

**OCR GCSE IN DESIGN AND TECHNOLOGY
(RESISTANT MATERIALS TECHNOLOGY) 1956**

**OCR GCSE (SHORT COURSE) IN DESIGN AND TECHNOLOGY
(RESISTANT MATERIALS TECHNOLOGY) 1056**

KEY SKILLS GUIDANCE

OCR GCSE IN DESIGN AND TECHNOLOGY (RESISTANT MATERIALS TECHNOLOGY) (1956) AND (SHORT COURSE) (1056)

Introduction

Key Skills are central to successful employment and underpin future success in learning independently. Whilst they are certificated separately, the Key Skills guidance for this qualification has been designed to support the teaching and learning of the content. Opportunities for developing the generic Key Skills of Communication, Application of Number and Information Technology are indicated through the use of a  'key symbol' in Section C of the specification. The wider Key Skills of Working with Others, Problem Solving and Improving Own Learning and Performance may also be developed through the teaching programmes associated with the specification.

The following matrix indicates those Key Skills for which opportunities for at least some coverage of the relevant Key Skills Unit exist within Design and Technology (Resistant Materials Technology).

	Communication	Application of Number	IT	Working with Others	Improving Own Learning and Performance	Problem Solving
Level 1	✓	✓	✓	✓	✓	✓
Level 2	✓		✓	✓	✓	✓

This document offers detailed guidance on the Key Skills evidence that a candidate might produce during the course. It focuses on the evidence required to meet the criteria for the internally assessed Key Skills portfolio. For example, in producing the work for assessment as evidence of C2.1a (Contribute to a discussion about a straightforward subject) a candidate is required to:

- Make clear and relevant contributions in a way that suits their purpose and situation.
- Listen and respond appropriately to what others say.
- Help to move the discussion forward.

The Key Skills and Evidence Requirements on the following tables are quoted from Part B of the QCA Key Skills specification and, as such, are addressed to the candidate. The Opportunities for Development provide guidance for teachers about how the specification might be used to provide teaching and learning opportunities and/or assessment opportunities for the Key Skill.

For further information about the requirements of these units, teachers should refer to QCA's Key Skills specifications (2000 version).

For further information about the assessment and certification of Key Skills, teachers should contact OCR.

COMMUNICATION LEVELS 1 & 2

GCSE DESIGN AND TECHNOLOGY (RESISTANT MATERIALS TECHNOLOGY)

KEY SKILL		EVIDENCE REQUIREMENTS	OPPORTUNITIES FOR DEVELOPMENT
C1.1	Take part in a one-to-one discussion and a group discussion about different, straightforward subjects.	<ul style="list-style-type: none"> • Provide information that is relevant to the subject and purpose of the discussion. • Speak clearly in a way that suits the situation. • Listen and respond appropriately to what others say. 	None directly related to the specification.
C1.2	Read and obtain information from two different types of documents about straightforward subjects, including at least one image.	<ul style="list-style-type: none"> • Read relevant material. • Identify accurately the main points and ideas in material. • Use the information to suit your purpose. 	5.1.1(b), 5.1.7
C1.3	Write two different types of documents about straightforward subjects. Include at least one image in one of the documents.	<ul style="list-style-type: none"> • Present relevant information in a form that suits your purpose. • Ensure text is legible • Make sure that spelling, punctuation and grammar are accurate so your meaning is clear. 	None directly related to the specification.
C2.1a	Contribute to a discussion about a straightforward subject.	<ul style="list-style-type: none"> • Make clear and relevant contributions in a way that suits your purpose and situation. • Listen and respond appropriately to what others say. • Help to move the discussion forward. 	5.1.11(b)
C2.1b	Give a short talk about a straightforward subject, using an image.	<ul style="list-style-type: none"> • Speak clearly in a way that suits your subject, purpose and situation. • Keep to the subject and structure your talk to help listeners follow what you are saying. • Use an image to clearly illustrate your main points. 	None directly related to the specification.
C2.2	Read and summarise information from two extended documents about a straightforward subject. One of the documents should include at least one image.	<ul style="list-style-type: none"> • Select and read relevant material. • Identify accurately the lines of reasoning and main points from text and images. • Summarise the information to suit your purpose. 	5.1.1(d)
C2.3	Write two different types of documents about straightforward subjects. One piece of writing should be an extended document and include at least one image.	<ul style="list-style-type: none"> • Present relevant information in an appropriate form. • Use a structure and style of writing to suit your purpose. • Ensure text is legible and that spelling, punctuation and grammar are accurate, so your meaning is clear. 	None directly related to the specification.

