

Opportunities for Information and Communication Technology in Primary School

Reviewed by Annette Bindon, Senior Lecturer, The Nottingham Trent University

This book is targeted at primary school teachers and draws on the author's classroom-based research to present a series of case studies which illustrate ways in which ICT can be used to enhance teaching and learning across the curriculum. The book makes no attempt to cover all aspects of ICT. In the stimulating introductory chapter the author makes a strong case for using ICT as a tool to promote inquiry-based learning and there is a significant focus in the book on the use of the computer for problem solving and investigational work. There are already a number of good books around that provide the broad picture of ICT use but this recent publication offers a new dimension and challenges the reader to think carefully about the learning which is taking place and the ways in which children's thinking can be developed using ICT.

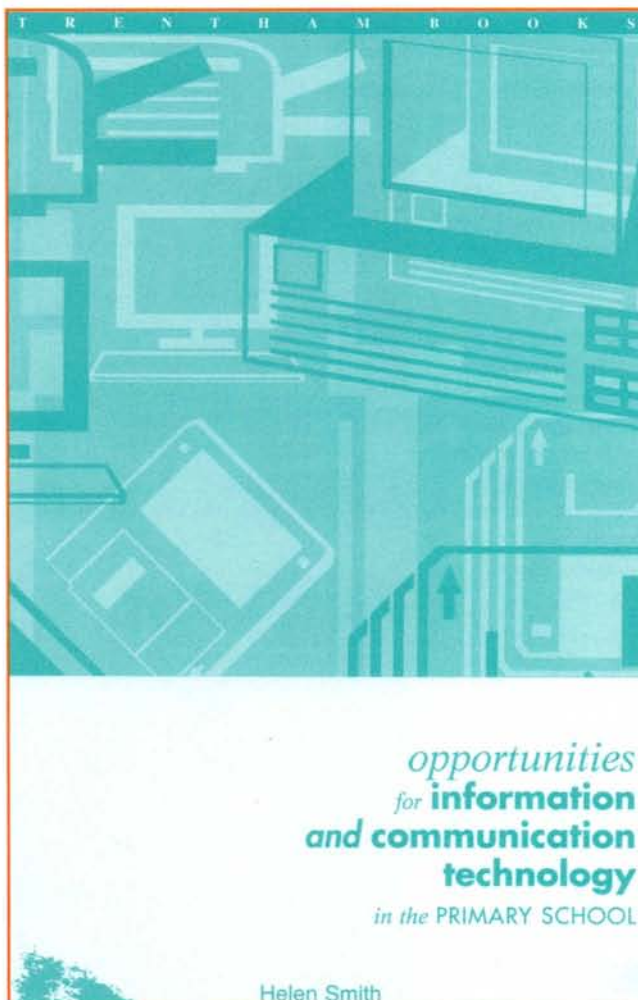
Chapters on data-logging, control, databases and spreadsheets provide a wealth of information and ideas for use in the classroom. Teachers wishing to focus particularly on the development of ICT in science and mathematics will find this book extremely helpful. The resources recommended (software and hardware) are described fully at a simple level and opportunities for developing and extending children's experience are offered.

I particularly liked the creative approach described for the use of ICT in English where children worked as designers, authors and publishers using, at one level, concept keyboards to present information and at another level simple multimedia authoring packages. What is being offered

Opportunities for Information and Communication Technology in Primary School

Helen Smith
Trentham Books Ltd: £9.95
ISBN: 1 85856 106 X
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Appropriate content	////	Generic use	=
Pupil/student use	n/a	One of a series	
Teacher resource	////	Photocopiable	
Visuals	n/a	Pupil/student activities	=
Overall style	////	Cross-curricular	=



goes beyond the run of the mill word-processing activities that are common practice at the moment and suggests uses of ICT that provide challenge and opportunities for creativity for the children.

The use of the Internet and CD-ROMs is also considered. The chapter on 'Information Retrieval using CD-ROM' is particularly thought provoking and teachers may well be persuaded to evaluate the way CD-ROMs are used in their classroom as a result of reading this chapter.

The case study material is extensive and a strength of this book. Teaching approaches are offered, children's (and teachers') misconceptions aired and a good deal of theoretical input included which may well demystify some areas of ICT which teachers shy away from introducing in their classrooms. Much of the material in the book is drawn from research with Year 5 and 6 children and teachers at Key Stage 1 might find that a good deal of the content lacks relevance

to their teaching situation. There are, however, interesting reports of work with Roamer, Talking Books and My World, and these sections will interest and be of value to teachers of Key Stage 1.

