

On Demand CWSF-TV Guide



CWSF-TV TÉLÉ-ESPC



STEM in Action



Featured Alumni

● Grades 5-8









Hands on Science
















Our Regions



● Grades 9-12

Program Title	Description	Theme	Grade	Length
#WeBelongInTech Women in Computer Science	In 10 years, Women in Computer Science at the University of Waterloo have helped over 1,300 students. Learn about some of the women who have been involved.	▶	● ●	3 min
Alumni Stories	CWSF has been happening for 60 years and over this course of time we have developed an incredible Alumni network across the world. We caught up with some of them to find out what they are up to now.	▶	● ●	5 min
An Exciting Future Career, Brought To You By STEM!	This series of videos in both English and French highlight some of the exciting career options available through STEM education. Thank you to Let's Talk Science for providing this content.	▶	● ●	10 min
Behind the Scenes Tour of CircuitMess	Join CEO, Albert Gajšak, as he takes you on a behind the scenes tour of the CircuitMess Facility. The goal at CircuitMess is to bring electronics and programming to the crowd in a fun and interesting way, and that's why all their products are DIY. You can learn more about CircuitMess at the STEM Expo.	▶	●	9 min
Brilliant Labs	Brilliant Labs is a not for profit, hands on technology and experiential learning platform based in Atlantic Canada. They support the integration of creativity, innovation, coding and an entrepreneurial spirit within classrooms and educational curricula.	▶	●	10 min
Alumni Adventures in STEM	Hear from CWSF Alumni as they explore the impact STEM projects have had on their lives, provide advice for students on what makes a great project, and share reflections on their STEM careers.	▶	●	15 min
Exploring Opposites with the Canadian Museum of Nature	Explore this virtual behind-the-scenes look at opposites in the natural history collections: big & small, wet & dry, and more at the Canadian Museum of Nature.	▶	● ●	20 min

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Extreme Weather: Canada's Urgent Need to Adapt TEDx Intact Centre on Climate Adaptation	This TedX presentation focuses on the manifestation of climate change as extreme weather, associated financial implications and how widespread climate change impacts individuals, homes and municipalities. The presentation zeros in on adaptation efforts Canada has made, while highlighting standards and guidelines that can be implemented to limit the impacts of extreme weather. As Director, Climate Finance and Science at the Intact Centre on Climate Adaptation, Kathryn assesses the impact of climate change on specific industry sectors and the broader capital markets. She is developing guidance to help investment professionals integrate climate change and extreme weather risk into forward-looking portfolio analysis to minimize associated risk. By extension, her research will influence companies to adapt to climate change in an effort to minimize risk/exposure.		●	16 min
"Fire is Beautiful"	This video will look at rebuilding Indigenous Fire Stewardship with Yunesit'in and Xeni Gwet'in First Nations		● ●	10 min
Hand on Physics with Professor Rehse of the University of Windsor	This is a 3 part video series includes the following videos by Dr.Rehse of the University fo Windsor: <ul style="list-style-type: none"> • Can we build a light saber? Dr. Steven Rehse explains the physics of light sabers. • Is laser hair removal real science? Dr. Rehse blows up our doubts. • Firenado! The physics of the fire tornado. 		●	10 min
Inspirational Women in STEM	Canadian Association for Girls in Science (CAGIS) has put together a series of inspiring videos highlighting Canadian women in STEM careers. These two videos from their #GirlsNeedRoleModels series feature Emily Choy, Arctic Marine Biologist and Daniella Petitti, FNTI Flight Instructor.		● ●	3 min
Meet the 2021 CWSF Grand Award Winners	Join host Stuart McKelvie as he interviews the 2021 CWSF Grand Award Winners! Learn about their projects, their future plans and their passions.		● ●	10 min
Leaders of Tomorrow - Women in STEM at Dalhousie University	Female students and researchers are leading the way on some of Dalhousie's most exciting and impactful scientific research projects. With its main campus located just 300m from the Atlantic Ocean, Dalhousie University is a leader in Ocean Science, Marine Biology and Ocean Tech. Hear inspiring stories from female students and researchers working on projects in these critical fields.		● ●	5 min

