

MEDUXNEKEAG ENVIRONMENTAL SHOWCASE 2017 TEACHER PACKAGE

MEDUXNEKEAG RIVER ASSOCIATION INC.

December 2016



Anglophone West School District Woodstock Education Centre



Anglophone West School District Woodstock Education Centre

Hello,

Welcome to the 2017 Meduxnekeag Environmental Showcase. In its 15th year, the showcase has grown in scope and outreach since the beginning, thanks in large part to your continued involvement and support. This year we have developed more material than ever before to further enhance this important learning opportunity for the students (parents and teachers too!).

In celebration of the 15th Meduxnekeag Environmental Showcase and Canada's 150th birthday there will be two \$1000 prizes that schools can win. The first \$1000 prize will go to the school with the highest percentage of student participants and the second \$1000 prize will go to the school that most completely covers this year's theme "150 Environmental Projects".

In the following document you will find materials to assist you in preparation for the 2017 Meduxnekeag Environmental Showcase. We have developed these materials as a result of discussions with teachers and administrators. The documents are as follows:

- Meduxnekeag Environmental Showcase timeline
- Preparing for the school Meduxnekeag Environmental Showcase
- Curriculum guidance document for the 2017 Meduxnekeag Environmental Showcase
- Showcase marking rubric
- Judges checklist
- Letter to parents/guardians explaining the showcase and project expectations
- Schedule for the Grand Finale Showcase

We look forward to working with you and the students on this year's Meduxnekeag Environmental Showcase. Please let us know if you have any questions. We also appreciate hearing suggestions to improve this package for future showcases. We are looking forward to another year of fantastic projects and trust that our partnership will continue to grow as we bring this important learning opportunity to the students.

Best regards,

Darlene Tapley – Meduxnekeag Environmental Showcase Committee Co-Chair Carl Faulkner – Meduxnekeag Environmental Showcase Committee Co-Chair Jennifer Calhoun, Education Coordinator Simon J. Mitchell, Program Coordinator George Peabody, Administrator

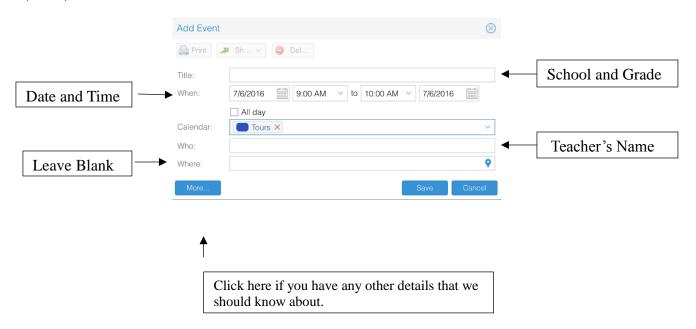
Meduxnekeag Environmental Showcase Executive Summary

This year's theme is "150 Environmental Projects" please see pages 8 and 9 for the complete list. We encourage each student to choose a different project from the list.

This year we are offering <u>two</u> school prizes of \$1000. The first \$1000 prize will go to the school with the highest percentage of student participants. The second \$1000 prize will go to the school that most completely covers this year's theme "150 Environmental Projects"

The Grand Finale Showcase will be on April 29, 2015 at NBCC Woodstock Gymnasium, 100 Broadway Street, Woodstock

This year we are scheduling school showcase competitions via online booking page. Please follow the following link to book your school showcase https://teamup.com/ks4020f784a423c477. Please pick a date and time that works for you, right click on that time slot and a window will pop up. Please fill in the following information: School, Date, Time, Teacher's Name and contact information (email).







Some friendly reminders about the 2017 Your Environmental Trust Fund at Work Meduxnekeag Environmental Showcase

Every year some adjustments are made to the Meduxnekeag Environmental Showcase based on feedback from teachers, administrators, students, parents and from what we have learned from hosting this event for over a decade. This year there are a few adjustments that we wanted to direct your attention to, namely:

- Kindergarten students can complete the project as a class and each individual will receive a certificate.
 We encourage individual student projects when possible.
- Kindergarten, Grade 1 and 2 students can present projects to the judges in their classroom if desired
- The program continues to expand the experiential component of projects, resulting in the students
 experiencing the natural environment. This is further emphasized via the Meduxnekeag Valley Nature
 Preserves tours, offered by the Association and linked not only with the Showcase theme but with
 curriculum as well.
- We are available to make a presentation to the teachers and also the students at your school at any time leading up to the showcase. We have found this to be quite useful and really encourages greater participation amongst the students. https://teamup.com/ks4020f784a423c477

Meduxnekeag Environmental Showcase Timeline – 2016/2017

What follows is the timeline for the 2017 Meduxnekeag Environmental Showcase. We will endeavor to adhere to this as we proceed towards the showcase. We appreciate your cooperation with this effort.

November 2016

- △ Determine theme for 2017
- A Review relevant curriculum links and develop 2017 guidance document
- A Compile documentation for the showcase and finalize the teacher package

December 2016-January 2017

- A Present 2017 Showcase package to teachers
- Arrange a visit from the Meduxnekeag Showcase team to your school to present to the teachers and students on the 2017 Meduxnekeag Environmental Showcase have a Q & A about this year's program

February 2017

- ▲ Finalize schools and number of showcase participants
- ▲ In school Meduxnekeag Environmental Showcase begins and carries on until April 28, 2017

April 2015

△ Grand Finale Showcase on April 29, 2015 at NBCC Woodstock Gymnasium, 100 Broadway Street, Woodstock

May and June 2015

A Schedule a curriculum linked guided walk of the Meduxnekeag Valley Nature Preserve for your class. This is a great time to visit the Preserve as many of the rare and unique plants are in flower and readily identifiable. Walks last for an hour to an hour and a half and can be tailored to what your class is learning, or has learned. Bus bookings are your responsibility and must be done at least two weeks prior to the field trip. Meduxnekeag River Association will cover all busing costs. Schedule your field trip using our online booking program using the following link https://teamup.com/ks4020f784a423c477 or via email at meduxnekeag@nb.aibn.com to confirm field trip details.

PREPARING FOR THE SCHOOL ENVIRONMENTAL SHOWCASE

The Meduxnekeag Environmental Showcase presents an opportunity for the students at your school to learn in a creative way, while curriculum requirements are being satisfied. Your school showcase will be a celebration that includes the entire school and acknowledges the achievements of all students. You can plan your school showcase for any time between February 2017 and the middle of April 2017.

