

For Students

Congratulations on being selected to participate in BPhO Round 1.

The competition is designed to challenge and reward the best physicists in British schools and to select the UK Physics Team for competition at international level. Further information about the competition can be found below and on our website: www.bpho.org.uk.

Structure of the paper

The paper comes in two Sections (1hr 20min each) and can be sat in either one or two sittings:

- Section 1: You are given a wide selection of question and can attempt any parts; however a *maximum mark of 40* can be obtained over all parts.
- Section 2: You choose only TWO long answer questions to answer.

The questions

The questions allow you to test your knowledge and to practice open-ended and unstructured questions, as seen at higher levels of study. The questions are about problem solving and you will be expected to find the appropriate 'route' to obtain the solution. You may also need to draw upon different areas of physics to solve a problem.

The paper contains a wide selection of questions for you to choose from. This is because you will have covered different material from students in other schools. The choice ensures there are questions for everyone to answer and you are not expected to have covered all of the material in the paper.

Please do not be disappointed if you find the paper challenging. It is written to challenge students and you will continue to develop your problem solving skills through your studies in physics.

How to prepare

Problem solving skills are developed over time, so practice makes perfect. Visit our website to view past papers with solutions. Work through some problems to familiarise yourself with the style of question.

Tips for answering the questions

You must write down the question in terms of symbols and equations, and try calculating quantities in order to work towards a solution. You will need to show your reasoning by showing your workings. Even if you cannot complete the question, show how you have started your thinking; with ideas and, generally, by drawing a diagram.

P.T.O

Award and prizes

The paper is designed to test understanding and problem solving skills at an advanced level. Therefore gaining an award in the British Physics Olympiad is a prestigious and valued achievement for CVs and UCAS applications.

Over 1,700 students participate each year and awards are allocated based on students' performance. Each year we allocate the following number of awards; 50 Top Gold; 100 Gold; 100 Silver; 200 Bronze I; 200 Bronze II. All participants receive a certificate and Gold award winners receive a book price.

Students who attend the Oxford Training Camp will also be invited to an awards ceremony at the Royal Society in London.

International Physics Olympiad

The top 50 students from BPhO Round 1 will be invited to participate in BPhO Round 2. Students have usually achieved a mark of over 65% to qualify for BPhO Round 2.

The top 15 students from BPhO Round 2 will then be invited to take part in the Oxford training camp held at the University of Oxford. Here the final team for the International Physics Olympiad will be selected. This year the International Physics Olympiad takes place in Astana, Kazakhstan. Visit our website for more information.

The test date

Talk to your teacher about the details of the test. Your teacher will inform you of the test date and venue, and you can make a note here:

Section 1: Test date..... Time.....

Section 2: Test date..... Time.....

Venue.....

Future dates for your diary

BPhO Round 2	Monday 27 th January 2014
Oxford Training Camp – Round 3	Over Easter 2014 vacation - date to be confirmed
International Physics British Olympiad	13 th - 21 st July, 2014

Have fun problem solving!

Kind regards,

Dr Sian Owen
British Physics Olympiad Administrator

Website: www.bpho.org.uk

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