

# What If Competition - 2011



KiwiSpace is proud to support an international student space competition organised by [Anousheh Ansari's](#) nonprofit, [Ahoora Foundation](#).

A summary of the competition is presented below. This competition challenges students to think about the unique benefits that space-based systems provide, to solve real on-earth problems using current and future space technologies.

Full details can be found at the competition website: [www.whatifprize.org](http://www.whatifprize.org)

New Zealand teams entering the competition are encouraged to [Register with KiwiSpace](#) to be included in national leaderboards.

**YOU CAN STILL ENTER:** I have had word from the organiser, that they will still accept entries into the competition, even if you didn't register by the original deadline.

**JUST ANNOUNCED:** The Grand Prize winner will be the best team from all three 1st Place Grade Level Winners. Anousheh Ansari will visit the school of the grand prize winning team during the Spring (NZ Autumn) of 2012.

## Competition Summary

Entrants are required to submit an essay answering the questions posed in the topic (left).

Submissions due:

**20th December 2011**

Elegibility:

**Teams: 1-2 students**

**Ages: 10-14**

**Adult supervisor required**  
(ask your teacher)

[Complete rules and Info.](#)

## Judging Criteria

### **Creativity and innovation:**

How original or unique is the idea?  
Are there creative elements or methods proposed to tackle the challenge or raise awareness of the challenge?

### **Scientific accuracy:**

Is the idea based on scientific principles?

### **Completeness and Presentation:**

How complete is the idea? Are all the assumptions well documented?  
How well are the ideas articulated?  
Are images, videos, and other means used to deliver the proposed solution?

## Topic: Can you save people on earth from ash cloud?

It is the year 2040. Fossil fuels are no longer used around the world- almost everyone on the planet uses solar energy and fuel from plants and algae to meet their energy needs. A volcanic eruption from the Yellowstone Supervolcano has caused the sun to be blocked out by about 10% around the world, due to a giant cloud of ash and aerosol particles that is circling the globe. It is predicted that it will take at least 2-3 years for the emergency to be controlled, though there may be problems for many more years to come.



What if you are on an orbiting space station when the volcano erupts, and your government tells you that you will have to remain on the station for the next 2-3 years, since they cannot send anyone to help you until the emergency situation has been controlled? Your space station is self-sufficient, so you can produce all of the breathable air, food and water that you will need while in orbit. However, your space station is part of a massive orbiting solar energy array, so you can send electricity, images, and messages to a limited number of people on the ground as you pass overhead.

**How would a massive volcanic eruption disrupt life for people, animals and plants on the ground, both near the volcano and worldwide? What could you do to help the emergency situation from the space station? Specifically describe how you would prioritize your time and the solar energy resources on the station to help people on the ground, especially if there were more people that need help than you could ever possibly assist from the space station.**

### Enter now!

Find a friend, or enter on your own - and ask your teacher or an adult to [register you for the competition](#) by 30 September.

### First Place (for each grade-level):

- \$1000 cash scholarship award for each team
- 1st Place Award Certificate
- "What If?" t-shirt for each member of the team

**All students who submit an entry receive:**

- Participation certificate
- "What If?" t-shirt for each member of the team

**Teachers/Adult Sponsors receive:**

- Sponsorship certificate
- A "What If?" t-shirt