Please note: these guidelines are intended as suggestions only. If this is your first School Showcase, be sure to contact the Meduxnekeag River Association Inc. to solicit a presentation from us to your teachers and school administrators on the program and how to best implement the program in your school.

We encourage all students in elementary classes to participate in the Meduxnekeag Environmental Showcase. If only a small number of students (fewer than one class, for example) in your school are creating Showcase projects, you are encouraged to revise this plan to fit your circumstances. You may want to consider displaying the projects in a classroom or multipurpose room for tours by other students and staff, and you should think about having your students visit other classes to do short oral presentations on their topics. A number of schools have displayed showcase projects during open houses and when parent/teacher interviews are occurring. We are very supportive of this approach and can be available during these events to speak to the program with parents.

STAGE ONE: PLANNING

- A Make sure your school is registered with the Meduxnekeag River Association Inc. and that you have a current copy of the curriculum guidance document for this year's Showcase
- A Promote your Environmental Showcase to other teachers, and invite all classes to participate.
- A Select a date for your School Showcase: check the school calendar for conflicts. Make sure you've allowed enough time to participate in the Grande Finale Showcase in April. Be sure to confirm the date and time of your showcase with the Meduxnekeag River Association
- △ Distribute information to all participating teachers
- A Familiarize yourself with the curriculum guidance document and supporting materials for showcase projects
- A Book the area of the school you will be using (gym, library, front foyer, etc)
 - Remember to plan time in your schedule for set-up and take-down of projects.
- A Make sure that all teachers involved are familiar with project guidelines.

STAGE TWO: GETTING READY FOR THE SCHOOL SHOWCASE

- ▲ Invite clubs and community groups (and maybe local businesses) to attend your Showcase and set up displays that will educate the students about their community
- Allow sufficient time for all classes to view the student projects: if possible, keep the Showcase open one evening. In this case, send invitations home with students
- ▲ Invite special guests like teachers in other schools, administrators, school board members, and local politicians.

STAGE THREE: YOUR SCHOOL ENVIRONMENTAL SHOWCASE

- A Organize the showcase projects by grade and class in the library / gym. Kindergarten and Grades 1 and 2 can be set-up in the classroom if desired. Identifying the student and grade with a tag on the table with each project is useful for the judges
- At the time of your school showcase the Meduxnekeag River Association staff will arrive ahead of time to assist with any last minute details. We encourage the school to find local community member to act as judges for the school showcase competition (if there is a near-by high school, high school students may be available to assist with the judging). Generally 2 judges are required per grade. The Judges will utilize the judging checklist when interviewing students about their projects.
- △ Once judging is completed, the Meduxnekeag River Association staff will compile results and determine who the representatives will be from each grade that will participate in the Grand Finale Showcase.
- △ Certificates, awards and materials for the school will be handed out to the students by MRA and the judges.
- ▲ Teacher(s) of the representatives headed to the Grand Finale will receive details on the program for that day and asked to circulate to appropriate parents/guardians

STAGE FOUR: GRAND FINALE SHOWCASE

- A Please be sure that your chosen students have agreed to attend the Showcase for the entirety of that event, and will follow the planned schedule of activities
- ▲ The days agenda will be revealed upon arrival at the Grand Finale Showcase.

STAGE FIVE: LEARNING AND FUN AT THE MEDUXNEKEAG VALLEY NATURE PRESERVE

A School winners from the Grand Finale Showcase are invited to the Meduxnekeag Valley Nature Preserve for an extended tour – this can involve a picnic lunch (students bring their own lunch) if that is of interest. We will try to go on some of the trails that the students generally don't go on. May is a great month for the tours. To book a tour, contact the Meduxnekeag River Association using the online booking page https://teamup.com/ks4020f784a423c477 or by emailing Meduxnekeag@nb.aibn.com

For more information about the Meduxnekeag Environmental Showcase visit www.meduxnekeag.org

2017 Meduxnekeag Environmental Showcase - Curriculum guidance

For: Teachers involved in the 2017 Meduxnekeag Environmental Showcase

Prepared by: Meduxnekeag River Association Inc.

This document is intended to provide guidance and relevant curriculum links to teachers participating in the 2017 Meduxnekeag Environmental Showcase – it endeavors to provide tangible links between the curriculum units and this year's theme of "150 Environmental Projects".

This is the 15th annual Meduxnekeag Environmental Showcase and to celebrate we will be awarding <u>two</u> \$1000 prizes to participating schools. The winning school(s) can use these prizes for any environmental education endeavors of their choosing.

The first \$1000 prize will go to the school with the highest percentage of student participants and the second \$1000 prize will go to the school that most completely covers this year's theme "150 Environmental Projects" (ie we have a list of 150 environmental projects, we are hoping the students at your school will cover as many of these as possible. For example if you have 100 participating students we would like to see 100 different themed environmental projects. The school who has the most different project from that list will win the \$1000 award.)

The theme, as in previous years, is to be <u>the central part</u> of the student projects. Within the theme, projects can focus on any of a variety of aspects of **150 Environmental Projects**, for example:

- A What do you do at home, or school to conserve energy?
- A What do you do at home or school to reduce waste?
- A How does planting native plants effect the local ecosystem?
- ▲ What does water scarcity look like in your community? How would it effect industry?
- ▲ Why do animals in our area have to hibernate?
- ▲ Where does waste go in our community?

For the complete list of 150 Environmental Projects please consult the next page 8 and 9.

Note that the above are only <u>examples</u>; they are not intended to be the <u>only</u> way to focus on the theme; projects which respond to the theme in other ways are perfectly acceptable! Please note that projects do not have to be about or based on the Meduxnekeag River, instead it is about "**Environmental Projects**" in your immediate area, whether that be your home, cottage, community, school, etc.

This is not about Bengal tigers, or some far off animal/place - it needs to be local, preferably in their backyard. We want the students to report on "150 Environmental Projects" as they experience, or are aware of it. Projects are to be completed by individual students – completed projects in pairs is not allowed (it causes significant problems for us in awarding prizes and certificates!)

The local libraries have information on this topic and there are extensive resources on the internet. Most importantly, we want the students to get out and explore their surrounding human and natural environment to learn about Their Environment - this creates an experiential learning experience for the student and reinforces connections to their surrounding natural environment.

