

Moderators' Report/ Principal Moderator Feedback

Summer 2013

GCSE Astronomy (5AS02) Paper 01



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GCSE Astronomy

As in previous years since its introduction, the Controlled Assessment work submitted this summer shows that the system gives students an effective insight into the principles of astronomical observation.

The majority of centres had clearly prepared their students fully for their chosen Controlled Assessment tasks, enabling them to take reliable astronomical observations and to make meaningful deductions from them.

Many candidates were clearly selecting from the full range of observational tasks available in the Specification, thus ensuring that their Controlled Assessment work covered several areas or techniques and helped to support their work in the 5AS01 examination paper.

As in previous years, some leniency was seen in the awarding of marks towards the higher end of the range. Two main reasons for this were identified: Firstly, full marks in each strand of the Assessment Criteria can only be awarded if all the requirements of the task title have been met. For example, the Lunar Features tasks (A1 and B1) require the comparison of the appearance of certain features at different lunar phases. Consequently, students who have not explicitly set out this comparison or who have simply presented a set of drawings or photographs of the whole visible lunar surface cannot receive full marks for Observation, no matter how high the quality of their drawings or photographs.

Similarly, the Constellation Drawing/Photography tasks (A4 and B4) require estimates of the magnitudes of the major stars in the constellation, along with notes of any colours visible. Candidates who do not make any estimates of magnitudes cannot therefore receive full marks for Observation, no matter how effective their actual constellation drawings or photographs. In addition, by leaving out the quantitative data of magnitude estimates, they will also have hampered their subsequent work in the Analysis and Evaluation strands.

Secondly, centres are reminded that there are definite requirements for the award of marks in the highest strand (4 or 5) of all the Assessment Criteria, particularly those of Design and Evaluation.

In the design criterion, many centres are awarding full marks without noting the requirement for the candidate to evaluate fully a number of alternative observing sites, instruments, targets or times, using detailed astronomical knowledge and understanding. Many centres appear to be satisfied with a detailed description of the astronomical principles underlying the task (as was largely acceptable in the previous legacy Specification for GCSE Astronomy).

In the Evaluation criterion, centres are not insisting on the need for some detailed suggestions for the improvement or extension of the task when awarding full marks. Very general comments about taking more readings or using more accurate equipment are insufficient on their own. A few centres would appear to be advising their candidates to write up their observations in a similar style to that required by the previous version of this Specification, i.e. confusing Statement of Task for Design and missing out any systematic or quantitative evaluation altogether.

The above issues are now fully exemplified by the samples of Controlled Assessment work, each accompanied by a marking commentary, which are available from the Edexcel website at: <u>www.edexcel.com/quals/gcse/gcse09/Astronomy/Pages/default.aspx</u>

Once again, almost all centres correctly administered the Controlled Assessment tasks and provided their moderator with the correct sample of work, along with the yellow OPTEMS sheet and a Candidate Record Sheet for each candidates.

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







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