celestial objects and organize collected data.

C2 D1 D2 B1 A1 A2 E1 E2 E3

S1-4-03 Investigate how various cultures used knowledge of the position and motion of visible celestial objects for navigation.

E1 E2 E3

S1-4-04 Compare and contrast historical perspectives on the relationship between Earth and space.

A1-A5 E1-E3 C2 F3 B1

S1-4-05 Explain reasons for the apparent motion of the Sun, stars, planets, and the Moon as seen from Earth.

A1-A5 E1-E3 C2 F3 B1

S1-4-06 Differentiate between units of measure used for astronomical distances, and perform simple calculations using these units.

B2 G1

S1-4-07 Compare and contrast scientific and cultural perspectives on the origin and evolution of the Universe.

H1 H2 H3 I1 I2

S1-4-08 Differentiate between the major components of the Universe. Include: planets, moons, comets, and asteroids, nebulae, stars, galaxies, and black holes.

C1-C3 D1-D3 F1-F3 G1-G2 H1-H3

S1-4-09 Explain how various technologies have extended our ability to explore and understand space.

I1-I2 H1-H2 G1-G2 F1-F3 C1 C3

S1-4-11- Evaluate the impact of space science and technologies in terms of their benefits and risks to humans.

F1-F3 I1-I2 D3 C1 C3