

**Teacher's guide**

**Edexcel GCSE in  
Design & Technology 3970 - 3974 (Short Course)**  
First examination 2003  
February 2001

Edexcel is one of the leading examining and awarding bodies in the UK and throughout the world. We provide a wide range of qualifications including academic, vocational, occupational and specific programmes for employers.

Through a network of UK and overseas offices, Edexcel's centres receive the support they need to help them deliver their education and training programmes to learners.

For further information please call our Customer Response Centre on 0870 240 9800, or visit our website at [www.edexcel.org.uk](http://www.edexcel.org.uk)

#### *Acknowledgements*

This document has been produced by Edexcel on the basis of consultation with teachers, examiners, consultants and other interested parties. Edexcel recognises and values all those who contributed their time and expertise to the development of the qualification.

Authorised by Peter Goff

Publications Code UG009838

All the material in this publication is copyright

© Edexcel Foundation 2001

# Contents

---

<b>Introduction</b>	<b>1</b>
Teacher's Guide – key features of the Short Course	1
<b>Changes old to new</b>	<b>2</b>
How different are the new specifications from the old syllabuses?	2
How do the Edexcel GCSE specifications help teachers manage the change from old to new?	3
What are the main features of the new Edexcel GCSE specifications?	4
<b>Planning for delivery</b>	<b>6</b>
Model of delivery	6
<b>Assessment requirements</b>	<b>9</b>
<b>Teaching key skills with design and technology</b>	<b>15</b>
<b>Teaching ICT with design and technology</b>	<b>18</b>
<b>Teaching citizenship with design and technology</b>	<b>19</b>
<b>Incorporating the wider curriculum</b>	<b>20</b>
<b>Textbooks and resources</b>	<b>21</b>
Textbooks	21
Internet sites	28
General organisations	38
Resources and materials	40
<b>Support and training</b>	<b>50</b>
Support materials	50
Examiners' and moderators' comments and mark schemes	50
Edexcel Publications	50
Training	51
Website	51
Regional offices and Customer Response Centre	51



# Introduction

---

This Teacher's Guide should be read in conjunction with the Edexcel GCSE Short Course specifications for Design & Technology. The specification titles are:

- ÷ Food Technology
- ÷ Textiles Technology
- ÷ Graphic Products
- ÷ Resistant Materials Technology
- ÷ Systems & Control Technology.

The above titles are referred to using the following specification codes:

Short course specification code	Material route
3970	Design & Technology: Food Technology
3971	Design & Technology: Textiles Technology
3972	Design & Technology: Graphic Products
3973	Design & Technology: Resistant Materials Technology
3974	Design & Technology: Systems & Control Technology

## Teacher's Guide – key features of the Short Course

- ÷ Concise and reduced specification content based on the Full Course content.
- ÷ Common content can be co-taught with the Full Course.
- ÷ Specification is organised under the assessment objectives.
- ÷ 40% terminal examination (1 hour) with two tiers of entry.
- ÷ Clear links between the content, assessment objectives and questions in the terminal examination.
- ÷ Short Course paper has three questions that are a subset of the Full Course questions.
- ÷ Exam includes a product analysis question which is accessible to all levels of students.
- ÷ 60% coursework project (20 hours) supported by exemplar material.
- ÷ Choice of Edexcel-set tasks with a 10 page portfolio proforma.
- ÷ Very simple coursework mark scheme to assess a single coursework project.
- ÷ Clear and easy to use Candidate Mark Record Sheet and annotation.
- ÷ INSET programmes to cover all aspects of the qualification including the use of ICT.
- ÷ Supporting textbooks and on-line resources.
- ÷ Material areas, give direct progression to Edexcel AS/Advanced GCE.

# Changes old to new

---

All GCSE specifications (the new name for syllabuses) have been revised to reflect the changes to the National Curriculum Programmes of Study, Design & Technology Subject Criteria and to the AS/Advanced GCE specifications. With this in mind, all five of the new Edexcel GCSE specifications are consistent with and provide a progression to Edexcel's Advanced Subsidiary (AS) and Advanced GCE courses in Design & Technology. GCSE (Short Course) Design & Technology provides an interesting course for students who do not want to follow the Full Course GCSE in Design & Technology.

## How different are the new specifications from the old syllabuses?

The new GCSE Design & Technology criteria require a minimum level of change. These changes are outlined below.

Changes to the assessment objectives (AO) from 40% designing and 60% making to:

AO1	20%	Classification and selection of materials and components Preparing, processing, finishing materials and industrial practice
AO2	60%	Designing and making
AO3	20%	Design and market influence including the wider effects of design and technology on society

- ÷ ICT skills are to be tested within written assessment – these skills will include the use of CAD/CAM where appropriate.
- ÷ The use of ICT within coursework is compulsory. In practice ICT will include the use of CAD/CAM where appropriate and available.
- ÷ The incorporation of teamwork.
- ÷ There must be at least one assignment that addresses the assessment objectives in an integrated way. This must include a 3D product and portfolio and/or the equivalent appropriate ICT evidence. The whole activity must not exceed 20 hours for the Short Course.
- ÷ Signposting of key skills opportunities at level 2.
- ÷ Signposting of opportunities for the development of moral, ethical, social and cultural issues, environmental education, health and safety education and the European dimension.
- ÷ Signposting of opportunities for the development of education for citizenship.

The next section, '*How do the Edexcel GCSE specifications help teachers manage the change from old to new?*' goes on to explain how Edexcel has addressed each of the changes outlined.

## How do the Edexcel GCSE specifications help teachers manage the change from old to new?

Edexcel has addressed all of the new GCSE Design & Technology criteria through the structure and content of its new specifications. The aim has been to make the change from the old syllabuses to the new specifications as seamless as possible. At the same time Edexcel has taken the opportunity to develop an identical structure and simplified assessment strategy for all the specifications in the suite. The list below explains how Edexcel has addressed each of the changes to the design and technology criteria.

- ÷ Each specification content is organised under the new assessment objectives section AO1 includes all the content which relates to materials and components; preparing, processing, finishing materials and industrial practice. Section AO3 includes all the content which relates to evaluating processes and products. There are clear links from the content of each assessment objective to specified questions in the terminal examination paper.
- ÷ The addition of the new assessment objective AO3, does not result in the addition of even more content to the Edexcel specifications. Rather, superfluous content has been removed to give a lean and manageable specification.
- ÷ The use of ICT is tested within the Short Course paper. Students should develop understanding of the use of CAD/CAM in single item production. The use of ICT will be tested in Question 1 in the Foundation Tier and Question 2 in the Higher Tier. There will be specialist ICT Inset for each material area.
- ÷ The aim of using ICT in coursework projects is to enable students to enhance their design and technology capability. Students should develop understanding of the use of CAD/CAM in single item production. In practice CAD/CAM is assessed where it is appropriate and available. Students will not be penalised for non-use of CAD/CAM. Please refer to the Coursework Guide for more information about the use of ICT in coursework. There will be specialist ICT INSET for each material area.
- ÷ Students have the opportunity for group work on some aspects of coursework projects. Each student must, however, provide a uniquely definable and assessable contribution. Opportunities for group work may include identifying and gathering information, developing briefs and specifications, evaluating and testing activities and making and evidencing part of a larger product.
- ÷ There is a single coursework project which should not exceed 20 hours. It includes a 10-page portfolio and a 3D product for each specification in the suite. The requirement for a separately-assessed product investigation has been removed. Instead students should analyse and evaluate products and processes in order to recognise the difference between quality of design and quality of manufacture. This AO3 knowledge and understanding will be assessed in the Product Analysis question – Question 3 in the Foundation Tier and Question 1 in the Higher Tier.
- ÷ Each specification in the suite sign-posts opportunities for developing the key skills of communication, information technology, application of number, improving own learning and performance, working with others and problem solving. The key skills are sign-posted where they may occur naturally within a programme of study and are offered only as a guide. Centres may wish to use alternative opportunities and approaches to suit their own situations.

- ÷ Each specification in the suite also sign-posts opportunities for the development of spiritual, moral, ethical, social and cultural issues, environmental education, health and safety education and the European dimension. Similarly, these opportunities are sign-posted where they may occur naturally within a programme of study and are offered only as a guide.
- ÷ Each specification in the suite also sign-posts opportunities for the development of education for citizenship. Again, these opportunities are sign-posted where they may occur naturally within a programme of study and are offered only as a guide.

## What are the main features of the new Edexcel GCSE specifications?

The opportunity to develop new specifications at GCSE level means that, for the first time, there can be progression right through from the start of Key Stage 4 (KS4) to the end of Key Stage 5 (KS5). Accordingly, the Edexcel specifications at GCSE have been developed with a view to students being able to continue their design and technology studies through AS right up to Advanced GCE Level or Advanced Vocational Certificates of Education in Manufacturing and Engineering, should they wish to do so.

One of the key opportunities has been to ensure that all the specifications at KS4 and KS5 use similar and consistent terminology both in the content and in the assessment criteria. All the Edexcel GCSE specifications include familiar and new content which has been structured to follow the new assessment objectives, AO1, AO2 and AO3. The Short Course content is a subset of the Full Course content and is reduced to achieve the lowest possible amount of content. Sections of the content that are common to both the Full and Short Courses can be co-taught.

### External assessment

The length of the terminal examination has been reduced to 1 hour for the Short Course. Students must be entered for either the Foundation or the Higher Tier. There are three questions in the Short Course paper, which are a subset of the Full Course paper. Each question assesses a specific part of the specification content, as indicated in the tables below. Question 3 (AO3) in the Foundation Tier is the same as Question 1 (AO3) in the Higher Tier, forming the overlap between the two tiers.

Short Course Higher Tier	
Question	Assessment objective tested
1	AO3
2	AO1
3	AO1

Short Course Foundation Tier	
Question	Assessment objective tested
1	AO1
2	AO1
3	AO3

### Internal assessment

The old designing and making weighting has been changed to a combined 60% for designing and making in AO2. This means students can develop integrated coursework projects which can now have any weighting within AO2. The assessment criteria have therefore been developed to ensure that students who demonstrate high-level designing or making skills (or both) can achieve a good grade.

