



Educational Activities

Program descriptions



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The Petty Harbour Mini Aquarium

Our mission is to foster curiosity about local marine life and inspire action toward personal and global sustainability through display, interpretation and direct action.

GET YOUR HANDS WET!

The mini aquarium allows for an intimate, personal learning experience, showcasing local marine life collected right off the coast. Thirty small exhibits in an 800-square foot footprint, the modest building comes to life with the amazing creatures we display and the stories they tell of sustainability and coastal culture.

OUR PROGRAMING

We offer engaging, hands-on, curriculum based programs for children from grades 1 to 8 and special needs groups (see page 12 for other grades). These programs allow students to explore their local environment and inspire them to get curious, get involved and take action. All programs align with the Newfoundland and Labrador Curriculum Guides and teach children about the importance of habitats, biodiversity, food chains, anatomy and adaptations. Our knowledgeable interpretation staff and volunteers will guide your students through these programs. Each of them is experienced and passionate about marine biology and conservation... and they can't wait to meet you!

SCHEDULE

Monday to Friday from June to October

Start times flexible between 9 to 11 am and 1 to 2:30 pm

LENGTH OF PROGRAMS

Primary 60 mins

Elementary 1.5 hours

Junior High 1.5 hours

GRADES 1 & 2- MINI VOYAGERS OF CHANGE

In this program, students will learn all about the changes that the Mini Aquarium's animals go through, whether those are daily, seasonally or throughout their life cycle. They'll be amazed at how marine life can change in appearance and behaviour!

They'll then be surprised to find out that sea stars have eyes on the end of their arms, as they learn all about the different senses through their guided exploration of our touch tanks. These senses help animals meet their needs, a topic we'll further discuss as we dissect a squid or perhaps a fish!

Grade 1 Curriculum Outcomes Reached

STSE/Knowledge:

100-9 identify each of the senses

100-8 identify and describe common characteristics of humans and other animals, and identify variations that make each person and animal unique

100-4 observe and identify similarities and differences in the needs of living things

100-5 describe different ways that plants and animals meet their needs

100-7 describe the different ways that humans and other living things move to meet their needs

103-2 recognize that humans and other living things depend on their environment and identify personal actions that can contribute to a healthy environment

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

Skills:

201-1 follow a simple procedure where instructions are given one step at a time

201-8 follow given safety procedures and rules and explain why they are needed

Grade 2 Curriculum Outcomes Reached

STSE/Knowledge:

- 101-7 observe and describe changes in the appearance and activity of an organism as it goes through its life cycle
- 102-6 identify constant and changing traits in organisms as they grow and develop
- 100-15 compare the life cycles of familiar animals and classify them according to the similarities and differences of their life cycles
- 102-7 describe features of natural and human-made environments that support the health and growth of some familiar animals

Skills:

- 202-9 identify questions that arise from what was learned

GRADE 3- JUNIOR HABITAT EXPLORERS

In this two-part program, students will get to learn about the different local marine habitats replicated in the Mini Aquarium. The concept of habitat will be introduced, with an emphasis on sandy bottom and seaweed environments.

Students will then attempt to predict the effects of different fishing techniques. Our demonstration will allow them to better understand these fishing methods and the effects they have on our oceans.

A dissection wraps up this fun program!

Grade 3 Curriculum Outcomes Reached

STSE/Knowledge:

- 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
- 102-12 describe ways in which plants are important to living things and their environment

As well as the Grade 4 curriculum found on page 8



GRADE 4- HABITAT EXPLORERS

In this two-part program, students will get to learn about the different local marine habitats replicated in the Mini Aquarium. They'll compare the rocky intertidal habitats of the sea stars and urchins, to the sandy bottom where the flounders and skates laze around, to the open waters where cods actively swim.

Students will then take part in our You Are What You Eat program where they will learn what happens to plastic waste after it enters the ocean ecosystem. An interactive game demonstrates how ocean food chains work and discusses the problem microplastics pose.

A dissection wraps up this fun program!