This book is more than a teacher's guide. Not only does it offer practical advice but also a philosophy for using ICT. It will also be of use to anyone who is stimulated by the ways in which children learn. The author supports her approaches with reference to learning theories and the bibliography is a rich source for further reading.

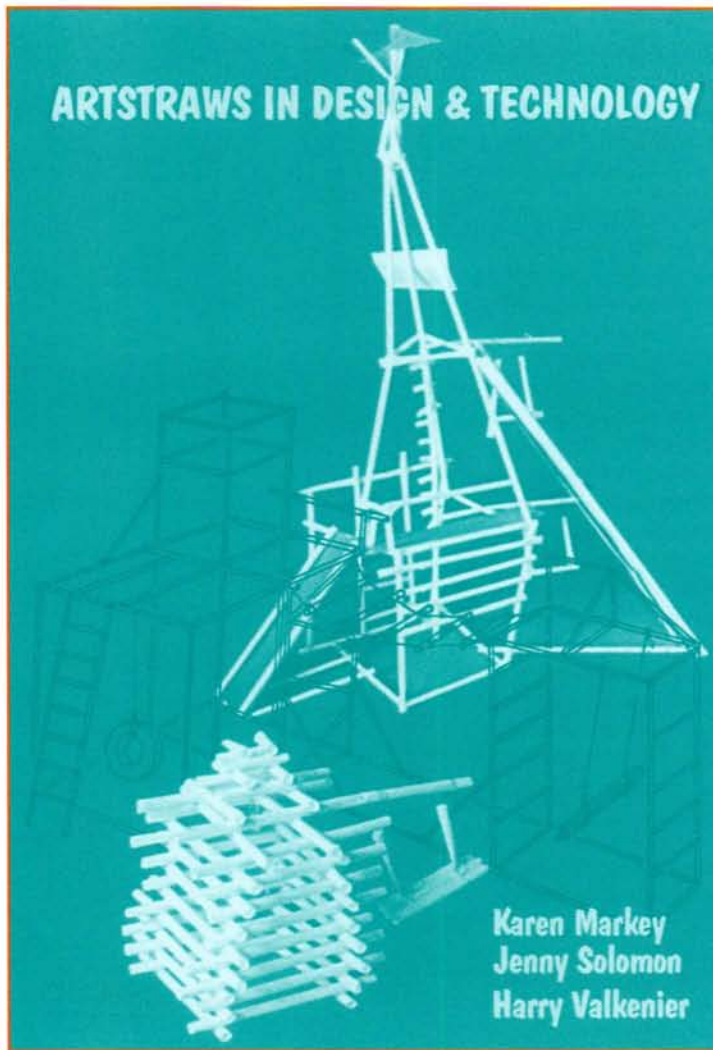
The paperback edition of this book costs £9.95. It is very readable (I read it from cover to cover with hardly a break) and attractively presented with useful drawings and screen shots to illustrate the text. This book is ideal for the ICT coordinator in the primary school and would be a valuable addition to the reading lists of student teachers.

Artstraws in Design and Technology

Reviewed by Melanie Fasciato, Senior Lecturer, Manchester Metropolitan University

This pamphlet draws together ideas about how to join and use Artstraws to make a variety of 'models'. It is illustrated with simple line drawings and three photographs of children's work. In terms of what can be done with Artstraws it appears to be fairly comprehensive and includes both familiar and new ideas. This is a book for teachers, although the illustrations may be useful for children to look at if the teacher wants everyone to make a particular 'model'. The best way of using this book would be for the teacher to make up examples of each joining technique and 'model' themselves.

There are references to the 'old' Programme of Study for design and technology, although I feel that there has been a very free interpretation of the meaning at times. There are also references to other Programmes of Study, including mathematics, science and history. This is where I started to be a little concerned about the title of the book. Design and technology is not simply about making 'lookalike' models of things which exist and yet the ubiquitous Tudor House and Saxon Huts appear, with ideas about how to achieve the 'wattle and daub effect' by fixing Artstraws onto cardboard boxes. While I have no real objection to children doing this in the name of history, or model making, I am convinced that this is not design and technology. There are other ways of exploring Tudor building materials which have more to do with design and technology. There are other examples where design and technology is interpreted as model making. These include the production of stained glass windows, (referred to as 'stain glass') a ladder and perhaps most perplexing, a Chinese paper lantern that cannot be used because of the danger of using candles inside a paper structure. The use of Artstraws for model making in science is, however, fully justified since they are an inexpensive material which is easily manipulated and can be used to quickly construct models for fair tests. They are also useful for constructing 3D shapes and patterns in mathematics.