- ÷ The assessment criteria for the Short Course have been greatly simplified to give a very simple coursework mark scheme. There are six assessment criteria for designing and making. Each one of these is further divided into two key features. The Candidate Mark Record Sheet is simple and straightforward, with two easy-to-apply assessment stages using a ‘best fit’ process.
- ÷ Students should spend approximately 20 hours working on one of 20 Edexcel-set tasks, listed in the Coursework Guide. Students should use copies of the 10-page A3 proforma to produce their A3 portfolios or provide hard copy of equivalent ICT evidence.

# Planning for delivery

The Edexcel Short Course meets the requirements of the GCSE criteria for design and technology and fully covers the KS4 Programme of Study. The Short Course content is:

- ÷ structured around the assessment objectives AO1, AO2 and AO3
- ÷ developed from the statements in the KS4 Programme of Study.

This means that the KS4 Programme of Study can be delivered directly through the structure of the specification.

## Model of delivery

The model of delivery outlined below is based on the structure of the Short Course specification. Centres may develop their own models of delivery or follow this model.

Year 10	AO	Content	Outline of course delivery
Term 1		Introduction to course	Introduction to course. Short, focused tasks to teach designing and communication skills.
Term 1	AO1	Classification and selection of materials and components	Focused tasks that deliver materials knowledge and specialist skills.
Term 2		Preparing, processing, finishing materials and industrial practice	Focused tasks that deliver specialist knowledge about materials and processes. Short design and make task to develop and acquire skills, including the use of ICT in single item production.
Term 3	AO3	Design and market influence  By half term start coursework project	Focused tasks related to the analysis and evaluation of products and processes.  Identify need, gather information, produce specification.
Year 11	AO	Content	Outline of course delivery
Term 4-5	AO2	Designing and making	Students demonstrate their designing and making skills and knowledge and understanding through a design and make task.
Term 5-6	AO1 + AO3	Complete coursework project  Revision	Complete coursework project by half term to allow final refinements before 1st May.  Revision of AO1 and AO3 content. Exam skills and practise examination questions.

## Delivery of the specification content in more detail

### **AO1: Materials and components; preparing, processing, finishing materials and industrial practice**

Teachers should be familiar with much of the content of AO1. It builds on knowledge and understanding of materials, components and processes normally studied at Key Stage 3 (KS3) and KS4. The content to be studied is clearly stated in the specification and has been kept to the minimum.

The industrial practice content of the specification is not new. It relates to the use of CAD/CAM in single item production. This is addressed in AO1 as follows:

#### **b Preparing, processing and finishing materials sections (vi) and (vii)**

These two sections relate to how ICT, including CAD/CAM is used in single item production, which is assessed in external assessment and coursework where appropriate. Students should be taught how CAD/CAM is used to generate, develop, model and communicate design proposals and in the production of single items.

- ÷ This may require the use of textbooks, videos, clipart libraries, CD ROMs, databases, scanners, digital cameras, the Internet, CAD software, spreadsheets, plotters and printers, vinyl cutters, electronic or computer-aided machines – where appropriate and available.
- ÷ It is not expected that all centres will have access to a wide range of CAD/CAM resources, but centres should aim to give students some ICT experience, however limited.
- ÷ Students should use CAD/CAM to enhance their coursework where appropriate and available.

Centres may wish to deliver this content in Year 10 and/or in Year 11 and through the use of CAD/CAM in coursework, where appropriate and available.

### **AO3: Design and market influence**

Although this is a new assessment objective teachers may be familiar with its content, because it builds on knowledge and understanding that has been taught in many syllabuses at KS4. The content to be studied is a subset of the AO3 full course content and includes:

- ÷ AO3 includes knowledge and understanding related to quality of design and quality of manufacture. The section requires students to analyse and evaluate products and processes drawn from one-off, batch and high-volume products. Students should be taught to use standard product design specification criteria as a basis for analysing products. These criteria include aesthetics, function, user and market requirements, moral, cultural and environmental considerations, materials and manufacturing processes, quality, safety and value for money.

AO3 is tested through a product analysis question.

The content of AO3 can be delivered through a range of taught elements, investigative activities and focused tasks. Centres are free to choose their own products for product analysis, but these must enable coverage of the AO3 content and enable students to meet the assessment requirements. Students should analyse more than one textile product drawn from one-off, batch and high volume products. Please refer to the next section *Assessment requirements* for more details about the product analysis question.

Design and market influence may be delivered at any time during the GCSE course, but it is often effective in providing inspiration for students' own coursework project ideas. It may therefore be appropriate to deliver design and market influence near the end of Year 10, when students are deciding on their coursework projects.

## **AO2: Designing and making**

There is a single coursework project which includes a 3D product for each specification in the suite. The coursework project is not tiered. Please refer to the Coursework Guide for the Short Course for more information about the kind of projects that are appropriate for each materials area.

Coursework should not exceed 20 hours and A3 portfolios should consist of approximately 10-pages. This reduction in the workload for coursework is designed to enable the development of manageable projects, with coursework folders that are a conclusion to research and that demonstrate a concise record of product development.

In line with the reduced requirement related to folder content, Edexcel has developed a simple, concise and easy to use mark scheme, with two easy-to-apply marking stages using a 'best-fit' approach. This, together with a 10-page coursework folder should make the marking of coursework much more manageable.

# Assessment requirements

Assessment of the Short Course specification consists of two components, both of which are compulsory:

- ÷ **01 coursework**
- ÷ **02 terminal examination.**

Internal assessment – coursework	
01	60% weighting
Coursework is internally assessed and externally moderated by Edexcel. Guidance on the selection and carrying out of coursework projects is provided in the Edexcel Coursework Guide. All students must demonstrate their designing and making skills and knowledge and understanding through a design and make task, which should not exceed 20 hours.	

External assessment – terminal examination		
Paper 2F or 2H	40% weighting	
There are two tiers of entry with a separate paper for each tier. Students may be entered <b>either</b> for the Foundation Tier or the Higher Tier. The grades available for each tier are as follows:		
Foundation Tier (Grades G to C)	Paper: 2F Three questions	Time: 1 hour
Higher Tier (Grades D to A*)	Paper 2H Three questions	Time: 1 hour

Differentiation will be achieved in external assessment by the tier of entry, outcome and task. In entering students for the appropriate tier, centres should take account of each student's performance at KS3 and her/his subsequent progress at KS4. A safety net is provided for students entered for the Higher Tier in the form of an allowed grade E. Students failing to achieve grade E on the Higher Tier will be reported as Unclassified.

## Specimen papers

The specimen papers are to be used by centres as a guide as to the style and structure of questions, expected responses, syllabus coverage and weightings for the design and technology suite.

Whilst subsequent papers will always test AO1 and AO3, it may be necessary to change the order of the questions to improve the candidates access and performance.

## Short Course paper structure

- ÷ The Short Course has two papers, 2F and 2H, which correspond to the Foundation and Higher Tiers.
- ÷ Each paper is 1 hour duration.

- ÷ Each paper is made up of three questions with a total of 44 marks per paper.
- ÷ Grade C/D overlap between the two papers is mostly achieved by the Product Analysis question.

## Assessment of quality of written communication

Students should be reminded of the importance of clear and orderly presentation in their answers. They should include diagrams where these are helpful.

## Paper 2F – Foundation Tier

There are three questions in the Foundation Tier. Each question assesses a specific part of the specification content. In the specimen papers these appear in the order indicated in the table below, however this may not be the order for subsequent papers.

Paper 2F			
Question	Assessment objective tested	Content covered by question	Question style/type
1	AO1	Preparing, processing, finishing materials and industrial practice.	Structured questions on a theme.
2	AO1	Classification and selection of materials and components.	Structured questions on a theme.
3	AO3	Design and market influence.	Product analysis – students are asked to analyse a product following the analysis process.

## Style and structure of questions

Each question assesses content related to specific assessment objectives. The questions are ‘ramped’ throughout the paper. This means that the first parts of each question are easier and more accessible and they get progressively harder throughout the whole question. For example a question may:

- ÷ start with the command ‘Name or State’
- ÷ move onto the command ‘Describe’
- ÷ move on to the command ‘Explain’
- ÷ then finish with ‘Explain and give an example of...’.

However the command alone does not depict the level of the question. This is achieved by the content of the question combined with the command.

This style of questioning means that the paper can be structured to enable students achieve marks throughout the paper. This structure enables differentiation of students from G to C.

The last question in the Foundation Paper is a Product Analysis question which also provides the overlap between grades D to C.

## Short Course Foundation Tier Paper 2F

### Question 1

This tests AO1 b: Preparing, processing and finishing materials and industrial practice.

As it is the first question it will include visual elements where students will be required to name and describe components, tools or equipment, related to a theme or context. Items may be linked to processes and/or industrial practice – which may include the use of CAD/CAM in one-off production.

### Question 2

This tests AO1 a: classification and selection of materials and components.

The question covers knowledge and understanding of the working properties and selection of materials and components. This is related to a theme or context.

### Question 3: Product analysis question

This tests AO3 c: design and market influence.

This question covers knowledge and understanding of a product drawn from one-off, batch and high volume products. When analysing commercial products it is good practice to use product design specification criteria as the basis for learning about the product. Such criteria might include: its function and how it looks and performs, the needs and values of users and the market (including ‘values’ issues), the materials and processes used in the product manufacture, safety issues, quality of design and manufacture and value for money.

Question 3 will include a diagram showing a product. Additional written information will be given to supplement the diagram. Students will be asked to analyse the product through a series of structured questions that will be based around some of the following:

- ÷ giving specification criteria for the product
- ÷ suggesting suitable materials and/or components
- ÷ properties of materials in relation to the product, their suitability, processing, testing etc
- ÷ aspects relating to a manufacturing process
- ÷ the fitness for purpose of the product.

Question 3 in the Foundation Tier is exactly the same as Question 1 in the Higher Tier. It provides the overlap between grades D and C in the two tiers.

Students will benefit from undertaking focused tasks in which they are asked to analyse one-off, batch and high volume products. Analysis may be based initially on product design specification criteria outlined in the content of AO3. As students become more proficient it is good practice to use the structure of the Product Analysis question for examination practise.

## Paper 2H – Higher Tier

There are three questions in the Higher Tier. Each question assesses a specific part of the specification content. In the specimen papers these appear in the order indicated in the table below, however this may not be the order for subsequent papers.

Paper 2H			
Question	Assessment objective tested	Content covered by question	Question style/type
1	AO3	Design and market influence.	Product analysis - students are asked to analyse a product following the analysis process.
2	AO1	Preparing, processing and finishing materials and industrial practice.	Structured questions on a theme.
3	AO1	Classification and selection of materials and components.	Structured questions on a theme.

