

Virtual and On-Site workshops available for Toronto, Durham, Peel and York Regions



2022/2023 Kindergarten to Grade Eight

Curriculum-Aligned STEM Workshops

Over 10 Million Young Scientists Inspired Since 1989!

After 33 years, **Scientists in School** is now delivering our engaging **hands-on STEM workshops both Virtually and On-Site**. All of the highly investigative activities you expect, **delivered safely and seamlessly** to you and your students in a choice of two different formats!

Cost: \$235

V Virtual Workshop:
60 minutes, 30 student maximum

OS On-Site Workshop:
90 minutes, 30 student maximum

**Click
here to
book!**

Age Groups

Click on your grade of interest below to access descriptions of the Virtual and On-Site workshops available for your students:

Kindergarten

Grade One

Grade Two

Grade Three

Grade Four

Grade Five

Grade Six

Grade Seven

Grade Eight

Value Proposition

Your inquisitive students, under the guidance of experts, will become scientists, engineers and environmental stewards while developing the global competency skills they need to become tomorrow's STEM workforce.

In 2020-2021, 2,500 teachers who hosted our Virtual workshops across Canada completed our post workshop survey. Here is what teachers had to say!

95% Found our workshops EXTREMELY EFFECTIVE in enhancing their students' attitudes towards STEM.

95% Found our workshops EXTREMELY EFFECTIVE in enhancing their students' interest in STEM.

94% Found our workshops EXTREMELY EFFECTIVE in encouraging their students to think critically.

92% Found our workshops EXTREMELY EFFECTIVE in enhancing their students' understanding of scientific principles.

The Lasting Impact of Our Workshops

Scientists in School alumna, Andrea Larney, fondly remembers the days the teacher announced that Scientists in School would be visiting the class! "We were excited to go to science class!"

Today, Andrea is a professional communicator with a passion for science communication and science literacy.

[Watch Andrea Larney](#) describe how becoming a "scientist" during a Scientists in School workshop sparked her life-long interest in pursuing science!



Virtual or On-Site? Which delivery model best suits your needs?

V VIRTUAL WORKSHOPS:

- + 60 minutes
- + Join from anywhere across Canada
- + Mini science bags with investigative materials shipped ahead for each student
- + Individual ownership of materials and investigations
- + Multi-camera views, up-close visuals

OS ON-SITE WORKSHOPS:

- + 90 minutes
- + Select topics available in Peel, Toronto, York, and Durham
- + Includes scientific materials and equipment for students to share
- + Pair and small group activities
- + We set up, clean up, and provide assistance where needed

BOTH V AND OS :

- Hands-on, investigative + Curriculum-aligned + Led by trained STEM experts and role models +
- Post-workshop resources provided + Real-world connections + Fun, inquiry-based +
- Relevant investigations + Prompt critical thinking + Spark creativity + Build problem-solving skills +
- Require no volunteers, but they are always welcome!

How VIRTUAL Works:

-  Browse through this catalogue and select a Virtual workshop.
-  Book a workshop by visiting the booking portal [here](#).
-  Schedule the workshop with your presenter.
-  Receive mini science bags and distribute to students.
-  Presenter leads the workshop remotely via Microsoft Teams*.



How ON-SITE Works:

-  Browse through this catalogue and select an On-Site workshop.
-  Book a workshop by visiting the booking portal [here](#).
-  Schedule the workshop with your presenter.
-  Presenter comes to your school with materials to share.
-  Presenter leads the workshop in your classroom.

STEM WORKSHOPS

KINDERGARTEN

Cost: \$235

V Virtual workshop

OS On-Site workshop

Class Size: 30 student maximum

**BOOK
HERE!**

“They were SO engaged, and loved being scientists experimenting and learning about physics. I look forward to more exploration and extending the learning post-workshop!”

~ Kindergarten Teacher ~

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www.scientistsinschool.ca

Let's Be Scientists!



