



**INVESTIGATION
STATION**

Put the magnifying glasses to work! Draw a picture of what you see.

ASK YOUR CHILDREN:

- What colors do you see?
- Which are similar?
- What are the differences?

SCHOOL PROGRAMMING GUIDE
2024-2025

SCIENCE

EAST

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SCIENCE EAST OVERVIEW



LEARN MORE ABOUT US

Science East is one of the most active public science and technology educational organizations in New Brunswick. We work both inside and outside of the school system to reach students, teachers, families and communities in every region of the province. Our mission is to inspire and inform through hands-on learning!

The key to Science East's high demand in the school system is our inquiry-based and hands-on programs, that are thoughtfully designed and delivered by our experienced staff. Through partnerships, we work with teachers and districts to adapt to their constantly changing needs.

Science East offers a multitude of STEM workshops that complement the K-12 curriculum by matching outcomes with unique hands-on workshops.

Our activities cover several topics, such as coding, robotics, artificial intelligence, environment, engineering, math, space and more!

All activities are offered in French and English.








Pricing can be found on page 8.

*** PLEASE NOTE THAT OUR
SCIENCE CENTER
LOCATED IN FREDERITON
IS CLOSED FOR THE
2024-2025 SEASON.
THANK YOU FOR YOUR
UNDERSTANDING!**



WORKSHOPS

Our educators travel directly to schools province-wide to offer workshops that will strengthen students understanding of science! Each workshop complements a part of the K-12 curriculum.

	TOPICS	GRADE	DETAILS
	STORYTELLING	PreK-3	Choose one of our robots and recreate a story from a book including characters and costumes! We have a wide selection of story books and themes for you to choose!
	MY FIRST ROBOT	PreK-5	Introduce your student to robots and coding with this engaging screen-free workshop. Develop your student's computational thinking skill with robots adapted to their age. We have multiple robots to choose from.
	USING YOUR SENSES	PreK-5	Students will use their senses of hearing, sight and touch as they discover the surprises brought by Science East. From a sensory bin, to kid friendly microscopes to music making robots, this will tickle their senses for sure!
	HABITAT AND COMMUNITY	K-8	This screen-free activity introduces students to robots while they create a community or habitat for their robot-car or robot-animal! Make sure that your tiger has enough food and a nice shelter and don't forget to add codes to tell your robot to slow down in the school zone! Other topics include ocean and space.
	ANIMALS AND ADAPTATIONS	K-8	Learn where animals from around the world live and create your own animal adapted to survive in the desert or arctic! Use your observation skills to identify animals based on their skulls, scats and tracks only.
	SCIENCE SHOW	K-12	Choose your topic and enjoy the science show! Learn to observe and be amazed by the wide variety of topics including: states of matter, invisible forces, optics, electricity, and many more.
	PIXEL ART	K-12	Use a tablet to show your creativity as you recreate your favorite video game character and learn about pixels and resolution. Go back in time as you use a frame by frame technique to create animations.

WORKSHOPS

TOPICS GRADE DETAILS

	TECHNOLOGY DETECTIVE	3-12	Your students will develop their critical thinking while using new scientific tools. Students could : analyze samples of water, use a digital microscope, extract DNA from strawberries or even use remote sensing technology to map the content of a mystery box?
	ROBOT BATTLES	3-12	Time to robo-battle! Learn a the design process as students work in teams to plan, create, test, and redesign armor for robots! Problem solving and creativity are a must in this design challenge.
	STRUCTURES	3-8	How do shapes play a role in structures? How do engineers test their designs? Students will learn all this and more with our fun hands-on activity! Use problem solving and teamwork to build a bridge with wooden planks, a tower out of straws or even protect an egg astronaut during it's landing!
	SIMPLE MACHINES	3-8	Explore the world of pulleys, wedges, wheels and axles, levers, inclined planes, and screws! What machines do we use in everyday life? Students will use problem solving and teamwork to build simple machines to accomplish a challenge assigned by educators.
	EARTH SCIENCE AND OCEANS	3-8	Build your very own erosion barrier in a creative, hands-on challenge or learn about oceans, its food chain and try to identify sea animals using a dichotomous key. Students can also make their very own fish prints using or model fish!
	BLOCK-BASED CODING	5-8	Learn about block-based coding by using the free application Scratch. Students will learn the logic behind coding while they create their own story or video game.
	CIRCUITS	5-8	Allow your students to learn about electricity and basic circuits in this series of challenges. Students will add wires, light and buttons to make their own circuits. They will also develop their critical thinking and problem solving skill as they make their circuit work.
	MACHINE LEARNING (COMING EARLY 2025)	5-8	Introduce your students to artificial intelligence and learn how it is used in facial recognition app and self-driving car. Students will teach a computer to recognize different objects!
	ARTIFICIAL INTELLIGENCE (COMING EARLY 2025)	K-5	Students will learn how data is collected and used by artificial intelligence. Students will learn to observe, make predictions and develop basic experimental skills as they design their experiment!

STEM KITS

STEM kits bring Science East into the classroom with skills based activities tied to the New Brunswick curriculum. STEM kits provide educators with all materials needed and detailed instructions for facilitation of group and individual activities on a variety of topics.

Our STEM kits include everything for teachers to lead the activity :

- Lesson plan
- Extension Activities
- Curriculum Connections
- Storybook
- Materials and/or Equipment



AVAILABLE PROVINCE WIDE

"The kits were nicely organized. The students loved the micro:bits and they were able to use them without any frustration on my part thanks for the instructions and lesson plans provided!" - Grade 3 Teacher at Florenceville Elementary School

"I liked the hands-on materials and appreciated the chance to use some expensive equipment that would normally not been available in the classroom"
- Kindergarden Teacher at Keswick Ridge School

STEM KITS

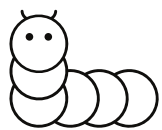
TOPICS GRADE DETAILS



BEEBOTS

K-2

BeeBots provide students with a screen free introduction to sequencing and coding. In this exploration, give your students free reign to solve challenges and learn about the importance of bees!



