

OXFORD CAMBRIDGE AND RSA EXAMINATIONS Advanced Subsidiary GCE

GENERAL STUDIES THE SCIENTIFIC DOMAIN (COURSEWORK) JUNE 2005 OPEN ON RECEIPT



RESOURCE BOOKLET

Assignment Theme: 'Developments in the Scientific Domain'.

This booklet contains guidance on the production of a key skills portfolio of evidence. Suggested recording sheets are also included.

Production of a Key Skills Portfolio of evidence.

Candidates entering Unit 2963 The Scientific Domain (Coursework) or Unit 2967 The Social Domain 2 (Coursework) may use the coursework produced as a source of evidence for key skills.

The assignment brief for Unit 2963 is detailed in question paper 2963/AS. Guidance for teachers is contained in 2963/IT.

The planning, preparation and execution of the assignment offers candidates the opportunity to produce portfolio evidence for all parts of all six key skills (Communication, Application of Number, Information Technology, Working with Others, Improving Own Learning and Performance and Problem Solving) at levels 2 or 3.

The assignment brief has been drawn up with all six key skills in mind, but the extent to which evidence is generated will depend upon the approach followed by the individual candidate. The assignments are not intended to produce forced opportunities for the demonstration of key skills, but to provide freedom and scope for candidates to develop their individual portfolios of evidence.

Teachers should note that in certain areas (eg Communication) it may be necessary to organise some form of group activity in order to meet the key skills requirements.

Centres are also reminded that teachers may be required to authenticate candidates' submissions for key skills purposes, in particular for Information Technology.

Centres are advised to retain securely copies of candidates' individual assignments if it is intended to use them as key skills evidence.

Teachers are advised to refer to the Key Skills specifications for detailed guidance on assessment of key skills. Appendix A of the OCR GCE General Studies (3831/7831) specification also provides guidance on incorporating key skills in the General Studies teaching programme.

The attached recording sheets are designed to assist candidates to track their own progress. Recording sheets are provided for each of the generic key skills (Communication, Application of Number and Information Technology) at both levels 2 and 3. Recording sheets for the wider key skills (Working with Others, Improving Own Learning and Performance and Problem Solving) are provided at level 3.

These recording sheets are designed to be used with the Key Skills units specified in 2000. Centres should ensure that evidence submitted for Key Skills certification has been assessed against the current Key Skills specification.

Centre Number:		Candidate Number:	
Centre Name:		Candidate Name:	
Date:			Candidate Signature:
		Cand	lidate to enter
	Portfolio Reference/ Page number	Brief desc	Comment cription of how this was achieved
C2.1a Contribute to a discussi	on about a s	traightforward topic	
Description of topic discussed			
Number and description of participants			
Make clear and relevant contribution			
Listen and respond appropriately to others			
Keep the discussion going			
Help to move the discussion forward			
C2.1b Give a talk about a straightforward subject, using an image (5–6 minutes)			
Subject of talk			
Size and description of audience (2 or more people)			
Image used			
Brief notes used for talk			
Speaking clearly			
Keeping to the subject			
Using image to make points			
Evidence people could follow the talk			
Witness statements			

	Candidate to enter	
	Portfolio Reference/ Page number	<i>Comment</i> Brief description of how this was achieved
C2.2 Read and summarise info	rmation from	n two extended documents (3 or more pages)
Document 1 including image		
Document 2		
Material selected and read		
Lines of reasoning identified		
Main points from text		
Main points from images		
Summary of information		
C2.3 Write two different types	of document	s about straightforward subjects
Write extended document including image (3 or more pages)		
Present information in relevant form		
Structure writing to suit purpose		
Appropriate style of writing		
Ensure text is legible		
Spelling, punctuation and grammar accurate		
Meaning is clear		

