



### Cambridge Chemistry Challenge Lower 6th

Thank you for participating in the 2013 Cambridge Chemistry Challenge for Lower Sixth (Year 12). We were again really pleased at the large number of entries; this year, more than 6200 marks were entered into the database, an increase of more than 45% from last year.

The feedback from schools was overwhelmingly positive; “We are grateful for opportunities like this where we can have a focus for stretching our most able pupils”, “This was, again, a really excellent paper and an extremely interesting and challenging exercise for our top students”. Initial detailed comments received suggested that each question had marks accessible to all AS students but, as ever, the paper is designed to challenge the very brightest. Performances of particular note were the six Gold awards and one Roentgenium given to students in Year 11 or below – this included one Year 9 student who was given a Gold award.

This year we accepted entries, as an experiment, from three international centres in China, Thailand and Singapore. We have not included these students in the grade analysis below, but interestingly they exactly mirrored the range of results obtained from UK centres.

The grade boundaries for Roentgenium and Gold were approximately the same as last year, but were slightly more generous for Silver and Copper. We did not feel that the material in the paper was substantially harder this year, but some schools reported time pressure during the exam.

The highest scoring papers were moderated by the committee with quite a number moving both up and down.

The paper, the mark-scheme, and the examiners' comments will appear on the website soon. We hope you feel taking part in this competition was a worthwhile experience and we would welcome any additional feedback; please email [feedback@C3L6.com](mailto:feedback@C3L6.com).

For your interest a summary of the results is included over the page.

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## Results Summary

We felt a mark of 20 or above represented a very good achievement on this paper and showed the students were able to think their way successfully through unfamiliar material. More than a fifth of the candidates were of this standard and achieved at least a Silver Award. A mark over 28/60 was considered very good indeed and demonstrated a significant leap beyond A-level. These students were given a Gold Award or higher. The highest award, the Roentgenium, was only given to the top 0.8% of students: they have been invited to attend a residential course at the University of Cambridge. It was very pleasing to see 39 schools from *all* sectors of secondary education represented in this group; this confirms our view that talented and ambitious students can be found everywhere. 435 schools submitted at least one mark; very few of these schools did not achieve any award. A few schools registered at least one student but did not submit any marks. We hope this group will be encouraged to submit their marks in the future.

We must stress again that the grade boundaries on this paper, and therefore what represents a good achievement, are very different from the AS papers that these students are used to tackling. Some schools did not submit their marks because they thought that a mark of less than 50% was worthless. On the contrary: 28/60 merited a Gold award! Much has been spoken recently about the “resilience” of A level students, and the importance of students keeping going with questions, even in the face of difficulty. We think that the C3L6 paper provides a great opportunity to practise these skills. It should be remembered that a score of 70% in a university exam is a first-class performance and very few undergraduates score anything like the scores that AS exams produce.

| Award       | Mark  | Number of Students | Percentage |
|-------------|-------|--------------------|------------|
| Roentgenium | 44-60 | 48                 | 0.77%      |
| Gold        | 28-43 | 447                | 7.2%       |
| Silver      | 20-27 | 840                | 13.5%      |
| Copper      | 10-19 | 2325               | 37.4%      |
| No Award    | 0-9   | 2560               | 41.2%      |

