

This document is designed at an aspect ratio for screen use.  
Please don't print it unless absolutely necessary.

# International School Challenge!

SUSTAINABLE  
DEVELOPMENT  
GOALS



ACTIVITIES

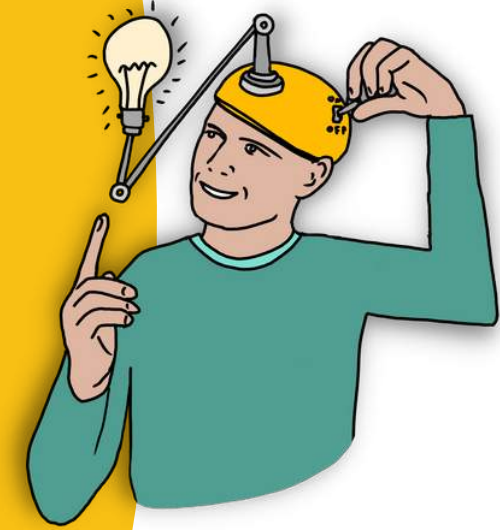


ONTARIO, CA VERSION

# We are Little Inventors

Part of the Tomorrow Projects international creative education organisation - Little Inventors inspires imagination by taking children's amazing ideas seriously.

Our mission is to give children across the world the opportunity to develop and showcase their creativity and problem-solving skills, build their confidence, curiosity and resilience to become caring citizens of our planet; all invaluable attributes that will support them as adults in their everyday life and chosen career paths.



**Dominic Wilcox**  
Chief Inventor



**Craig Bright**  
General Manager



**Ellie Birkhead**  
Head of Projects & Events



**Phoebe Martin**  
Project & Event Co-ordinator



**Bethany O'Neill**  
Content Creator

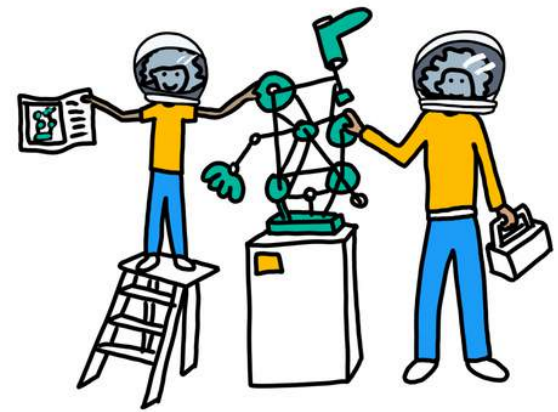


**Lottie Smith**  
Workshop Facilitator

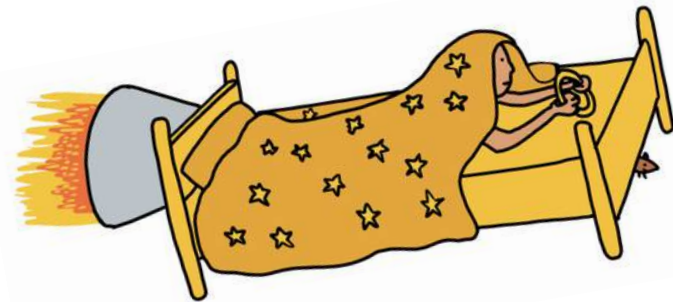
# What do we want this challenge to achieve?



To support and increase the understanding of STEM and other creative skills in young people.



To encourage young people to start considering their own careers from an early age through creativity, exploration and innovation.



To support young people to develop their creativity and problem-solving skills, ability to work in teams, build their confidence, curiosity and resilience.



