Activity: Gallery Tour

The following are curriculum-based learning outcomes which may be applied to a gallery tour:

Atlantic Canada Science Curriculum: Grade Primary (2004)
Students will be expected to:

- "detect consistency and pattern in objects and events and use language to describe these patterns" (100-3)
- "recognize the role and contribution of science in their understanding of the world" (400)

Atlantic Canada Science Curriculum: Grade 1 (2005)
Students will be expected to

- "recognize the role and contribution of science in their understanding of the world" (400)

Atlantic Canada Science Curriculum: Grade 2 (2005)
Students will be expected to:

- "recognize the role and contribution of science in their understanding of the world" (400)

Atlantic Canada Science Curriculum: Grade 3 (2005)
Students will be expected to:

- "identify, investigate, and suggest explanations for life needs of plants and describe how plants are affected by conditions in which they grow" (100-29)
- "recognize the role and contribution of science in their understanding of the world" (400)

Atlantic Canada Science Curriculum: Grade 4 (2006)
Students will be expected to:

- "demonstrate respect for the local environment" (108-3)
- "compare the external features, behavioural patterns, structural, and/or behavioural adaptations for an animal to survive a particular habitat, real or imagined" (204-3, 300-1, 300-2, 302-2)
- "identify and describe rocks that contain records of Earth's history" (300-7)
- "appreciate the role and contribution of science and technology in their understanding of the world" (409)

Atlantic Canada Science Curriculum: Grade 5 (2008)
Students will be expected to

- "appreciate the role and contribution of science and technology in their understanding of the world" (409)

Atlantic Canada Science Curriculum: Grade 6 (2008)
Students will be expected to

- "classify animals as vertebrates or invertebrates and compare the characteristics of mammals, birds, reptiles, amphibians and fishes" (300-16, 300-17)
- "classify common arthropods using a variety of sources" (205-8, 300-18)
- "identify changes in animals over time and research and model the work of scientists" (107-11, 207-4, 301-16)

- "appreciate the role and contribution of science and technology in their understanding of the world" (409)

Atlantic Canada Science Curriculum: Grade 7 (2001)

Students will be expected to:

- "provide examples of Canadians and Canadian institutions that have contributed to our understanding of local, regional, and global geology" (112-12)
- "develop a chronological model or geological time scale of major events in Earth's history" (209-4, 311-6)
- "identify signs of ecological succession in a local ecosystem" (306-4)
- "appreciate the role and contribution of science and technology in their understanding of the world" (422)

Atlantic Canada Science Curriculum: Grade 8 (2001)

Students will be expected to:

- "provide examples of public and private Canadian institutions that support scientific and technological research and endeavours" (112-5)
- "appreciate the role and contribution of science and technology in their understanding of the world" (422)

Atlantic Canada Science Curriculum: Grade 9 (2001)

Students will be expected to:

- "appreciate the role and contribution of science and technology in their understanding of the world" (422)

Atlantic Canada Science Curriculum: Grade 10 (2000)

Students will be expected to:

- "explain why ecosystems with similar characteristics can exist in different geographical locations" (318-3)
- "explain why the ecosystem may respond differently to short-term stress and long-term change" (318-4)
- "explain how biodiversity of an ecosystem contributes to its sustainability" (318-6)
- "analyse the impact of external factors on the ecosystem" (331-6)
- "value the role and contribution of science and technology in our understanding of phenomena that are directly observable and those that are not" (436)

Atlantic Canada Science Curriculum: Grade 11 Biology (2000)

Students will be expected to:

- "explain how a paradigm shift can change scientific world views" (114-1)
- "explain the roles of evidence, theories, and paradigms in the development of scientific knowledge" (114-2)
- "analyse the patterns and products of evolution" (316)
- "value the role and contribution of science and technology in our understanding of phenomena that are directly observable and those that are not" (436)

Atlantic Canada Science Curriculum: Grade 12 Biology (2001)

Students will be expected to:

- "explain how a paradigm shift can change scientific world views" (114-1)

- "explain how a major scientific milestone revolutionized thinking in the scientific communities" (115-3)
- "analyse examples of Canadian contributions to science and technology" (117-1)
- "analyse the patterns and products of evolution" (316)
- "describe historical and evolutionary contexts that have changed evolutionary concepts" (316-1)
- "evaluate current evidence that supports the theory of evolution and that feeds the debate on gradualism and punctuated equilibrium" (316-2)
- "analyse evolutionary mechanisms such as natural selection, genetic variation, genetic drift, artificial selection, and biotechnology, and their efforts on biodiversity and extinction" (316-3)
- "outline evidence and arguments pertaining to the origin, development, and diversity of living organisms on Earth" (316-4)
- "value the role and contribution of science and technology in our understanding of phenomena that are directly observable and those that are not" (436)

Atlantic Canada Science Curriculum: Grade 12 Geology (2003)

Students will be expected to

- "explain the roles of evidence, theories, and paradigms in the development of scientific knowledge" (114-2)
- illustrate how science attempts to explain natural phenomena" (115-2)
- "explain how a major scientific milestone revolutionized thinking in the scientific communities" (115-3)
- "explain how scientific knowledge evolves as new evidence comes to light" (115-6)
- "describe examples of Canadian contributions to science and technology" (117-10)
- "explain how data support or refute the hypothesis of plate tectonics" (214-12)
- "describe historical and cultural contexts that have changed evolutionary concepts" (316-1)
- "illustrate the geologic time scale and compare it to human time scales" (332-4)
- "give examples of how geology is interconnected and integrated with other sciences" (360-3)
- "explain how a knowledge of geology might influence our decisions about how we use Earth's resources" (360-7)
- "explain the plate tectonic theory" (362-6)
- "describe the geological activity associated with plate boundaries and relates this to the rock cycle" (362-7)
- "explain and describe the process of fossil formation" (364-5)
- "value the role and contribution of science and technology in our understanding of phenomena that are directly observable and those that are not" (436)

The information above was taken from the Atlantic Canada Science Curriculum.