Summary of Key Skills portfolio evidence Communication Level 3

Centre Number:			Candidate Number:
Centre Name:			Candidate Name:
Date:			Candidate Signature:
		Cand	idate to enter
	Portfolio Reference/ Page number		Comment ription of how this was achieved
C3.1a Contribute to a group di	scussion ab	out a complex subjec	t
Description of complex topic discussed			
Number and description of participants			
Make clear and relevant contributions			
Listen and respond sensitively to others			
Develop points and ideas			
Create opportunities for others to contribute			
Conclusion of the discussion			
C3.1b Make a presentation abo	out a comple	x subject, using an in	nage (5–6 minutes)
Title of the presentation			
Size and description of audience			
Notes and illustrations available			
Availability of witness statements			
Speak clearly			
Adapt style to suit purpose			
Adapt style to suit subject			
Adapt style to suit audience			

		Candidate to enter
	Portfolio Reference/ Page number	Comment Brief description of how this was achieved
Adapt style to suit situation		
Structure the sequence so that it is easy to follow		
Use a range of techniques to engage the audience		
Use images effectively		
Could the audience follow the presentation?		
Availability of witness statements		
C3.2 Read and synthesise info (one document should include		n two extended documents about a complex subject image)
Select and read material		
Identify accurately and compare lines of reasoning		
Identify the main points from text and images		
Synthesise key information		
Include your own interpretation		
C3.3 Write two different types	of document	ts about complex subjects
Description of complex subject		
Abstract or sensitive issues considered		
Write an extended document including one image		
Select and use appropriate form and style of writing		
Organise relevant information clearly and coherently		
Use specialist vocabulary where appropriate		
Ensure text is legible		
Accurate spelling, punctuation and grammar		

Summary of Key Skills portfolio evidence Application of number Level 2

Centre Number:	Candidate Number:
Centre Name:	Candidate Name:
Date:	Candidate Signature:

Carry through at least **one** substantial activity that includes straightforward tasks for N2.1, N2.2, N2.3.

	Portfolio Reference/ Page number	Comment Brief description of how this was achieved
N 2 1 Interpret information from	•	ent sources, including material containing a graph.
Description of straightforward		in sources, including matchar containing a graph.
activity		
Source containing a graph		
Choose how to obtain information		
Obtain the relevant information: Source 1		
Obtain the relevant information: Source 2		
Select methods to achieve results needed		
Copies of source materials		
N2.2 Carry out calculations inv	olving two c	or more steps, showing methods and levels of accuracy
Describe data set of more than 20 items		
Calculate amounts and sizes		
Calculate scales and proportions		
Handle statistics		
Use formulae		
Show methods		
Show levels of accuracy		
Check methods		

Candidate to enter

Portfolio Reference/ Page number
Comment Brief description of how this was achieved

Correct errors
Image: Constant of the section of how this was achieved

Check results make sense
Image: Constant of the section of how this was achieved

N.2.3 Interpret the results of calculations and present findings
Image: Constant of the section of how this was achieved

Use at least one graph
Image: Constant of the section of how this was achieved

Use at least one chart
Image: Constant of the section of how this was achieved

Select ways to present findings
Image: Constant of the section of how the section

Summary of Key Skills portfolio evidence Application of number Level 3

		Candidate Number:
Centre Number:		Candidate Number.
Centre Name:		Candidate Name:
Date:		Candidate
		Signature:
		Candidate to enter
	Portfolio	Comment
	Reference/ Page number	Drief description of how this was achieved
N.3.1 Plan and interpret inform	ation from t	wo different types of sources, including a large data set
Purpose of activity: formulate		
question		
Source 1 (including large data set)		
Source 2 (e.g. graphical, printed, direct measurement)		
Plan how to obtain information to		
meet purpose (e.g. sequence of tasks)		
Plan how to use information		
Obtain relevant information		
Note expected problems		
Choose appropriate methods for		
obtaining results		
Justify choice of method		
N.3.2 Carry out multi-stage cal Amounts and sizes	culations to	appropriate level of accuracy showing methods
Scales and proportions		
Handling statistics		
Rearranging and using formulae		
At least two stage calculations		
state out the stage culoulations		
Checking results for errors		
Working with large data set		

