

Alberta
High School

Starry Night Lesson Plans

In order of relevance

GRADE 9

UNIT E: SPACE EXPLORATION

| | | | | | | | |
|---|-------|-------|-------|-------|-------|-------|-------|
| 1. Investigate and describe ways that human understanding of Earth and space has depended on technological development | B1-B2 | C1-C4 | D1-D3 | F1-F3 | G1-G3 | H1-H3 | I1-I3 |
| <ul style="list-style-type: none"> Identify different perspectives on the nature of Earth and space, based on culture and science | E1-E4 | | | | | | |
| <ul style="list-style-type: none"> Investigate and illustrate the contributions of technological advances—including optical telescopes, spectral analysis and space travel—to a scientific understanding of space | F1-F3 | G1-G3 | H1-H3 | I1-I3 | | | |
| <ul style="list-style-type: none"> Describe, in general terms, the distribution of matter in space (<i>e.g., stars, star systems, galaxies, nebulae</i>) | G1-G3 | H1-H3 | | | | | |
| <ul style="list-style-type: none"> Identify evidence for, and describe characteristics of, bodies that make up the solar system; and compare their characteristics with those of Earth | B1-B2 | C1-C4 | D1-D3 | F1-F3 | I2 | | |
| <ul style="list-style-type: none"> Describe and apply techniques for determining the position and motion of objects in space | E1-E4 | G1-G3 | I1-I3 | H1-H3 | | | |
| <ul style="list-style-type: none"> Investigate predictions about the motion, alignment and collision of bodies in space; and critically examine the evidence on which they are based (<i>eclipses; meteor showers</i>) | A5 | B2 | C2 | D1-D3 | | | |
| 2. Identify problems in developing technologies for space exploration, describe technologies developed for life in space, and explain the scientific principles involved | I1-I3 | F1 | F2 | | | | |
| 3. Describe and interpret the science of optical and radio telescopes, space probes and remote sensing technologies | I1-I3 | F1-F3 | G1-G3 | H1-H3 | | | |
| 4. Identify issues and opportunities arising from the application of space technology, identify alternatives involved, and analyze implications | I1-I3 | F2 | D1-D3 | | | | |