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Meduxnekeag Environmental Showcase 150 Environmental Projects To Celebrate Canada's 150th Birthday

Please pick one of the following topics for each student project

Relationships between Science and Technology

- 1. Conserve Energy- in homes
- 2. Conserve Energy-industry
- 3. Reduce Waste
- 4. Recycle
- 5. Reuse or transform something old into something new
- 6. Don't litter
- 7. Air Pollution
- 8. Water Pollution
- 9. Composting
- 10. Reduce greenhouse gases- at home
- 11. Reduce greenhouse gases-at school
- 12. Reduce greenhouse gases- at businesses
- 13. Green Homes
- 14. Ozone layer, why do we need it?
- 15. Efficient transportation
- 16. Purchase local
- 17. Car pooling
- 18. Bike stations
- 19. Wind power
- 20. Tidal power
- 21. Solar power
- 22. Geo Thermal
- 23. Micro hydro project
- 24. Biomass energy
- 25. Forestry Drones
- 26. Agriculture Drones
- 27. Research Drones
- 28. Adopt a Highway/Semi-annual garbage clean up
- 29. Clean a stream
- 30. Effect of dams on wildlife(aquatic)
- 31. Advancements in fisheries- drones

Our Environment

- 32. What I need to grow (plants)
- 33. Planting native tree species
- 34. Planting native flowers
- 35. Grow your own food
- 36. Organic vs. Non-organic gardens
- 37. Food plots for wildlife
- 38. Why do we have seasons
- 39. Plant a butterfly garden
- 40. Causes and Effect of Algae Blooms

- 41. Fresh water aquatic life
- 42. Appalachian Hardwood Forest
- 43. Acadian Forest
- 44. Local, edible fungus
- 45. Biodiversity of habitats
- 46. The Importance of Insects
- 47. How can I help my environment
- 48. Green spaces/ public spaces

Physical Science

- 49. Sustainable hunting
- 50. Sustainable fishing
- 51. Semi-natural fish rearing stations
- 52. Public helping with fish and wildlife enforcement and regulation
- 53. No trace camping
- 54. Sustainable forestry
- 55. Air quality
- 56. My carbon footprint
- 57. Carbon sequestration
- 58. Water conservation
- 59. Water scarcity
- 60. Sustainable Energy
- 61. Gravity(ie how does it effects tree growth)
- 62. Plants magnetic field
- 63. Oxygen production(release)
- 64. Birds(why do they sing/identification)
- 65. Birds What do they eat
- 66. Bird Migration: Why do they migrate
- 67. Bird Migration: Map a birds flight from their NB seasonal home to their other season home
- 68. Echolocation (bats)
- 69. CO₂ absorption
- 70. Photosynthesis

Earth and Space Science

- 71. Hydrosphere
- 72. Hydrological Cycle
- 73. Biosphere
- 74. Geosphere
- 75. Aquifers-Water supply
- 76. Water table
- 77. Water cycle-Evaporation, condensation, precipitation
- 78. Weather Patterns
- 79. Clouds

- 80. Weather events-rain, snow, thunder and lightning
- 81. Weather events: Hurricanes, Tropical storms
- 82. Cause and effect of Forest Fires-good and bad
- 83. Atmosphere
- 84. The Sun
- 85. Energy transfer(where do you get your energy)
- 86. Erosion-river bank
- 87. Rock Cycle
- 88. Fossils
- 89. The importance of wetlands
- 90. The importance of old forests
- 91. Conservations of environmentally significant wetlands
- 92. Boreal Forests
- 93. Protected natural areas
- 94. Changing seasons
- 95. Migration
- 96. Climate Change
- 97. Riparian Corridor
- 98. Native Aquatic Plants
- 99. Importance of living and nonliving things

Life Science

- 100. Play games that don't require electricity
- 101. What do I eat (food chains/webs)
- 102. How do I get what I need? (food, shelter..)
- 103. Hibernation
- 104. Where are the bee's
- 105. Where do I live (animals)
- 106. Why do we need pollinators
- 107. Let it grow-what does it need to grow
- 108. Species diversity
- 109. Species at risk (ie elm trees, butternut trees, lady slippers)
- 110. Endangered species(ie Wood turtles)
- 111. Species now extinct in NB (ie wolves and caribou). Why can't they thrive here?
- 112. My favorite outdoor spot
- 113. Protection from the elements
- 114. Historically/Culturally significant plants: White Birch Trees
- 115. Historically/Culturally significant plants: Wild Ginger
- 116. Historically/Culturally significant plants: Spruce Needles
- 117. Historically/Culturally significant plants: White Ash Trees

- 118. Historically/Culturally significant plants: Fiddle heads
- 119. Historically/Culturally significant plants: Beech Nut
- 120. Historically/Culturally significant plants: Beaked Hazel
- 121. Historically/Culturally significant plants: Sugar Maple
- 122. Historically/Culturally significant animals: Black Bear
- 123. Historically/Culturally significant animals: Moose
- 124. Historically/Culturally significant animals: Atlantic Salmon
- 125. Historically/Culturally significant animals: Ducks
- 126. Soil Quality
- 127. Fertilization practices
- 128. Ecosystems
- 129. Habitats
- 130. Proper food consumption
- 131. Edible Nature (edible wild plants)
- 132. Effect Invasive species have on native plants
- 133. Invasive species: Garlic Mustard
- 134. Invasive species: Hogweed
- 135. Environmentally Sustainable Subdivisions
- 136. What I do(parts of plants or how they affect the environment)
- 137. Life cycle of a plants
- 138. Life cycle of an animal
- 139. Bat population decline
- 140. Compare parts of plants to humans or animals
- 141. Effects of insecticides on insects
- 142. How can GPS help protect the environment
- 143. Decomposers
- 144. Consumers
- 145. Producers
- 146. Where/how do plants get their nutrients
- 147. Septic system improvements rural and urban
- 148. Where does drinking water come from?
- 149. Where does waste go
- 150. People powered travel

Please pick <u>one</u> of the above topics for each student project

2017 Meduxnekeag Environmental Showcase – 150 Environmental Projects

Curriculum summary

Kindergarten

You and Your World

Unit 3: Our Senses

▲ K 3.2 use one or more of their senses to explore the characteristics of materials, noting how materials can be manipulated

Unit 4: Place and Community

▲ K4.1 describe and locate some of the natural and constructed features of their community

Social Studies (from Foundation document, K-12)

By the end of Grade 3, students will be expected to:

Citizenship, Power and Governance

▲ take age appropriate actions to demonstrate their responsibilities as citizens

Culture and Diversity

- A identify similarities and differences in the ways cultures meet human needs and wants
- A give examples of how experiences are interpreted differently

Interdependence

- A recognize and describe the interdependent nature of relationships
- ▲ identify and describe some human organizations and natural systems
- A identify and describe examples of interactions among people, technology and the environments
- A demonstrate an understand of the concept of sustainability
- ♣ plan and evaluate age-appropriate actions to support peace and sustainability in our interdependent world