	Candidate to enter		
	Portfolio Reference/ Page number	<i>Comment</i> Brief description of how this was achieved	
N.3.3 Interpreting results			
Select method of presentation			
Justify method of presentation (strengths and weaknesses of activities)			
Present findings effectively with evidence			
Explain how results of calculations relate to purpose			
Assess accuracy, approximation and scales of error			
Use at least one graph			
Use at least one chart			
Use at least one diagram			

Summary of Key Skills portfolio evidence Information Technology Level 2

Centre Number:	Candidate Number:
Centre Name:	Candidate Name:
Date:	Candidate Signature:
	Candidate to enter

Portfolio	
Reference/	
Page number	

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	Portfolio Reference/ Page number	Comment Brief description of how this was achieved
IT2.1 Search for and select info	ormation for	two different purposes
Describe Purpose 1		
Identify information needed (P1)		
Identify suitable sources (P1)		
Carry out effective searches (P1)		
Select relevant information (P1)		
Search records included (P1)		
Use of multi-criteria for searching (P1)		
Note of sources used (P1)		
Describe Purpose 2		
Identify information needed (P2)		
Identify suitable sources (P2)		
Carry out effective searches (P2)		
Select relevant information (P2)		
Search records included (P2)		
Use of multi-criteria for searching (P2)		
Note of sources used (P2)		

		Candidate to enter		
	Portfolio Reference/ Page number Brief description of how this was achieved			
IT2.2 Explore and develop info	rmation and	derive new information for two purposes		
Enter and bring together information (P1)				
Check helpful format (P1)				
Explore information (P1)				
Develop information P1				
Derive new information (P1)				
Enter and bring together information (P2)				
Check helpful format (P2)				
Explore information (P2)				
Develop information (P2)				
Derive new information (P2)				
IT2.3 Present combined inform	nation for two	o different purposes		
One example of text				
One example of images				
One example of numbers				
Select appropriate layout				
Use appropriate layout				
Combine information				
Check accuracy				
Check clarity				
Save your work				

Summary of Key Skills portfolio evidence Information Technology Level 3

Centre Number:	Candidate Number:
Centre Name:	Candidate Name:
Date:	Candidate Signature:

You need to plan and carry through **one** substantial activity to include IT3.1, 3.2 and 3.3.

	Candidate to enter				
	Portfolio Reference/ Page number	<i>Comment</i> Brief description of how this was achieved			
IT3.1 Plan and use different so purposes	urces to sea	rch for, and select, information required for two different			
Describe the purpose of the activity					
Plan how to obtain information					
Plan how to use the information					
Choose appropriate sources for finding information					
Name the sources					
Choose appropriate techniques for finding information					
Carry out effective searches					
Describe scope of searches					
Make selection based on judgements of relevance and quality					
Include printout of sources					
Assess the quality of sources					

		Candidate to enter
	Portfolio Reference/ Page number	<i>Comment</i> Brief description of how this was achieved
IT3.2 Explore, develop and exc purposes	hange infor	mation and derive new information to meet two different
Enter and bring together information in a consistent form		
Use automated routines where appropriate		
Create structures and procedures to explore information		
Create structures and procedures to develop information		
Use effective methods of exchanging information		
IT3.3 Present information from	different so	urces for two different purposes and audiences
Include one example of text		
Include one example of images		
Include one example of numbers		
Develop the structure and content of your presentation		
Use the views of others to guide refinements		
Include witness statements of views		
Use format and style that suits your purpose		
Use format and style that suits your audience		
Present information effectively		
Ensure accuracy		
Ensure presentation makes sense		

Summary of Key Skills portfolio evidence Improving own learning and performance Level 3

Centre Number:	Candidate Number:
Centre Name:	Candidate Name:
Date:	Candidate Signature:

Provide at least one substantial example of meeting the standard LP3.1, 3.2 and 3.3

