OCR
Oxford Cambridge and RSA

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

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

Criteria			Teacher Comment	Mark	Page No.
AO1(a).1: Candidate will produce a workable and clearly presented plan for **one** investigation linked to a vocational context; the plan shows • the aims and objectives • a basic knowledge of the scientific principles • experimental techniques to be used • timing for activities • information on deadlines candidate will need to be aware of; **[0 1 2]**	AO1(a).2: candidate will produce an achievable and logically presented plan, for **one** investigation with direct vocational involvement which shows • a sound knowledge and understanding of the aims and objectives set • a range of experimental techniques which will be used • appropriate detailed time information for all activities • identification of constraints candidate will have to work under and how they can be overcome; **[3]**	AO1(a).3: candidate will produce a comprehensive, realistic, achievable and logically presented plan for **one** suitable investigation which demonstrates • a thorough knowledge and understanding of the objectives • a wide range of experimental techniques which will be used • appropriate workable time guidelines • identification and discussion of the constraints, their effect and suitable contingency plans. **[4 5]**			
AO1(b).1: Candidate will show evidence of selected research about an investigation to include • vocational links • suitable experimental work • health and safety guidance • referencing of sources used; **[0 1 2]**	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 • relevant vocational links • a range of experimental work • related health & safety guidance • related referencing of sources; **[3]**	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 • researched vocational links • a wide range of experimental work • detailed & relevant health & safety guidance • suitable referencing and validation of sources used. **[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]**			
			Total/60		

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).

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.