### Style and structure of questions

The paper is ramped so that students achieve marks throughout the paper, which enables differentiation of students from D to A\*.

### Short Course Higher Tier paper 2H

#### Question 1: Product analysis question

The first question in the Higher Paper is a Product Analysis. It is exactly the same as Question 4 of the Foundation Tier, it therefore provides the overlap between grades D to C in the two tiers.

#### Question 2

This tests AO1 b: Preparing, processing and finishing materials and industrial practice.

The question will require more in-depth knowledge and understanding expected of a Higher Tier student. It will be set out in a slightly different style to Question 1 in the Foundation Tier. Students will be given an item related to a theme or context on the use of tools or equipment. Items may be linked to processes and/or industrial practice – which may include the use of CAD/CAM in one-off production.

#### Question 3

This tests AO1 a: Classification and selection of materials and components.

The question covers knowledge and understanding of the working properties and selection of materials and components which is related to a theme or context. The question will require more in depth knowledge and understanding expected of a Higher Tier student. It will be set out in a slightly different style to Question 2 in the Foundation Tier.

## Exam techniques and guidance notes

In both the Foundation Tier and the Higher Tier students have to answer three questions, each with a number of different parts. Students should be encouraged to carefully read all the questions in the paper before answering, so that they answer each question appropriately. They should then read the stem of each question to ensure that the information and instructions are fully understood. A technique adopted by some students is to highlight the key words in the stem to ensure that each point has been addressed in the answer. There are no trick questions in any of the papers.

It is good practise to allocate time for answering parts of a question that relates to the marks awarded for that part of the question. A 5-mark question therefore requires more time spent on it than a 2-mark question.

Spending more time on a question than is necessary, may jeopardise students' scoring opportunities on further questions. There are obviously places within the examination paper where students will 'pick-up' time in answering parts of questions more quickly than anticipated. This time could be usefully spent on the product analysis questions where time allocation may be tighter.

The following notes give a clear indication of the most common sort of questions and the expected responses students could give in the Design & Technology papers.

### Give/state/name

Normally a one-word or two-word answer, at the very most a sentence. Allocation of marks is normally 1, or at most 2, depending upon the complexity of the knowledge required.

eg Give the name of the symbol below.

This will result in only one correct answer. The mark scheme lists the single answer with the mark allocation being a single mark.

eg Give 2 reasons .....

The mark scheme will give a number of possible reasons. The mark allocation would be 2 x 1 (2 answers, 1 mark for each answer).

Exactly the same style should be adopted for State, Name etc.

eg Name a specific item ...

This requires students to give a specific item. Generic answers such as wood or plastic would gain no marks.

## **Describe**

A higher level of response than GIVE/STATE/NAME.

Normally requires a statement or account of something, consisting of one or two sentences making reference to a number of points.

Allocation of marks is normally at least 2 (1 mark for each point accounted for). If more points are required in the description, then mark allocation is increased accordingly.

## **Explain**

A higher level response than DESCRIBE.

Normally requires a clear or detailed account of something which normally includes justification, reasons or examples.

Allocation of marks is normally at least 2 (1 mark for each point with justification). If more points are required to be justified, then mark allocation is increased accordingly.

eg Explain how .....

Normally the mark scheme will give a number of key points expected in the answer with a statement such as '1 mark for each key point'.

A simple statement is only worth 1 mark whilst a complete description scores 2 marks.

This is exactly the same procedure for such instructions as describe, discuss, evaluate etc.

## **Use notes and sketches/annotated sketches**

Students should answer questions by using both notes and sketches to support or clarify particular points in the answer.

Sketch means a quick drawing that communicates the information. Marks are awarded for the communication of the idea rather than the drawing skills shown.

Allocation of marks is 1 mark for each point answered by either sketch or supporting note.

## **Calculations**

If students are required to calculate an answer they should be encouraged to indicate all stages of the calculation rather than simply writing down the final answer. In this way even if the final answer is incorrect, students can be awarded marks for process.

# Teaching key skills with design and technology

Key skills are the general skills that can help students improve their own learning and performance. They are relevant to what is done in education and training, work and life in general. All Edexcel GCSE specifications offer a range of opportunities for developing and generating evidence for the six key skills:

- ÷ communication
- ÷ application of number
- ÷ information technology
- ÷ working with others
- ÷ improving own learning and performance
- ÷ problem solving.

There are key skills units at five levels. At GCSE level students will normally address key skills at level 2, although they may achieve key skills at any of the five levels. At level 2 students work with straightforward subjects and activities in familiar situations. Internal assessment for key skills is based on a portfolio of evidence collected from day-to-day studies in a range of different subjects, including Design & Technology.

Table 1 provides generic information about the key skills communication, application of number and information technology at level 2.

**Table 1**

Key skills	Opportunities for using these key skills	At level 2 students must be able to:
<p><b>Communication</b> This key skill is about speaking and listening, reading and writing.</p>	<p>eg when taking part in discussions, using a diagram to explain something when giving a talk, reading material for a project or writing a short essay.</p>	<ul style="list-style-type: none"> <li>÷ help move discussions forward</li> <li>÷ give a short talk using an image to illustrate the main points</li> <li>÷ read and summarise information from extended documents</li> <li>÷ use a suitable structure and style when writing extended documents.</li> </ul>
<p><b>Application of number</b> This key skill is about interpreting information to do with numbers, doing calculations and presenting findings.</p>	<p>eg when making measurements or obtaining information from graphs and diagrams, calculating amounts and sizes, using charts to explain the results of calculations.</p>	<p>Carry through a substantial activity that requires students to:</p> <ul style="list-style-type: none"> <li>÷ select information and methods to get the results needed</li> <li>÷ carry out calculations involving two or more steps and numbers of any size, including the use of formulae and check methods and levels of accuracy</li> <li>÷ select ways to present findings, including the use of a graph, describe methods and explain results.</li> </ul>
<p><b>Information technology</b> This key skill is about using a computer to find, explore, develop and present information, including text, numbers and images.</p>	<p>eg when using a computer to find information for a project, work out ways to tackle a problem, create charts and graphs, write a letter or report.</p>	<ul style="list-style-type: none"> <li>÷ identify suitable sources, carry out effective searches and select relevant information</li> <li>÷ bring together, explore and develop information, and derive new information</li> <li>÷ present combined information, text, images and numbers, in a consistent way.</li> </ul>

It can be seen from Table 1 that design and technology can provide numerous opportunities for delivering and evidencing key skills. Please refer to *Appendix 1* in the GCSE Design & Technology specifications where key skills opportunities are detailed more fully. All the specifications signpost opportunities where key skills may fall naturally within a programme of study. It may be that not all the examples given are appropriate for all programmes and they may need to be adapted to suit particular situations. Teachers may devise alternative opportunities and approaches when developing their own programmes of study.

The evidence generated through GCSE Design & Technology will contribute towards students' key skills portfolio. Centres should check the current position on proxy key skills qualifications as some students may be exempt from part or all of the assessment of a specific key skill. Copies of the key skills specifications, together with evidence recording documentation can be ordered from Edexcel Publications.

## Key skills terms

The following terms are used in relation to key skills.

**Evidence:** what students need to produce to prove they have the skills required. In design and technology opportunities for collecting evidence arise during set class tasks, focused tasks and in coursework. Examples of evidence include:

- ÷ items and products made by students
- ÷ written material, design work and photographs
- ÷ audio/visual recordings
- ÷ computer print-outs and diagrams
- ÷ records from an assessor and others who have seen the work.

Some evidence may be used for more than one key skill. For example computer printouts of text and images, graphs and charts may be used for communication, application of number and information technology.

**Extended documents:** these include textbooks, reports, articles and essays of more than three pages. They may deal with straightforward or more complex subjects and include images such as diagrams, pictures and charts. Students are asked to read and write extended documents at level 2 and above to identify, for example, lines of reasoning in fairly lengthy material and then to structure their own writing to help others follow the sequence of their ideas.

**Straightforward:** straightforward subjects and materials are those that are found in everyday studies and activities. Content is put across in a direct way with the main points being easily identified. Usually sentence structures are simple with familiar vocabulary.

**Complex:** complex subjects and materials present a number of ideas, some of which may be abstract, very detailed or require students to deal with sensitive issues. The relationship of ideas and lines of reasoning may not be immediately clear. Specialised vocabulary and complicated sentence structures may be used.

**Substantial activity:** an activity that includes a number of related tasks, where the results of one task will affect the carrying out of the others. For example, in application of number a substantial activity will involve obtaining and interpreting information, using this information when carrying out calculations and explaining how the results of calculations meet the purpose of the activity.

**Portfolio:** a file or folder for collecting and organising evidence for assessment. It should include a contents page to show where evidence for each part of the unit(s) can be found. This may be in hard copy or electronic form.

Please refer to the Edexcel publication *Teaching Key Skills with Edexcel GCSEs*.

# Teaching ICT with design and technology

---

The new GCSE specifications provide opportunities for students to develop their ICT capability through the holistic use of CAD/CAM to support their learning, where it is appropriate and available. References to CAD/CAM are included in the Short Course in AO1 section b.

## **b Preparing, processing, finishing materials and industrial practice, sections (vi) and (vii)**

Students are asked to develop understanding of the use of CAD/CAM in single item production, which is assessed in external assessment and coursework. The aim is to develop knowledge and understanding of CAD/CAM and capability in its use. CAD/CAM may be used where it would enhance coursework activities, such as in research, designing, nutritional analysis, costing, planning and manufacture, where appropriate and available.

Students who use hand-drawn communication will not be penalised for non-use of CAD. There are many occasions when developing hand and eye co-ordination should be encouraged. For example, when generating ideas it is often more appropriate to use hand-drawn techniques. Students should be encouraged to develop both hand and computer skills.

Students should also be encouraged to understand how CAM is used for cost-effective manufacture and some students may wish to use CNC machines where they are available. Students will not be penalised for non-use of CAM in manufacture.

Please refer to the Coursework Guide for more information about the use of CAD/CAM in coursework. There will be specialist ICT INSET to support each materials area.