People, Place and Environment

- A ask basic geographic questions; acquire, organize and analyze geographic information; and answer geographic questions at an age-appropriate level
- A identify some of the basic physical process that have shaped the earth
- describe some of the physical and human characteristics of their local communities
- A identify ways people depend on, modify, and are influenced by the physical environment

Time, Continuity and Change

- ▲ use basic concepts and vocabulary associated with time, continuity and change
- A identify and use primary and secondary sources to learn and communicate about the past
- A demonstrate an understanding of cause and effect and change over time
- ▲ use knowledge of the past to assist in decision making
- △ communicate ideas about their vision for the future

Grade 1

You and Your World

Unit 2: Our Environment

▲ 1.2.1 describe how plants and animals meet their needs in a given environment

- ▲ 1.2.3 observe and describe how living things respond to changes in solar energy that occur on a daily and seasonal cycle
- ▲ 1.2.4 record observations and display data to explain seasonal changes
- ▲ 1.2.5 describe how people depend upon and interact with different natural environments
- ▲ 1.2.6 take age-appropriate action to practice responsible behaviour in caring for the environment.

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Grade 2

You and Your World

Unit 2: Technology and Community

△ 2.2.1 describe how people contribute to making change in communities

Unit 5: Change and the Physical Environment

- △ 2.5.1 describe how air and water interact in the environment and how these elements impact people and places
- ▲ 2.5.2 compare properties of familiar liquids and solids and investigate how they interact
- △ 2.5.3 describe how people's interactions with the environment have changed over time
- △ 2.5.4 demonstrate an understanding of sustainable development and its importance to the future.

Social Studies (from Foundation document, K-12)

By the end of Grade 3, students will be expected to:

Citizenship, Power and Governance

- A demonstrate how individuals and groups can influence decision making
- ▲ recognize the individuals and groups have different perspectives on public issues
- ▲ take age appropriate actions to demonstrate their responsibilities as citizens

Culture and Diversity

- A identify similarities and differences in the ways cultures meet human needs and wants
- A give examples of how experiences are interpreted differently

Interdependence

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Grade 3

Science

Unit 1: Life Science: Plant Growth and Changes

STSE Outcomes

- ▲ 100-29 identify and investigate life needs of plants and describe how plants are affected by the conditions in which they grow
- △ 102-12 describe ways in which plants are important to living things and the environment

Skills Outcomes

Initiating and Planning

- △ 200-1 ask questions that lead to exploration and investigation
- △ 200-3 make predictions, based on an observed pattern

Performing and Recording

- △ 201-5 make and record relevant observations and measurements, using written language, pictures, and charts
- △ 201-6 estimate measurements

Analysing and Interpreting

- △ 202-2 place materials and objects in a sequence or in groups according to one or more attributes
- △ 202-4 construct and label concrete-object graphs, pictographs, or bar graphs
- △ 202-5 identify and suggest explanations for patterns and discrepancies in observed objects and events *Communication and Teamwork*
 - △ 203-2 identify common objects and events, using terminology and language that others understand
 - △ 203-5 respond to the ideas and actions of others and acknowledge their ideas and contributions

Unit 2: Earth and Space Science: Exploring Soils

STSE Outcomes

- ▲ 100-38a describe the effect of moisture on characteristics (e.g., cohesion ability to hold together, texture, colour of the soils
- △ 100-38b compare the absorption of water by different soils
- △ 100-39 observe and describe the effects of moving water on different soils
- △ 100-35 investigate and describe how living things affect and are affected by soils

Skills Outcomes

Initiating and Planning

- △ 200-1 ask questions that lead to exploration and investigation
- △ 200-3 make predictions, based on an observed pattern

Performing and Recording

- △ 201-3 use appropriate tools for manipulating and observing materials and in building simple models
- ▲ 201-5 make and record relevant observations and measurements, using written language, pictures, and charts
- △ 201-7 identify and use a variety of sources of science information and ideas

Analysing and Interpreting

- △ 202-2 place materials and objects in a sequence or in groups according to one or more attributes
- △ 202-4 construct and label concrete-object graphs, pictographs, or bar graphs
- △ 202-7 propose an answer to an initial question or problem and draw simple conclusions based on observations or research

Communication and Teamwork

- △ 203-1 communicate questions, ideas, and intentions while conducting their explorations
- △ 203-3 communicate procedures and results, using drawings, demonstrations, and written and oral descriptions

Social Studies (from Foundation document, K-12)

By the end of Grade 3, students will be expected to:

Citizenship, Power and Governance

▲ take age appropriate actions to demonstrate their responsibilities as citizens

Culture and Diversity

- A identify similarities and differences in the ways cultures meet human needs and wants
- A give examples of how experiences are interpreted differently

Interdependence

- * recognize and describe the interdependent nature of relationships
- ▲ identify and describe some human organizations and natural systems
- A identify and describe examples of interactions among people, technology and the environments
- A demonstrate an understand of the concept of sustainability
- ♣ plan and evaluate age-appropriate actions to support peace and sustainability in our interdependent world

People, Place and Environment

- A ask basic geographic questions; acquire, organize and analyze geographic information; and answer geographic questions at an age-appropriate level
- A identify some of the basic physical process that have shaped the earth
- describe some of the physical and human characteristics of their local communities
- A identify ways people depend on, modify, and are influenced by the physical environment

Time, Continuity and Change

- ▲ use basic concepts and vocabulary associated with time, continuity and change
- A identify and use primary and secondary sources to learn and communicate about the past
- A demonstrate an understanding of cause and effect and change over time
- △ use knowledge of the past to assist in decision making
- △ communicate ideas about their vision for the future

Grade 4

Science

Unit 1: Life Sciences

STSE Outcomes

- ▲ 108-3 describe how personal actions help conserve natural resources and care for living things and their habitats
- △ 108-6 identify their own and their family's impact on natural resources

Skills Outcomes

Initiating and Planning

- △ 204-1 propose questions to investigate and practical problems to solve
- △ 204-3 state a prediction and a hypothesis based on an observed pattern of events
- ▲ 204-6 identify various methods for finding answers to given questions as well as solutions to given problems, and ultimately select one that is appropriate

Performing and Recording

- △ 205-1 carry out procedures to explore a given problem and to ensure a fair test of a proposed idea by controlling major variables
- △ 205-5 make observations and collect information relevant to a given question or problem
- △ 205-10 construct and use devices for a specific purpose

