

Moderation Feedback

Assessment Panel:	Chemistry
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Qualification area

Subject(s) and Level(s) included in this report	Chemistry Acc 3, Int 1, Int 2, Higher and Advanced Higher
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Central Moderation

General comments on central moderation activity

In April 2002 25% of centres did not send evidence for Outcome 3 (O3). In anticipation of this event the SQA issued clear, unambiguous instructions regarding evidence required for moderation so only six centres were not accepted; four sent no O3 evidence, one sent O3 evidence for the wrong Unit.

Centres generally showed a high standard of candidate evidence which had been marked carefully in accordance with national guidelines.

Specific issues identified

Four centres did not face candidate evidence with SQA flyleaves and two centres filled out form MSOO (Moderation Sample form) incorrectly. This is most likely due to a breakdown in communication within the centre between the SQA Co-ordinator and the PT.

Outcomes 1 & 2

- 1 DO7012 NAB 001 Q 18 a) (i) 'oxygen' is an acceptable answer as well as 'air'. Air/oxygen and phenol are needed for ½ mark, the second ½ mark is gained for the answer oxidation. A significant number of centres showed confusion on these points though the distribution of marks is clearly stated in the mark scheme.
- 2 A minority of centres did not appear to realize a NAB test result of 17.5 should be rounded up to 18.
- 3 Approximately 25% of centres seemed unaware of either the *Update on Chemistry NABs: Higher Chemistry Marking Guidelines*; or *General information for markers*. The latter were issued with NAB001, Unit 1 at each NQ level and the former were sent to all centres in 2000. The moderation team enclosed photocopies of the relevant documents with the feedback sent to each centre where these issues were identified.

Outcome 3

- 1 HSDU material produced for level 12 (Higher) gives clear guidelines for assessment of O3. No such material is available at level 13 (Advanced Higher) and examples were seen of level 13 O3 evidence contained incorrect calculations and evidence (which showed no sign of internal assessment) where the candidates had not overtaken PC(c) or PC(e).

- 2 Higher and Int 2, Unit 1, PPAs 1&2, candidates are still quoting calculated rates to one or, at most, two significant figures. Centres should use these PPAs to emphasise the lower error in the longer time measurements and encourage the use of at least three sig. figs.
- 3 Graphs were the weakest part of many O3 reports. 'Joining the dots' was common. This leads to the inclusion of rogue results which would have been easily identified if a line of best fit had been used, as per the mark scheme.
- 4 O3 evidence with *temperature* as the independent variable frequently included values of exactly 20°C, 30°C and 40°C. Centres should encourage candidates to use three different **accurately** measured temperatures at 10 to 15°C intervals.
- 5 A significant minority of centres showed evidence of internal moderation which ensures a consistent approach to assessment of candidate evidence and streamlines the central moderation event. Many centres clearly indicate why marks have been awarded or deducted; this is of great help to moderators and is an example of best practice. It would be very useful if a signature and date were added to the report to confirm internal moderation.
- 6 The document issued 7 December 2001 *Outcome of the Phase 1 Subject Reviews* states candidates will be required 'to produce evidence once for outcome 3 in each science course at a particular level'. At DO 12 (Higher) level only PPAs from Unit 1 have core skills of problem solving embedded which means that one of these three PPA reports will be needed no matter which Unit is being moderated.