KINDERGARTEN

Explore all kinds of amazing things as a scientist. Investigate what makes yeast grow. Take your animal for a walk and examine how it moves. Analyze a mystery footprint and identify who came to visit. Ready? Steady? Let's be scientists!

On the Move!



KINDERGARTEN

Explore how things move! Discover the science behind a magic trick, defy gravity by creating a balancing bird, engineer a car and race it to the finish line. We'll be on the move!

Sense of Wonder



KINDERGARTEN

The world around us is a feast for our senses! Investigate sound and design your own shakers. Explore how our sense of taste and smell are connected. Discover the science behind depth perception and trick your eyes with 3D glasses. Now your interactions with the world will just make sense!



STEM WORKSHOPS

GRADE ONE

Cost: \$235

V Virtual workshop

OS On-Site workshop

Class Size: 30 student maximum

**BOOK
HERE!**

*“An engaging,
real life learning
opportunity for my
students. I love the
individual Mini
Science Bags to
allow students to
further the concepts
that we experienced
as a class.”*

~ Grade 1 Teacher ~

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Intriguing Invertebrates **V**

GRADE 1

Who has thousands of teeth? Who can float on water? Are you intrigued? Students will learn about the invertebrates in their own backyards by creating models of these creatures. Physical characteristics, habitats they live in, the way they move and eat will be investigated with hands-on and engaging activities.

Our World of Energy **V**

GRADE 1

Follow the influence of the sun as we study the impact energy has in our world. Investigate light and sound energy. Transform chemical energy into heat while making bubbles. Discover how to conserve heat and experiment with your own little house. Create a storyboard to follow the path of energy from the sun to all living things.

Structures, Materials and More **V OS**

GRADE 1

Follow an engineer's journey from materials to structure. Explore a variety of materials to understand their qualities. Then, through trial and observation, test for structural effectiveness. Learn about attaching items with a fun fastener challenge. Finally, build with materials to understand the purpose of structures.



STEM WORKSHOPS

GRADE TWO

Cost: \$235

V Virtual workshop

OS On-Site workshop

Class Size: 30 student maximum

**BOOK
HERE!**

“Engaging, hands-on, interactive! The kids were interested and participating the entire time. They loved the Mini Science Bags that came with the lesson. Another great experience!”

~ Grade 2 Teacher ~

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I Like To Move It!

GRADE 2

Push, pull, lift and roll! Hone your building and observation skills as you make things move. Investigate pulleys, wheels and inclined planes. Combine all these simple machines to create an awesome mechanism that helps us move objects.



Properties Really Matter

GRADE 2

Liquids and solids are everywhere! Explore household solids and liquids and how they interact. Investigate the properties of solubility, absorption and buoyancy. Then engineer the solution to a common problem. Create an unusual concoction from an everyday solid and watch it dance!



STEM WORKSHOPS

GRADE THREE

Cost: \$235

V Virtual workshop

OS On-Site workshop

Class Size: 30 student maximum

**BOOK
HERE!**

“I’m using this workshop as a model to improve my science program. I love the ongoing questions that students ask to continue their discovery. Fantastic!”

~ Grade 3 Teacher ~

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Amazing Forces!



GRADE 3

Amazing forces are all around us! Get creative by engineering a maze, then use gravity and magnetic force to navigate it. Investigate friction caused by different surfaces and its effect on movement. Experiment with a launching device, while exploring stored energy and control of force.

Get the Dirt on Plants!



GRADE 3

Dig into the exciting and connected world of soil and plants! Explore the importance of soil by investigating soil layers and experimenting with water retention. Uncover the relationship between plants and everyday items we use. We will dissect a seed, learn about seed dispersal, and examine plant growth up close!

Strong Structures



GRADE 3

Build your knowledge of structural strength as a junior engineer. Discover how to design a structure to withstand both tension and compression. Test different materials for strength, and investigate how the strength of a material can be altered by manipulating its shape!