APPLICATION OF NUMBER LEVELS 1 & 2 GCSE DESIGN AND TECHNOLOGY (RESISTANT MATERIALS TECHNOLOGY)

KEY SKILL		EVIDENCE REQUIREMENTS	OPPORTUNITIES FOR DEVELOPMENT
N1.1	Interpret straightforward information from two different sources. At least one source should be a table, chart, diagram or line graph.	<ul style="list-style-type: none"> Obtain the information you need to meet the purpose of your task. Identify suitable calculations to get the results you need. 	None directly related to the specification.
N1.2	Carry out straightforward calculations to do with: <ol style="list-style-type: none"> amounts and sizes; scales and proportion; handling statistics. 	<ul style="list-style-type: none"> Carry out calculations to the levels of accuracy you have been given. Check your results make sense. 	5.1.7
N1.3	Interpret the results of your calculations and present your findings. You must use one chart and one diagram.	<ul style="list-style-type: none"> Choose suitable ways to present your findings. Present your findings clearly. Describe how the results of your calculations meet the purpose of your task. 	None directly related to the specification.
You must: carry through at least one substantial activity that includes straightforward tasks for N2.1, N2.2 and N2.3			
N2.1	Interpret information from two different sources, including material containing a graph.	<ul style="list-style-type: none"> Choose how to obtain the information needed to meet the purpose of your activity. Obtain the relevant information. Select appropriate methods to get the results you need. 	None directly related to the specification.
N2.2	Carry out calculations to do with: <ol style="list-style-type: none"> amounts and sizes; scales and proportion; handling statistics; using formulae. 	<ul style="list-style-type: none"> Carry out calculations, clearly showing your methods and levels of accuracy. Check your methods to identify and correct any errors, and make sure your results make sense. 	None directly related to the specification.
N2.3	Interpret the results of your calculations and present your findings. You must use at least one graph, one chart and one diagram.	<ul style="list-style-type: none"> Select effective ways to present your findings. Present your findings clearly and describe your methods. Explain how the results of your calculations meet the purpose of your activity. 	None directly related to the specification.

INFORMATION TECHNOLOGY		LEVELS 1 & 2	GCSE DESIGN AND TECHNOLOGY (RESISTANT MATERIALS TECHNOLOGY)
KEY SKILL		EVIDENCE REQUIREMENTS	OPPORTUNITIES FOR DEVELOPMENT
IT1.1	Find, explore and develop information for two different purposes.	<ul style="list-style-type: none"> • Find and select relevant information. • Enter and bring in information, using formats that help development. • Explore and develop information to meet your purpose. 	5.1.2, 5.1.8
IT1.2	Present information for two different purposes. Your work must include at least one example of text, one example of images and one example of numbers.	<ul style="list-style-type: none"> • Use appropriate layouts for presenting information in a consistent way. • Develop the presentation so it is accurate, clear and meets your purpose. • Save information so it can be found easily. 	5.1.3(h), 5.1.8
IT2.1	Search for and select information for two different purposes.	<ul style="list-style-type: none"> • Identify the information you need and suitable sources. • Carry out effective searches. • Select information that is relevant to your purpose. 	5.1.3
IT2.2	Explore and develop information, and derive new information, for two different purposes.	<ul style="list-style-type: none"> • Enter and bring together information using formats that help development. • Explore information as needed for your purpose. • Develop information and derive new information as appropriate. 	5.1.4, 5.1.8
IT2.3	Present combined information for two different purposes. Your work must include at least one example of text, one example of images and one example of numbers.	<ul style="list-style-type: none"> • Select and use appropriate layouts for presenting combined information in a consistent way. • Develop the presentation to suit your purpose and the types of information. • Ensure your work is accurate, clear and saved appropriately. 	5.1.8

WORKING WITH OTHERS LEVEL 1

GCSE DESIGN AND TECHNOLOGY (RESISTANT MATERIALS TECHNOLOGY)