The publication is cheaply produced, with 22 pages printed only on one side of each leaf and appearing to have been photocopied. There are typographical errors and the page layouts are untidy. At £3.49 including packaging and posting I do not think that this is a bargain. Packs of Artstraws already include a helpful leaflet showing how to join and use them in various ways. I am not convinced that this publication goes much beyond this. The opportunity could have been taken to produce more photographs of children's work, with captions explaining the context and age of the children as well as the techniques used. I am sure that Artstraws are an underused resource in both primary and secondary schools, but this pamphlet does little to promote their use.

Artstraws in Design and Technology

Karen Markey, Jenny Solomon, Harry Valkenier

Artstraws Ltd: £3.49 inc. p&p
Orders: 01792 796 151

Appropriate content	✓✓✓	Generic use
Pupil/student use	✓✓	One of a series
Teacher resource	✓✓	Photocopiable
Visuals	✓✓	Pupil/student activities ⇐
Overall style	✓	Cross-curricular ⇐

Design Challenge: Amazing Machines

Reviewed by Bridget Egan, King Alfred's College, Winchester

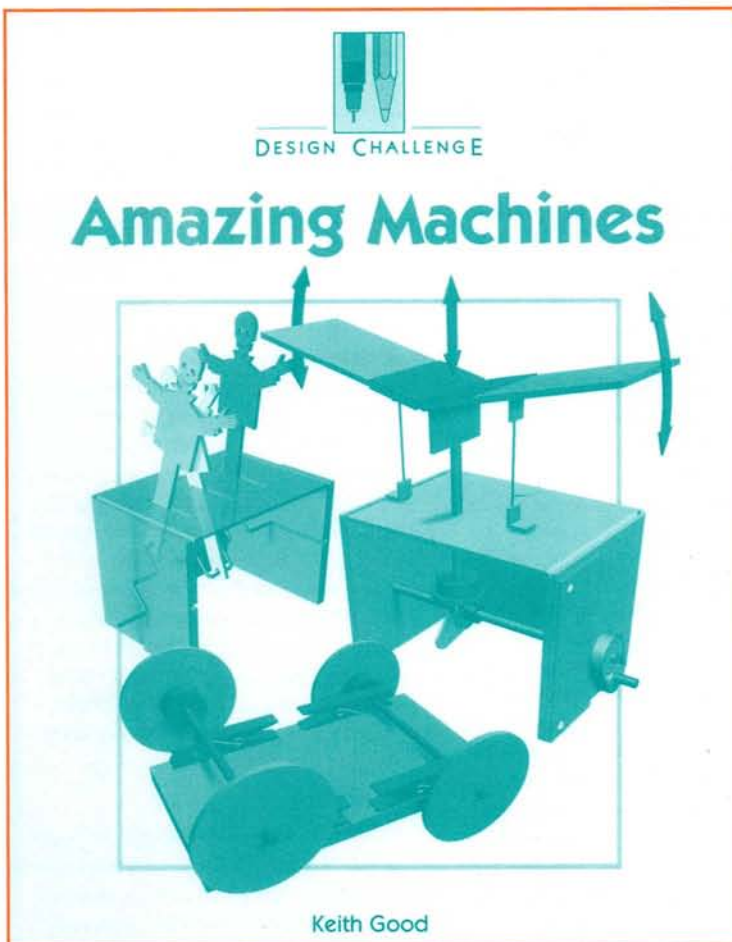
Amazing Machines is part of a short series of books intended to help children to solve design problems, by offering step-by-step instructions for basic construction, in this case of mechanisms, using low-cost materials normally to be found in any primary school. The book is well laid out, with not too much text on a page, and with colourful and very clear computer-generated graphics, which are easy to follow. Visually, I found it very appealing. The text is suitable for children in Key Stage 2, and this matches well the complexity of the mechanisms being proposed. For each mechanism, there is a list of materials and tools needed, and a simple 'recipe', as well as useful tips to ensure success. I particularly like the way of supporting the mechanisms in structures which, though sturdy, are made with temporary fixings, to allow the mechanisms to be fitted, and which also leave scope for any alterations that children find necessary as they progress. Because the illustrations are so clear, it will be easy for children to rough out their ideas for mechanisms in advance of making the final product, in order to make decisions about precise dimensions, whether they need to include additional bearings, and so on.