Analysing and Interpreting

- △ 206-1 classify according to several attributes and create a chart or diagram that shows the method of classification
- △ 206-2 compile and display data, by hand or by computer, in a variety of formats including frequency tallies, tables, and bar graphs
- △ 206-3 identify and suggest explanations for patterns and discrepancies in data
- △ 206-6 suggest improvements to a design or constructed object

Communication and Teamwork

▲ 207-2 communicate procedures and results, using lists, notes in point form, sentences, charts, graphs, drawings, and oral language

Knowledge Outcomes

- ▲ 302-1 identify a variety of local and regional habitats and their associated populations of plants and animals
- △ 300-1 compare the external features and behavioural patterns of animals that help them thrive in different kinds of places
- △ 300-2 compare the structural features of plants that enable them to thrive in different kinds of places
- △ 302-3 classify organisms according to their role in a food chain
- △ 301-1 predict how the removal of a plant or animal population affects the rest of the community
- △ 301-2 relate habitat loss to the endangerment or extinction of plants and animals

Unit 2: Physical Science: Light

STSE Outcomes

△ 108-6 identify their own and their family's impact on natural resources

Skills Outcomes

Initiating and Planning

- △ 204-7 plan a set of steps to solve a practical problem and to carry out a fair test of a science-related idea Performing and Recording
 - △ 205-3 follow a given set of procedures
 - △ 205-5 make observations and collect information that is relevant to a given question or problem
 - △ 205-10 construct and use devices for a specific purpose

Analysing and Interpreting

⁴ 206-1 classify according to several attributes and create a chart or diagram that shows the method of

classifying

△ 206-5 draw a conclusion, based on evidence gathered through research and observation, that answers an initial question

Communication and Teamwork

△ 207-1 communicate questions, ideas, and intentions, and listen

Unit 3: Physical Science: Sound

Skills Outcomes

Initiating and Planning

- △ 204-1 propose questions to investigate and practical problems to solve
- △ 204-2 rephrase questions in a testable form
- △ 204-3 state a prediction and a hypothesis based on an observed pattern of events

Performing and Recording

- △ 205-2 select and use tools to manipulate materials and build models
- △ 205-8 identify and use a variety of sources and technologies to gather pertinent information

Analysing and Interpreting

- ▲ 206-7 evaluate personally constructed devices with respect to safety, reliability, function, appearance, and efficient use of materials
- △ 206-9 identify new questions or problems that arise from what was learned

Communication and Teamwork

△ 207-6 work with group members to evaluate the

Knowledge Outcomes

△ 300-4 compare the range of sounds heard by humans to that heard by other animals

Unit 4: Earth and Space Science: Rocks, Minerals and Erosion

Skills Outcomes

Initiating and Planning

- △ 204-1 propose questions to investigate and practical problems to solve
- △ 204-2 rephrase questions in testable form
- △ 204-3 state a prediction and a hypothesis based on an observed pattern of events
- △ 204-8 identify appropriate tools, instruments, and materials to complete investigations

Performing and Recording

- △ 205-1 carry out procedures to explore a given problem and to ensure a fair test of a proposed idea by controlling major variables
- △ 205-5 make observations and collect information relevant to a given question or problem
- △ 205-7 record observations using a single word, notes in point form, sentences, and simple diagrams and charts

Analysing and Interpreting

- △ 206-1 classify according to several attributes and create a chart or diagram to show the method of classifying
- △ 206-9 identify new questions or problems that arise from what was learned

Communication and Teamwork

△ 207-2 communicate procedures and results, using lists, notes in point form, sentences, charts, graphs, drawings, and oral language

Knowledge Outcomes

- ▲ 300-6 describe rocks and minerals according to physical properties such as colour, texture, lustre, hardness, and crystal shape (minerals)
- ▲ 300-5 compare different rocks and minerals from the local area with those from other places
- ▲ 300-8 relate the characteristics of rocks and minerals to their uses
- ▲ 301-6 demonstrate a variety of methods of weathering and erosion

- △ 301-5 describe the effects of wind, water, and ice on the landscape
- △ 301-4 describe ways in which soil is formed from rocks
- ▲ 300-7 identify and describe rocks that contain records of the Earth's history
- △ 301-7 describe natural phenomena that cause rapid and significant changes to the landscape

Social Studies (from Foundation document, K -12)

By the end of Grade 6, students will have achieved the outcomes for entry – Grade 3 and will also be expected to:

Citizenship, Power and Governance

- ▲ identify and explain the rights and responsibilities of individual citizens in local, national, and global context
- A recognize how and why individuals and groups have different perspectives on public issues
- ▲ take age-appropriate actions to demonstrate their responsibilities as citizens

Interdependence

- A analyze their decisions as informed consumers
- A recognize and explain the interdependent nature of relationships among individuals, soceties and the environment explain the interrelationships within selected human organizations and natural systems
- ▲ identify and describe examples of positive and negative interactions among people, technology and the environment
- ▲ identify and explain the key characteristics of sustainable practices
- A plan and evaluate age appropriate actions to support peace and sustainability in our interdependent world

People, Place and Environment

- ▲ ask geographic questions ; acquire, organize, and analyze greographic information; and answer geographic questions at an age-appropriate level
- ▲ use maps, globes, pictures, models, and technologies to represent and describe physical and human systems
- A explain how physical process have shaped and affected the landscape and human systems
- describe how the environment affects human activity and how human activity endangers or sustains the environment

Time, Continuity and Change

- demonstrate an understanding of the concepts of vocabulary associated with time, continuity and change
- ▲ identify, evaluate and use appropriate primary and secondary sources to learn and communicate about the past
- A research and describe historical events and ideas from different perspectives
- A apply historical methodology to interpret and understand time, continuity and change at and age-appropriate level
- △ describe examples of cause and effect and change over time
- ▲ identify and compare events of the past to the present in order to make informed, creative decisions about issues
- ▲ identify trends that may shape the future

Grade 5

Science

Unit 1: Life Science: Meeting Basic Needs and Maintaining a Healthy Body

STSE

- △ 106-2 describe examples of tools and techniques that have contributed to scientific discoveries
- ▲ 106-4 describe instances in which scientific ideas and discoveries have led to new inventions and applications
- ▲ 107-2 describe and compare tools, techniques, and materials used by different people in their community and region to meet their needs
- ▲ 107-5 provide examples of how science and technology have been used to solve problems in their community and region
- △ 107-8 describe examples of technologies that have been developed to improve their living conditions
- △ 107-12 provide examples of Canadians who have contributed to science and technology
- △ 107-14 identify scientific discoveries and technological innovations of people from different cultures

