

# 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.

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

**Evidence:** The candidate needs to produce an information pack which can be used and understood by a group of scientific research technicians.

<b>Criteria</b>			<b>Teacher Comment</b>			<b>Mark</b>	<b>Page No.</b>
AO1(a).1: Candidate will produce a workable and clearly presented plan for <b>one</b> investigation linked to a vocational context; the plan shows <ul style="list-style-type: none"> <li>• the aims and objectives</li> <li>• a basic knowledge of the scientific principles</li> <li>• experimental techniques to be used</li> <li>• timing for activities</li> <li>• information on deadlines candidate will need to be aware of;</li> </ul>	AO1(a).2: candidate will produce an achievable and logically presented plan, for <b>one</b> investigation with direct vocational involvement which shows <ul style="list-style-type: none"> <li>• a sound knowledge and understanding of the aims and objectives set</li> <li>• a range of experimental techniques which will be used</li> <li>• appropriate detailed time information for all activities</li> <li>• identification of constraints candidate will have to work under and how they can be overcome;</li> </ul>	AO1(a).3: candidate will produce a comprehensive, realistic, achievable and logically presented plan for <b>one</b> suitable investigation which demonstrates <ul style="list-style-type: none"> <li>• a thorough knowledge and understanding of the objectives</li> <li>• a wide range of experimental techniques which will be used</li> <li>• appropriate workable time guidelines</li> <li>• identification and discussion of the constraints, their effect and suitable contingency plans.</li> </ul>					
[0 1 2]	[3]	[4 5]					
AO1(b).1: Candidate will show evidence of selected research about an investigation to include <ul style="list-style-type: none"> <li>• vocational links</li> <li>• suitable experimental work</li> <li>• health and safety guidance</li> <li>• referencing of sources used;</li> </ul>	AO1(b).2: candidate will show evidence of a wide range of relevant research, selected from a number of sources about an investigation to include <ul style="list-style-type: none"> <li>• relevant vocational links</li> <li>• a range of experimental work</li> <li>• related health &amp; safety guidance</li> <li>• related referencing of sources;</li> </ul>	AO1(b).3: candidate will show evidence of thorough research and suitable selection of information from a wide range of sources, about an investigation to include <ul style="list-style-type: none"> <li>• researched vocational links</li> <li>• a wide range of experimental work</li> <li>• detailed &amp; relevant health &amp; safety guidance</li> <li>• suitable referencing and validation of sources used.</li> </ul>					
[0 1 2]	[3]	[4 5]					

Criteria				Teacher Comment	Mark	Page No.
AO2(a).1: Candidate will produce a record of monitoring their plan with reasons showing how the plan has been followed;  [0 1 2]	AO2(a).2: candidate will show evidence of monitoring their plan, how the plan has been followed and include any modifications or changes needed to be made, providing reasons for the changes;  [3]	AO2(a).3: candidate show detailed evidence of monitoring their plan and will carry out and provide explanations of any strategies used to overcome any deficiencies or constraints of the plan.  [4]				
AO2(b).1: Candidate will interpret the outcomes of the investigation and discuss its success;  [0 1]	AO2(b).2: candidate will assess the reliability of the outcomes and the data and discuss how well the investigation achieved its aims;  [2 3]	AO2(b).3: candidate will discuss the reliability of the investigation with a detailed scientific discussion of how the investigation achieved its aims and objectives.  [4 5]				
AO2(c).1: Candidate will carry out a number of completed straightforward calculations which are linked to the investigation;  [0 1 2]	AO2(c).2: candidate will carry out a number of straightforward and complex calculations completed with partial success and accuracy which are linked to the investigation;  [3]	AO2(c).3: candidate will accurately and correctly complete a number of complex calculations which are linked to the investigation, giving answers to the correct number of significant figures.  [4 5]				
AO3(a).1: Candidate will provide evidence that the experimental procedures or trials in the investigation have been carried out safely and correctly and repeated where necessary using risk assessments;  [0 1 2]	AO3(a).2: candidate will show evidence that a range of experimental techniques and procedures has been safely and skilfully completed using suitably detailed risk assessments and within the constraints of the plan;  candidate will demonstrate that an appropriate degree of accuracy has been used;  [3 4]	AO3(a).3: candidate will show evidence that a wide range of experimental techniques and procedures has been safely, skilfully, accurately and independently completed, using detailed risk assessments which they have produced.  [5 6]				
AO3(b).1: Candidate will produce a clear and accurate report of the outcomes of the investigation, using basic scientific terminology correctly, which can be understood by research technicians with evidence of corrected spelling, punctuation and grammar;  [0 1 2]	AO3(b).2: candidate will produce a logical and accurate report of the outcomes of the investigation, using scientific terminology correctly, with correct punctuation and grammar, 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(b).3: candidate will produce a logical and well-structured report of the outcomes of the investigation using all the appropriate scientific terminology, with correct spelling, punctuation and grammar suitable for use by scientific technicians;  this will show a high level of scientific knowledge and understanding relevant to the investigation and its applied implications.  [6 7]				

Criteria				Teacher Comments		Mark	Page No.
AO3(c).1: Candidate will record the results of the investigation and present them in a suitable format  [0 1]	AO3(c).2: candidate will accurately record results and outcomes of the investigation and present them in a suitable format including a suitable description and explanation;  [2 3]	AO3(c).3: candidate will accurately record to the appropriate precision and present results of the investigation in a suitable manner and provide a detailed explanation.  [4]					
AO3(d).1: Candidate will show processing and interpretation of the data collected with a suitable link to the vocational context set;  [0 1 2]	AO3(d).2: candidate will show suitable accurate processing and interpretation of the data collected, relating to the objectives of the investigation;  [3]	AO3(d).3: candidate will show evidence that the appropriate method of processing has been selected and accurately and correctly used with any anomalous data identified and evaluated; candidate provides a critical analysis of the results relating to the objectives of the investigation.  [4 5]					
AO3(e).1: Candidate will produce a basic evaluation of the investigation;  [0 1]	AO3(e).2: candidate will produce an evaluation of the investigation;  [2 3]	AO3(e).3: candidate will produce a critical evaluation of the investigation, incorporating suitable amendments where appropriate.  [4]					
				<b>Total/50</b>			
If this work is a re-sit, please tick		Session and Year of previous submission	Jan / June	2	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](http://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.