# Teaching citizenship with design and technology

---

The new GCSE specifications provide a range of opportunities for students to develop their knowledge, skills and understanding of citizenship. Developing this understanding will:

- ÷ help students become informed, thoughtful and responsible citizens who are aware of their duties and rights
- ÷ promote their moral, social and cultural development, making them more self-confident and responsible both in and beyond the classroom
- ÷ encourage students to play a helpful part in the life of their schools, neighbourhoods, communities and the wider world
- ÷ teach them about our economy and democratic institutions and values
- ÷ encourage respect for different national, religious and ethnic identities
- ÷ develop students' ability to reflect on issues and take part in discussions.

It can be seen from the above that design and technology is one of the KS4 subjects that can provide opportunities for delivering citizenship. Opportunities occur both in the delivery of the specification content and when students undertake coursework. These opportunities may occur when:

- ÷ researching, designing and making products
- ÷ considering how technology affects society and their own lives
- ÷ developing understanding of the impact of values issues on design and technology
- ÷ analysing and evaluating products.

Please refer to *Education for citizenship* in the GCSE Design & Technology specifications, where opportunities for delivering citizenship through design and technology are detailed more fully. These opportunities need to fall naturally within a programme of study. It may be that not all the examples given in the specifications are appropriate for all programmes and they may need to be adapted to suit particular situations. Teachers may devise alternative opportunities and approaches when developing their own programmes of study.

Please also refer to the Edexcel publication *Teaching Key Skills with Edexcel GCSEs*.

# Incorporating the wider curriculum

---

The new GCSE specifications provide a range of opportunities for students to develop their knowledge, skills and understanding about the wider curriculum. This relates to opportunities for students to develop moral, ethical, social and cultural issues, environmental, health and safety and European issues.

Opportunities for delivering the wider curriculum occur both in the delivery of the specification content and when students undertake coursework. These opportunities may occur when:

- ÷ researching, designing and making products
- ÷ considering how technology affects society and their own lives
- ÷ developing understanding of the impact of values issues on design and technology
- ÷ analysing and evaluating products.

Please refer to *The wider curriculum* in the GCSE Design & Technology specifications, where opportunities for delivering these skills through design and technology are detailed fully. These opportunities need to fall naturally within a programme of study. It may be that not all the examples given in the specifications are appropriate for all programmes and they may need to be adapted to suit particular situations. Teachers may devise alternative opportunities and approaches when developing their own programmes of study.

Please also refer to the Edexcel publication *Teaching Key Skills with Edexcel GCSEs*.

# Textbooks and resources

---

## Textbooks

There is a wide range of textbooks currently available for GCSE in Design & Technology and most of them will contain useful material for teaching this specification. To give teachers maximum support, student textbooks and a Teacher's Resource File have produced specifically for all the Edexcel GCSE Design & Technology specification titles.

## Resistant Materials Technology

The following list of resources is not intended to be exhaustive or prescriptive. It is offered as a suggested starting point from which students may extend their research.

- Bairstow J, Barber R and Kenny M – *Design Modelling* (Hodder and Stoughton, 2000) ISBN 0340663391
- Barlex D – Nuffield Design and Technology Project 11 – 14: *Students Book* (Longman, 2000) ISBN 0582411149
- Beasley D – *Design Presentation* (Heinemann, 1984) ISBN 0435750542
- Bishop O – *Understanding Electronics* (Butterworth-Heinemann, 1995) ISBN 0750621001
- Breckon A, Finney M and Fowler P – *Collins CDT: Craft, Design & Technology Foundation Course* (Longman, 1986) ISBN 0003220532
- Cave J et al – *TEP Technology in Practice* (John Murray, 2000) ISBN 0719571790
- Cave J – *Access Technology Constructional Materials* (Thomas Nelson, 1994) ISBN 0174385358
- Cave J – *Access Technology-Mechanisms* (Stanley Thornes) ISBN 017438534X
- Chapman C and Peace M – *CDT Design and Realisation* (Collins, 1988) ISBN 0003220605
- Chapman C and Peace M – *Working with Materials* (Collins, 1996) ISBN 003273512
- Davies J and Goodier A – *STEP-Design & Technology: Resistant Materials* (Cambridge University Press, 1996) ISBN 0521498732
- Dul J and Weerdmeester B – *Ergonomics for Beginners* (Taylor and Francis, 1993) ISBN 0748400796
- Fair A and Rose N – *Design & Technology: Resistant Materials to GCSE* (Oxford UP) ISBN 0198327900
- Fair D and Kenny M – *Design Graphics* (Hodder and Stoughton, 1987) ISBN 0340405295
- Fowler P and Horsey M – *CDT Technology* (Collins, 1988) ISBN 0003274349
- Lambert B and Fowler C – GCSE D&T for Edexcel: Resistant Materials Technology – Student Book (Heinemann, to be Published in 2001) ISBN 0435417002**
- Lambert B and Fowler C – GCSE D&T for Edexcel: Resistant Materials Technology – Teacher's Resource File (Heinemann, to be Published in 2001) ISBN 0435417010**

**Lambert B and Fowler C – *GCSE D&T for Edexcel: Resistant Materials Technology – Evaluation pack (includes Teacher’s Resource File and a free Student Book) (Heinemann, to be published in 2001) ISBN 0435417029***

Nuffield Design and Technology Project – *D&T Product Design* (Longman, 1996)  
ISBN 0582234697

Prange B and Kelly M – *Wood and Technology* (Cambridge University Press, 1994)  
ISBN 0521438225

Ray J – *Plastics and Technology* (Cambridge University Press, 1995) ISBN 0521438861

Royal College of Art Schools Technology Project – *D&T Routes: Resistant Materials* (Hodder and Stoughton, 1997) ISBN 034067394X

Royal College of Art Schools Technology Project – *D&T Routes Key Stage4 Students Core Book* (Hodder and Stoughton, 1996) ISBN 0340673427

Royal College of Art Schools Technology Project – *RCA Routes Resistant Materials* (Hodder and Stoughton, 1997) ISBN 034067394X

Rose M and Simmonds K – *GCSE-CDT-Technology* (Longman 1990) ISBN 0582025982

Sage J and Thompson D – *Electronics and Control Systems* (Cambridge University Press, 1996)  
ISBN 0521499615

Stephenson (ed) – *Understanding Plastics* (University of York, 1996) ISBN 1853425672

Stevens R – *Metals and Technology* (Cambridge University Press, 1994) ISBN 0521404150

## Graphic Products

The following list of resources is not intended to be exhaustive or prescriptive. It is offered as a suggested starting point from which students may extend their research.

**Attwood J – GCSE D&T for Edexcel: Graphic Products – Student Book (Heinemann, to be published in 2001) ISBN 0435417800**

**Attwood J – GCSE D&T for Edexcel: Graphic Products – Teacher’s Resource File (Heinemann, to be published in 2001) ISBN 043541779**

**Attwood J – GCSE D&T for Edexcel: Graphic Products – Evaluation Pack (includes Teacher’s Resource File and a free Student Book) (Heinemann, to be published in 2001) ISBN 0435417789**

Bairstow J, Barber R and Kenny M – *Design Modelling: Visualising Ideas in 2D and 3D* (Hodder and Stoughton, 2000) ISBN 0340663391

Bann D – *The New Print Handbook* (Little Brown and Co, 1997) ISBN 0316641510

Burall P – *Green Design* (Design Council, 1991) ISBN 0850722845

Conran T – *The Conran Directory of Design* (Octopus Conran) ISBN 1850290059

Cottis J – *Product Modelling* (Oxford University Press, 1991) ISBN 0198327617

Dietz M and Monninger M – *Japan Design* (Taschen, 1994) ISBN 3822893501

Fair D and Kenny M – *Design Graphics* (Hodder and Stoughton, 1987) ISBN 0340405295

Goldman R and Papson S – *Nike Culture* (Sage, 1998) ISBN 0761961496

Hollis R – *Graphic Design* (Thames and Hudson, 1994) ISBN 0500202702

Leslie J and Burgoyne P – *FC Football Graphics* (Thames and Hudson, 1998) ISBN 0500280533

Finney M and Crampton K – *Collins CDT: Design and Communication* (Collins, 1988) ISBN 0003220338

Livingstone A and Livingstone I – *Dictionary of Graphic Design and Designers* (Thames and Hudson, 1992) ISBN 0500202591

Murphy J and Rowe M – *How to Design Trademarks and Logos* (Phaidon, 1988) ISBN 0714825573

O’Neill M – *Structural Package Designs* (The Pepin Press, 1998) ISBN 9054960515

Opie R – *Packaging Source Book* (Little Brown and Co, 1989) ISBN 0356176657

Pipes A – *Production for Graphic Designers* (Laurence King, 1997) ISBN 1856691101

Powell D – *Presentation Techniques* (Little Brown and Co, 1990) ISBN 0316912433

Poynor R – *Typography Now* (Booth-Clibborn Editions, 1998) ISBN 186154023X

Royal College of Arts Schools Technology Project – *D&T Routes Graphic Products* (Hodder and Stoughton, 1998) ISBN 0340673931

Shepard T and Loft A – *Design and Make It: Graphic Products* (Nelson Thornes, 1996) ISBN 0748724745

Sidles C – *Great Production by Design* (North Light Books, 1999) ISBN 0891348387

Stephenson J – *Graphic Design: Materials and Equipment* (Studio Vista, 1987)  
ISBN 0289800072

TEP – *The Young Technologists Handbook* (The Engineering Council) ISBN 1898126550

Tombini M – *The Look of the Century* (Dorling Kindersley, 1996) ISBN 0751303380

Vickers G – *Style in Product Design: Issues in Design* (Design Council, 1992)  
ISBN 0850722772

Walton R – *Hot Sites* (Harper Collins, 1999) ISBN 0688158889

Williams G – *Branded?* (V&A, 2000) ISBN 1851773258

## Textiles Technology

The following list of resources is not intended to be exhaustive or prescriptive. It is offered as a suggested starting point from which students may extend their research.