Skills Outcomes

Initiating and Planning

▲ 204-1 propose questions to investigate and practical problems to solve

Performing and Recording

- △ 205-2 select and use tools to manipulate materials and build models
- ▲ 205-7 record observations using a single word, notes in point form, sentences, simple diagrams and charts

Analysing and interpreting

- △ 206-2 compile and display data, by hand or by computer, in a variety of formats including frequency tallies, tables, and bar graphs
- △ 206-3 identify and suggest explanations for patterns and discrepancies in data
- △ 206-4 evaluate the usefulness of different information sources in answering a given question

Communication and teamwork

△ 207-5 identify problems as they arise and work cooperatively with others to find solutions

Knowledge Outcomes

▲ 302-4 describe the role played by body systems in helping humans and other animals to grow and reproduce and meet their basic needs

Unit 2: Physical Science: Properties and Changes in Materials

STSE Outcomes

- ▲ 104-7 demonstrate the importance of using the languages of science and technology to communicate ideas, processes, and results
- △ 107-8 describe examples of technologies that have been developed to improve living conditions

Skills Outcomes

Performing and Recording

- △ 205-5 make observations and collect information that is relevant to a given question or problem
- △ 205-8 identify and use a variety of sources and technologies to gather pertinent information

Analysing and Interpreting

- △ 206-1 classify according to several attributes and create a chart or diagram that shows the method of classification
- △ 206-2 compile and display data, by hand or by computer, in a variety of formats including frequency tallies, tables, and bar graphs

Communication and Teamwork

△ 207-3 work with team members to develop and carry out a plan

Knowledge Outcomes

- ▲ 300-10 identify properties such as texture, hardness, colour, buoyancy, and solubility that allow materials to be distinguished from one another
- △ 300-9 group materials as solids, liquids, or gases, based on their properties

Unit 4: Earth and Space Science: Weather

STSE Outcomes

- ▲ 104-7 demonstrate the importance of using the languages of science and technology to communicate ideas, processes, and results
- ▲ 105-1 identify examples of scientific questions and technological problems currently being studied
- ▲ 105-2 identify examples of scientific questions and technological problems addressed in the past
- ▲ 106-4 describe instances in which scientific ideas and discoveries have led to new inventions and applications
- ▲ 107-2 describe and compare tools, techniques, and materials used by different people in their community and region to meet their needs
- ▲ 107-5 provide examples of how science and technology have been used to solve problems in their community and region
- △ 107-10 identify women and men in their community who work in science- and technology-related areas
- △ 107-14 identify scientific discoveries and technological innovations of people from different cultures
- △ 108-1 identify positive and negative effects of familiar technologies

Skills Outcomes

Initiating and Planning

- △ 204-3 make a prediction and state a hypothesis based on an observed pattern of events
- △ 204-8 identify appropriate tools, instruments, and materials to complete their investigations

Performing and Recording

- △ 205-4 select and use tools for measuring
- △ 205-6 estimate measurements
- ▲ 205-7 record observations using single words, notes in point form, sentences, simple diagrams and charts
 - 205-10 construct and use devices for a specific purpose
- △ 205-8 identify and use a variety of sources and technologies to gather pertinent information

Analysing and Interpreting

- △ 206-1 classify according to several attributes and create a chart or diagram that shows the method of classification
- △ 206-2 compile and display data, by hand or by computer, in a variety of formats including frequency tallies, tables, and bar graphs
- △ 206-3 identify and suggest explanations for patterns and discrepancies in data
- △ 206-5 gather evidence through research and observation to answer a question and use the resulting information to draw a conclusion

Communicating and Teamwork

△ 207-4 ask others for advice or opinions

Knowledge Outcomes

- △ 300-13 describe weather in terms of temperature, wind speed and direction, precipitation, and cloud cover
- ▲ 302-11 describe the key features of a variety of weather systems
- ▲ 303-21 relate the transfer of energy from the sun to weather conditions
- △ 300-14 describe situations that demonstrate air takes up space, has weight, and expands when heated
- △ 302-10 identify patterns in indoor and outdoor air movement
- ▲ 301-13 relate the constant circulation of water on Earth to the processes of evaporation, condensation, and precipitation
- △ 301-14 describe and predict patterns of change in local weather conditions

Social Studies (from Foundation document, K -12)

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Citizenship, Power and Governance

- ▲ identify and explain the rights and responsibilities of individual citizens in local, national, and global context
- A recognize how and why individuals and groups have different perspectives on public issues
- ▲ take age-appropriate actions to demonstrate their responsibilities as citizens

Interdependence

- A analyze their decisions as informed consumers
- A recognize and explain the interdependent nature of relationships among individuals, soceties and the environment explain the interrelationships within selected human organizations and natural systems
- ▲ identify and describe examples of positive and negative interactions among people, technology and the environment
- ▲ identify and explain the key characteristics of sustainable practices
- A plan and evaluate age appropriate actions to support peace and sustainability in our interdependent world

People, Place and Environment

- ▲ ask geographic questions; acquire, organize, and analyze greographic information; and answer geographic questions at an age-appropriate level
- ▲ use maps, globes, pictures, models, and technologies to represent and describe physical and human systems
- A explain how physical process have shaped and affected the landscape and human systems
- describe how the environment affects human activity and how human activity endangers or sustains the environment

Time, Continuity and Change

- demonstrate an understanding of the concepts of vocabulary associated with time, continuity and change
- ▲ identify, evaluate and use appropriate primary and secondary sources to learn and communicate about the past
- A research and describe historical events and ideas from different perspectives
- A apply historical methodology to interpret and understand time, continuity and change at and age-appropriate level
- describe examples of cause and effect and change over time
- ▲ identify and compare events of the past to the present in order to make informed, creative decisions about issues
- A identify trends that may shape the future

Meduxnekeag Environmental Showcase judging criteria - 2015

Excellent Excellent Excellent Excellent Excellent Excellent	Good Good Good Good Good	Fair Fair Fair Fair Fair Fair	Poor Poor Poor Poor Poor
Excellent	Good	Fair	Poor
	Good	Fair	Poor
			Poor
			Poor
			Poor
Excellent	Good	Fair	Poor
Evallant	Good	Foir	Poor
			Poor
	Excellent Excellent Excellent Excellent Excellent	Excellent Good	Excellent Good Fair

Notes:



Anglophone West School District Woodstock Education Centre

Meduxnekeag Environmental Showcase 2017

Dear Parent / Guardian.

