



## The Big Bang UK Young Scientists and Engineers Competition

The Big Bang Competition is split into two streams:

Science	Engineering
Projects focussed on investigation, discovery and the scientific method	Projects focussed on invention, design and manufacture
Core project subjects: Biology, chemistry, physics or maths	Core project subjects: Physics, maths, D&T or computing
Judging focus: processes used in the project	Judging focus: outcomes of the project

**There are two entry routes into the competition and finalists from both routes are selected to showcase at The Big Bang UK Young Scientists & Engineers Fair on 15 & 16 March 2017**

### Entry route 1 – Regional heats

The Big Bang Near Me Fairs host regional competition heats where projects display their work to compete for places in the finals. All projects that attend the regional heats and meet the eligibility criteria for the Competition will be judged. During the day, projects will be visited by judges who will speak to the student(s) about their project and will score them against a set of criteria. As an example, a project judged at a Near Me Fair in June 2016 may receive a place in the Competition Finals in March 2017.

### Entry route 2 – Online application

Projects can apply via an online application form from July 2016 – 20 November 2016. Students will be required to provide a project summary and written responses to a series of questions and should include as much detail as possible about their project. In addition, students can upload supporting information such as photos or a 2 min video explaining their project; this provides an opportunity to show any graphs or other visual aids that form part of the project.

Once the deadline for entries (20 November) has passed, all the application form and videos are sent out to expert judges who will review and score them against the criteria. Judging will take place in November and the results will be sent to all entrants by the end of December 2016. The winners of the online heats will be invited to the finals.

## Judging Criteria

In all three sets of judging (Near Me Fairs, online entry and Competition Finals) the judges will be looking for projects that score highly against the following main criteria:

- 1. Project concept** - what was the motivation behind your project and what were your aims?
- 2. Project process** - how well did you plan and organise your work? What sort of experiments and research did you do? Were you innovative or creative in your approach?
- 3. Project outcome** - how well did your project achieve its aims? Is your final product or report of a high quality? Does your project have a 'real-world' application?
- 4. Personal skills** - how well did you deal with any problems or challenges? How well do you communicate your project? Does your enthusiasm shine through?

## The Big Bang UK Young Scientist and Engineers Competition Finals

All finalists will be invited to display their projects at The Big Bang Fair at The NEC, Birmingham on Wednesday 15 & Thursday 16 March 2017.

The judging at the Competition Finals will be more in-depth, but the judges will still be using the same main criteria.

All finalists will be judged several times on the Wednesday, not only for the core prizes but also for a variety of sponsor and disciplinary prizes. The judges will all come to the finalists' stands to talk to students about their projects and will usually operate in pairs.

On the Thursday, the top five senior projects in the Science & Engineering categories will present their projects to a team of celebrity judges in the hope to be crowned UK Young Scientist/s or UK Young Engineer/s 2017. Previous celebrity judges have included Professor Brian Cox, Jason Bradbury, Dr Maggie Aderin-Pocock, Liz Bonnin, Ben Miller and Dr Helen Sharman. Training and support will be provided for these projects on the Wednesday afternoon by the competitions team ahead of the celebrity judging.