

PETERHOUSE KELVIN SCIENCE PRIZE

Writing your essay

Write an essay of between 2,000 and 4,000 words on one of the following topics. Please bear in mind that length does not necessarily correlate with quality i.e. essays need not reach the maximum word count. Include a bibliography and ensure all sources are referenced. **Essays must be submitted as a PDF** via the online form. Please ensure that the pages in your essay are numbered and that your name and school appears on every page. Please also name the pdf file in the following format: Prize-Question number-Surname-Initial e.g. Kelvin-2-Smith-F.pdf.

Competitors are advised that the main focus of the essay should **not** be material previously or currently being studied by the entrant as part of their sixth form studies. The entrant may refer to topics that will be studied in future so long as, at the time of the closing date, the entrant has received no formal tuition on the topic in question. All entries must be verified by a Head of Sixth Form or Head of Science confirming that the essay is the entrant's own work and that the main focus of the essay is not something which s/he has hitherto studied in the sixth form classroom. Good luck!

How to submit

A maximum of **two entries** per competition per school can be accepted, except by prior arrangement with your school. All entries must be approved by a teacher, so make sure your English teacher and Head of Department know you are entering and you have the relevant email address to hand when you create your account. Once essays are uploaded to our system, it is not possible to make changes – please ensure you are happy with your work before pressing 'submit'. It is unfortunately not possible to provide feedback on essays.

The deadline for you to submit your essay is 16:00 GMT on **14th March 2016**. Essays which are not submitted by this time will not be considered under any circumstances. Your teacher will then receive emails from Peterhouse asking them to confirm that you are eligible and that the work complies with our guidelines, as listed in this document and on our website. They must do this by 16:00 GMT on **18th March 2016** – please inform them of this. Essays which have not been approved by a teacher will not be considered. For this reason, submission by post, fax or email will only be accepted in exceptional circumstances, and only by prior arrangement. Good luck!

Prizes

All three competitions have a top prize of £500 and a second prize of £250; several further essays will be highly commended. Winners will be contacted by post - please make sure your postal address and other contact details are entered correctly!

Kelvin Science Prize Questions 2016

1. You are given £10 billion to build a telescope. Where, how and why will you build it and how will you use it to uncover the secrets of the Universe?
2. 'There is no such thing as electron deficient compounds, only theory deficient Chemists.'
Discuss.
3. If you were to engineer a tree species to grow tall, what morphological and physiological traits would this species have and how tall could it eventually grow?
Physical laws to aid your explanation are welcomed.
4. "How far is it to the moon?"
This question may be unrelated to the moon. Read what it is really about here:
<http://www.hep.phy.cam.ac.uk/~lester/essayQuestion.html>
5. Is knowledge based medical training obsolete in 2015?