Unlike some classroom support books, this does not pre-empt children's design thinking by offering finished solutions to design challenges. It simply enables children to develop that design thinking in ways that ensure success. I found most of the book to achieve this, although I have one or two reservations. In the section on cranks, for example, it would have been useful to include a tip on bending the wire round a jig – it is quite difficult for youngsters to achieve a 'perfect' crank without one. Similarly, it would have been

Design Challenge: Amazing Machines

Keith Good
 Evans: £9.99
 ISBN: 0 237 51986 0
 Tel: 0171 935 7160

Appropriate content	////	Generic use
Pupil/student use	////	One of a series =
Teacher resource	////	Photocopiable
Visuals	////	Pupil/student activities =
Overall style	////	Cross-curricular



helpful to include a tip about adding extra support for long axles when putting more than one mechanism into a box. I am, too, a little sceptical about the design for gear wheels: in my experience children in Key Stage 2 find making their own gears extremely difficult, even using ready-made jigs. Rather than subject them to the frustration of failure, I prefer to use ready-made gears, or to construct gearing systems from more robust materials.

Although a number of books over the years have offered teachers ways to support the development of children's understanding of basic engineering, few have been so clear, so simple, and so user-friendly as this. Although there is little discussion of the principles involved, the 'Getting Ideas' sections direct children's thinking in productive ways, and could be used by teachers as starting points for more systematic investigation and enquiry. As an aid for children carrying out research into how they might achieve certain mechanical effects, I think this is well worth obtaining for the classroom.

If I have a criticism, it is on grounds of safety. Most of the safety tips are sound. It is surprising, therefore, to find the introduction advocating the use of a screwdriver to make holes in stiff card, and later in the text the suggestion that children should use nails for the same purpose. Cheap and easy-to-use single hole punches are widely available, give a good result, and are safe. I think it of the utmost importance that children are taught to use appropriate tools for the work that they undertake, and that they learn to use the tool designed for the purpose rather than making shift with whatever comes to hand. While all of us improvise in our private designing and making, I would prefer not to see unsafe – or at the least, dubious – practices promoted in literature aimed at children.

That being said, I welcome the series of which this is part. I think it good value for money, and would recommend it for any Key Stage 2 classroom. Other titles in the series are: 'Exciting Electrics', 'Super Structures', and 'Moulding Materials'. There is also an accompanying teachers' book.

101 Things to do on the Internet

Reviewed by Alan Cross, Director of the Centre for Primary Education, University of Manchester

Six years ago along with many others I had doubts about the value of the Internet for primary education. For three years now I have been convinced of its value to teachers. Only very recently have I become convinced of its potential in the primary classroom. However, for this to work we need to overcome three difficulties. These are teacher knowledge, access and security of information (including personal details). The first is the hardest to deal with as the last two will be solved by advances in technology or money.

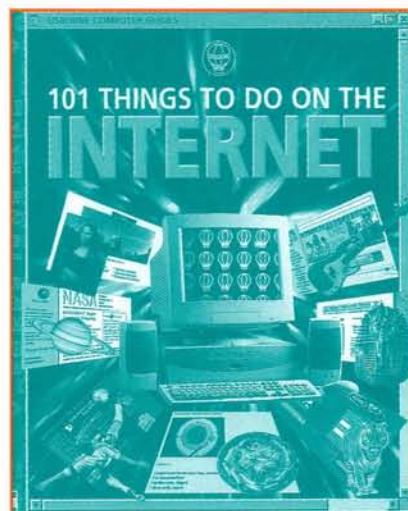
Books such as this one by Mark Wallace can contribute directly to the first. Whilst written for a general readership it is a very usable and valuable publication for all those who have not yet used the Internet or perhaps the growing group of those who have had minimal access. There is a minimum of jargon, the author introduces essential terms as it moves along. The book avoids a 'techy' feel, principally through its use of plain English, pictures and screenshots. The opening projects cover the basics, conducting searches on the Internet, which is ideal for beginners. There is a smooth and welcome shift for the reader with projects 14 to 93 which introduce ideas for Internet use, some of which will be new even to more experienced users. These go from simply accessing timetables and road maps, through shopping and entertainment to activities that are only available on the Internet. These include interactive and collaborative art, literature and science activities, newsgroups and virtual worlds. These topics have been chosen for their wide appeal and make the book very comfortable to dip into. Throughout, there is a strong but by no means exclusive

emphasis on sites of interest to children. Thus for teachers there are obvious applications both personally (shopping, travel) and professionally (finding out information about a topic on, for example, history), whilst children can have their poems published on the net.

