



(All Divisions)

Although you are encouraged to follow this year's theme, you may choose to explore a scientific topic of your choice.

(Note that Inventions is a separate section to Information and Scale Models. See page 15 for information about the Working Models section.)

What is an invention?

Inventions are original applications of technology which solve a problem. The scope for inventions is limited only by your imagination. You are asked to apply your knowledge of science to make a **WORKING** invention that has a practical application. Your invention may be a new device, method or process that has not existed before or you may choose to look at an existing device and invent a solution that works better. In the past, students have entered such devices as rain alarms, dog feeders, mechanical lawn edges and a pool fence safety door, among many others.

✓ Tick that you have satisfied each of the guidelines and criteria below.

Entry guidelines

- Your invention must be presented as a **WORKING** invention.
- Your invention must be no larger than 0.5m x 0.5m x 0.5m, and weigh no more than 15 kg unless special permission is granted by the Science Talent Search Section Coordinator.
- You must include with your invention a written report which:
 - explains how your invention solves a problem
 - explains what is original or new about your invention
 - describes how you went about building and testing it, problems you encountered and how they were solved.
 - shows a clear understanding of the science involved.**
 - includes instructions on how to operate your invention where appropriate.

(Your report should be no more than four A4 pages in length, presented in a paper manila folder (not plastic) with a copy of the completed Face Sheet firmly attached to the front.)

- Your invention must be original. (Scale models of existing devices should be entered in the Working Models section.)

- Your invention must be safe to operate in a crowded area and must have appropriate safety features (eg. boilers must have correctly operating safety valves). Dangerous chemicals must not be used and rocket-type inventions will not be judged.
- Attach a photo of your invention to your report to give to the judges on Judging day.



Judging criteria

On Judging Day you will present and discuss your invention with the Judges.

Your invention will score best if:

- it is highly original and/or inventive
- it solves a real problem
- it is well constructed
- it is easy to use
- the scientific principle used is clearly understood and demonstrated
- you have shown resourcefulness in the parts you have chosen to use
- you can explain your invention clearly and accurately in terms of the **science** behind it, how it works and the design process
- you can show that you have put effort into designing and making your invention.

JUDGING DAY FOR INVENTIONS

Saturday 13 August 2011

Methodist Ladies' College,
Fitzwilliam Street Entrance, Kew

Country entrants are strongly encouraged to bring their invention along to Judging Day to discuss their entry with Judges (rather than posting the invention). If country entrants post their model it must be well packaged to avoid damage during transit, and must arrive at STAV by 29 July.

All guidelines should be followed to avoid being disadvantaged during judging.