KEY SKILL		EVIDENCE REQUIREMENTS	OPPORTUNITIES FOR DEVELOPMENT
You must: Provide at least two examples of meeting the standard for WO1.1, WO1.2 and WO1.3 (one example must show you can work in one-to-one situations and one example must show you can work in group situations).			
WO1.1	Confirm what needs to be done to achieve given objectives, including your responsibilities and working arrangements.	<ul style="list-style-type: none">• Check that you clearly understand the objectives you have been given for working together.• Identify what needs to be done to achieve these objectives and suggest ways you could help.• Make sure that you are clear about your responsibilities and working arrangements.	5.1.1, 5.1.2, 5.1.3, 5.1.4
WO1.2	Work with others towards achieving given objectives, carrying out tasks to meet your responsibilities.	<ul style="list-style-type: none">• Carry out tasks to meet your responsibilities.• Work safely, and accurately follow the working methods you have been given.• Ask for help and offer support to others, when appropriate.	5.1.1, 5.1.2, 5.1.3, 5.1.4, 5.2.6
WO1.3	Identify progress and suggest ways of improving work with others to help achieve given objectives.	<ul style="list-style-type: none">• Identify what has gone well in working with others.• Report any difficulties in meeting your responsibilities and say what you did about them.• Suggest ways of improving work with others to help achieve the objectives.	5.1.11

WORKING WITH OTHERS LEVEL 2

GCSE DESIGN AND TECHNOLOGY (RESISTANT MATERIALS TECHNOLOGY)

KEY SKILL		EVIDENCE REQUIREMENTS	OPPORTUNITIES FOR DEVELOPMENT
You must: Provide at least two examples of meeting the standard for WO2.1, WO2.2 and WO2.3 (one example must show you can work in one-to-one situations and one example must show you can work in group situations).			
WO2.1	Plan straightforward work with others, identifying objectives and clarifying responsibilities, and confirm working arrangements.	<ul style="list-style-type: none">• Identify the objectives of working together and what needs to be done to achieve these objectives.• Exchange relevant information to clarify responsibilities.• Confirm working arrangements with those involved.	5.1.1, 5.1.2, 5.1.3, 5.1.4
WO2.2	Work cooperatively with others towards achieving identified objectives, organising tasks to meet your responsibilities.	<ul style="list-style-type: none">• Organise your own tasks so you can be effective in meeting your responsibilities.• Carry out tasks accurately and safely, using appropriate working methods.• Support cooperative ways of working, seeking advice from an appropriate person when needed.	5.1.5, 5.1.10, 5.2.6
WO2.3	Exchange information on progress and agree ways of improving work with others to help achieve objectives.	<ul style="list-style-type: none">• Provide relevant information on what has gone well and what has gone less well in working with others, including the quality of your work.• Listen and respond appropriately to progress reports from others.• Agree ways of improving work with others to help achieve the objectives.	5.1.11

IMPROVING OWN LEARNING AND PERFORMANCE**LEVEL 1****GCSE DESIGN AND TECHNOLOGY
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KEY SKILL		EVIDENCE REQUIREMENTS	OPPORTUNITIES FOR DEVELOPMENT
You must: Provide at least two examples of meeting the standard for LP1.1, LP1.2 and LP1.3.			
LP1.1	Confirm understanding of your short-term targets, and plan how these will be met, with the person setting them.	<ul style="list-style-type: none">• Make sure targets clearly show what you want to achieve.• Identify clear action points and deadlines for each target.• Identify how to get the support you need and the arrangements for reviewing your progress.	5.1.2, 5.1.5, 5.1.10
LP1.2	Follow your plan, using support given by others to help meet targets. Improve your performance by: <ul style="list-style-type: none">• Studying a straightforward subject.• Learning through a straightforward practical activity.	<ul style="list-style-type: none">• Work through your action points to complete tasks on time.• Use support given by others to help you meet targets.• Use different ways of learning suggested by your supervisor, and make changes, when needed, to improve your performance.	5.1.4
LP1.3	Review your progress and achievements in meeting targets, with an appropriate person.	<ul style="list-style-type: none">• Say what you learned and how you learned, including what has gone well and what has gone less well.• Identify targets you have met and your achievements.• Check what you need to do to improve your performance.	None directly related to the specification.

