GRADE 4 SCIENCE GARDENS OF THE DEEP



AT JOHNSON GEO CENTRE

Join us for a fantastic field trip experience to discover the relatively unknown world of cold-water corals and sponges of the North Atlantic at Johnson GEO CENTRE!

Johnson GEO CENTRE and Oceans Learning Partnership jointly offer the Gardens of the Deep program to give Grade 4 students and teachers a unique opportunity to explore deep sea habitats and learn more about ocean sciences. This hands-on program is designed to align with many of the learning outcomes associated with the Habitats & Communities Unit (details on Pg. 2).

When you book your program, you will receive an Educator's Guide that includes detailed descriptions of activities, field trip requirements, and pre- and post-field trip learning resources.

WHAT WILL THE PROGRAM COVER?

Hands-on learning is what we do! Grade 4 students will become Marine Ecologists for the day and dive into learning about these unique organisms and their habitats, which can be found just off the coast of Newfoundland and Labrador!

Experienced interpreters at Johnson GEO CENTRE will guide students through four (4) engaging stations as they discover predator/prey relationships, ocean food webs and feeding adaptations, and an understanding of the effect climate change is having on our oceans.

This program and its corresponding exhibit were developed in partnership with local Memorial University and Fisheries and Oceans Canada (DFO) scientists who study deep sea corals and sponges.

LOGISTICS AND COST

- Location: Johnson GEO CENTRE, St. John's
- Time needed: 2 hrs. (morning or afternoon available)
- It must be scheduled in advance
- Maximum 60 students per program
- The cost is \$5.50 per student
- Free for chaperones (max. of 1 chaperone per 10 students)

HOW DO I SIGN UP MY CLASS?

For more details and to sign up, please contact us at gcprograms@mun.ca



GENERAL CURRICULUM OUTCOMES

Outlined below are the GCOs the students will gain during the program. Although these outcomes are not fully developed through this program, they are encouraged throughout.

GCO 1: Students will develop an understanding of the nature of science and technology, of the relationships between science and technology, and of the social and environmental contexts of science and technology.

- Demonstrate that science and technology use specific processes to investigate the natural and constructed world to seek solutions to practical problems.
- Demonstrate that science and technology develop over time.
- Describe ways that science and technology work together in investigating questions and problems and in meeting specific needs.

GCO 2: Students will develop the skills required for scientific and technological inquiry, for solving problems, for communicating scientific ideas and results, for working collaboratively, and for making informed decisions.

- Ask questions about objects and events in the local environment and develop plans to investigate those questions.
- Observe and investigate their environment and record the results.
- Interpret findings from investigations using appropriate methods.
- Work collaboratively to carry out science-related activities and communicate ideas, procedures, and results.

GCO 3: Students will construct knowledge and understandings of concepts in life science, physical science, and Earth and space science, and apply these understandings to interpret, integrate, and extend their knowledge.

- Describe and predict causes, effects, and patterns related to change in living and non-living things.
- Describe interactions within natural systems and the elements required to maintain these systems.

GCO 4: Students will be encouraged to develop the attitudes that support the responsible acquisition and application of science and technological knowledge to the mutual benefit of self, society, and the environment.

- Realize that the applications of science and technology can have both intended and unintended effects.
- Willingly observe, question, explore and investigate.
- Consider their own observations and ideas as well as those of others during investigations and before drawing conclusions.
- Appreciate the importance of accuracy and honesty.
- Work collaboratively while exploring and investigating.
- Be sensitive to and develop a sense of responsibility for the welfare of other people, other living things, and the environment.
- Show concern for their safety and that of others in planning and carrying out activities and in choosing and using materials.







