

Newfoundland & Labrador

Grade One

Earth And Space Science: Daily And Seasonal Changes

101-6 describe ways of measuring and recording environmental changes that occur in daily and seasonal cycles

100-14 describe changes in heat and light from the sun

102-3 observe and describe changes in sunlight and describe how these changes affect living things

102-4 investigate and describe changes that occur on a daily basis in the characteristics, behaviours, and location of living things

102-5 investigate and describe changes that occur in seasonal cycles in the characteristics, behaviours, and location of living things

103-4 investigate and describe human preparations for seasonal changes

Grade Two

Physical Science: Relative Position and Motion

Investigate and describe different patterns of movement.

Describe the motion of an object in terms of a change in position and orientation relative to other objects.

Grade Four

Life Science: Light

303-3 distinguish between objects that emit their own light and those that require an external source of light to be seen

303-8 compare how light interacts with a variety of optical devices such as kaleidoscopes, periscopes, telescopes, and magnifying glasses

303-2 demonstrate that light travels in all directions away from a source

303-4 investigate how a beam of light interacts with a variety of objects, in order to determine whether the objects cast shadows, allow light to pass, or reflect light

303-5 predict the location, shape, and size of a shadow when a light source is placed in a given location relative to an object

Grade Five

Earth and Space Science: Weather

Relate the transfer of energy from the sun to weather conditions.

Grade Six

Earth And Space Science: Space

301-21 describe how astronauts are able to meet their basic needs in space

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

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

300-23 describe the physical characteristics of components of the solar system—specifically, the sun, planets, moons, comets, asteroids, and meteors

302-13 identify constellations in the night sky

Nature of Science and Technology

105-6 describe how evidence must be continually questioned in order to validate scientific knowledge

Relationships Between Science and Technology

106-3 describe examples of improvements to the tools and techniques of scientific investigation that have led to new discoveries

High School

Earth Systems 3209

1.7 use the ideas of the Big Bang and of Creationism to help illustrate how new evidence changes scientific models and theories (114-2, 115-7)

1.8 describe some explanations of the origin of the solar system (115-7)

1.9 use the disagreement on the origin of the Earth to illustrate the limitations that exist in the application of science and technology to problems (115-2, 117-2)

2.4 explain the origin of the solar system using the solar hypothesis (115-2)

2.5 use the solar nebular hypothesis to illustrate the roles of evidence, theory and hypothesis in the development of scientific knowledge (114-2, 115-3)

2.6 use the solar nebula hypothesis to illustrate how scientific knowledge develops as a result of careful observation and experiments and peer review by groups and individuals throughout the world working co-operatively (114-2, 117-6)

2.7 relate the formation of the geosphere to the origin of the solar system (330-1, 331-8)

4.31 use mass extinctions as a context to trace the development of a scientific theory using relevant examples of how major shifts occur in the scientific world view as a result of the testing, revising or replacing of theories and how this leads to a better understanding of the Universe (114-1, 114-2)