

YOUR IDEA, OUR WORLD.

Grade 6 - 8





Let's hear your ideas!

Samsung's **Solve for Tomorrow** contest is a global initiative inspiring elementary and high school students to apply **STEM-based learning** toward **real-world challenges** that impact their communities.

Prizes and Recognition



Grand Prize (1st Place): The 1st-place winner of Samsung's Solve for Tomorrow contest receives \$50,000 in Samsung Vouchers and/or Samsung products for their school, which is named The School for Tomorrow and holds the title for a year.



2nd & 3rd Place: The 2nd- and 3rd-place winners of each receive \$10,000 in Samsung Vouchers and/or Samsung products for their school.

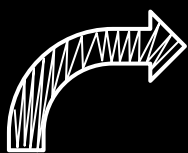


Regional and National Finalists: Twelve Regional Finalists each win \$2,500 in Samsung Vouchers and/or Samsung products for their school, and four National Finalists each receive \$5,000 in Samsung Vouchers and/or Samsung products for their school.



Fan Favourite: The public gets a chance to vote on their favourite Solve for Tomorrow finalist entry, and the most popular finalist will win \$5,000 in Samsung Vouchers and/or Samsung products for their school.

Contest Overview and Timeline



This is the part we will focus on for now!



Day 1:

WHY YOUR IDEAS MATTER

Three horizontal bars of equal length, colored blue, orange, and red from left to right, positioned below the main title.

A person is sitting on a wooden bench, looking out at the ocean. They are under the shade of a large, dark tree. The sky is overcast and the water is calm.

Why Your Ideas Matter

- Sometimes, all it takes is a fresh perspective to find solutions to challenges in health, sustainability, or supporting equity-seeking groups.
 - You have the **power to create change!**
- In this project, you will:
 - Explore key issues in Canada.
 - Use creativity to design impactful proposed solutions.
 - Come up with ideas to improve lives.

Why Your Ideas Matter

Consider the following:

What if everyone in Canada had access to clean drinking water?

What if cities ran on 100% renewable energy?

What if every Canadian had free access to mental health services?

What if everyone had access to affordable housing?

What if every school in Canada had a community garden?

How would our world be different?



Your Turn

Complete the worksheet to consider some of these “What If?” questions.

(Page 3)

Name: _____

Date: _____

WHY YOUR IDEAS MATTER

Sometimes, **all it takes is a fresh perspective** to find solutions to challenges in health, sustainability, or supporting equity-seeking groups. You have the power to create change! In this workbook, you'll explore key issues in Canada and use your creativity to design solutions that could improve lives.



Instructions: Choose a “What If?” from the list below and imagine a brighter future.

- ☐ What if everyone in Canada had access to clean drinking water?
- ☐ What if cities ran on 100% renewable energy?
- ☐ What if every Canadian had free access to mental health services?
- ☐ What if everyone had access to affordable housing?
- ☐ What if every school in Canada had a community garden?

1. What would life be like if your “What If” question came true?

2. What changes could be made to help make this brighter future a reality?

Think Global, Act Local

- **“Think Global, Act Local”** means:
 - Pay attention to big problems **around the world**, related to health, sustainability, or equity-seeking groups.
 - Do small things in your community to help solve those problems, like recycling or volunteering.
 - **Lots of small actions** can make a big difference globally.





- Health is the state of your body and mind.
 - Includes **physical fitness** and **mental well-being**.
 - Involves healthy habits and managing stress.



What are some examples of health challenges that people can face?

How can schools or communities promote healthy lifestyles?



What is SUSTAINABILITY?

- Using resources wisely to **protect the environment**.
 - Ensures future generations can meet their needs.
- Focus on reducing waste and conserving energy.



What actions can we take to reduce waste, recycle, or protect natural habitats?

What could your community do to save energy or reduce pollution?

Who are EQUITY- SEEKING GROUPS?



- Equity-seeking groups are people who face barriers to opportunities and support.



What challenges do some people face in finding jobs that others might not face?

How can we create more opportunities for everyone to have equal access to education, healthcare, or jobs?

Key Terms

Health	How well your body and mind are working, and it includes everything from physical fitness to mental well-being.
Sustainability	Using resources in a way that protects the environment so future generations can live well, too.
Equity-seeking Groups	Groups of people who don't have the same opportunities or support as others, making it harder for them to succeed.