IMPROVING OWN LEARNING AND PERFORMANCE**LEVEL 2****GCSE DESIGN AND TECHNOLOGY
(RESISTANT MATERIALS TECHNOLOGY)**

KEY SKILL		EVIDENCE REQUIREMENTS	OPPORTUNITIES FOR DEVELOPMENT
You must: Provide at least two examples of meeting the standard for LP2.1, LP2.2 and LP2.3.			
LP2.1	Help set short-term targets with an appropriate person and plan how these will be met.	<ul style="list-style-type: none">• Provide accurate information to help set realistic targets for what you want to achieve.• Identify clear action points for each target.• Plan how you will use your time well to meet targets, including use of support and arrangements for reviewing your progress.	5.1.1, 5.1.5
LP2.2	Take responsibility for some decisions about your learning, using your plan and support from others to help meet targets. Improve your performance by: <ul style="list-style-type: none">• Studying a straightforward subject.• Learning through a straightforward practical activity.	<ul style="list-style-type: none">• Use your action points to help manage your time well and complete tasks, revising your plan when needed.• Identify when you need support and use this effectively to help you meet targets.• Select and use different ways of learning to improve your performance, working for short periods without close supervision.	5.1.3, 5.1.10
LP2.3	Review progress with an appropriate person and provide evidence of your achievements, including how you have used learning from one task to meet the demands of a new task.	<ul style="list-style-type: none">• Identify what and how you learned, including what has gone well and what has gone less well.• Identify targets you have met and evidence of your achievements.• Identify ways to further improve your performance.	5.1.11, 5.1.10(c)

PROBLEM SOLVING LEVEL 1**GCSE DESIGN AND TECHNOLOGY
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KEY SKILL		EVIDENCE REQUIREMENTS	OPPORTUNITIES FOR DEVELOPMENT
You must: Provide at least two examples of meeting the standard for PS1.1, PS1.2 and PS1.3.			
PS1.1	Confirm your understanding of the given problem with an appropriate person and identify two options for solving it.	<ul style="list-style-type: none">• Check that you are clear about the problem you have been given and how to show success in solving it.• Identify different ways of tackling the problem.• Decide, with help, which options are most likely to be successful.	5.1.2
PS1.2	Plan and try out at least one option for solving the problem, using advice and support given by others.	<ul style="list-style-type: none">• Confirm with an appropriate person the option you will try for solving the problem.• Plan how to carry out this option.• Follow through your plan, making use of advice and support given by others.	5.1.3
PS1.3	Check if the problem has been solved by following given methods and describe the results, including ways to improve your approach to problem solving.	<ul style="list-style-type: none">• Check if the problem has been solved by accurately following the methods you have been given.• Describe clearly the results of tackling the problem.• Identify ways of improving your approach to problem solving.	5.1.11

PROBLEM SOLVING LEVEL 2

GCSE DESIGN AND TECHNOLOGY (RESISTANT MATERIALS TECHNOLOGY)

KEY SKILL		EVIDENCE REQUIREMENTS	OPPORTUNITIES FOR DEVELOPMENT
You must: Provide at least two examples of meeting the standard for PS2.1, PS2.2 and PS2.3.			
PS2.1	Identify a problem and come up with two options for solving it.	<ul style="list-style-type: none"> Identify the problem, accurately describing its main features, and how to show success in solving it. Come up with different ways of tackling the problem. Decide which options have a realistic chance of success, using help from others when appropriate. 	5.1.1, 5.1.3
PS2.2	Plan and try out at least one option for solving the problem, obtaining support and making changes to your plan when needed.	<ul style="list-style-type: none"> Confirm with an appropriate person the option you will try for solving the problem, and plan how to carry it out. Use your plan, organising the relevant tasks and making changes to your plan when needed. Obtain and effectively use any support needed. 	5.1.3, 5.1.4, 5.1.5
PS2.3	Check if the problem has been solved by applying given methods, describe results and explain your approach to problem solving.	<ul style="list-style-type: none"> Check if the problem has been solved by accurately applying the methods you have been given. Describe clearly the results, and explain the decisions you took at each stage of tackling the problem. Identify the strengths and weaknesses of your approach to problem solving, and describe what you would do differently if you met a similar problem. 	5.1.11