Aldrich W – *CAD in Clothing and Textiles* (Blackwell Science, 1994) ISBN 0632038934

Chuter A – *Introduction to Clothing Production Management* (Blackwell Science, 1995)  
ISBN 0632039396

**Cresswell L and Watkins S – *GCSE D&T for Edexcel: Textiles Technology – Student Book* (Heinemann, To be published in 2001) ISBN 043541786X**

**Cresswell L and Watkins S – *GCSE D&T for Edexcel: Textiles Technology – Teacher’s Resource File* (Heinemann, to be published in 2001) ISBN 043417851**

**Cresswell L and Watkins S – *GCSE D&T for Edexcel: Textiles Technology – Evaluation Pack (includes Teacher’s Resource File and a free student book)* (Heinemann, to be published in 2001) ISBN 0435417843**

Cresswell L – *Understanding Industrial Practices in Textiles Technology – Teacher’s Resource File* (Mail Order: Zig-Zag PO Box 24113 London SW18 5WT – Email: zig-zag.com@virgin.net) ISBN 0953348008

Down J – *Design & Technology* (Oxford University Press, 1999) ISBN 0198328133

Drew L – *The Business of Fashion* (Cambridge University Press, 1992) ISBN 0521408253

Joyce C – *Textile Design* (Watson-Guphill, 1993) ISBN 0823053253

Mackenzie D – *Green Design: Design for the Environment* (Laurence King Publishing, 1997)  
ISBN 1856690962

McKelvey K and Munslow J – *Illustrating Fashion* (Blackwell Science, 1997)  
ISBN 0632040246

RCA Schools Technology Project – *D&T Routes: Textiles* (Hodder and Stoughton, 1998)  
ISBN 0340673915

Waring L – *Hats Made Easy: Minor Craft Series* (Sally Milner Publishing, 1996)  
ISBN 1863511504

Wells K – *The Complete Book of Fabric Dying and Printing* (Conran Octopus, 1997)  
ISBN 185029 8661

Weston A – *The Anstey Weston Guide to Textile Terms* (Weston Publishing Ltd, 1997)  
ISBN 0953013006

## Food Technology

The following list of resources is not intended to be exhaustive or prescriptive. It is offered as a suggested starting point from which students may extend their research.

- Barnett A – *Examining Food Technology* (Heinemann, 1996) ISBN 0435420623
- Barnett A – *Understanding Ingredients* (Heinemann, 1998) ISBN 0435428284
- Campbell B, Clapton B and Tipton C – *GCSE D&T for Edexcel: Food Technology – Student Book* (Heinemann, to be published in 2001) ISBN 0435417894**
- Campbell B, Clapton B and Tipton C – *GCSE D&T for Edexcel: Food Technology – Teacher’s Resource File* (Heinemann, to be published in 2001) ISBN 0435417886**
- Campbell B, Clapton B and Tipton C – *GCSE D&T for Edexcel: Food Technology – Evaluation Pack (includes Teacher’s Resource File and a free Student Book)* (Heinemann, to be published in 2001) ISBN 0435417878**
- Department for Education and Employment – *Characteristics of Good Practice in Food Technology* (HMSO, 1996) ISBN 0112709516
- Inglis J and Plewes S – *Collins Real-World Technology: Food Technology* (Collins Educational, 1997) ISBN 0003294900
- McGarth H – *All about Food* (Oxford University Press, 1997) ISBN 0198327676
- Royal College of Art Schools Technology Project– *D&T Routes: Food* (Hodder & Stoughton, 1997) ISBN 0340673923
- Ridgwell J – *Examining Food and Nutrition* (Heinemann, 1996) ISBN 0435420585
- Robinson J, Barnard E and Roberts H – *Design and Make It! Food Technology* (Nelson Thornes, 1997) ISBN 0748724729
- Tull A – *Food and Nutrition* (Oxford University Press, 1997) ISBN 0198327668
- Tull A – *Food and Nutrition: GCSE Edition* (Oxford University Press, 1995) ISBN 0198327935

## Systems and Control Technology

The following list of resources is not intended to be exhaustive or prescriptive. It is offered as a suggested starting point from which students may extend their research.

- Adams J and Hutchings R – *Electronics* (Nelson Thorne, 1996) ISBN 0174482515
- Bishop O – *Practical Electronics for GCSE* ( John Murray, 1989) ISBN 071954632X
- Bishop O – *Understanding Electronics* (Butterworth-Heinemann, 1995) ISBN 0750621001
- Cave J et al – *TEP Technology in Practice* (John Murray, 2000) ISBN 0719571790
- Cave J – *Access Technology Electronics* (Nelson Thornes, 1994) ISBN 0174385749
- Cave J – *Access Technology-Mechanisms* (Stanley Thornes, 2000) ISBN 017438534X
- Chapman C and Peace M – *CDT Design and Realisation* (Collins Educational, 1988) ISBN 0003220605
- Chapman C and Peace M – *Working with Materials* (Collins, 1996) ISBN 0003273512
- Cosway E, Fasciato M, Felstead H, Macklin D and Sheppard T – *Design and Make It! Resistant Materials Technology* (Nelson Thornes, 1997) ISBN 0748724702
- Duncan T – *Electronics for Today and Tomorrow* (John Murray, 1997) ISBN 0719574137
- Duncan T – *Success in Electronics* (John Murray, 1997) ISBN 0719540151
- Fowler P and Horsley M – *Collins CDT Technology* (Collins Educational, 1988) ISBN 0003274349
- Mawson, Bell, Poole and Sheppard – *Design and Make It! Electronic Products* (Nelson Thornes, 1997) ISBN 0748724737
- Payne B and Rampley D – *Collins Real-world Technology: Electronic Products-Design Systems* (Collins Educational, 1997) ISBN 0003200124
- Plant M – *Basic Electronics: Complete Volume* (Hodder and Stoughton, 1990) ISBN 0340414901
- Rich S and Edwards A – *GCSE Technology: Mechanisms* (Nelson Thornes, 1991) ISBN 0748701508
- Sage J and Thompson D – *Design & Technology: Electronics and Control Systems* (Cambridge UP, 1996) ISBN 0521499615
- Yarwood A and Haywood D – *CDT Technology* (Hodder and Stoughton, 1990) ISBN 0340414863

## Internet sites

Due to the ever-changing nature of websites, the following lists can only be an indication of what may be currently available.

### General information Internet sites

Organisation	Website address	Information available
B&Q	<a href="http://www.diy.co.uk">www.diy.co.uk</a>	DIY retailer site. Useful, categorised, how to do tips, ideas etc. Products listed only.
Body Shop	<a href="http://www.the-body-shop.com">www.the-body-shop.com</a>	Great site. Easy and quick. Big on values, ethics, issues and links/action.
BSI	<a href="http://www.bsi.org.uk/education">www.bsi.org.uk/education</a>	Information about standards including 'Compendium of Essential Design & Technology Standards for Schools and Colleges'.
Crafts Council	<a href="http://www.craftscouncil.org.uk">www.craftscouncil.org.uk</a>	The work of the Crafts Council and associated activities.
Curtin University	<a href="http://www.dali.ece.curtin.edu.au/~clive/public.html">www.dali.ece.curtin.edu.au/~clive/public.html</a>	Just-in-time manufacturing.
D&T Times	<a href="http://www.salford.ac.uk/d&amp;t-times">www.salford.ac.uk/d&amp;t-times</a>	More teacher based but links to other D&T sites – WISE etc.
Design Council	<a href="http://www.design-council.org.uk">www.design-council.org.uk</a>	Product glimpses, Design Journal and news.
Edexcel Foundation	<a href="http://www.edexcel.org.uk">www.edexcel.org.uk</a>	Information on specifications and support materials.
Government Department	<a href="http://www.culture.gov.uk">www.culture.gov.uk</a>	General information – press releases available and links to other government departments.
HSS Hire Shops	<a href="http://www.hss.co.uk">www.hss.co.uk</a>	Useful for tools with visuals. Plus health and safety on lifting and shifting.
ICI	<a href="http://www.ici.com">www.ici.com</a>	Chemicals, explosives, materials, safety, health, environment, paints and spa baths.
Liquid Nails	<a href="http://www.liquidnails.com">www.liquidnails.com</a>	Adhesives. Useful adhesive selector system with performance details of products plus some visuals.
Llenroc Plastics Factory	<a href="http://www.orie.cornell.edu/~jackson/plnttour.html">www.orie.cornell.edu/~jackson/plnttour.html</a>	Tour of the factory processes. Visuals and bigger visuals but copyright.
Prym-Dritz Project Page	<a href="http://www.dritz.com">www.dritz.com</a>	How to dye wood and wicker with Dylon Cold Water Dyes. Links to CraftNet Village.

<b>Organisation</b>	<b>Website address</b>	<b>Information available</b>
UNISON	<a href="http://www.unison.org.uk">www.unison.org.uk</a>	Trade union site. Open access to health and safety information bulletins.
Visual Impairment Service	<a href="http://www.connections.gcal.ac.uk/info/groups/Vis-ImpService.html">www.connections.gcal.ac.uk/info/groups/Vis-ImpService.html</a>	Information about designing needs – eg lighting – for visually impaired people.
Warwick University	<a href="http://www.wbs.warwick.ac.uk">www.wbs.warwick.ac.uk</a>	Introduction to operations management which links you to factory tours: eg M&Ms and Llenroc Plastics.

## Resistant Materials Technology

Organisation	Website address	Information available
British Standards Institute	<a href="http://www.bsi.org.uk">www.bsi.org.uk</a>	Useful British Standards materials.
Usernomics	<a href="http://www.usernomics.com/meta.html">www.usernomics.com/meta.html</a>	Ergonomics with links to similar sites.
Marshall Brain's How Stuff Works	<a href="http://www.howstuffworks.com">www.howstuffworks.com</a>	Ideal research material for product investigations.
Ask Jeeves	<a href="http://www.ask.co.uk">www.ask.co.uk</a>	General site to ask questions which will provide site addresses.
Dyson	<a href="http://www.dyson.co.uk">www.dyson.co.uk</a>	Dyson products plus fairly detailed functional details.
Design Council UK	<a href="http://www.design-council.org.uk">www.design-council.org.uk</a>	Design Council site.
BBC	<a href="http://www.bbc.co.uk/education">www.bbc.co.uk/education</a>	Useful BBC bitesize revision site.
Technology Insight	<a href="http://www.technology.org.uk">www.technology.org.uk</a>	Design & Technology Times, help with developing projects.
ICI	<a href="http://www.ici.com">www.ici.com</a>	ICI site, products and schools site.
Gatsby Technical	<a href="http://www.tep.org.uk">www.tep.org.uk</a>	TEP site, products, CAD/CAM.
B & Q	<a href="http://www.diy.co.uk">www.diy.co.uk</a>	B&Q site, products and help/how to do pages.
Engineering Council	<a href="http://www.engc.org.uk">www.engc.org.uk</a>	Engineering council, help pages, information, Neighbourhood Engineers, WISE and Young Engineer pages.
Princeton University	<a href="http://www.cs.princeton.edu/~kguinee/Thesis/Phones.html">www.cs.princeton.edu/~kguinee/Thesis/Phones.html</a>	General history of telephones.