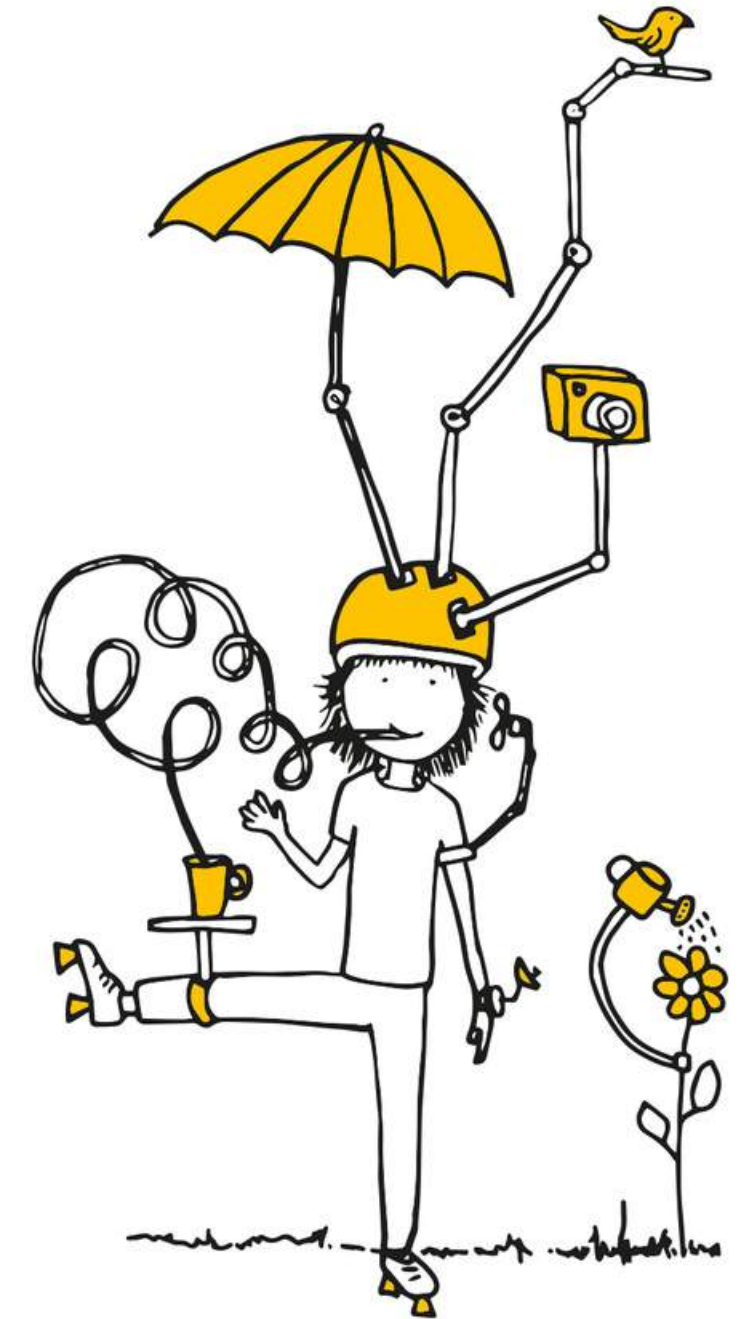
To increase awareness of the need for sustainable development and the goals set by the United Nations, and the power young people have to make a difference.

# Challenge Background

The aim of Little Inventors challenges is to allow students to express the far reaches of their imagination through creativity. We want to inspire young people to think up and draw original, ingenious, funny, fantastical or perfectly practical invention ideas. There are no limits!

We want to encourage children to think about where they live and the local environment that is around them. They will be able to draw and submit their own inventions to appear on [sustainable-development-goals.littleinventors.org](https://sustainable-development-goals.littleinventors.org) where they will be reviewed by the Little Inventors team.

