

National Qualifications 2002-3

Chemistry: Moderation Guidance for Centres

If you have been selected for central moderation, you must include evidence of each of the Outcomes for the unit selected for moderation for each candidate in the sample.

For units at Access 3, Int. 1, Int. 2, Higher and Advanced Higher you must include:

- a unit test for Outcomes 1 and 2, and
- one Outcome 3 report.

The evidence for each candidate should be clearly marked and annotated to support the decision made for that candidate. Where a candidate has taken more than one attempt at each test or report it is only necessary to submit the final version.

It would be extremely helpful to moderators if you could include a copy of the NAB test used together with a copy of the marking scheme used for each test especially if additional acceptable answers were agreed with centre staff as the result of internal moderation.

Outcome 3 Reports

For Access 3 to Higher level the Outcome 3 report **must be from a Unit 1 PPA** (prescribed practical activity) irrespective of the unit selected for moderation.

Completion Dates and Processing Results

Care should be taken in deciding on the completion date for each unit as a candidate cannot be resultated for a unit until all of the evidence for that unit has been assessed. Centres are reminded that they are required to have a completion date of the 31 March for at least one unit in each course. This means that the Outcome 3 report must be completed before this date.

Access 3 Chemistry

Only the Access 3 Chemistry PPAs from Unit 1 (Chemistry in Action) are of an appropriate level of demand for the automatic certification of the associated core skill profile at Access 3 and so one of the following PPAs must be submitted:

- the effect of temperature changes on dissolving speed
- the effect of concentration changes on reaction speed
- testing the pH of solutions.

These PPAs for Access 3 Chemistry are identical to those for Int. 1 Chemistry Unit 1 (Chemistry in Action).

Int. 1 Chemistry

Only the Int. 1 Chemistry PPAs from Unit 1 (Chemistry in Action) are of an appropriate level of demand for the automatic certification of the core skill of Problem Solving at Int. 1 and so one of the following PPAs must be submitted:

- the effect of temperature changes on dissolving speed
- the effect of concentration changes on reaction speed
- testing the pH of solutions.

Candidates may transfer evidence of Outcome 3 from Int. 2 Chemistry Unit 1 (Building Blocks) to Int. 1 Chemistry in respect of the PPAs:

- the effect of concentration changes on reaction rate
- the effect of temperature changes on reaction rate.

Int. 2 Chemistry

Only the Int. 2 Chemistry PPAs from Unit 1 (Chemistry in Action) are of an appropriate level of demand for the automatic certification of the core skill of Problem Solving at Int. 2 and so one of the following PPAs must be submitted:

- the effect of concentration changes on reaction rate
- the effect of temperature changes on reaction rate
- electrolysis.

Candidates may transfer evidence of Outcome 3 from Higher Chemistry Unit 1 (Energy Matters) to Int. 2 Chemistry in respect of PPAs:

- the effect of concentration changes on reaction rate
- the effect of temperature changes on reaction rate.

Higher Chemistry

Only the Higher Chemistry PPAs from Unit 1 (Energy Matters) are of an appropriate level of demand for the automatic certification of the core skill of Problem Solving at Higher and so one of the following PPAs must be submitted:

- the effect of concentration changes on reaction rate
- the effect of temperature changes on reaction rate
- enthalpy of combustion.

Advanced Higher Chemistry

The Outcome 3 report submitted for evidence can be on any one of the following PPAs:

Unit 1 (Electronic Structure and the Periodic Table)

- Preparation of potassium trioxalatoferrate (III)
- Colorimetric determination of manganese in steel

Unit 2 (Principles of Chemical Reactions)

- Complexometric determination of nickel using EDTA
- Gravimetric determination of water in hydrated barium chloride
- Determination of a partition coefficient
- Verification of a thermodynamic prediction
- Kinetics of the acid-catalysed propanone/iodine reaction

Unit 3 (Organic Chemistry)

- Preparation of cyclohexene
- Identification by derivative formation
- Preparation of benzoic acid by hydrolysis of ethyl benzoate
- Preparation of aspirin
- Aspirin determination.