Grade 4 Curriculum Outcomes Reached

Knowledge:

302-1 identify a variety of local and regional habitats and their associated populations of plants and animals

302-2 describe how a variety of animals are able to meet their basic needs in their habitat

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

Skills:

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

204-3 state a prediction and a hypothesis based on an observed

205-5 make observations and collect information that is relevant to a given question or problem

STSE:

108-3 describe how personal actions help conserve natural resources and care for living things and their habitats

GRADES 5 & 6- INVERTEBRATE INVESTIGATORS

In this program, students will take on the role of Investigators as they uncover facts about their counterparts, the invertebrates. Through their guided exploration of our exhibits and touch tanks, they'll discover the characteristics that distinguish vertebrates from invertebrates. Using their inquisitive eye, they'll unearth the hidden secrets of the marine world thanks to our microscope stations. Even more findings await them as we wrap up this program with an animal dissection.

Grade 5 Curriculum Outcomes Reached

Knowledge:

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

Skills:

205-3 follow a given set of procedures

205-5 make observations and collect information that is relevant to a given question or problem

STSE:

104-7 demonstrate the importance of using the languages of science and technology to communicate ideas, processes, and results

Grade 6 Curriculum Outcomes Reached

Knowledge:

300-15 describe the role of a common classification system for living things

300-16 distinguish between vertebrates and invertebrates

300-17 compare the characteristics of mammals, birds, reptiles, amphibians and fish

300-18 compare characteristics of common arthropods

300-19 examine and describe some living things that cannot be seen with the naked eye

Skills:

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

204-8 identify appropriate tools, instruments, and materials to complete their investigations

205-8 identify and use a variety of sources and technologies to gather pertinent information

206-9 identify new questions that arise from what was learned

STSE:

104-8 demonstrate the importance of using the languages of science and technology to compare and communicate ideas, processes and results

105-1 describe examples of scientific questions and technological problems that **are currently** being studied.

107-11 identify examples of careers in which science and technology play a major role

GRADES 7 & 8- APPRENTICE AQUARISTS

In this two-part program, students will learn the skills to become junior aquarists, using spectrometers, thermometers and electronic probes to complete water quality tests in our exhibits. We'll further their training with a discussion on the differences between ocean and freshwater and a hands-on look at our touch tanks will allow them to discover the interactions between biotic and abiotic factors. Students will then complete the You Are What You Eat program where they will learn what happens to plastic waste after it enters the ocean ecosystem. An interactive game demonstrates how ocean food chains work and discusses the problem microplastics pose. A dissection wraps up this fun program!

Grade 7 Curriculum Outcomes Reached

Knowledge:

- 304-1 explain how biological classification takes into account the diversity of life on Earth
- 306-3 describe interactions between biotic and abiotic factors in an ecosystem
- 308-1 compare various instruments used to measure temperature

Skills:

- 208-2 identify question to investigate arising from practical problems and issues
- 208-5 state a prediction and a hypothesis based on background information or an observed pattern of events
- 210-11 state a conclusion, based on experimental data, and explain how evidence gathered supports or refutes an initial idea

STSE:

- 110-7 provide examples of technologies used in the past to meet human needs
- 110-8 describe examples of how technologies have been improved over time
- 111-1 provide examples of scientific knowledge that have resulted in the development of technologies
- 112-3 explain how society's needs can lead to development in science and technology
- 112-9 identify science-and-technology-based careers in their community
- 113-1 identify some positive and negative effects and intended and unintended consequences of a particular scientific or technological development
- 113-9 make informed decisions about applications of science and technology, taking into account environmental and social advantages and disadvantages

Grade 8 Curriculum Outcomes Reached

Knowledge:

306-3 describe interactions between biotic and abiotic factors in an ecosystem

311-8 analyse factors that affect productivity and species distribution in marine and freshwater environments

311-19 describe the interactions of the ocean currents, winds and regional climates

311-10 explain how waves and tides are generated and how they interact with shorelines

Skills:

208-2 identify question to investigate arising from practical problems and issues

210-11 state a conclusion, based on experimental data, and explain how evidence gathered supports or refutes an initial idea

STSE:

110-8 describe examples of how technologies have been improved over time

111-3 provide examples of technologies that have enabled scientific research

112-3 explain how society's needs can lead to development in science and technology environmental and social advantages and disadvantages

112-5 provide examples of public and private Canadian institutions that support scientific technological research and endeavours

113-2 describe possible positive and negative effects of a particular scientific or technological development and explain how different groups in society may have different needs and desires in relation to it





In this two-part program, students will learn the advantages and disadvantages of sexual and asexual reproduction, as well as external and internal fertilization, through a hands on scavenger hunt inside the aquarium. We'll further their training with a discussion on what factors influence each, using the aquarium animals as models.