STEM WORKSHOPS

GRADE FOUR

Cost: \$235

V Virtual workshop

OS On-Site workshop

Class Size: 30 student maximum

**BOOK
HERE!**

“When I book Scientists in School, my students’ faces light up and they become highly engaged in science and learning. Always a positive experience for students and teachers.”

~ Grade 4 Teacher ~

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Get it in Gear

GRADE 4



Simple machines are all around us! Discover where we use levers, gears and pulleys in everyday life. Investigate how levers lift. Assemble gear trains and belt drives and examine how they operate. Construct different pulley systems and explore why we use them.

Hoo’s in the Owl Pellet?

GRADES 4-6



Experience being a real-life biologist! Use an integrated STEM approach to investigate the diet of an owl and estimate the prey number and type. Dissect an owl pellet, sort and identify bones. Opportunities pre- and post-workshop to enhance your student’s literacy, numeracy and visual arts activities by integrating owl pellet dissection and analysis into your program.

Shine a Light

GRADE 4



Join us on this optical adventure and discover how light travels, passes through objects, and makes shadows. We will continue our journey by exploring how light bends, bounces and moves through a fibre-optics cable. With our new-found knowledge, we’ll build an obstacle course to investigate reflection and refraction in action!

Sounds Like Science

GRADE 4



Follow the vibrations to discover the properties of sound: pitch and volume. Design and build ear protectors, while experimenting with materials that absorb or reflect sound. Use your newfound knowledge to create a unique musical instrument.

Wetland Wonders

GRADE 4



Become immersed in the world of wetlands. Discover who makes a home here and how they influence their environment. Create a food chain and explore invasive species. Build a wetland and learn the importance of preserving this habitat. Wetlands are truly a wonder.



STEM WORKSHOPS

GRADE FIVE

Cost: \$235

V Virtual workshop

OS On-Site workshop

Class Size: 30 student maximum

**BOOK
HERE!**

*“Engaging, hands-on
learning!*

*Scientists in School
delivered an exciting
and informative
session. They were
so flexible
and adaptable.
Can't wait to book
again next year!”*

~ Grade 5 Teacher ~

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As a Matter of Fact...

V OS

GRADE 5

Discover why chemistry matters! Explore solubility, crystallization and a change in state while writing your initials. Create a situation where nothing remains the same and observe and identify the indicators of a chemical change. Solve a mystery using the physical and chemical properties of materials found in the cupboard!

Every Body Moves:

V

GRADE 5

Pop into the inner workings of the Human Body. Create a model to learn how systems work together to put an arm in motion. Experiment to find which fuel source works best to energize us. Explore the digestion process as food travels down the tract. Movement is in every body!

Fending Off Forces

V

GRADE 5

Fend off external and internal forces by exploring the techniques engineers use to keep buildings standing tall and strong. Shake off an earthquake, support a load, and balance your way to structural stability.

Hooo's in the Owl Pellet?

V

GRADES 4-6

Experience being a real-life biologist! Use an integrated STEM approach to investigate the diet of an owl and estimate the prey number and type. Dissect an owl pellet, sort and identify bones. Opportunities pre- and post-workshop to enhance your student's literacy, numeracy and visual arts activities by integrating owl pellet dissection and analysis into your program.



STEM WORKSHOPS

GRADE SIX

Cost: \$235

V Virtual workshop

OS On-Site workshop

Class Size: 30 student maximum

**BOOK
HERE!**

“Such a fun workshop! The kids had a great time and have talked about it since! Great kick-off to our science unit. One girl said she wanted to be an engineer after the workshop – I was thrilled!”

~ Grade 6 Teacher ~

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Electricity: Close the Circuit!

V OS

GRADE 6

Explore the nature of electricity and its use. See how static electricity makes objects move. Design and build circuits to learn how a house is wired. Test conductors, insulators and switches.

Genetic Diversity and You!

V

GRADES 6-8

Explore the genetic diversity in plants, animals and humans through genetic traits. Find out which traits are common and how they are passed down. Read chromosomes, examine families and calculate the probability of traits passing to the next generation. Enhance your understanding of mutations by making a DNA model of your name.