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Metalhead Scientists and Musicians: Inspirations Revealed	Metal music (and rock 'n' roll) can be inspired by the natural world. And sometimes it's the other way around! Find out more from these music-loving scientists. Enjoy interviews with Mark Jansen from Epica and Jason Ashcraft from Helion Prime by the Canadian Museum of Nature's "metalhead ecologist" Dominique Fauteux. Also have fun discovering some species named after famous music bands.		●	8 min
Science in the Kitchen with Dominic: Capsaicin	Our taste buds are involved in detecting five elements of taste perception: salty, sour, bitter, sweet and umami. What about spicy food? Spiciness is not a taste, but is linked to pain. In this segment, you will witness Dominic feel the pain as he goes up the Scoville Scale and uses science to learn how to numb the pain!		● ●	5 min
Science in the Kitchen with Dominic: Emulsifying Agents	We all learned it in science class: water and oil don't mix! When making salad dressing, you need to mix oil with vinegar, which is mostly water-based. How can we achieve that? In this segment, you will explore the power of emulsifying agents to achieve the impossible!		● ●	5 min
Science in the Kitchen with Dominic: Leavening agent	Do you enjoy your fluffy bread, pancakes, and other pastries? How do we get all these air pockets in our baked goods? Leavening agent can be chemical or biological in nature, but they produce similar effects. Your recipe calls for baking powder and you don't have it at home? Dominic will use science to show you how to make your own.		● ●	5 min
Snappy Science: Balloon Kebab	With just the right scientific technique, when a pointy object and a balloon meet it doesn't always end with a BANG! INTERACTIVE ACTIVITY: To participate in this activity you will need: a balloon and a wooden skewer.		●	2 min
Snappy Science: Naked Egg	What happens when you bounce a raw egg? After this activity your answer might surprise you! Follow along to setup an experiment that you will continue at home. INTERACTIVE ACTIVITY: To participate in this activity you will need: a container, an egg, and vinegar.		●	2 min
Snappy Science Activities: Fantastic Flyers	Flip your idea of a classic paper airplane on its head as we learn how to make some new kinds of paper flyers. INTERACTIVE: To create your own Fantastic Flyer all you will need is paper, scissors, tape and a straw!		●	5 min
Snappy Science Activities: Wacky Water	Follow along with the amazing properties of water and how water molecules love to stick together. INTERACTIVE ACTIVITY: To participate in this activity you will need: access to water, a tray, a tea towel, a piece of string, a playing card or piece of cardstock and a drinking glass.		●	3 min

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Standing Trees	<p>How do you measure the value of a forest? Enter Robinson Conservation Forest, a naturally diverse Wabanaki forest in the Wolastoq watershed in central New Brunswick, on the east coast of Canada / Turtle Island. This special forest and the people connected to it push us to see beyond the timber value of a forest—to see the forest beyond the trees. From carbon storage to flood mitigation to family connections and cultural traditions, forests like this are vital to the identity and well-being of our communities.</p> <p>This video was produced through the Common Ground Project, a partnership between Community Forests International, Ulnooweg Development Group, and the Family Forest Network of Nova Scotia.</p>	▶ 	● ●	10 min
The Math Guru	<p>The Math Guru was founded in 2010 by Vanessa Vakharia, a certified high school math teacher with a Masters in Mathematics Education. Vanessa used to hate math. In fact, she failed grade 11 math twice (twice!) and decided she was simply not a “math person.” Then she changed schools. She decided to brave another math course with an open mind. This is when she realized: There is no such thing as a “math person.” Realizing she could do math has led to a lifetime of fulfilling wild dreams including hosting a podcast called Math Therapy, writing two books, and starting a rock band (that opened for Bon Jovi two years ago!) Vanessa has prepared a few clips for us to enjoy this week.</p>	▶ 	●	15 min
The past, present, and future of STEM: CWSF edition	<p>A documentary that highlights the accomplishments of young STEM innovators, the social component of their work, and a glimpse into the future of their field. Features interviews with past CWSF winners, researchers, and other ground-breaking leaders to tell an inspiring story.</p>	▶ 	●	
Using Science to Create the Best LEGO® Robot for a Sumo Fight	<p>Have you entered a robotics competition and you had to build a robot for a sumo fight? How can we use science to make a robot that will increase your chance of winning? In this segment, you will explore many scientific concepts with Dominic that will give you an advantage when designing your award-winning robot: friction, centre of gravity, gear ratios, inclined planes and many more. Video in English followed by French.</p>	▶ 	● ●	5 min
What if Dinosaurs Survived?	<p>What if a meteorite hadn't hit the Earth and wiped out the dinosaurs 66 million years ago? Would dinosaurs have continued to evolve? Would they have walked among us?</p> <p>This video looks at an amazing and controversial thought experiment, by former Museum palaeontologist Dr. Dale Russell. He discovered that some dinosaurs, like Troodon, were far brainier than first thought. He developed a dinosauroid model that was a hypothetical evolved form of Troodon. Hear Dr. Russell describe the features of this striking cross between a dinosaur and a human.</p>	▶ 	●	7 mins

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Where is All the Water in the World?	This quick activity provides an amazing perspective of how much fresh water is available to all of us on Earth.		●	6 min
Why scientific writing is important and also not everything.	This segment showcases the benefits of scientific writing and publishing, especially at the science fair level, all while highlighting how science communication is just as important and useful in today's social media landscape.		●	5 min