Our students are participating in the Meduxnekeag Environmental Showcase. This environmental education program is a partnership between the Meduxnekeag River Association Inc. (www.meduxnekeag.org), Woodstock Education Centre and our school

This year's showcase theme is "150 Environmentally Significant Things- to Celebrate Canada's 150th Birthday" This is the 15th annual Meduxnekeag Environmental Showcase and to celebrate we will be awarding two \$1000 prizes to participating schools! These prizes can be used by the school(s) for any environmental education endeavors of their choosing. The first \$1000 prize will go to the school with the highest percentage of student participants and the second \$1000 prize will go to the school that most completely covers this year's theme "150 Environmental Projects".

The theme, as in previous years, is to be the central part of the student projects. Within the theme, projects can focus on any of a variety of aspects of **150 Environmentally Significant Things**; for example:

- ♠ What do you do at home, or school to conserve energy?
- ▲ What do you do at home or school to reduce waste?
- A How does planting native plants effect local ecosystems?
- A What does water scarcity look like in your community? How would it effect industry?
- A Why do animals in our area have to hibernate?
- A Where does waste go in our community?

For the complete list of 150 Environmental Projects please consult the next page.

Note that the above are only <u>examples</u>; they are not intended to be the <u>only</u> way to focus on the theme; projects which respond to the theme in other ways are perfectly acceptable! Please note that projects do not have to be about or based on the Meduxnekeag River, instead it is about the "**Environment**" in your immediate area, whether that be your home, cottage, community, school, etc.

This is not about Bengal Tigers, or some far off animal/place - it needs to be local, preferably in their backyard. We want the students to report on "Environment". Projects are to be completed by individual students. Your project can be artwork, constructions, model, diagram, poster, photos, or any combination and must include something written in your own handwriting or printing (as short as a few sentences for Kindergarten and as long as an essay for Grade 5 students)

The local libraries have information on this topic and there are extensive resources on the internet. Most importantly, we want the students to get out and explore their surrounding human and natural environment to learn about 150 Environmental Project-to Celebrate Canada's 150th Birthday - this creates an experiential learning experience for the student and reinforces connections to their surrounding natural environment.

The Meduxnekeag Environmental Showcase will be held at our	r school on	, 2017. Stu	idents can bring projects
in the day of the showcase and set-up in	when they come to school	ol. The jud	ging will occur during
the day and then projects can return home with the students.			

Thank you for your support of this important learning opportunity for the students. If you have any questions I can be reached

Best regards

Meduxnekeag Envíronmental Showcase 150 Envíronmental Projects

To Celebrate Canada's 150th Birthday

Please pick <u>one</u> of the following topics for each student project

Relationships between Science and Technology

- 1. Conserve Energy- in homes
- 2. Conserve Energy-industry
- 3. Reduce Waste
- 4. Recycle
- 5. Reuse or transform something old into something new
- 6. Don't litter
- 7. Air Pollution
- 8. Water Pollution
- 9. Composting
- 10. Reduce greenhouse gases- at home
- 11. Reduce greenhouse gases-at school
- 12. Reduce greenhouse gases- at businesses
- 13. Green Homes
- 14. Ozone layer, why do we need it?
- 15. Efficient transportation
- 16. Purchase local
- 17. Car pooling
- 18. Bike stations
- 19. Wind power
- 20. Tidal power
- 21. Solar power
- 22. Geo Thermal
- 23. Micro hydro project
- 24. Biomass energy
- 25. Forestry Drones
- 26. Agriculture Drones
- 27. Research Drones
- 28. Adopt a Highway/Semi-annual garbage clean up
- 29. Clean a stream
- 30. Effect of dams on wildlife(aquatic)
- 31. Advancements in fisheries- drones

Our Environment

- 32. What I need to grow (plants)
- 33. Planting native tree species
- 34. Planting native flowers
- 35. Grow your own food
- 36. Organic vs. Non-organic gardens
- 37. Food plots for wildlife
- 38. Why do we have seasons
- 39. Plant a butterfly garden
- 40. Causes and Effect of Algae Blooms
- 41. Fresh water aquatic life
- 42. Appalachian Hardwood Forest

- 43. Acadian Forest
- 44. Local, edible fungus
- 45. Biodiversity of habitats
- 46. The Importance of Insects
- 47. How can I help my environment
- 48. Green spaces/ public spaces

Physical Science

- 49. Sustainable hunting
- 50. Sustainable fishing
- 51. Semi-natural fish rearing stations
- 52. Public helping with fish and wildlife enforcement and regulation
- 53. No trace camping
- 54. Sustainable forestry
- 55. Air quality
- 56. My carbon footprint
- 57. Carbon sequestration
- 58. Water conservation
- 59. Water scarcity
- 60. Sustainable Energy
- 61. Gravity(ie how does it effects tree growth)
- 62. Plants magnetic field
- 63. Oxygen production(release)
- 64. Birds(why do they sing/identification)
- 65. Birds What do they eat
- 66. Bird Migration: Why do they migrate
- 67. Bird Migration: Map a birds flight from their NB seasonal home to their other season home
- 68. Echolocation (bats)
- 69. CO₂ absorption
- 70. Photosynthesis

Earth and Space Science

- 71. Hydrosphere
- 72. Hydrological Cycle
- 73. Biosphere
- 74. Geosphere
- 75. Aquifers-Water supply
- 76. Water table
- 77. Water cycle-Evaporation, condensation, precipitation
- 78. Weather Patterns
- 79. Clouds
- 80. Weather events-rain, snow, thunder and lightning
- 81. Weather events: Hurricanes, Tropical storms
- 82. Cause and effect of Forest Fires-good and bad

- 83. Atmosphere
- 84. The Sun
- 85. Energy transfer(where do you get your energy)
- 86. Erosion-river bank
- 87. Rock Cycle
- 88. Fossils
- 89. The importance of wetlands
- 90. The importance of old forests
- 91. Conservations of environmentally significant wetlands
- 92. Boreal Forests
- 93. Protected natural areas
- 94. Changing seasons
- 95. Migration
- 96. Climate Change
- 97. Riparian Corridor
- 98. Native Aquatic Plants
- 99. Importance of living and nonliving things

Life Science

- 100. Play games that don't require electricity
- 101. What do I eat (food chains/webs)
- 102. How do I get what I need? (food, shelter..)
- 103. Hibernation
- 104. Where are the bee's
- 105. Where do I live (animals)
- 106. Why do we need pollinators
- 107. Let it grow-what does it need to grow
- 108. Species diversity
- 109. Species at risk (ie elm trees, butternut trees, lady slippers)
- 110. Endangered species(ie Wood turtles)
- 111. Species now extinct in NB (ie wolves and caribou). Why can't they thrive here?
- 112. My favorite outdoor spot
- 113. Protection from the elements
- 114. Historically/Culturally significant plants: White Birch Trees
- 115. Historically/Culturally significant plants: Wild Ginger
- 116. Historically/Culturally significant plants: Spruce Needles
- 117. Historically/Culturally significant plants: White Ash Trees
- 118. Historically/Culturally significant plants: Fiddle heads

