The Canada-Wide Youth Science Challenges

real issues real science real rewards

Challenge Your Students

Canada and the world are facing tough problems. Canadian youth want to make a difference. They know science isn’t easy, but it’s important. We’re challenging them to make their world a better place.

And with nearly $1M in awards, prizes, and scholarships, we’re serious!

The Canada-Wide Youth Science Challenges target seven issues that matter to Canadian youth, the future of the country and the world – Discovery, Energy, Environment, Health, Information, Innovation and Resources.

Challenge your students to use their curiosity and creativity – and the inquiry and critical thinking skills you’re teaching them – to tackle these issues by investigating a question or designing a solution to a problem.

Real science and engineering – real world problems. If “science fair” makes you think volcanoes and solar systems, you couldn’t be more wrong!

This past year:

• Maya Burhanpurkar, a grade 8 student from Shanty Bay, ON tested the cardiac and gastrointestinal effects of two promising Alzheimer’s drugs (melatonin and alpha lipoic acid) using Daphnia (water fleas) and Lactobacillus (yogurt bacteria).
• Laurent Joli-Cœur, a Secondary 3 (grade 9) student from Westmount, QC designed, built, and tested a device to prove that light from Jupiter casts a shadow on Earth.
• Eric LeGresley, a grade 11 student from Chilliwack, BC used advanced computer modeling and simulation to evaluate prospective anti-influenza drugs.

...the three Platinum Award winners from nearly 500 grade 7-12 students whose Challenge projects competed at the 51st annual Canada-Wide Science Fair in Charlottetown, PEI.

If you’re looking for more student engagement, deep and meaningful learning, real-world application, and the opportunity for authentic assessment – challenge your students with a project. We can help:

Find tools, resources and advice about the Canada-Wide Youth Science Challenges and science projects at IfYouthscience.ca and sfyouthscience.ca

Access our inquiry-based Smarter Science® teaching resources at smarterscience.ca

Challenge projects can be entered in over 100 regional fairs, in every province and territory, where students can be selected for the national finals – Canada-Wide Science Fair 2013 – May 11-18 in Lethbridge, Alberta. Find your nearest regional science fair using Fair Locator in the menu at sfyouthscience.ca.

Challenge YOUR students to invent the future.

In this mailing

Please post or share this newsletter and the contents of this mailing with your students and science colleagues:

Take the Challenge poster on the Canada-Wide Youth Science Challenges calling on students to do a science project and enter their regional science fair.

Smarter Science / SMARTS Insert describing Youth Science Canada’s initiatives for K-12 educators and our online community for young scientists in grades 7-12.

Deep River Science Academy Insert inviting applications for Summer 2013 (high schools only).

Students Tell Us

Top 10 Reasons To Do A Science Project

1. Learn a lot.
2. Make friends & contacts.
3. Have fun!
4. Do real science.
5. It’s a great experience!
6. Challenge yourself.
7. Win cash, trips & scholarships.
8. Develop skills like critical thinking, communication & time management.
9. Pursue your own ideas & interests.
10. Explore careers in science & engineering.

From Youth Science Canada’s survey of 500 Grade 7-12/Ctiger student visitors at the 2013 Canada-Wide Science Fair.

Discovery Create new fundamental knowledge based on your curiosity by asking a question and using the techniques of scientific inquiry to develop an answer.

Energy Improve our use of current energy sources, evaluate the transition to alternative energy sources, or reduce our energy footprint.

Environment Reduce our impact on, improve our understanding, and ensure the quality of water, air, soil, and the diversity of living things.

Health Increase our understanding of the human body, or apply science and technology to improve health, control disease, or support an aging population.

Information Enhance our use of information using digital and networking technologies, or applications of new media.

Innovation Combine scientific principles with your curiosity to develop a new material, structure, device, or system to solve a problem or improve an existing solution.

Resources Develop ideas to use our natural resources that provide sustainable sources of food, products, or prosperity.

Photo: Matt Cormier
National and International Competitions and Programs
Canada's Young Scientists – Spectacular Results in 2012

Young Canadians who participate in science fairs have a world of opportunities open to them through Youth Science Canada’s national and international programs. When grade 7-12/Cégep students enter their project in a regional science fair, they can be selected to attend the Canada-Wide Science Fair (CWSF), where Youth Science Canada awards nearly $1 million in cash, scholarships, trips, scientific experiences and other awards to the best science and technology projects every year.

Over the past year, winning CWSF awards or participating in other Youth Science Canada programs has given Canada’s top high school scientists the opportunity to travel to Slovakia, Sweden, and the USA to represent their country and compete internationally.

International experiences give young scientists a chance to benchmark themselves and their science – against the best in the world. And when they take to the international stage, Canada’s young scientists excel.

Team Canada-ISEF 2012 put on a spectacular performance at the Intel International Science and Engineering Fair, bringing home a total of 30 awards, including one of two $50,000 Intel Foundation Young Scientist Awards presented to the best of the best, three of the seventeen Best of Category Awards, and four First

Nuclear Waste Management Organization (NWMO) sponsored the Canada-Wide Science Fair for the first time in 2012.

Microsoft Canada announced a new partnership with Youth Science Canada to launch the Microsoft Canada Alumni Award. The recipient will be a Canada Wide Science Fair alumnus who best personifies excellence in innovation, science and technology in their chosen field. The award will be presented for the first time at CWSF 2013 in Lethbridge, Alberta next May.

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