Hoo's in the Owl Pellet?

V

GRADES 4-6

Experience being a real-life biologist! Use an integrated STEM approach to investigate the diet of an owl and estimate the prey number and type. Dissect an owl pellet, sort and identify bones. Opportunities pre- and post-workshop to enhance your student's literacy, numeracy and visual arts activities by integrating owl pellet dissection and analysis into your program.

Our Place in Space

V

GRADE 6

Explore Earth's relationships within our solar system. Discover how to tell time using the sun and an instrument you keep in your pocket. Examine the phases of the moon with the help of a special device. Construct and test technology used at the International Space Station. Find out more about our place in space!

Up in the Air!

V

GRADE 6

It's all about balance when exploring flight. Coanda effect, the properties of air and Newton's third law are all important when soaring above the clouds. Experiment with a variety of materials to construct the perfect parachute and make a glider that will boggle your mind.



STEM WORKSHOPS

GRADE SEVEN

Cost: \$235

V Virtual workshop

OS On-Site workshop

Class Size: 30 student maximum

**BOOK
HERE!**

“The workshops are a fun way to engage students in curriculum-connected STEM learning. I was impressed by the quality activities, and the knowledgeable and friendly scientist.”

~ Grade 7 Teacher ~

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Engineer It: Up, Out and Across



GRADE 7

Your students will use sophisticated building techniques to test the limits of three different structures. Build up to new heights with a tower challenge; build out to explore cantilevers; and build across while learning about the wonders of suspension bridges.

Finding Solutions!



GRADE 7

Be part of our STEM start-up company and design a planet-friendly bath product. Check out the competition and define criteria which will differentiate your creation. Explore the properties of matter and learn about acidity and basicity. Use the particle theory to communicate the results of investigations into concentration and rate of dissolving. Then use your science savvy to plan, design and test your own magic formula.

Genetic Diversity and You!



GRADES 6-8

Explore the genetic diversity in plants, animals and humans through genetic traits. Find out which traits are common and how they are passed down. Read chromosomes, examine families and calculate the probability of traits passing to the next generation. Enhance your understanding of mutations by making a DNA model of your name.



STEM WORKSHOPS

GRADE EIGHT

Cost: \$235

V Virtual workshop

OS On-Site workshop

Class Size: 30 student maximum

**BOOK
HERE!**

“My students were actively engaged, and participated in every aspect of scientific inquiry. I learned a lot about science and genetics careers too. I highly recommend this program.”

~ Grade 8 Teacher ~

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All Systems Go!

GRADE 8



Get a grip on systems! Build an assistive hand device like those created by bio-medical engineers to aid with fine motor skills. Explore inputs and outputs as you design and analyze linkages, incorporate pneumatics, assess mechanical advantage and consider trade-offs in force, distance and materials. It's all systems go!

Genetic Diversity and You!

GRADES 6-8



Explore the genetic diversity in plants, animals and humans through genetic traits. Find out which traits are common and how they are passed down. Read chromosomes, examine families and calculate the probability of traits passing to the next generation. Enhance your understanding of mutations by making a DNA model of your name.

Go with the Flow

GRADE 8



Explore fluids and their properties! Build a colourful but salty density column. Find a boat while exploring buoyancy. Compare viscosities while racing liquids. Discover the difference between gases and liquids under pressure.



OUR ANNUAL IMPACT

2021-2022:
Organization-wide



Our Mission

Our Mission is to ignite scientific curiosity in children so that they question intelligently; learn through discovery; connect scientific knowledge to their world; are excited about science, technology, engineering and math; and have their interest in careers in those fields piqued.

Our Vision

Our Vision is for all young Canadians to be actively engaged in the seeing, doing and understanding of science.

We are very grateful to have engaged 250,000 children in rich, engaging virtual experiences, during a year of challenging health restrictions. We're looking forward to expanding our reach with both in-person and virtual experiences in the future.