## Graphic Products

Organisation	Website address	Information available
Kent Leech	<a href="http://www.kentleech.com">www.kentleech.com</a>	Design studios for digital art, 3-D modelling, web graphics, technical illustration etc.
Industrial Illustrators	<a href="http://www.ix3.com">www.ix3.com</a>	3D models, technical illustration, exhibits, printed media, e-publications.
Yale University	<a href="http://www.info.med.yale.edu/calm/manual">www.info.med.yale.edu/calm/manual</a>	Comprehensive guide to website design including graphics, grids and layouts, typography etc.

Organisation	Website address	Information available
Between Designs	<a href="http://www.betweendesign.com">www.betweendesign.com</a>	Artistic explorations of design and graphics.
Theresa Kiplinger	<a href="http://www.oneiota.com">www.oneiota.com</a>	Web design, illustration, new media, animation.
Ledpants	<a href="http://www.ledpants.com">www.ledpants.com</a>	Contemporary graphic designers.
Coca Cola Corporation	<a href="http://www.coca-cola.com">www.coca-cola.com</a>	Company website.
Pepsi Cola Corporation	<a href="http://www.pepsi.com">www.pepsi.com</a>	Company website.
Virgin	<a href="http://www.virgincola.com">www.virgincola.com</a>	Company website.
Cadburys	<a href="http://www.cadbury.uk">www.cadbury.uk</a>	Company website.
Nestlé	<a href="http://www.nestle.com">www.nestle.com</a>	Company website.
Frijj	<a href="http://www.frijj.com">www.frijj.com</a>	Company website.
Nike	<a href="http://www.nike.com">www.nike.com</a>	Corporate web pages including company profiles and history, product information, games and merchandise.
Nootopia	<a href="http://www.nootopia.com">www.nootopia.com</a>	House of Hemp: a different raw material. Art pads, books, magazines, posters to clothes. Strong on ethics/values. Product lists, prices, some details and some visuals.
Jok R. Church	<a href="http://www.beakman.com/upc/barcode.html">www.beakman.com/upc/barcode.html</a>	Bar codes – information and how they work.
Edex (ISP)	<a href="http://www.edex.net.uk">www.edex.net.uk</a>	The Medium is the Message: product promotion to enable production of simulated advertising campaign.
Princeton University	<a href="http://www.cs.princeton.edu/~kguinee/Thesis/Phones.html">www.cs.princeton.edu/~kguinee/Thesis/Phones.html</a>	General history of telephones.
B.T.	<a href="http://www.bthome.com/e_shop/index.html">www.bthome.com/e_shop/index.html</a>	BT Shop: functional details and visuals of phones and other BT products. Shops lists.
Zanussi	<a href="http://www.zanussi.com">www.zanussi.com</a>	Zanussi: products – visuals and functional details.
Electrolux	<a href="http://www.electrolux.se">www.electrolux.se</a>	Electrolux: products and function details plus visuals plus history of firm.
Dyson	<a href="http://www.dyson.co.uk">www.dyson.co.uk</a>	Dyson: products plus fairly detailed functional details. Small and enlarged visuals.

Organisation	Website address	Information available
Philips	<a href="http://www.philips.co.uk">www.philips.co.uk</a>	Philips: domestic and personal care products (eg pistol hairdryers). Visuals and bigger visuals. Functional details.
Hotpoint	<a href="http://www.hotpoint.co.uk">www.hotpoint.co.uk</a>	Hotpoint: products, function details, big visuals, plus history of company/future.
Spacestar Communications	<a href="http://www.northernnet.com">www.northernnet.com</a>	Surfing the Aether: history of radio, visuals of older radios.
Purley Radio Ltd	<a href="http://www.simplyradios.com">www.simplyradios.com</a>	Purley Radio Ltd: radios – Freeplay, revival (Roberts), Technics etc some prices. Good visuals. Through this to Euronics.
Graham Mancha	<a href="http://www.mancha.demon.co.uk">www.mancha.demon.co.uk</a>	Graham Mancha: original post-war furniture and design. Including lighting. Visuals, details and bigger visuals.
Hector Finch	<a href="http://www.hectorfinch.com">www.hectorfinch.com</a>	Hector Finch Lighting: antique visuals and slightly bigger visuals with some details and classical to art deco and 1950s lights.
Bow Tech Products Ltd	<a href="http://www.bowtech.co.uk">www.bowtech.co.uk</a>	Bow Tech: underwater lighting, video cameras and such things. Radiation tolerant products. Visuals and function, performance, details.
Sony Corporation	<a href="http://www.sony.com">www.sony.com</a>	Sony: electronic products – including Walkman and many other things. Easy to get information – views and feature comparisons. Prices included. Good visuals.
Argos Ltd	<a href="http://www.argos.co.uk">www.argos.co.uk</a>	Argos: Argos on line. Select category – eg household, audio, kitchen – small range of their products listed with prices. Visuals and details.
IKEA	<a href="http://www.ikea.com">www.ikea.com</a>	IKEA: local store bit still under construction but good search facility which comes up with matching categories. Visuals and philosophy.
Toys R Us	<a href="http://www.tru.com">www.tru.com</a>	Toys R Us: Frequently Asked Questions (FAQs), Toy Tips market research, age appropriate guide, some visuals and product info.
University of Central Florida	<a href="http://pegasus.cc.ucf.edu/~ucfcasio/casio.htm">pegasus.cc.ucf.edu/~ucfcasio/casio.htm</a>	Casio Classroom: calculators to digital cameras. Visuals and specifications.
Bissell	<a href="http://www.bissell.com">www.bissell.com</a>	Bissell: sweepers and cleaners. Includes specifications, visuals and replacement parts with visuals.

## Textiles Technology

Organisation	Website address	Information available
Big Deal Boardshop	<a href="http://www.bigdeal.com">www.bigdeal.com</a>	Snowboarding gear – everything from boards to clothes to bags. Visuals, details and dollar prices.
Butterick Patterns	<a href="http://www.butterick.com">www.butterick.com</a>	Information on patterns and their uses. Question page.
CapitB Trust The National Training Organisation	<a href="http://www.careers-in-clothing.co.uk">www.careers-in-clothing.co.uk</a>	Information about the clothing industry, the manufacturing process, careers in clothing, teaching textiles and design.
Courtaulds Textiles	<a href="http://www.courtaulds.com">www.courtaulds.com</a>	Information about clothing, lingerie, furnishings.
DuPont	<a href="http://www.dupont.com">www.dupont.com</a>	Very extensive information on their fibres and fabrics – including safety data, properties, applications, manufacture contacts. Easy and quick site. Lots of visuals.
Fergusons Irish Linen	<a href="http://www.fergusonsirish/linen.com">www.fergusonsirish/linen.com</a>	Story of the company. Tour of the factory and process with visuals. Products with visuals, sizes and prices. Interior design page.
Levi Strauss & Co	<a href="http://www.levi.com">www.levi.com</a>	Product info, lots of pics, denim dictionary, searchable FAQs including manufacturing. Product and company information. Office locations.
Marks & Spencer	<a href="http://www.marksandspencer.com">www.marksandspencer.com</a>	Small range of clothing plus search facility.
NADCAT and the Designer forum	<a href="http://www.hanger.co.uk">www.hanger.co.uk</a>	Fashion and style magazine, featuring clothing and textile companies, updated every two months.
NADCAT	<a href="http://www.nadcat.co.uk">www.nadcat.co.uk</a>	Information about Nottinghamshire clothing and textile companies, uses of textiles and new technology. Information for GCSE coursework, which will also be useful for Advanced work.
National Cotton Council	<a href="http://www.cotton.org">www.cotton.org</a>	Information on current cotton trends – trend and mood boards.
Paul Smith	<a href="http://www.paulsmith.co.uk">www.paulsmith.co.uk</a>	Visuals, What's New. QuickTime Movies if you can reach them.
Simplicity Patterns	<a href="http://www.simplicity.com">www.simplicity.com</a>	Information on different patterns and sewing information.

<b>Organisation</b>	<b>Website address</b>	<b>Information available</b>
Stoll UK	<a href="http://www.stolluk.co.uk">www.stolluk.co.uk</a>	Latest technology in knitting machines and the development of knitwear and knitwear trends. CAD/CAM.
Tencel	<a href="http://www.Tencel.com">www.Tencel.com</a>	Information about one of the newest fibres used in the fashion and textile industry.
Textile Institute	<a href="http://www.texti.org">www.texti.org</a>	Information about the Textile Institute, its services and membership details. Information Services Division and links to other sites both technical and creative.
Topshop Topman	<a href="http://www.tops.co.uk">www.tops.co.uk</a>	Visuals, prices. Links to Debenhams, Burton Menswear, Dorothy Perkins, Evans, Principles and Innovations.

## Food Technology

Organisation	Website address	Information available
Asda	<a href="http://www.u-net.com/asda">www.u-net.com/asda</a>	Fast, basic, easy. Consumer information, food facts, special diets, recipes.
Birds Eye	<a href="http://www.birdseye.com">www.birdseye.com</a>	Products, bits of info on frozen foods, spice chart, nutrition stories, company history, meal planner, recipes with nutritional information per serving.
Boots	<a href="http://www.boots.co.uk">www.boots.co.uk</a>	Some highlighted products such as kids' cooking packs, drinks, information about things like sugar in diet, teeth, healthy eating, sugar content, baby drinks, toothbrushes. Homeopathic remedies. Some visuals.
Cadbury	<a href="http://www.cadbury.co.uk">www.cadbury.co.uk</a>	History of Cadbury, Frys, Cadbury Design, the Bournville factory and chocolate. Some outline info on making chocolate. Design development key brands. Chocolate Market Review. Education source list. Useful visuals.
Food and Drink Federation	<a href="http://www.foodfuture.org.uk">www.foodfuture.org.uk</a>	Current and future development of food.
Institute of Food Science and Technology	<a href="http://www.easynet.co.uk/ifst">www.easynet.co.uk/ifst</a>	Up-to-date information on all current issues. Links to other sites.
Kelloggs	<a href="http://www.kelloggs.com">www.kelloggs.com</a>	Products and nutrition information Frequently Asked Questions (FAQs) and access to e-mail the nutritionist.
M&Ms Factory	<a href="http://www.m-ms.com/factory/index.html">www.m-ms.com/factory/index.html</a>	Tour of the M&Ms factory process in cartoon character format. Moving things – like conveyor belts.
MAFF- Ministry of Agriculture, Fisheries and Food	<a href="http://www.maff.gov.uk/">www.maff.gov.uk/</a>	The latest lowdown on what the government thinks about food, farming and fisheries. Aspects ranging from environmental issues through to the latest legislation or consultation processes, this site offers a wealth of support and background information for food technology teachers.
Sainsbury's	<a href="http://www.j-sainsbury.co.uk/">www.j-sainsbury.co.uk/</a>	Nutritional information including special diets, food safety, lunch box ideas.
Tesco	<a href="http://www.tesco.co.uk/">www.tesco.co.uk/</a>	Great for lists of foods etc including prices and pack sizes. But you have to register to visit the shop. Then you can go to a department to find what you want and enter this in the search facility.
The Vegetarian Society	<a href="http://www.vegsoc.org">www.vegsoc.org</a>	Information, recipes etc.

