1. What’s the Problem?
Take a week to observe the world around you. Think about undeserved societal or environmental needs. What problems or inconveniences do you encounter? Take notice of problems you see on TV and in the newspaper. What problems do your friends complain about?

✓ Make a list of observations:
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___________________________________________________________________
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2. Get Inspired!

✓ Go to https://www.innovation-gen.com/student-challenge/challenge-topics read through entry topic. Which entry topic makes the biggest impression on you and your team? Why?
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___________________________________________________________________
___________________________________________________________________

3. Get Some Focus!
Take a look at your list of problems, and pick your top three ideas.
Things to consider
• Most problems can be solved, but some can be solved more easily than others.
• Which problems seem the most important to help solve?
• Do you feel passionate about any of the topics?
• Which problem provides you with the best opportunity to use science in your solution?

✓ List your top three problems.

1. ________________________________

2. ________________________________

3. ________________________________
4. Brainstorm Solutions
Now that you have narrowed down your options, it’s time to give some serious thought to possible solutions. For each of the problems, try to develop at least two workable solutions. Keep in mind that judges are looking for NEW, product idea or solution.

✓ Brainstorm ideas/solutions that will impact each problem.

**Problem 1:** ________________________________________________________________

  Solution 1: ________________________________________________________________

  Solution 2: ________________________________________________________________

**Problem 2:** ________________________________________________________________

  Solution 1: ________________________________________________________________

  Solution 2: ________________________________________________________________

**Problem 3:** ________________________________________________________________

  Solution 1: ________________________________________________________________

  Solution 2: ________________________________________________________________

5. Decision Time!
Now it is time to focus on one idea. Take a look at all of your teams' solutions. Which one:
  • best uses scientific principles?
  • would have the greatest impact on people around you?
  • seems the most interesting to work on?
  • seems to be the most doable?
  • is the most creative and innovative?

6. Choose one problem and one solution. Write your choices below.

____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________
6. Hit the Books!
Gather as much information as you can about the problem. Know your topic inside and out! Learn about any science involved in the problem and your solution. Has anyone else tried to solve the problem? What are some other solutions that have been tried? Have they worked? Why do you think your solution will work?

✓ Keep a list of sources that your team uses.

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7. Refine your solution
Now is the time for your team to seriously lay out the details of your solution. Make sure your idea:
• does not already exist.
• is doable.
• is innovative.
• uses science.

8. Describe your solution in detail.

___________________________________________________________________

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8. Get the Word Out – Plan, Plan, Plan!

No one will know about your great idea unless you make a video that can capture their attention and clearly explain your problem and unique product design solution. Having a plan is the key to an engaging video.

✓ Write a script. Write out every word that will be said in the video. This will help each team member understand their role in the video to make sure your collective idea is clearly explained and engaging!

✓ Storyboard the scenes. A storyboard is a series of drawings to show each shot or scene in a video. Use the storyboarding guideline to plan your video. Make note of when you will use music, pictures, graphics, or animation. Be sure not to use copyrighted material.

9. Get the Word Out – Press Record!

It is time to put your storyboard into action.

✓ Record and edit your video.

✓ Have friends and family preview your video and see if they have any helpful advice.

✓ Be sure the final video is between one and two minutes long.

✓ Upload your video to YouTube and publish for public viewing and set to unlisted. Please note, do not set your video to private. (see youtube.com/help for details).


Good luck!