Students will then get a hands on look at a blue lobster exoskeleton, and discover what makes it blue (hint, it's not food coloring!), while discussing the likelihood of these mutations occurring. The program wraps up with a game show comparing the skate and lobster eggs and larvae.

Grade 9 Curriculum Outcomes Reached

Knowledge:

- 305-2 Distinguish between sexual and asexual reproduction in representative organisms
- 305-3 Compare sexual and asexual reproduction in terms of their advantages and disadvantages
- 305-5 Discuss factors that may lead to changes in a cell's genetic information

Skills:

- 209-4 Organize data using a format that is appropriate to the task or experiment
- 210-4 Predict the value of a variable by interpolating or extrapolating from graphical data
- 210-6 Interpret patterns and trends in data, and infer and explain relationships among the variables
- 211-1 Receive, understand, and act on the ideas of others
- 211-3 Work cooperatively with team members to develop and carry out a plan, and troubleshoot problems as they arise

STSE:

- 109-14 Explain the importance of using precise language in science and technology
- 111-1 Provide examples of scientific knowledge that have resulted in the development of technologies
- 112-12 Provide examples of Canadian contributions to science and technology

Other Programming

SPECIAL NEEDS

Contact us to find out more on how we can accommodate your group. Our inclusion program focuses on visual recognition at our touch tanks as well as a guided exploration of the other animals. Pick and choose from our other activities: squid dissection, whale presentation with pictures and bones, and scavenger hunt. Wheelchair accessible.

PROGRAM CUSTOMIZATION

We are happy to adapt our programs to best suit your class curriculum objectives and meet the needs of your overall unit goals. Select the outcomes you would like covered and we'll see how we can match them with engaging and hands-on activities.

PROGRAMMING FOR OTHER GRADES

Want programming for any other grades?

We can make arrangements based on your goals or curriculum outcomes.

Please fill out the Booking Inquiry Form online or contact bookingsminiaqua@gmail.com

BIRTHDAY PARTIES, CAMPS AND OTHER GROUPS

Know someone celebrating his or her birthday? Think of the Mini Aquarium for a fun and fishy children's celebration!

Also take note that we offer customized programs for camps, clubs, daycares, senior groups and conferences.

Check out miniaqua.org/make-a-booking.html for more information.

General Booking Information

FACILITIES

Two single stall washrooms are located outside the Aquarium and accessible to students with limited mobility.
We are a wheelchair friendly facility.

GROUP SIZE

We have a 30-student maximum due to our staffing and facility size. Students will be divided into two groups and will rotate. Classes can be arranged to take place back to back to accommodate for full buses.

STUDENT/TEACHER RATIO

The teacher/school is responsible for providing the following ratios:

Grades 1 to 5 | 10:1 student to chaperone ratio

Grades 6 and up | 15:1 student to chaperone ratio

PRICE

\$5.00/student

\$6.00/additional adult (no cost for chaperones required for ratio)

Payment can be made following the program at the front desk.

We accept:

- Cash
- Cheques (payable to "Petty Harbour Mini Aquarium")
- Credit card (Visa, Mastercard) and Debit

You may also request an invoice be sent to your school.

If costs become a barrier, please let us know. We may be able to find funding or source a donor to help support your class.

QUESTIONS? READY TO BOOK?

Contact our Program Coordinator who is eager to help and do everything possible to ensure that your group has an enjoyable and educational experience at the Petty Harbour Mini Aquarium!

bookingsminiaqua@gmail.com

Thank you for fostering curiosity of
marine life!