## Systems and Control Technology

Organisation	Website address	Information available
Basic Electronics Home Page	<a href="http://ourworld.compuserve.com/homepages/G_KNOTT">ourworld.compuserve.com/homepages/G_KNOTT</a>	The most comprehensive introduction to basic electronics found on the Internet. Created by Graham Knott at the University City of Cambridge, this site is designed to assist A-level, GNVQ students etc in the practical design and construction of electronic projects.
Circuit City	<a href="http://www.circuitcity.com">www.circuitcity.com</a>	Electronic products. Four-page list of manufacturer websites. Most you can go straight through to.
Everyday Practical Electronics Magazine Home Page	<a href="http://www.epemag.wimborne.co.uk">www.epemag.wimborne.co.uk</a>	Offers information on topical issues, a beginner's guide to soldering, access to PIC source codes for PIC-based projects, plus other handy files.
GEC	<a href="http://www.gec.com">www.gec.com</a>	Who they are. Products from Eurostar to fridges via electronic chips and nuclear power stations. Access to other product sites.
How Batteries Work	<a href="http://www.duracellusa.com/Spp/Battery/how.html">www.duracellusa.com/Spp/Battery/how.html</a>	This site offers information on the history and uses of the battery, how an electro-chemical cell works, the anatomy, chemistry and performance of a battery. Also offers a series of games.
Radiometrix Ltd	<a href="http://www.radiometrix.co.uk">www.radiometrix.co.uk</a>	Design and manufacture low power radio data modules. Visuals, features, function descriptions, block diagrams. FAQs, sales and links.
SchoolNet Robotics	<a href="http://www.schoolnet.ca/vp-pv/robotics/">www.schoolnet.ca/vp-pv/robotics/</a>	The SchoolNet Robotics Centre designs builds robots and other objects controllable over the Net. Site includes details of the robots.
Sony	<a href="http://www.sony.co.jp/index.html">www.sony.co.jp/index.html</a>	Contains information and advice about Sony's latest products. Site is a must when teaching design-related courses. Includes new developments in the film, music and electronic games industries and the latest reports from Sony Laboratories and technical information.
Technology in Education	<a href="http://www.technology-in-education.co.uk">www.technology-in-education.co.uk</a>	Currently featured on the site are details of YEDA, the Young Electrical Designer Awards, a comprehensive buyer's guide and a whole range of articles which cover topics such as electronics and aspects of hardware or software procurement.

Organisation	Website address	Information available
The Institution of Electrical Engineers	<a href="http://www.iee.org.uk/publish">www.iee.org.uk/publish</a>	Useful information about electronics. Includes demonstration and continuing professional development for teachers of D&T. The INSPEC area of the site provides access to the world's scientific and technical literature in physics, electrical engineering, electronics, communications, control engineering, computers and computing, and ICT.
Understanding Electricity	<a href="http://www.rmplc.co.uk/orgs/electric/index.html">www.rmplc.co.uk/orgs/electric/index.html</a>	Focus on the area of energy and electricity. Offers an on-line catalogue of resources to support the understanding of electricity use and an insight into the electricity companies around the UK.

## General organisations

### **British Nutrition Foundation**

High Holborn House  
52-54 High Holborn  
London WC1V 6RU  
Tel: 020 74046504

### **British Standards Institution**

Information about Standards including *Compendium of Essential Design & Technology Standards for Schools and Colleges*, price £25  
BSI Customer Services: 020 8996 9001 [www.bsi.org.uk/education](http://www.bsi.org.uk/education)

### **Centre for Alternative Technology**

Machynlleth, Powys SY20 9AZ,  
Tel: 01654 703743

### **Computer Textile Design Group (CTTG)**

Margaret Beith  
14 Middlecroft  
Guilden Sutton  
Chester CH3 7HF.  
Membership £25 with magazine, meetings and training

### **Design and Technology Association (DATA)**

16 Wellesbourne House  
Walton Road  
Wellesbourne  
Warwickshire CV35 9JB  
Tel: 01789 470007

### **Design Museum**

Education Department  
Design Museum  
28 Shad Thames  
London SE1 2YD  
Tel: 020 7403 6933  
[www.designmuseum.org.uk](http://www.designmuseum.org.uk)

### **Institute of Food Science and Technology**

5 Cambridge Court  
210 Shepherd's Bush Road  
London W6 7NJ  
Tel: 020 7603 6316

Teacher's pack on food practicals, classroom experiments. Contacts in industry for free samples and visits.

### **Modus Magazine**

Schools membership package includes magazine, regional programmes with events and activities, national conferences.

### **Technology Enhancement Programme**

Gatsby Technical Education Project  
4/7 Red Lion Court  
London EC4A 3EN

**The DATA Journal**

The Journal of Design and Technology Education

DATA

16 Wellesbourne House

Walton Road

Wellesbourne

Warwickshire CV35 9JB

Tel: 01789 470007

Fax: 01789 841955

E-mail: [DATA@DATA.org.uk](mailto:DATA@DATA.org.uk)

**The Textile Institute International**

Fourth Floor, St James's Buildings

Oxford Street

Manchester M1 6FQ

Tel: 0161 237 1188

## Resources and materials

### Resistant Materials Technology and Graphic Products

Due to ever-changing nature of resources and materials, the following can only be an indication to what may be currently available. Please check details and prices before ordering.

#### Organisations

##### **Education and Training Product Guide – TQ Intelligent Solutions**

TecQuipment Ltd  
Bonsall Street  
Long Eaton  
Nottingham NG10 2AN  
Tel: 0115 972 2611

##### **Dyson Education Box**

Dyson Press Office  
20 Shawfield Street  
London SW3 4BD  
Tel: 020 7833 8244  
E-mail: [press.office@dyson.com](mailto:press.office@dyson.com)

#### CD ROMs

##### **Materials Database,**

SATRO 1993 (IBM) ISBN 0904214188

#### CD ROMs for Resistant Materials

##### **Dorling Kindersley**

Design & Technology Resistant Materials Revision  
Revision materials, useful self testing section

##### **TEP**

GCSE D&T: Resistant Materials  
Animations of manufacturing and industrial processes

##### **Techsoft**

2D Design  
CAD/CAM package, allows drawing and direct downloads to Roland Stika as well as Roland CAMM systems

##### **ISMI**

TurboCAD  
Professional drawing package, useful clip-art library of signs and symbols

##### **Microsoft**

Encarta encyclopaedia  
Useful encyclopaedia with direct web links

## **TEP**

Manufacturing Multimedia

Although designed for GNVQ it has some useful information on manufacturing

## **Materials Selection and Processing**

See TEP and DATA websites. Also [www-materials.eng.cam.ac.uk/mpsite](http://www-materials.eng.cam.ac.uk/mpsite)

## **Design Image Database**

Longman Education ISBN 0582 957 206

## **Manufacturing, Controlling Speed**

The Technology Enhancement Programme

4-7 Red Lion Street

London EC4A 3EB

Tel: 020 7583 0900

## **Focus on Plastics**

Plastics Manufacturing processes

Focus Educational software

Tel: 01872 222 391

## **Videos**

### **Technical Graphics**

Classroom video

PO Box 19, Newport

### **Making Steel and Shaping Steel**

British Steel Education Service

Steel House Redcar

Teeside

TS10 5QW

Tel: 01642 404040

## **Software**

### **Do3D Software by Superscape**

Anglia Multimedia

Tel: 01268 755 811

### **TechSoft Design Tools**

TechSoft (UK) Ltd

The Grange

Eryrys, Mold

Denbighshire CH7 4DB

Tel: 0184 780318

E-mail: [email@techsoft.co.uk](mailto:email@techsoft.co.uk)

[www.techsoftuk.co.uk](http://www.techsoftuk.co.uk)

### **Pro/DESKTOP**

CAD/CAM software

Contact DATA for more information

## **Miscellaneous resources**

### **Product Analysis and Evaluation**

Design Council ISBN 0850723643

28 slides and booklet.

### **Essentials of Health and Safety at Work**

HSE Books 1990 ISBN 0118854453

### **The Good Technology Guide – DATA**

ISBN 1 898788014

## Textiles Technology

Due to the ever-changing nature of resources and materials, the following can only be an indication to what may be currently available. Please check details and prices before ordering.

### CD ROMs

#### Textiles Database

Rangemore Software Ltd  
1 Rangemore Hall Mews  
Rangemore  
Burton upon Trent  
Staffs DE13 9RE  
Tel: 01283 716400  
E-mail: [quaternary@rangemore-software.freeserve.co.uk](mailto:quaternary@rangemore-software.freeserve.co.uk)

*Search for fibre names, properties*

### Videos

#### Talent and Technology

93 Sumutra Road  
London  
NW6 1PT  
Tel: 020 7435 3749  
*CAD/CAM, Quick Response manufacture, case studies.*

#### Boulton-Hawker Films Ltd

28 George Street  
Ipswich IP7 5BG  
Tel: 01473 822 235

*Designing and manufacturing menswear, young fashion designers, including some aspects of CAD/CAM) Australia 1992*

*The Way We Dress USA 1996*

*Understanding Fabrics USA 1994*

### Software

#### Garment Styler (£63)

Cochenille Studi  
c/o Gillian Lamb  
16 Firwood Close  
St John's, Woking  
Surrey GU21 1QU  
Tel: 01483 476 356

*Student friendly garment designer software, for non-structured clothing, using standard or own measurements. Print full, 1/2 or 1/4 scale patterns for sewing.*

**Designaknit 7**

Software program for designing knitted fabrics and garments. Includes new utility for converting scanned images, digital photos or computer-generated graphics into stitch patterns. Current users of Designaknit 6 may upgrade. Information packs and free demo disk available.

