Curriculum-based Outcomes for Junior High and High School Activities

The following are curriculum-based learning outcomes which may be applied to junior high and high school activities:

Geological Timeline Exercise:

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)
- "identify signs of ecological succession in a local ecosystem" (306-4)
- "compare some of the catastrophic events, such as earthquakes and volcanic eruptions, that occur on or near the Earth's surface" (311-4)
- "develop a chronological model or geological time scale of major events in Earth's history" (209-4, 311-6)
- "appreciate the role and contribution of science and technology in our understanding of the world" (422)

Atlantic Canada Science Curriculum: Grade 8 (2001)
Students will be expected to:

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

Atlantic Canada Science Curriculum: Grade 9 (2001)
Students will be expected to:

- "describe theories on the formation of the solar system" (312-1)
- "describe theories on the origin and evolution of the universe" (312-3)
- "appreciate the role and contribution of science and technology in our understanding of the world" (422)

Atlantic Canada Science Curriculum: Grade 10 (2000)
Students will be expected to:

- "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:

- "compare and contrast different types of procaryotic and eucaryotic cells" (314-7)
- "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 the roles of evidence, theories and paradigms in the development of evolutionary knowledge" (114-2)
- "analyse the patterns and products of evolution" (316)

- "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 effects 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 evolutionary knowledge" (114-2)
- "illustrate how science attempts to explain natural phenomena" (115-2)
- "illustrate the geologic time scale and compare it to human time scales" (332-4)
- "value the role and contribution of science and technology in our understanding of phenomena that are directly observable and those that are not" (436)

Modern Equivalents Exercise:

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Students will be expected to:

- "identify signs of ecological succession in a local ecosystem" (306-4)
- "appreciate the role and contribution of science and technology in our understanding of the world" (422)

Atlantic Canada Science Curriculum: Grade 8 (2001)
Students will be expected to:

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

Atlantic Canada Science Curriculum: Grade 9 (2001)
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Students will be expected to:

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- "value the role and contribution of science and technology in our understanding of phenomena that are directly observable and those that are not" (436*)*

Natural Selection Game:

Atlantic Canada Science Curriculum: Grade 7 (2001)
Students will be expected to:

- "apply the concept of a food web as a tool for interpreting the structure and interactions of a natural system" (111-6)
- "appreciate the role and contribution of science and technology in our understanding of the world" (422)

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Atlantic Canada Science Curriculum: Grade 12 Biology (2001)
Students will be expected to:

- "explain how a major scientific milestone revolutionized thinking in the scientific communities" (115-3)
- "analyse the patterns and products of evolution" (316)
- "describe historical and cultural concepts 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 effects on biodiversity and extinction" (316-3)
- "outline evidence and arguments pertaining to the origin, development, and diversity of living organisms on Earth" (316-4)
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CSI Joggins:

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Atlantic Canada Science Curriculum: Grade 11 Biology (2000)
Students will be expected to:

- "explain the roles of evidence, theories, and paradigms in the development of scientific knowledge" (114-2)
- "construct arguments to support a decision or judgment, using examples and evidence and recognizing various perspectives" (118-6)
- "value the role and contribution of science and technology in our understanding of phenomena that are directly observable and those that are not" (436)

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- "construct arguments to support a decision or judgment, using examples and evidence and recognizing various perspectives" (118-6)
- "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 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)
- "identify and describe science and technology-based careers related to the science they are studying" (117-7)
- "develop, present and defend a position or a course of action based on findings" (215-5)
- "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)