460

Communities across Canada



250,000

Children and youth inspired through workshops



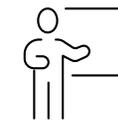
10,500

Virtual classroom and community workshops delivered



250,000

Mini Science Bags packed and delivered



15,750,000

Face time minutes of investigation



10,000,000+

Young scientists inspired since 1989!



PARTNERS IN STEM

Scientists in School is a leading science education charity that has reached over 10 million young scientists since our founding in 1989. Through our hands-on, inquiry-based STEM classroom and community workshops, we ignite scientific curiosity in children so that they question intelligently; learn through discovery; connect scientific knowledge to their world; get excited about STEM; and have their interest in careers in those fields piqued. None of this would be possible without the support of our corporate, community, government and individual donors who provide funding that is used to subsidize the cost of all workshops, provide complimentary workshops to schools and organizations in marginalized and under-resourced communities, develop new programs and improve existing programs, and expand to new communities across Canada.

Catalyst

Natural Sciences and Engineering Research Council of Canada + Ontario Trillium Foundation

Innovation

John and Deborah Harris Family Foundation + Nuclear Waste Management Organization + Ontario Power Generation + TD Friends of the Environment Foundation

Imagination

ArcelorMittal Dofasco + Canadian Nuclear Safety Commission + MilliporeSigma, the U.S. and Canada Life Science Business of Merck KGaA, Darmstadt, Germany + Nissan Canada Foundation

Discovery

Alectra Utilities + AMD Canada + City of Hamilton - City Enrichment Fund Program + Community Foundation Grey Bruce + CST Inspired Minds Learning Project + Edith H. Turner Foundation, Hamilton Community Foundation + Edmonton Community Foundation + F. K. Morrow Foundation + G. Murray and Edna Forbes Foundation Fund, South Saskatchewan Community Foundation + General Motors Canada + Hunter Family Foundation + Kiwanis Club of Ottawa Foundation + Municipality of Clarington + Ottawa Community Foundation + Pendle Fund, Community Foundation of Mississauga + Sifton Family Foundation + S. M. Blair Family Foundation + Stratford Perth Community Foundation - Keith and Frances Culliton Family and Melanson Family Funds + Superior Glove Works + Syncrude + Systematix Inc. + The Arthur & Audrey Cutten Foundation + The Catherine & Maxwell Meighen Foundation + The Gordon & Ruth Gooder Charitable Foundation + The Lorne and Evelyn Johnson Foundation, South Saskatchewan Community Foundation + The McLean Foundation + The Saint John's Legacy Foundation + The Township of Tiny + Vesta Energy

Exploration

Brant Community Foundation + Burlington Hydro + CAE Inc. + Cajole Inn Foundation + Cambridge & North Dumfries Community Foundation + Cameco Corporation + Campbellford Seymour Community Foundation + Canadian Foundation of University Women Owen Sound and Area + City of Brantford + Community Foundation for Lennox & Addington + County of Wellington + Durham Community Foundation + Dwight and Karen Brown Family Fund, Ottawa Community Foundation + Edmonton Community Foundation + Elexicon Energy + Huronia Community Foundation + Huronia Community Foundation - David and Delva Finch Fund + Lab X Media Group at Huronia Community Foundation + London Community Foundation - Acorn Fund for Youth + Martin Foundation Fund at Hamilton Community Foundation + Municipality of South Bruce (South Bruce Community Liaison Committee) + Niagara Community Foundation + Red Deer and District Community Foundation + Rotary Club of Ajax + Rotary Club of Whitby Sunrise + Scarborough Garden & Horticultural Society + Siemens Canada Limited, Peterborough + Smart and Caring Children and Youth Fund at the Community Foundation of Mississauga + The Community Foundation of Orillia and Area + Thomas Sill Foundation + Town of Whitby, Mayor's Community Development Fund + Yuill Family Foundation + Zynga Gaming Inc.

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