What do you think a better society looks like, and how do you see yourself helping to create it?



Your Turn

Complete the worksheet over the next few days to brainstorm different challenges in your community.

(Page 4)

Name: _____

Date: _____

THINK GLOBAL, ACT LOCAL



Instructions: Over the next few days, keep your eyes open for challenges related to health, sustainability, or equity-seeking groups in your community. Make a list of what you find (e.g., waste in public spaces, limited access to parks, no recycling bins in your school).

Health	Sustainability	Equity-seeking Groups

Key Terms:

Health	How well your body and mind are working, and it includes everything from physical fitness to mental well-being.
Sustainability	Using resources in a way that protects the environment so future generations can live well, too.
Equity-seeking Groups	Groups of people who don't have the same opportunities or support as others, making it harder for them to succeed.

Innovative Technology

- **Innovative technology** means new or improved inventions and ideas that can solve real-life problems in smart and efficient ways.
- **Related terms:**
 - Adaptive Creative
 - Advanced Smart Efficient
 - Sustainable Progressive



Innovative Technology



- Examples of innovative technology:



Think-Pair-Share:

Choose an innovative technology (e.g. solar panels) and consider the issue it addresses and its impact on society. Compare your chosen technology and ideas with a partner.



Reflect on a product
you use daily.

How could its design be
improved to benefit
human health,
equity-seeking groups or
the environment?





Your Turn

Complete the worksheets to show what you know about innovative technology.

(Pages 5 - 6)

Name: _____ Date: _____

INNOVATIVE TECHNOLOGIES



Innovative technology refers to new or improved inventions, processes, or methods designed to solve real-world problems in creative ways. These solutions can help us to both today and in the future.

1. Why is it important to consider the future with technology?

2. Brainstorm examples of innovative technology.

Healthcare	
Transportation	
Waste Management	
Agriculture	
Energy	

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Name: _____ Date: _____

INNOVATIVE TECHNOLOGIES

3. Write what you know about each innovative technology. Consider how it benefits the environment, health, or equity-seeking groups.

a) Reusable Water Bottles



b) Solar Panels



c) LED Light Bulbs



d) Energy-Efficient Appliances



e) Electric Vehicles



f) Smart Thermostats



g) Wind Turbines



h) Vertical Farming



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Day 2:

PROBLEM IDENTIFICATION

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PROBLEM IDENTIFICATION



Issues and Impact

- Consider the different challenges that impact the environment, society, and our global community.
- **Examples:**
 - Plastic pollution
 - Lack of access to clean water
 - Homelessness
 - Food insecurity
 - Mental health stigma




Issues and Impact

- To assess community issues, consider both the **issue** and the **impact**. For example:

Issue: Lack of access to clean water.

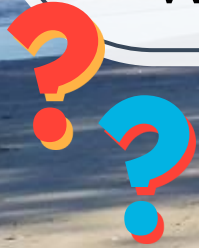
Impact: Not having clean water can cause health problems, make it hard to earn money, and create unfair situations, which all affect people's lives.


A photograph of a person sleeping on a wooden park bench. The person is wearing a light-colored jacket, brown pants, and grey sneakers. Their head is resting on their arms, which are crossed over their chest. To the left of the bench is a dark, cylindrical trash can. The ground is covered in gravel. The image is framed by a black border.

Look at this picture.
What is the issue?
What is the impact?



Look at this picture.
What is the issue?
What is the impact?



A photograph of a man in a bright green polo shirt and blue jeans pushing a stroller on a paved path. A young child in a pink shirt and blue jeans is walking alongside the stroller, holding onto it. The path is surrounded by lush green trees and grass. In the background, a white car is visible on the path. The sky is overcast.

Think-Pair-Share:
Brainstorm a
challenge that
impacts your local
community.
Compare your
thinking with a
peer.



Your Turn

Identify
challenges you
have observed
in your
community.

(Pages 7 - 8)

Name: _____ Date: _____

PROBLEM IDENTIFICATION



You have to identify a **problem** before you can find a **solution**.

1. Choose a focus area.

♥ **Health:** Think about issues related to physical access to healthcare, etc.