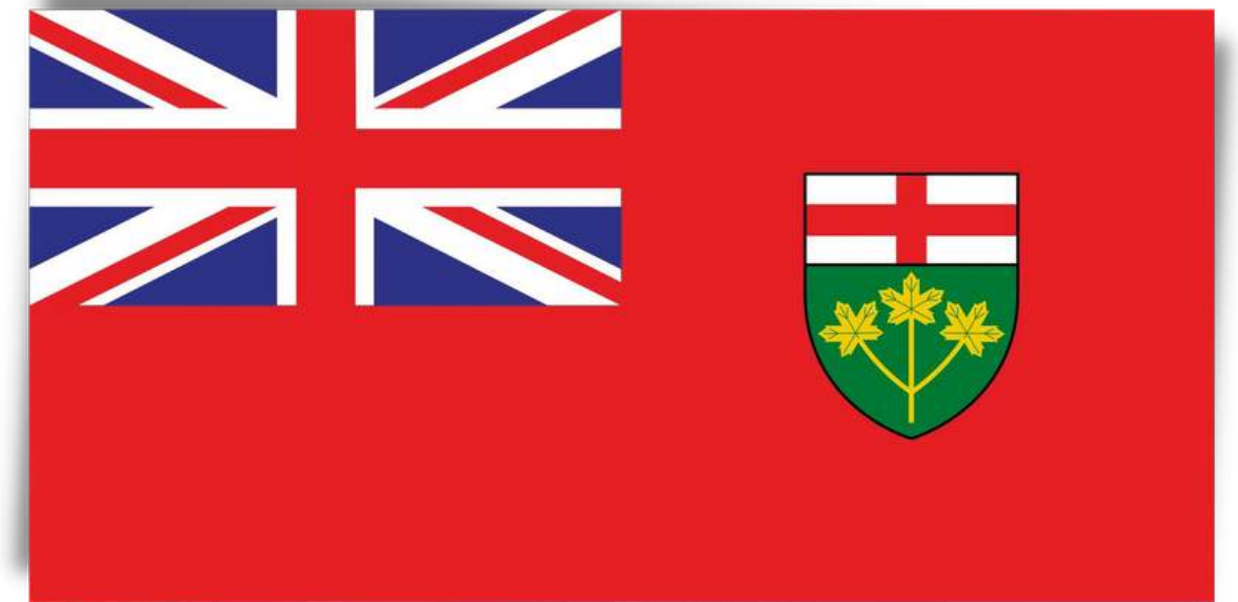
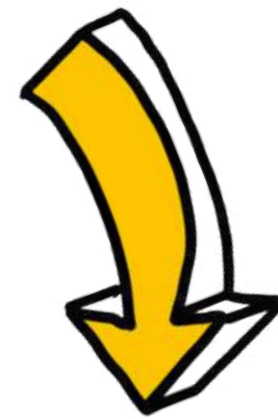
Their idea might be chosen as a Little Inventors team favorite, or even brought to life by one of our Magnificent Makers.



# Ontario Curriculum Connections



This challenge is designed to align with the following curriculum expectations outlined in the latest Ontario Curriculum documents.



## Kindergarten

Problem solving and innovating: This frame encompasses children's learning and development with respect to:

- exploring the world through natural curiosity, in ways that engage the mind, the senses, and the body;
- making meaning of their world by asking questions, testing theories, solving problems, and engaging in creative and analytical thinking;
- the innovative ways of thinking about and doing things that arise naturally with an active curiosity, and applying those ideas in relationships with others, with materials, and with the environment.

The learning encompassed by this frame supports collaborative problem solving and bringing innovative ideas to relationships with others.

Belonging and contributing: This frame encompasses children's learning and development with respect to: their sense of connectedness to others;

- their relationships with others, and their contributions as part of a group, a community, and the natural world;
- their understanding of relationships and community, and of the ways in which people contribute to the world around them.

The learning encompassed by this frame also relates to children's early development of the attributes and attitudes that inform citizenship, through their sense of personal connectedness to various communities.