**Fittingly Sew 1.2**

Software programme for flat pattern drafting. Free demo disk on request with details of hardware requirements.

The two items above are available from:

Cilla Mann

PO Box 18

Chester CH2 4WT

Tel: 01244 303050

Download demo program from [www.softbyte.co.uk/demonstr.htm](http://www.softbyte.co.uk/demonstr.htm)

**Miscellaneous resources****R D Franks Ltd**

Kent House

Market Place

London W1N 8EJ

Tel: 020 7636 1244

*For an up-to-date catalogue of textiles and clothing books and specialist magazines.*

## Food Technology

Due to the ever-changing nature of resources and materials, the following can only be an indication to what may be currently available. Please check details and prices before ordering.

### Organisations

#### Food Technology and ICT equipment

Economatics Ltd  
Epic House  
Attercliffe  
Sheffield S9 5AA

*Help in food technology, HACCP, data logging, range of software eg 'Cuisine' for product development. Range of pasteurisers, plate freezers, cheese vat.*

#### Food Processing Equipment

Armfield Ltd  
Bridge House  
West Street  
Ringwood  
Hants.  
Tel: 01425 478781

*A range of small-scale industrial food processing equipment.*

### Videos

#### Risk assessment video managing risk (10 minutes)

Ridgewell Press

*Man production of food (60 mins) – jam, pasta, curry sauce mixes, soup production, pre-packaging meat, apple production, chocolate product, confectionery, coffee blending, roasting and packaging.*

#### Classroom Video Ltd

Hickscommon Road  
Winterbowne, Bristol, BS36 1EJ  
Tel: 01454 776670

#### Biscuit making

Arnott Biscuits  
Darby House  
Bletchingley Road  
Mersthan  
Redhill  
Surrey RH1 3DN  
Tel: 01737 642880

## Software

Nutrients for the PC (requires windows 95) (£99)

### **Hampshire Micro-technology Centre**

The Parkway  
94-96 Wickham Road  
Fareham, Hants PO16 7JL

*PC Cuisine from Econometrics* (£100)

Tel: 0114 2813311

Ridgewell J – *Food Technology* (£50)

## Miscellaneous resources

### **Ridgewell Press publications/books/resource packs:**

*Food product development – Scones*

*Food systems and control – Risk assessment + HACCP*

*Tasting and testing* – ISBN 0952164507

*Nutrition and food design* – ISBN 0952164515

*Food temperature control* – ISBN 0952164582

*Food activities* – ISBN 0952164558

*Food coursework* – ISBN 0952164531

*Teaching food technology in secondary schools*

*A guide to modified atmosphere packaging*

Ridgewell J – *Skills in Food Technology* (Heinemann) ISBN 0435 42084 4

### **Nutrition and Food Science**

MCB University Press Ltd  
60/62 Toller Lane  
Bradford  
West Yorkshire BD8 9BY  
ISSN 0034 6659

### **Food Science and Technology Today**

Journal of the Institute of Food Science and Technology UK

Executive Secretary

5 Cambridge Court

210 Shepherd's Bush Road

London W6 7NL

Tel: 020 7603 6316

ISSN 0950 9623

### **The Home Economist**

Journal of the Institute of Home Economics and Consumer Science Research

21 Portland Place

London W1N 3AF

Tel: 020 7436 5677

ISSN 0261 1384

**Products and Packages**

INCPLEN

Tenterden House  
3 Tenterden Street  
London W1R 9AH

*Packs for all key stages (good information).*

**Institute of Food Science and Technology**

5 Cambridge Court  
210 Shepherds Bush Road  
London W6 7NJ  
Tel: 020 7603 6316

*Teacher's pack, industry contacts, free samples, ideas for food practicals.*

**MAFF Food Sense Booklets**

Food Sense  
London SE99 7TT

*Healthy Eating, Food Safety, About Food Additives, Understanding Food Labels, Food Protection, Food Allergy, Food and Pesticides, Chemicals in Food, Food Additives, Look at the Label, Food Standards Agency, Understanding Radioactivity in Food, Genetic Modifications and Food, Microwave Labels and Organic Food.*

**British Nutrition Foundation**

High Holborn House  
52054 High Holborn  
London WC1V 6RQ  
Tel: 020 7404 6504

*Complete study packs (videos, case studies, Q&A cards, etc) for: Food Technology, Diet and Health, Energy and Nutrients.*

Computer software: EatMeter

## Systems and Control Technology

Due to the ever-changing nature of resources and materials, the following can only be an indication to what may be currently available. Please check details and prices before ordering.

### Software

#### **The Technology Shop**

Matrix Multimedia Ltd  
10 Hey Street  
Bradford BD7 1DQ  
Tel: 01274 730 808  
E-mail: sales@matrixmultimedia.co.uk  
www.matrixmultimedia.co.uk

*The company provides PICtutor CD ROM; C for PICmicros CD ROM; Virtual PICmicro; PICmicro development kits; combined CD ROMs and development kits.*

#### **Denford Ltd**

Denford Ltd  
Birds Road  
Brighthouse  
West Yorks HD6 1NB  
Tel: 01484 712264  
E-mail: info@denford.co.uk  
www.denford.com

*The company provides MiniCAM; Pro/Desktop and ArtCAM.*

#### **TechSoft Design Tools**

TechSoft (UK) Ltd  
The Grange  
Eryrys  
Mold  
Denbighshire CH7 4DB  
Tel: 0184 780318  
E-mail: email@techsoft.co.uk  
www.techsoftuk.co.uk

*The company provides a CAD software package.*

#### **Soft Electronics Software**

Nottingham Trent University – ICON project  
Clifton Campus  
Clifton Lane  
Nottingham  
NG11 8NS  
Tel: 0115 848 3721  
E-mail: andycooper@ntu.ac.uk  
www.education.ntu.ac.uk/icon/

*The company provides and gives information on software.*

## **Miscellaneous resources**

### **Rapid Electronics Ltd**

Rapid Electronics Ltd  
Heckworth close  
Colchester  
Essex  
CO4 4TB  
Tel: 01206 751 166  
E-mail: sales@rapidelec.co.uk

*The 'Technical Publications' section illustrates many very useful and cheap resources, eg IC 555 Projects, electronic board games, practical remote control projects, lots of PIC publications.*

### **Education and Training Product Guide – TQ Intelligent Solutions**

TecQuipment Ltd  
Bonsall Street  
Long Eaton  
Nottingham NG10 2AN  
Tel: 0115 972 2611

# Support and training

---

## Support materials

The following support materials will be available from spring 2001 onwards:

- ÷ specimen papers
- ÷ coursework guide
- ÷ exemplar materials
- ÷ student guide
- ÷ internal assessment guide

Other materials will be available to centres during the lifetime of the specification in response to centres' needs.

Copies of these support materials may be obtained from Edexcel Publications at the address below.

## Examiners' and moderators' comments and mark schemes

These will be issued to centres for design and technology after each examination series. Additional copies may be obtained from Edexcel Publications at the address below.

## Edexcel Publications

Support materials and further copies of this Teacher's Guide can be obtained from:

Edexcel Publications  
Adamsway  
Mansfield  
NG18 4FN

Tel: 01623 467467

Fax: 01623 450481

E-mail: [publications@linneydirect.com](mailto:publications@linneydirect.com)

## Training

Each year Edexcel provides a programme of training courses covering aspects of the specifications and assessment.

These courses take place throughout the country. For further information on what is planned, please consult the annual Training and Professional Development Guide, which is sent to all centres, or contact:

INSET  
Edexcel Foundation  
Stewart House  
32 Russell Square  
London WC1B 5DN  
  
Tel: 020 7758 5620  
Fax: 020 7758 5950  
Fax: 020 7758 5951 (second fax number)  
E-mail: [inset@edexcel.org.uk](mailto:inset@edexcel.org.uk)

## Website

[www.edexcel.org.uk](http://www.edexcel.org.uk)

Please visit the Edexcel website, where further information about training and support for all qualifications, including this GCSE, can be found.

The website is regularly updated, and an increasing amount of support material and information will become available through it.

## Regional offices and Customer Response Centre

Further advice and guidance is available through a national network of regional offices. For general enquiries and for details of your regional office please contact the Edexcel Customer Response Centre on:

Tel: 0870 240 9800  
E-mail: [enquiries@edexcel.org.uk](mailto:enquiries@edexcel.org.uk)

### Regional subject advisers

#### *For the South*

Susan Medway  
Tel/Fax: 01235 862307  
E-mail: [susan.medway@edexcel.org.uk](mailto:susan.medway@edexcel.org.uk)

#### *For the East*

Una Jones  
Tel/Fax: 01206 366398  
E-mail: [una.jones@edexcel.org.uk](mailto:una.jones@edexcel.org.uk)

#### *For the West*

Carol Griffiths  
Tel/Fax: 0151 648 8695  
E-mail: [carol.griffiths@edexcel.org.uk](mailto:carol.griffiths@edexcel.org.uk)

#### *For Wales*

Dorothy Powell  
Tel/Fax: 01873 890 382  
E-mail: [dorothy.powell@edexcel.org.uk](mailto:dorothy.powell@edexcel.org.uk)

Further copies of this publication are available from  
Edexcel Publications, Adamsway, Mansfield, Notts, NG18 4FN

Telephone 01623 467467  
Fax 01623 450481  
E-mail: [publications@linneydirect.com](mailto:publications@linneydirect.com)

Order Code UG009838 February 2001  
For more information on Edexcel qualifications please contact our  
Customer Response Centre on 0870 240 9800  
or E-mail: [enquiries@edexcel.org.uk](mailto:enquiries@edexcel.org.uk)  
or visit our website: [www.edexcel.org.uk](http://www.edexcel.org.uk)

Edexcel Foundation is a registered charity and a Company Limited  
By Guarantee Registered in England No. 1686164

**Edexcel**  
*Success through qualifications*