

Moderators' Report/ Principal Moderator Feedback

June 2011

GCSE Astronomy
2AS01

Edexcel is one of the leading examining and awarding bodies in the UK and throughout the world. We provide a wide range of qualifications including academic, vocational, occupational and specific programmes for employers.

Through a network of UK and overseas offices, Edexcel's centres receive the support they need to help them deliver their education and training programmes to learners.

For further information, please call our GCE line on 0844 576 0025, our GCSE team on 0844 576 0027, or visit our website at www.edexcel.com

If you have any subject specific questions about the content of this Moderators' Report that require the help of a subject specialist, you may find our **Ask The Expert** email service helpful.

Ask The Expert can be accessed online at the following link:

<http://www.edexcel.com/Aboutus/contact-us/>

Alternatively, you can contact our Science Advisor directly by sending an email to Stephen Nugus on ScienceSubjectAdvisor@EdexcelExperts.co.uk

You can also telephone 0844 576 0037 to speak to a member of our subject advisor team.

June 2011

Publications Code UG027453

All the material in this publication is copyright

© Edexcel Ltd 2011

GCSE Astronomy

This was the year of first examination for the new Controlled Assessment system for GCSE Astronomy. The work submitted this summer showed clearly that the new system's intention to give students a greater insight into the principles of astronomical observation had clearly been achieved. The design of the new Controlled Assessment system reflected a strong feeling amongst both teachers and professional astronomers that students should understand how accurate astronomical observations are taken and how they are used to advance scientific understanding. Centres had clearly appreciated this new direction and had clearly prepared their students fully for their chosen Controlled Assessment tasks, enabling them to make reliable astronomical observations and to make meaningful deductions from them.

Several of the suggested Controlled Assessment tasks in the Specification had been developed in collaboration with professional astronomers and it was pleasing to see the very healthy take-up for these tasks, particularly the use of robotic telescopes to image objects from the Messier Catalogue. The remote use of robotic telescopes via the Internet needs to be carefully handled within the requirements of Controlled Assessment and further guidance on this can be found on the Controlled Assessment page of the GCSE Astronomy area at:
www.edexcel.com/quals/gcse/gcse09/Astronomy/Pages/default.aspx

Centres are also reminded that only those tasks listed in the Specification can be accepted for Controlled Assessment. Centres should not allow candidates to attempt tasks of their own design. Similarly, centres should encourage their candidates to read the exact requirements of the tasks which they are attempting. There were a number of instances this summer of candidates who had not completed all the observations required by the task, as set out in the Specification. These cases all resulted in a substantial loss of marks for the candidate.

It would appear that the new Controlled Assessment tasks, with their focus on observation, have allowed candidates achieving some of the lower grades to show fully their observational skills, whilst at the same time providing meaningful challenge for the highest attaining candidates.

This may be related to the new Assessment Criteria, which delineate clearly the four stages in astronomical observation – design, observation, analysis and evaluation. Centres wishing to ensure that their candidates gain the highest grades possible are encouraged to explain fully the different requirements of these four sections to their candidates. For the highest scores, candidates must address each section in full, linking each to the outcomes required in the task title. This approach will also ensure that students have a deeper understanding of the astronomical principles underlying the task, resulting also in improved results for unit 2 of this qualification.

Several examples were seen this year of candidates who had very impressive observations but who failed to achieve the highest scores due to no or only cursory

attention to the other three sections of design, analysis and evaluation. No matter how high the quality of the observations, the Assessment Criteria are quite distinct and such observations on their own can only ever account for 25% of the final mark for the task. It needs to be brought to the attention of some centres that this represents something of a change from the previous Specification.

Almost all centres correctly administered the Controlled Assessment tasks and provided their Moderator with the correct sample of work, along with yellow OPTEMS sheet highest and lowest scoring candidates and Candidate Record Sheets for all candidates. Almost all centres used the Assessment Criteria to place their candidates in the correct order in terms of the quality of their work, although some leniency was noted across a number of centres. Centres are reminded of the importance of adhering to the descriptors for the Assessment Criteria in the Specification and of looking closely at the samples of Controlled Assessment work in the Controlled Assessment Teacher Support Book, available for download from: www.edexcel.com/quals/gcse/gcse09/Astronomy/Pages/default.aspx.

Grade Boundaries

Grade boundaries for this, and all other papers, can be found on the website on this link:

<http://www.edexcel.com/iwantto/Pages/grade-boundaries.aspx>

Further copies of this publication are available from
Edexcel Publications, Adamsway, Mansfield, Notts, NG18 4FN

Telephone 01623 467467
Fax 01623 450481
Email publication.orders@edexcel.com
Order Code UG027453 June 2011

For more information on Edexcel qualifications, please visit
www.edexcel.com/quals

Pearson Education Limited. Registered company number 872828
with its registered office at Edinburgh Gate, Harlow, Essex CM20 2JE

Ofqual