CODE -A- PILLAR

K-2

Code-a-Pillars allow children to begin learning how to communicate with robots through code. Students will follow instructions and work to recreate simple patterns. Working as a group, students will have to communicate with a partner and problem-solve.



LIGHT & SHADOWS

K-2

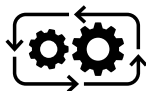
In this kit, students will explore the world of shadows as they ask questions, search for shadows, and manipulate light in a variety of ways. Students will have exploration time to make discoveries and ask engaging questions.



SOUND

K-2

This STEM kit encourages students to use their mathematical skills while also exploring a scientific concept. Data collection, representing, and analyzing are all important math and science skills that are a focus in this lesson.



SIMPLE MACHINES

5-8

In this activity, students will explore the concept of simple machines and how useful they are in daily life. They will create their own simple machine with the provided material to solve challenges.



STRUCTURES

3-8

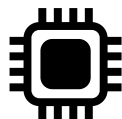
Introduce students to the world of engineering. by focusing on the two most important components of building structures: shapes and materials. Students will spend their time exploring shapes, analyzing materials, and recording data about their structures.



OZOBOTS

K-8

This activity introduces students to basic digital and science skills including pattern recognition and sequencing. This screen-free activity allow students to code robots using markers of colours! Why not use the robots in a mathematics oriented activity or build a city!



MICRO:BIT

3-8

With this engaging activity, children can control LED displays, create games, and interact with sensors. This hands-on experience introduces coding concepts in a fun and intuitive way, encouraging creativity while building a strong foundation in programming.



SOLAR ECLIPSE

K-5

This workshop allows students to learn the basics of light, shadows, and perspective. Students will also create a model of the moon and learn about its phases.



WASTE REDUCTION

K-2

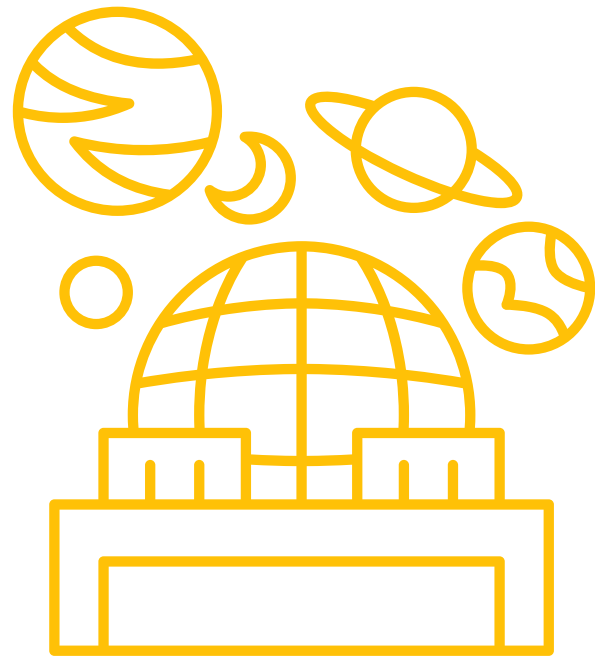
With this activity, your students will learn to recycle and compost through games and activities. They will learn to sort materials and even start a compost bin for the school!

TRAVELING PLANETARIUM

Discover the wonders of space with Science East's portable planetarium! Unique to New Brunswick, our incredible planetarium is available to use at the location of your choice. This interactive show is perfect for space-related curriculum and stargazers alike! Planetarium shows are completely interactive and audience-driven.

The traveling planetarium :

- ✓ Is adaptable to all ages
- ✓ Last about 45 minutes
- ✓ Fits in a 15 x 15 x 15 ft space
- ✓ Fits up to 30 students
- ✓ Is wheelchair accessible



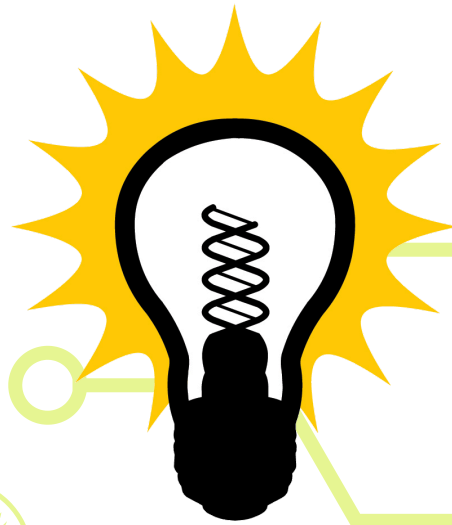
PROFESSIONAL DEVELOPMENT

With more than 20 years of experience and expertise, Science East offers interactive professional development workshops for teachers and educators.



We offer sessions tailored to your needs, whether you want to renew or learn about discovery learning, hands-on activities, coding, technology and more.

We can also teach you how to use the hidden equipment stored in you closet or help you train your school's Science Fair team!



SCIENCE

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PRICING

Schools and Community Groups Workshop / Science Show / Planetarium

45 Minutes ----- \$125.00/session + travel fee + taxes



\$75.00/session until December 2024

****School Groups Only****

Each session is 45 minutes long.

STEM kits

Free of charge. Schools only. Limited availability.

**CONTACT US DIRECTLY TO FIND OUT IF ANY GRANTS ARE
AVAILABLE FOR YOUR GROUP!**

INDIGENOUS AND SCHOOL GROUPS ARE TAX EXEMPT

PRICES ARE SUBJECT TO CHANGE