

Candidate Style Answers

GCSE Design & Technology: Industrial Technology

OCR GCSE in Industrial Technology: J304

Unit: A542

These candidate style answers are designed to accompany the OCR GCSE Industrial Technology specification for teaching from September 2009.

GCSE Design & Technology: Industrial Technology

Unit A542 Sustainable Design

OCR has produced these candidate style answers to support teachers in interpreting the assessment criteria for the new GCSE specifications and to bridge the gap between new specification release and availability of exemplar candidate work.

This content has been produced by senior OCR examiners, with the support of the Qualification Manager, to illustrate how the sample assessment questions might be answered and provide some commentary on what factors contribute to an overall grading. The candidate style answers are not written in a way that is intended to replicate student work but to demonstrate what a “good” or “excellent” response might include, supported by examiner commentary and conclusions.

As these responses have not been through full moderation and do not replicate student work, they have not been graded and are instead, banded “medium” or “high” to give an indication of the level of each response.

Please note that this resource is provided for advice and guidance only and does not in any way constitute an indication of grade boundaries or endorsed answers.

18d) Machine tooling can wear after repeated use in manufacturing products. Discuss ways that wear can be minimized. (7)	
<i>Candidate style answer</i>	<i>Examiner’s commentary</i>
<p><i>The tooling for manufacturing products can wear in two ways. The cutting tools can wear out and the machines can also wear.</i></p> <p><i>To minimize the wear on the cutting tools they should first be sharpened properly and set up correctly. On a lathe the cutting edge needs to be on the centre height of the machine. To make them last as long as possible the machine should be set to run at the right speed - fast for small diameters and slower for large diameters.</i></p> <p><i>If CNC machines are used, they are programmed to go at the right speed and can make adjustments to allow for tool wear.</i></p> <p><i>The machines must be kept</i></p>	<p>The candidate has covered the relevant areas in sufficient detail to produce a high level response to this question.</p> <p>Knowledge and understanding of the subject matter is demonstrated with detail clearly stated and technical terminology is used to good effect in most cases where appropriate.</p> <p>The response is generally well structured and shows competence in spelling and the application of the rules of grammar.</p>

maintained and lubricated to cut down wear and the size of cut must not be too big. If the machine becomes too worn it will not produce good quality products.