	Candidate to enter			
	Portfolio Reference/ Page number	<i>Comment</i> Brief description of how this was achieved		
LP3.1 Agree targets and plan h of appropriate person	now these wi	II be met over an extended period of time, using support		
State time period of targets				
Name supporting people				
State targets				
Ways to achieve information to meet targets				
Identify factors affecting plans				
Agree realistic targets with appropriate people				
Agree use of support to meet targets				
State possible difficulties				
List alternative action plans				
LP3.2 Take responsibility for y	our learning	by using your plan, seek feedback and support		
Study of a complex subject				
Learning through complex practical activity				
Evidence of independent learning				
Time management plan				
Revisions to time management plan				

	Candidate to enter			
	Portfolio Reference/ Page number	<i>Comment</i> Brief description of how this was achieved		
Use of feedback to help meet targets				
Evidence of adaptation to meet new demands				
LP3.3 Review progress on two learned from other tasks	occasions,	establish evidence of achievements and how you have		
Information on your learning				
Factors affecting your learning				
Identify targets met (Review 1)				
Information and evidence of your achievements (Review 1)				
Exchange of view with appropriate people (Review 1)				
Agree ways to further improvements (Review 1)				
Identify targets met (Review 2)				
Information and evidence of your achievements (Review 2)				
Exchange of view with appropriate people (Review 2)				
Agree ways to further improvements (Review 2)				

Summary of Key Skills portfolio evidence Problem solving Level 3

Centre Number:	Candidate Number:
Centre Name:	Candidate Name:
Date:	Candidate Signature:

Provide at least **one** example of meeting the standards of PS3.1, 3.2 and 3.3.

	Candidate to enter			
	Portfolio Reference/ Page number	<i>Comment</i> Brief description of how this was achieved		
PS3.1 Explore a complex prob	lem, come u	p with three options for solving it, justify selected option		
Description of complex problem				
Exploration of the problem				
Analysing features of the problem				
Agree how to show success in solving problem				
Option 1 for solution				
Option 2 for solution				
Option 3 for solution				
Compare solutions				
Assess risk factors				
Selected option				
Justification of selection				

		Candida	te to enter		
Portfolio Reference/ Page number	Bri	ef descript	Commen ion of how th	t his was achieved	
 					_

PS3.2 Plan and implement at least one option for solving problem, review progress, revise approach as necessary				
Plan to carry out chosen solution				
Obtain agreement of appropriate person				
Implement plan				
Use the support of others				
Obtain feedback from others				
Review progress towards solution				
Revise approach as necessary				
PS3.3 Apply agreed methods to problem solving	o check if pr	oblem solved, describe results and review approach to		
Agree with appropriate person methods of checking				
Apply checking methods accurately				
Draw conclusions				
Describe results				
Review approach used				
Consider whether alternative methods might have been effective				

Summary of Key Skills portfolio evidence Working with others Level 3

Centre Number:	Candidate Number:
Centre Name:	Candidate Name:
Date:	Candidate Signature:

Provide at least **one** example of meeting the standard of WO3.1, 3.2 and 3.3.

	Candidate to enter		
	Portfolio Reference/ Page number	<i>Comment</i> Brief description of how this was achieved	
WO3.1 Plan complex work with others, agreeing objectives, responsibilities and working arrangements			
Description of one-to-one situation			
Description of group working situation			
Number and description of group members			
Agreement on objectives of working together			
Agree action to achieve objectives			
Exchange information based upon evidence			
Agree responsibilities			
Agree working arrangements			
WO3.2 Seek to establish and maintain co-operative working relationships			
State extended period of time			
State your responsibilities			
State responsibilities of others			
Organise tasks to be effective			
Carry out your tasks to be effective			
Produce and check on quality of your work			

	Candidate to enter		
	Portfolio Reference/ Page number	Comment Brief description of how this was achieved	
Maintain co-operative working			
Agreement on ways to overcome difficulties			
Agree changes to achieve objectives			
Exchange accurate information on progress			
WO3.3 Review work with others and agree ways to improve collaborative working in future			
Agree extent to which work with others has been successful			
Agree objectives that have been met			
Identify factors influencing outcome			
Agree ways for improvement in future			

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