Applied Science

OCR GCE Unit G627 Investigating the Scientist's Work

Unit Recording Sheet

Please read the instructions printed at the end of this form. **One** of these sheets, suitably completed, should be attached to the assessed work of **each** candidate.

Unit Title	**8 Investigating the Scientist's Work**	**Unit Code**	**G627**	**Session**	Jan / June	**Year**	**2**	**0**	**0**	
Centre Name					**Centre Number**					
Candidate Name					**Candidate Number**					

Evidence: an information pack which can be used and understood by a group of scientific research technicians.

Criteria			**Teacher Comment**	**Page No.**
AO1(a).1: You will produce a workable and clearly presented plan for one investigation linked to the vocational context; the plan shows a basic knowledge of the scientific principles and experimental technique involved; **[0 1 2]**	**AO1(a).2:** You will produce an achievable and logical presented plan, for **one** investigation with direct vocational involvement which shows a sound knowledge and understanding of the aims and objectives set; **[3]**	**AO1(a).3:** You will produce a comprehensive, realistic, achievable and logically presented plan for **one** suitable investigation which demonstrates through knowledge and understanding of the aims and objectives. **[4 5]**	**Mark**	
AO1(b).1: You will show evidence of selected research about suitable experimental work and health and safety, identifying information on deadlines you will need to be aware of; **[0 1 2]**	**AO1(b).2:** You will show evidence of a wide range of relevant research, selected from a number of sources with suitable validation, identifying constraints you will have to work under and how they can be overcome; **[3]**	**AO1(b).3:** You will show evidence of thorough research and suitable selection of information from a wide range of sources, identifying and discussing constraints, their effect and suitable contingency plans. **[4 5]**	**Mark**	
AO2(a).1: You will record the results of the investigation and present them in a suitable format; **[0 1]**	**AO2(a).2:** You will produce a description and explanation of the results presented in a suitable format; **[2 3]**	**AO2(a).3:** You will record and present the results of the investigation in a suitable manner and provide a detailed explanation. **[4]**	**Mark**	
AO2(b).1: You will show limited processing and interpretation of the data collected with a suitable link to the vocational context set; **[0 1 2]**	**AO2(b).2:** You will show suitable processing and interpretation of the data collected, relating to the objectives of the investigation; **[3]**	**AO2(b).3:** You will show evidence that the appropriate method of processing has been selected and used and any anomalous data identified and evaluated; a critical analysis of the results relating to the objectives of the investigation. **[4 5]**	**Mark**	
AO2(c).1: You will carry out a number of completed straightforward calculations; **[0 1 2]**	**AO2(c).2:** You will carry out o number of complex calculations completed with partial success; **[3]**	**AO2(c).3:** You will carry out a number of complex calculations to completion, obtaining the correct solution to the appropriate degree of accuracy. **[4 5]**	**Mark**	

AO3(a).1: You will provide evidence that the experimental procedure or trails in the investigation have been safely and correctly carried out and repeated where necessary using risk assessments; **[0 1 2]**	AO3(a).2: You will show evidence that a range of experimental techniques and procedures has been safely and skilfully completed, using suitably detailed risk assessments, within the constraints of the plan; you will demonstrate that an appropriate degree of accuracy has been used; **[3 4]**	**AO3(a).3:** You will show evidence that a wide range of experimental techniques and procedures has been safely, skilfully, accurately and independently completed, using risk assessment which you have produced. **[5 6]**	**Mark**	
AO3(b).1: You will produce a record which shows that the plan has been followed and monitored; **[0 1 2]**	**AO3(b).2:** You will record any modifications or changes needed to be made, providing reasons for the changes; **[3]**	**AO3(b).3:** You will carry out and provide explanations of any strategies used to overcome any deficiencies or constraints of the plan. **[4 5]**	**Mark**	
AO3(c).1: You will produce a clear and accurate report of the outcomes of the investigation, using basic scientific terminology correctly, which can be understood by research techniques; **[0 1 2]**	**AO3(c).2:** You will produce a logical and accurate report of the outcomes of the investigation, using scientific terminology correctly, which can be understood and used by research technicians; there is evidence to show understanding of the scientific concepts involved in the investigation; **[3 4 5]**	**AO3(c).3:** You will produce a logical and well structured report of the outcomes of the investigation using the appropriate scientific terminology, suitable for use by scientific technicians; this will show high level of scientific knowledge and understanding relevant to the investigation and its applied implications. **[6 7]**	**Mark**	
AO3(d).1: You will interpret the data; **[0 1]**	**AO3(d).2:** You will assess the reliability of the data and how well the investigation achieved its aims; **[2 3]**	**AO3(d).3:** You will discuss the reliability of the investigation with a detailed scientific discussion of how the investigation achieved its aims and objectives. **[4]**	**Mark**	
AO3(e).1: You will produce a basic evaluation of the investigation; **[0 1]**	**AO3(e).2:** You will produce an evaluation of the investigation; **[2 3]**	**AO3(e).3:** You will produce a critical evaluation of the investigation, incorporating suitable amendments where appropriate. **[4]**	**Mark**	
		Total/50		

If this work is a re-sit, please tick		Session and Year of previous submission	Jan / June	**2**	**0**	**0**		Please tick to indicate this work has been standardised internally

Please note: This form may be updated on an annual basis. The current version of this form will be available on the OCR website (www.ocr.org.uk).
A completed Centre Authentication form CCS160 **must** accompany the MS1 when it is sent to the moderator.

Guidance on Completion of this Form

1 **One** sheet should be used for each candidate.
2 Please ensure that the appropriate boxes at the top of the form are completed.
3 Please enter *specific* page numbers where evidence can be found in the portfolio, and where possible, indicate to which part of the text in the mark band the evidence relates.
4 Circle the mark awarded for each strand of the marking criteria in the appropriate box and also enter the circled mark in the final column.
5 Add the marks for the strands together to give a total out of 50. Enter this total in the relevant box.