

# Curriculum Days

**November 2-4, November 8-10 and  
November 15-17, 2011**

**Grades 1-6**

Students take part in two 45-minute hands-on workshops geared specifically to their grade level.

Each workshop includes a 15 minute introduction on a specific curriculum topic, followed by 30 minutes of hands-on exploration.



**REGISTER EARLY  
TO AVOID DISAPPOINTMENT**

For more information and to make a reservation:  
TELEPHONE **613 991-3053** / FAX **613 993-7923**

Canada

# CURRICULUM DAY WORKSHOPS

*Curriculum Day workshops complement the Museum's regular school programs by focusing on specific aspects of the school curriculum. Each workshop consists of a 15-minute introduction followed by 30 minutes of hands-on exploration.*

## GRADE 1

**Objects and Materials:** Explore the connection between objects and materials by using your senses to identify a variety of materials and then classifying them according to property and function. Try your hand at waterproofing using different materials.

**Everyday Structures:** Explore the world of structures and shapes in our Museum exhibits. Compare structures with respect to differences in form and function. Build your own structures using a variety of materials and test them out in our construction challenges.

## GRADE 2

**Liquids and Solids:** Learn about the properties of liquids and solids and find out which materials dissolve in water and which do not. Experiment with liquids of different densities. Study buoyancy by designing and building your own boats and rafts.

**Simple Machines:** Explore the principles of force and movement with this introduction to simple machines. Explore the terms "work" and "load" as you look at the basic principles of levers and incline planes.

## GRADE 3

**Pushing and Pulling Forces:** Explore forces that cause movement, including magnetism, static electricity and gravity. Compare the strength of different forces. Find out which materials are magnetic and which are not. Discover the role friction plays in moving materials. Discover how different forces can be applied to an object to start, stop, or change its direction of movement.

**Stability:** Build structures using different materials and determine the effect of shape on the strength of your materials. Test the ability of your construction and its components to support a load; learn about stability in our balancing game.

## GRADE 4

**Light:** Investigate the way various materials affect light; learn about reflection and refraction and discover how these properties can be used to make optical devices such as periscopes, telescopes, kaleidoscopes and microscopes.

**Pulleys and Gears:** Discover how pulleys and gears make changes in speed, direction and force possible. Learn how these simple machines can provide mechanical advantage.

## GRADE 5

**Forces Acting on Structures:** Discover the advantages of using simple machines to make our work easier; compare the force required by different levers and pulley systems to lift a load. Choose materials to construct a bridge that will support a given load and investigate tension and compression.

**Properties and changes in Materials:** Explore the characteristics of the 3 states of matter through hands-on activities. Learn about changes in states of matter, and discover which reactions release or absorb heat. Discover which reactions are reversible and which are permanent.

## GRADE 6

**Electricity:** Learn about static and current electricity in our hands-on electricity workshop. Discover how electricity is produced and how it can be transformed into other forms of energy. Compare the conductivity of various solids and liquids, construct series and parallel circuits, and learn the appropriate electrical symbols.

**Space:** Learn about the solar system and the Earth's cycles using our scale models. Find out what scientists have discovered about the planet Mars and take a look at 3-D photographs and photomosaics made from images from Mars orbiters and landers. End your workshop by viewing some of the major constellations in the Museum's inflatable planetarium.

# CURRICULUM DAYS

## Registration Form – Fall 2011

Please complete one form for each attending class.

School Name: \_\_\_\_\_ School Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_ Fax Number: \_\_\_\_\_

Teacher's E-mail Address: \_\_\_\_\_

Teacher's Name: \_\_\_\_\_ Grade: \_\_\_\_\_ Number of Students: \_\_\_\_\_

Estimated Arrival Time: \_\_\_\_\_ Estimated Departure Time: \_\_\_\_\_

Language of Program:     English     French

Preferred Date:

November 2	<input type="checkbox"/>	November 3	<input type="checkbox"/>	November 4	<input type="checkbox"/>
November 8	<input type="checkbox"/>	November 9	<input type="checkbox"/>	November 10	<input type="checkbox"/>
November 15	<input type="checkbox"/>	November 16	<input type="checkbox"/>	November 17	<input type="checkbox"/>

Preferred Time:

9:30 a.m.	<input type="checkbox"/>	10:15 a.m.	<input type="checkbox"/>	11:00 a.m.	<input type="checkbox"/>	11:45 a.m.	<input type="checkbox"/>
12:30 p.m.	<input type="checkbox"/>	1:15 p.m.	<input type="checkbox"/>	2:00 p.m.	<input type="checkbox"/>		

**Workshops:** You will be scheduled for the **two 45-minute workshops** appropriate for the grade level of your class. For split grades, please indicate which grade option you would prefer.

	<b>Workshop A</b>	<b>Workshop B</b>
<b>Grade 1</b>	Objects and Materials	Everyday Structures
<b>Grade 2</b>	Liquids and Solids	Simple Machines
<b>Grade 3</b>	Pushing and Pulling Forces	Stability
<b>Grade 4</b>	Light	Pulleys and Gears
<b>Grade 5</b>	Forces Acting on Structures	Properties and changes in Materials
<b>Grade 6</b>	Electricity	Space

**Admission: \$7 per student (minimum charge: \$140 per class)**

A \$20 cancellation fee will apply if a program is cancelled with less than 2 weeks' notice.

A \$140 cancellation fee will apply if a program is cancelled with less than 48 hours' notice.

Please return completed form to:

Canada Science and Technology Museum  
Reservation Office  
P.O. Box 9724, Station T  
Ottawa, Ont. K1G 5A3

FAX: 613-993-7923



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