

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	Synthesising Organic Chemicals				Unit Code	G629	Session	June	Year	2 0
Centre Name							Centre Number			
Candidate Name							Candidate Number			
Evidence: The candidate needs to produce evidence of their investigation in to synthesising organic chemicals.										
Criteria							Teacher Comment		Mark	Page No.
<p>AO1(a).1: Candidate will show a basic knowledge and understanding of the classifications of organic compounds and will be able to</p> <ul style="list-style-type: none"> • name organic compounds • identify functional groups • draw structural and displayed formulae • explain isomerism; <p>their research will show some evidence of selection and suitable referencing;</p> <p style="text-align: right;">[0 1]</p>	<p>AO1(a).2: candidate will show knowledge and understanding of the classifications of a range of organic compounds and be able to</p> <ul style="list-style-type: none"> • name organic compounds • identify functional groups • draw structural and displayed formulae • explain isomerism and discuss the difference in properties between isomers; <p>their research will show evidence of the use of selection from a range of sources and suitable referencing;</p> <p style="text-align: right;">[2]</p>	<p>AO1(a).3: candidate will show a thorough knowledge and understanding of the classifications of a wide range of organic compounds and will be able to</p> <ul style="list-style-type: none"> • name organic compounds • identify functional groups within molecules • draw structural and displayed formulae • explain the importance of isomerism with relation to the difference in properties between isomers; <p>candidate will show relevant selective information that will be clearly presented and referenced.</p> <p style="text-align: right;">[3]</p>								
<p>AO1(b).1: Candidate will show understanding of four reaction types by</p> <ul style="list-style-type: none"> • giving examples using appropriate nomenclature • relating the reaction type to the specific functional group; <p style="text-align: right;">[0 1]</p>	<p>AO1(b).2: candidate will show understanding of four of the reaction types listed in the specifications by</p> <ul style="list-style-type: none"> • selecting examples using appropriate nomenclature • relating the reaction type to the specific functional group; <p>candidate will describe the reaction types using correct scientific terminology; information will be clearly presented;</p> <p style="text-align: right;">[2]</p>	<p>AO1(b).3: candidate will show understanding and explain of at least five reaction types listed in the specifications by</p> <ul style="list-style-type: none"> • giving examples using appropriate nomenclature • relating the reaction type to the specific functional group <p>candidate will explain the reaction types using correct scientific terminology; information will be clearly presented.</p> <p style="text-align: right;">[3]</p>								

Criteria			Teacher Comment	Mark	Page No.
AO1(c).1: Candidate will research two drug types listed in the specifications and show a basic knowledge and understanding of therapeutic drugs, their usage and mode of action in the body; scientific terms and conventions will have generally been used correctly in the report with corrected punctuation and grammar; [0 1]	AO1(c).2: candidate will research three of the drug types listed in the specifications and show detailed knowledge and understanding of therapeutic drugs, their usage and mode of action in the body; scientific terms and conventions will have been used correctly in the report with correct punctuation and grammar; [2 3]	AO1(c).3: candidate will research at least three drug types listed in the specifications and show a detailed knowledge and understanding of therapeutic drugs, their usage and mode of action in the body; explanations of the therapeutic effect of drugs will be given and the use of the drugs evaluated; scientific terms and conventions will have been used correctly in explanations throughout, with correct spelling, punctuation and grammar. [4]			
AO2(a).1: Candidate will produce information on a process used to manufacture an organic compound; candidate will identify most of the factors needed to be considered to ensure a safe and economic process, selecting some appropriate sources and presenting information clearly; [0 1 2]	AO2(a).2: candidate will show researched evidence of a process used to manufacture an organic compound; candidate will identify all the factors needed to be considered to ensure a safe and economic process, selecting a range of appropriate sources and interpreting information clearly; [3]	AO2(a).3: candidate will show detailed and selective research on a process used to manufacture an organic compound; candidate will describe the factors needed to be considered to ensure a safe and economic process, using a wide range of appropriate sources and interpreting information clearly, evaluating and justifying this information, and presenting it clearly, concisely and coherently. [4 5]			
AO2(b).1: Candidate will find and use information about some of the costs and benefits of the organic compound and its manufacture to <ul style="list-style-type: none"> • individuals • companies • society; [0 1 2]	AO2(b).2: candidate will find and explain information about the costs and benefits of the organic compound and its manufacture to <ul style="list-style-type: none"> • individuals • companies • society; information will be clearly presented; [3]	AO2(b).3: candidate will find, explain and evaluate information about the costs and benefits of the organic compound and its manufacture to <ul style="list-style-type: none"> • individuals • companies • society; information will be presented clearly and concisely. [4 5]			
AO2(c).1: Candidate will demonstrate that they have completed straightforward calculations either related to their research or to their preparations; some assistance may have been used; [0 1]	AO2(c).2: candidate will demonstrate that they have completed simple and complex calculations correctly either related to their research or to their preparations with little assistance; [2 3]	AO2(c).3: candidate will demonstrate that they have completed correctly and independently complex calculations either related to their research or to their preparations. [4]			

Criteria				Teacher Comment	Mark	Page No.
AO3(a).1: Candidate will record evidence of the safe completion of the preparation and purification of two organic compounds, one of which is a useful drug; candidate will give evidence of the use of valid risk assessments; [0 1 2 3 4]	AO3(a).2: candidate will record evidence of the planning and the safe completion of the preparation and purification of two organic compounds, one of which is a useful drug, using a range of techniques; candidate will give evidence that they have used COSHH data to produce valid risk assessments with some assistance; [5 6 7 8]	AO3(a).3: candidate will record evidence of independent planning and the skilful and safe completion of the preparation and purification of two organic compounds, one of which is a useful drug, using a wide range of techniques and justifying reasons for the use of such techniques; candidate will independently produce and use risk assessments using COSHH data where appropriate. [9 10]				
AO3(b).1: Candidate will make and record some observations and measurements for both preparations and purifications and display information clearly; [0 1]	AO3(b).2: candidate will make and record in a suitable format observations and measurements from both preparations and purifications to the appropriate level of precision; [2]	AO3(b).3: candidate will make and record accurately all relevant observations and measurements from both preparations, with the appropriate precision, and display all information clearly and logically. [3 4]				
AO3(c).1: Candidate will provide evidence of some processing and interpretation of the results; [0 1 2]	AO3(c).2: candidate will provide evidence of the processing of results from both preparations; the processing will be set out clearly; [3 4]	AO3(c).3: candidate will provide correct processing of all the results from both preparations; the processing will be set out clearly and logically. [5 6]				
AO3(d).1: Candidate will draw some conclusions related to both preparations and give a basic evaluation of the practical work; [0 1 2]	AO3(d).2: candidate will draw conclusions with explanations related to the outcomes of both preparations and evaluate the practical work suggesting alternative techniques; [3 4]	AO3(d).3: candidate will draw detailed conclusions explaining and evaluating both practicals and suggesting alternative techniques or routes where appropriate. [5 6]				
Total/50						
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.