## Grade 1

### SCIENCE

A3.2 investigate how science and technology can be used with other subject areas to address real-world problems

B1.1 describe changes or problems that could result from the loss of living and non-living things that are part of everyday life, while taking different perspectives into consideration

B1.2 identify actions that can be taken to contribute to a healthy environment

C1.1 describe everyday uses of energy at school and at home, and suggest ways to use energy responsibly

C1.2 describe how the lives of people and other living things would be affected if electrical energy were no longer available

C2.5 demonstrate an understanding that humans get the energy resources they need from the world around them, and that the supply of many of these resources is limited

D1.1 identify the kinds of waste materials produced by humans, and plan and carry out a course of action for minimizing waste in the classroom or at home, explaining why each action is important

D1.2 assess everyday objects, including structures, that have similar purposes, in terms of the materials they are made from, the source of these materials, and what happens to these objects when they are worn out or no longer needed

### SOCIAL STUDIES

B1.3 create a plan that outlines some specific ways in which they can responsibly interact with the built and/or natural environment in the local community

## Grade 2

### SCIENCE

A3.2 investigate how science and technology can be used with other subject areas to address real-world problems

B1.1 examine impacts that animals can have on society and the environment, and describe some ways in which any negative impacts can be minimized

B1.2 assess impacts of various human activities on animals and the places where they live, and describe practices that can minimize negative impacts

D1.2 assess the impact on the environment of technologies that use simple machines to facilitate movement

E1.1 assess the impact of human activities on air and water, taking various perspectives into consideration, including those of First Nations, Métis, and Inuit, and plan a course of action to protect the quality of the air and/or water in the local community

E1.2 assess their personal and household uses of water, and create a plan to use water responsibly

E1.3 examine the availability of freshwater and drinking water around the world, and describe the impact on communities

### SOCIAL STUDIES

B1.3 demonstrate an understanding of the importance of sustainability in people's interrelationship with their natural environment and of some of the consequences of sustainable and/or non-sustainable actions



## Grade 3

### SCIENCE

- A3.2 investigate how science and technology can be used with other subject areas to address real-world problems
- B1.1 assess ways in which plants are important to humans and other living things, taking different perspectives into consideration, and identify ways in which humans can protect native plant species and their habitats
- B1.2 assess ways in which human activities have an impact on plants and plant habitats, and identify personal actions that they could take to minimize harmful effects and enhance positive ones
- E1.2 assess the impact of human activity on soils, and describe ways in which humans can improve the quality of soils and/or lessen or prevent harmful effects on soils
- E2.5 identify various strategies used to maintain and improve soil health in Ontario
- E2.6 describe the process of composting, and explain some benefits of composting

### SOCIAL STUDIES

- B2.1 formulate questions to guide investigations into some of the short- and/or long-term effects on the environment of different types of land and/or resource use in two or more municipal regions of Ontario
- B2.2 gather and organize a variety of data and information on the environmental effects of different land and/or resource use and measures taken to reduce the negative impact of that use
- B2.5 evaluate evidence and draw conclusions about some of the short- and long-term effects on the environment of different types of land use in municipal regions of Ontario and about key measures to reduce the negative impact of that use

# Grade 4



## SCIENCE

- A3.2 investigate how science and technology can be used with other subject areas to address real-world problems
- B1.1 assess positive and negative impacts of human activities on habitats and communities, while taking different perspectives into account
- B1.2 analyse the impact of the depletion or extinction of a species on its habitat and community, and describe possible actions to prevent such depletions or extinctions
- C1.2 assess the impacts on the environment of light energy and sound energy produced by various technologies, while taking different perspectives into account
- E1.2 assess social and environmental impacts of extracting and refining rocks and minerals and of manufacturing, recycling, and disposing of products derived from rocks and minerals, while taking various perspectives into account

## SOCIAL STUDIES

- B1.2 assess aspects of the environmental impact of different industries in two or more physical and/or political regions of Canada
- B1.3 describe some key actions taken by both industries and citizens to address the need for more sustainable use of land and resources
- B2.1 formulate questions to guide investigations into some of the issues and challenges associated with balancing human needs/wants and activities with environmental stewardship in one or more of the political and/or physical regions of Canada
- B2.2 gather and organize information and data from various sources to investigate issues and challenges associated with balancing human needs/wants and activities with environmental stewardship in one or more of the political and/or physical regions of Canada

## Uploading your invention ideas

Visit the challenge website, click the yellow 'Upload' button and upload the idea drawing sheets one by one.



Make sure to take photographs or scans of the invention sheets that are clear and bright.

[Go to the website >](#)