♻️ **Sustainability:** Consider environmental conservation, renewable energy, etc.

👥 **Equity-seeking Groups:** Reflect on social education, basic needs, etc.

My Focus Area: _____

2. Identify 3 different issues you have noticed to this focus area. Explain their impact. An example is provided.

Issue	
Example: There aren't enough mental health clinics or counsellors in the community.	This is a problem because...
1.	
2.	
3.	

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Name: _____ Date: _____

PROBLEM STATEMENT



1. Choose one challenge and write a problem statement. Which issue in your community do you want to address?

Problem Statement:

2. Where could you go to learn more about this topic? Be specific.

3. Explain the impact of solving the identified problem. This could include improved health, social benefits, or environmental sustainability.

➡️ _____

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Day 3:

FINDING SOLUTIONS

Three horizontal bars of equal length are positioned below the title. The first bar on the left is blue, the middle bar is orange, and the bar on the right is red.

Finding Solutions

- How can the principles of STEM help us propose possible innovative solutions to local challenges?
 - Consider how science, technology, engineering, or math can be applied.



Think-Pair-Share:

Consider the issue of wheelchair accessibility in your community. What are three STEM-based ideas you could invent to address the issue?

Example: Create an app that maps wheelchair-accessible routes.





Finding Solutions

- When inventing, assess how each proposed solution could **positively impact** the community.
- Think about environmental, social, and economic factors.
- Weigh the potential positive outcomes. How will each proposed solution contribute to a sustainable and resilient community?




Finding Solutions

- Evaluate the **financial requirements** for implementing each solution.
- There are both short-term and long-term costs.
 - What equipment is needed?
 - Inventing technology?
 - How are people trained?
 - Regular maintenance?



Finding Solutions

- Assess how easy or difficult it is to put each solution into action.
- Consider available resources, **technology**, and community support.
- Think practically.



Why is it important to
consider cost and
available technology
when coming up with a
new idea?



Finding Solutions

- Reflect on the impact, cost, and ease of implementation for each solution.
- Choose the proposed solution you are most excited about and believe will make a positive impact in your community.



Your Turn

Invent and
evaluate
proposed
solutions to
challenges in
your
community.

(Pages 9 - 10)

Name: _____ Date: _____

FINDING SOLUTIONS



Once you have identified your **problem**, find a STEM-based (science, technology, engineering, math) solution

1. Think of three possible STEM-based solution challenges you identified.

1

2

3

2. Using point form notes, evaluate the impact and ease of implementation (easy or difficult to achieve).

Criteria	Solution 1	Solution 2
Impact		
Cost		
Ease of Implementation		

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Name: _____ Date: _____

SOLUTION STATEMENT



Choose the solution you are most excited about and believe will have a **positive impact** in your community.

1. How will you address an issue in your community?

Solution Statement:

2. Why did you choose this solution over the others? Consider impact, cost, and ease of implementation.

Peer Review: Share your potential solutions with a peer or another team. Obtain constructive feedback and consider different perspectives before making a final decision. Record their feedback here.



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Day 4:

PRESENTATION PLANNING

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PRESENTATION PLANNING

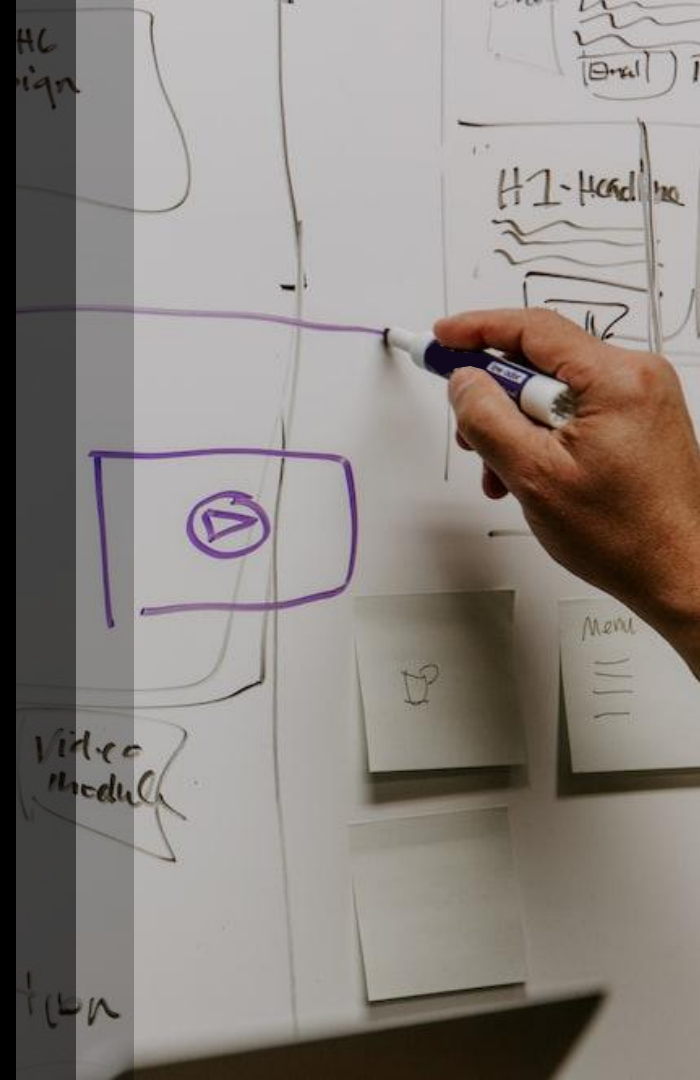
Project Planning

- Clearly define the purpose of your presentation - to **showcase your proposed STEM-based solution** for a local challenge.
- Identify the key messages you want your classmates to take away from your presentation.



Project Planning

- Capture attention with a compelling introduction.
- Clearly state the problem and your proposed solution.
- **Incorporate visuals**, prototype drawings, or examples to enhance understanding.



Project Planning

- Prepare for questions your classmates might have about your issue and proposed solution.
- Identify common questions related to your proposed solution and its implementation.





Your Turn

Plan your presentation and your overall project. (Pages 11 - 13)

Name: _____ Date: _____

PROJECT PRESENTATION

You will create a slideshow presentation to share your idea with your classmates. Use the organizer below to plan the content (clear vocabulary and images) for your slides.

1. Title Slide	2.	3.
4.	5.	6.
7.	8.	9.

Name: _____ Date: _____

PROJECT PLANNING - Part 1

Project Title: _____

Selected Solution: _____

Project Objectives: Clearly state the goals of your project.



Target Audience: Identify the specific group that will benefit from your

Resources, Materials, and Tools: List what you'll need to carry out your

1. _____
2. _____
3. _____
4. _____
5. _____

Name: _____ Date: _____

PROJECT PLANNING - Part 2

Phase 1: Planning

Task	Deadline
Problem Identification	
Finding Solutions	
Overall Idea Pitch	

Phase 2: Editing and Revising Ideas

Task	Deadline
First Review	
Second Review	

Phase 3: Entering the Contest

Task	Deadline
Contest Entry	December 20, 2024

Reflection: What challenges do you anticipate during each phase, and how do you plan to overcome them?

Make sure you review this rubric (Page 14) when you are making your presentation.

Note: Only your teacher will use and see this rubric, not the contest judges.

You can revise your idea using your teacher's feedback.

Name: _____ Date: _____

RUBRIC Total: /80 = %

Project Title: _____

Criteria	Level 1	Level 2	Level 3	Level 4	
Identification of Challenge	Fails to identify or support a challenge.	Identifies with limited depth.	Identifies with adequate research.	Clearly identifies with thorough research.	<u>20</u>
STEM-Based Solution	Proposes an unclear solution with little understanding.	Proposes a basic solution with limited understanding.	Proposes a viable solution with good understanding.	Proposes an innovative solution with clear understanding.	<u>20</u>
Action Plan	Action plan is unclear, with vague goals and steps.	Action plan has somewhat clear goals but lacks detailed steps.	Action plan has clear goals with detailed steps.	Action plan is exceptionally clear, with specific, well-defined goals.	<u>20</u>
Presentation Skills	Presents disorganized content with limited visuals.	Delivers somewhat organized presentation with basic visuals.	Delivers clear and organized presentation with visuals.	Delivers well-organized and engaging presentation.	<u>20</u>

Comments: _____

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