- 119. Historically/Culturally significant plants: Beech Nut
- 120. Historically/Culturally significant plants: Beaked Hazel
- 121. Historically/Culturally significant plants: Sugar Maple
- 122. Historically/Culturally significant animals: Black Bear
- 123. Historically/Culturally significant animals: Moose
- 124. Historically/Culturally significant animals: Atlantic Salmon
- 125. Historically/Culturally significant animals: Ducks
- 126. Soil Quality
- 127. Fertilization practices
- 128. Ecosystems
- 129. Habitats
- 130. Proper food consumption
- 131. Edible Nature (edible wild plants)
- 132. Effect Invasive species have on native plants
- 133. Invasive species: Garlic Mustard
- 134. Invasive species: Hogweed
- 135. Environmentally Sustainable Subdivisions
- 136. What I do(parts of plants or how they affect the environment)
- 137. Life cycle of a plants
- 138. Life cycle of an animal
- 139. Bat population decline
- 140. Compare parts of plants to humans or animals
- 141. Effects of insecticides on insects
- 142. How can GPS help protect the environment
- 143. Decomposers
- 144. Consumers
- 145. Producers
- 146. Where/how do plants get their nutrients
- 147. Septic system improvements rural and urban
- 148. Where does drinking water come from?
- 149. Where does waste go
- 150. People powered travel

Please pick <u>one</u> of the following topics for each student project

Agenda for the Grand Finale Showcase April 29, 2017

NBCC Woodstock Gymnasium, 100 Broadway Street, Woodstock

Agenda

12:00 p.m. Students arrive and set-up Showcase projects

1:00 p.m. Judging

Students and guest will enjoy refreshments during judging. Take the opportunity to see

and learn about some of the student projects

2:30 p.m. Presentation of certificates and awards

3:30 p.m. Projects dismantled and everyone heads home

Thanks for another wonderful year of the Meduxnekeag Environmental Showcase

Criteria	D (ED)	C (AD)	B (AD+)	A (SP)
Understanding of Content (basic concepts)	 ♣ shows understanding of few of the basic concepts: must read from a cue sheet ♣ demonstrates significant misconceptions ♣ explanations show limited understanding of concepts ♣ material lacks depth and may included inaccuracies 	 shows some understanding of the basic concepts: still relies heavily on a cue sheet demonstrates minor misconceptions can give partially explanations material shows some depth but may include minor inaccuracies 	 shows understanding of the basic concepts: only refers to cue cards for prompting demonstrates no significant misconceptions usually gives complete or nearly complete explanations material is well researched and accurate 	 shows a thorough understanding of all the basic concepts: rarely needs to refer back to notes demonstrates no misconceptions always gives complete, detailed explanations material is thoroughly researched and accurate
Organization	 ♣ presentation is disorganized and lacks clarity ♣ no real introduction or conclusion - repeated content ♣ audience is confused 	 ♣ presentation is generally organized and somewhat clear ♣ separate ideas discussed in separate sections with an attempt to include an introduction and conclusion ♣ audience can follow along 	presentation is organized with clarity content flows nicely audience finds ideas clear and easy to follow	 ♣ presentation is very organized, engaging and original ♣ content follows a logical sequence ♣ audience finds ideas easy to follow, clear, effective and original
Communication	 ▲ rarely uses appropriate science and technology terminology ▲ answers questions with little clarity and precision, requires prompting ▲ lacks fluency, expressiveness and audibility 	 ▲ sometimes uses appropriate science and technology terminology ▲ answers questions with some clarity and precision may need minimal prompting ▲ somewhat fluent, expressive and generally audible 	 usually uses appropriate science and technology terminology answers questions with clarity and precision fluent, expressive and audible 	 consistently uses appropriate science and technology terminology independently answers questions with clarity and precision while also sharing new information fluent, highly expressive and audible
Model (poster, diagram or 3D display)	 ▲ 3D display, report and/or illustrations are neither neat nor accurate ▲ they confuse the content ▲ model and ideas are derived from other sources (internet and/or adult creations) ▲ student can not recount how the model was created (or their role in creating the model) 		 ▲ 3D display, report and/or illustrations are accurate and clearly relate to the theme ♣ they reinforce the content ♣ model and ideas appear to be original works ♣ student can give an appropriate recount of how and why the model was created (or their role in creating the model) 	 ▲ 3D display, report and/or illustrations are neat, accurate and clearly relate to the overall theme ▲ they provide additional insight and interest to the content ▲ model and ideas are creative and original ▲ student can give a detailed recount of how and why the model was created (or their role in creating the model)
Written Component	 ♣ information appears to be disorganized ♣ errors in language conventions interfere with communication 	information is somewhat organized, but paragraphs are not well-constructed some errors in language conventions, not sufficient to interfere with communication	 information is organized with well-constructed paragraphs language conventions are easily understood 	 ♣ information is very organized with well-constructed paragraphs and heading/subheadings ♣ language conventions are used correctly and for conscious effect

Relation to	A no connection to the assign	ned A general connection to the	delar connection to the assigned	delear and creative connection to the
Theme	topic	assigned topic	topic	assigned topic
	theme is not the central parties the student's project (i.e. re	1 1	theme is the central part of the student's project	theme is the central part of the student's project
	project/ideas)	student's project	student's project	student's project

Meduxnekeag Project Rubric

This document is intended to provide assessment guidelines to teachers and judges participating in the 2017 Meduxnekeag Environmental Showcase. It endeavors to convey standards for quality work to students, parents and judges as well as justify and validate marking criteria. It is important that students be aware of the rubric so they know their target. It will also provide consistency for teachers and judges as well as continuity throughout the school district. The rubric has been created with the mission in mind that we want students to explore and learn about their surrounding environment while meeting curriculum requirements. The actual project itself is not as important as the actual learning that is demonstrated by the student. The rubric has been designed with this in mind.

The rubric should be used holistically for summative evaluation purposes. Evaluators should review the overall indicators highlighted that best describe the student's performance at this time. Each concept should be evaluated separately looking at indicators within the grid. After looking at each concept the evaluator should decide where the majority of indicators fall to determine the overall rank.