# 2018 September Moderation - Report



### Meeting Details

Meeting took place in:

North

AM or PM session?

AM

Which AM Meeting is this report for?

Science - Physical Sciences Level 3

Moderation Leader Name Jane Hall-Dadson

Moderation Leader Email jane.hall-dadson@education.tas.gov.au

Minute Keeper

Kym Knights

Minute Keeper Email kym.knights@education.tas.gov.au

#### Attendance

Please enter the name and school for all attendees. This can be copied and pasted from the registration list sent to the Moderation Leader.

Jane Hall-Dadson Lucy Withers Maria Windsor Darryl Bain Mike Karpinskyj Tony Cummings Kym Knights Kylie Waters Roberta Lewis Ann Burke Sue Saunders

Sue Saunders Luke Hochman Jan Archer Stewart Reid Mandy Simmons Kim McInnes Fiona Taylor Nick Bean Mark Cox





Luke Hammond Darren Chillcott Matthew Kent Roger Morgan David Lincolne

Apologies/absence s - please enter the names of teachers and their schools who appeared on the moderation leaders list who did not attend the meeting.

Jamie Wall

## Moderation Details for Calibration - Sample 1

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

Criterion 4 = Overall, Element 1, Element 2, Element 3, Element 4, Element 5, Element 6

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

В-

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

Element I - Parts of QI - Q4 show evidence of the ability to interpret and describe similarities nd differences in grps 1,2,17 and 18.

Element 2 - Q5 looks and trends and differences and understanding is partially demonstrated.

Element 3- Question I and 4 - atomic composition calculations

Element 4 - 3/4 marks for question 9 - describing concepts in nuclear decay

Element 6 - interprets problems making predictions in Q7

Element 5 - Q8 Interprets graphical data and generates additional data associated with nuclear decay(activity at 18





hours calculated correctly and time to drop to 37.5 almost correct)

Sample I - What evidence would you need to see in order to assign a higher rating (or ratings)? Q5 - familiarity with charge of nucleus affecting the size of the atom (comparing Ar with a group 17 is problematic, better to ask them to compare gps 16 and 17)

It would be better to have another question asking the student to apply and describe trends in the periodic table in familiar contexts.

In question 7b they have given a generic answer where they haven't taken context of question into account.

Mention of the ionisation properties of the alpha particle was not related to the destroying of cancer cells.

Sample I -Summary of group consensus at element level with comments B-

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

Encourage the student to read questions carefully and ensure they are addressing all requirements.

# Moderation Details for Calibration - Sample 2

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

Crit 4 = All elements

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

It was not possible to assign a rating to this paper

Sample 2 - What evidence supports

Too many of the questions in this paper are beyond the scope of the syllabus.







the rating (or ratings) the group has given?

To assign marks when the questions are not related to the elements of the criteria is unfair.

Criterion 2 could not be assessed as this should be done through practical tasks and reports.

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

Responses to the simpler questions were not completed well, while those beyond the scope of the syllabus were attempted and would have gained at least partial marks.

There were insufficient questions at PSC3C level to adequately assess the student's understanding of C4.

Concern was expressed that this higher level content may have been taught at the expense of time spent building understanding at a level appropriate to the course.

Specifically Q2, 3b, 4di) were at Chemistry 4C level and Q5, 8 required understanding the is appropriate in Physics 4C.

Q1 relates to Criterion 3.

Q4 had a spectrograph that was very hard to interpret and beyond the course requirements.

Q3f relates to Criterion 7 or 8.

Overall the paper was too difficult, had overcomplicated or ambiguous language and involved too much reading.

Sample 2 -Summary of group consensus at element level with comments See above

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

Ensure that adequate opportunities to show understanding at PSC3C level are provided.

Moderation Details for Calibration - Sample 3

Sample 3 - Please identify each

Crit 4 = All elements, Element 1, Element 2, Element 3,







criterion being moderated and IF SELECTED the elements within that criterion Element 4, Element 5, Element 6

Sample 3 - What rating (or ratings) has the group assigned this sample?

В

Sample 3 - What evidence supports the rating (or ratings) the group has given? Calculations around understanding of half lives are adequately completed, properties of radiation is adequately explained, but not all aspects are addressed in all questions.

Sample 3 - What evidence would you need to see in order to assign a higher rating (or ratings)? More detailed responses to questions are required. Specific examples eg the value of the half life of Ba-137m in question 8 should be included when asked to "Explain"

Sample 3 -Summary of group consensus at element level with comments В

Sample 3- What actions would you recommend for teachers to help the student attain a higher rating (or ratings)?

Take care when converting percentages to decimals and ensure that percentages add up to 100%.

Be careful to set tasks that do not go beyond the scope of the course, Q4b asks for an explanation of the working of a mass spectrometer, with a diagram. Understanding that elements and ionised and deflected by a magnetic field is enough in this course. Question 6b also goes beyond necessary understanding.

## Planning for March Moderation 2019 - Statewide Samples

Please select all that apply

Level 3 or 4

For Level 3 and 4 courses please suggest criteria

Criterion 6





for consideration by CTL's.

Please enter the name and email address of the person providing the samples: Peter Wright

Email

peter.wright@education.tas.gov.au

# Sharing Resources

Please record any links to or details of resources that were shared, or describe any assessment strategies that were discussed. Retesting - discussion about the policy for repeating criterion tests to raise internal marks at each school.

Do they retest each criteria?

How is this negotiated?

#### Course Support



