

# 2021 March Moderation - Report



## Meeting Details

Which meeting is this report for?

Science - Chemistry Level 4

## Moderation Details for Calibration - Sample 1

Sample 1 - Please identify each criterion being moderated and IF SELECTED the elements within that criterion

Criterion 7 = Overall

Sample 1 - What rating (or ratings) has the group assigned this sample?

C/C+

Sample 1 - What evidence supports the rating (or ratings) the group has given?

This was a challenging test with some questions that were borderline on the syllabus including the x-ray crystallography question and naming a molecule with more than one functional group. The knowledge of benzene and polymerisation was not adequate.

Sample 1 - What evidence would you need to see in order to assign a higher rating (or ratings)?

Knowledge of hydrogen bonding. The difference between chemical bonds and intermolecular forces needs to be explained more clearly. An improved understanding of synthesis in general and especially of polymerisation. Read the question carefully to make sure all facets are addressed. Learn structure, properties and reactivities of benzene as well as addition and condensation polymerisation.

Missing key terms.

Sample 1 - Summary of group consensus with comments to element level if applicable.

The student had little knowledge of the chemistry of aromatic compounds or of polymerisation.

Sample 1 - What actions would you recommend for teachers to help the student attain a higher rating (or ratings)?

Benzene undergoes substitution reactions unlike alkenes which undergo addition reactions. The student needs to tighten up on naming of organic compounds. Learn about polymerisation- addition and condensation reactions. Have a closer look at the synthetic sequences on the information sheet. Practice naming compounds. There are many videos on YouTube available eg Leah4 Science.

More lines on the test to show what level of detail is expected.

### Moderation Details for Calibration - Sample 2

Sample 2 - Please identify each criterion being moderated and IF SELECTED the elements within that criterion

Criterion 7 = Overall

Sample 2 - What rating (or ratings) has the group assigned this sample?

B

Sample 2 - What evidence supports the rating (or ratings) the group has given?

Did not understand infra red spectroscopy, misidentified the functional group.

Sample 2 - What evidence would you need to see in order to assign a higher rating (or ratings)?

Review spectroscopic methods, in particular identify key functional group absorbances in IR. Also fully outline MS fragmentation patterns. Finally apply understanding of IM forces to molecular structures.

Sample 2 - Summary of group consensus with comments to element level if applicable.

The student performed more strongly than the first student.

Sample 2 - What actions would you recommend for teachers to help the student attain a higher rating (or ratings)?

Review spectroscopic methods, in particular identify key functional group absorbances in IR. Also fully outline MS fragmentation patterns. Finally apply understanding of IM forces to molecular structures. Look in more detail at intermolecular forces versus intramolecular forces.

### Planning for September Moderation 2021 - Statewide Samples

For all courses please nominate the criteria and elements (if desired) for moderation.

Criterion 5

State the name of the person who will be providing the samples for moderation

TASC previous examination questions from 2020 exam

Sharing Resources

Please record any links to or details of resources that were shared, or describe any assessment strategies that were discussed.

None

Course Support

Please provide details of any future focus and ways forward you would like Years 9 to 12 Learning to consider in relation to this course:

None