One excellent device which this book uses is the '101 things to do' format. The whole basis of the book is that these are things that the reader will do and given access to the right resources any reasonably competent reader should be able to make use of these projects. A good example of the lack of jargon, economy of words and use of pictures to assist the text is project 8 which, in just over 100 words explains how to send an e-mail. The later projects relate to web page production that will offer challenges to those who have progressed further. Such activity presently lies out of the boundary of most teacher users of the Internet but it is only a matter of time before all schools have a site and many teachers and their children will be contributing.

It is simple to browse through the pages of 101 'projects' or even take them one at a time. Presentation is of high quality although some screen shots are small, which may cause difficulty for some readers. There has been an attempt on the part of the author to order the projects sequentially and to group activities. This means that once you spot something of interest there is often something related on adjoining pages. There are useful page references throughout which direct the reader to other related activities within the book. The book is up to date and there has been an attempt to make the book future proof. The author recognises the inbuilt obsolescence of any book describing the fast developing world of the Internet.

One simple evaluation of a book like this is to ask whether it stimulates you as a reader to try ideas. On this score this book did well, reminding me of things I keep meaning to try and some that I was not yet aware of. A tougher test is to pose the same challenge to a 'teacherInternetphobe' (if there is such a thing!). Enter Sue, a primary teacher of 20 years' experience but only a few Internet interactions to date. Her conclusion was that it does communicate ideas well, that phrases and words are explained simply and that it fires up an interest to do things both personally and



professionally (both as a professional and as a subject and medium for teaching). The acid test was passed as Sue later accessed a number of websites from the book and now plans more Internet work in school. To a general professional audience this book represents very good value for money. As regards design and technology there is some scope within the book in terms of communication of ideas, researching technological concepts, information about food technology.

One thing a book like this requires is a related Internet site. A web address which readers could access as one of the projects and which would give them one-line access to elements of or extensions from the book. The Usbourne website at www.usbourne.com is definitely worth a visit.

101 Things to do on the Internet

Mark Wallace

Usbourne: £6.99 (pb) £9.99 (hb)

ISBN: 07460 3294 3 (pb) 07460 3296 X (hb)

Orders: 0171 430 2800

Appropriate content	/////	Generic use	←
Pupil/student use	/////	One of a series	←
Teacher resource	/////	Photocopiable	
Visuals	/////	Pupil/student activities	←
Overall style	/////	Cross-curricular	←

Cover Lessons in Food and Textiles

Reviewed by Helen Wilson, Head of Textiles, Plantsbrook School

Providing work for cover lessons in food and textiles lessons at short notice for non-specialist colleagues to deliver is a problem we are all faced with from time to time so I was particularly pleased to have the opportunity to review this book and add it to my resources!

The book is designed to provide resources appropriate for mixed ability Key Stage 3 cover lessons which can be used by both specialist and non-specialist teachers. It provides a range of stand-alone activities that can be delivered without the need for specialist equipment or knowledge of the subject matter.

The activities are divided into groups appropriate for different year groups for both food and textiles. There are six activities for food lessons in Years 7, 8 and 9 and three or four activities for textiles in each year. There is a tracking sheet showing how each activity is related to the National Curriculum.

Food activities suggested for Year 7 include hygiene, tools, hazards, flow charts, school meals, menu cards. Year 8 activities look at bread, spices, cookers, pastry products, muffins and time management. Year 9 activities consider picnics, recycling, food storage, rice, snacks and outdoor eating.

There are significantly fewer activities for textiles. In Year 7 these include safety, small equipment and clothes care. Cushions, fastenings, block printing and costing are included in the Year 8 section with comparing clothes from the past and present, protective clothing and creating a corporate uniform in Year 9.

Each activity is set out as a double page spread with a full page (A4) photocopiable pupil sheet and a corresponding Teachers' notes page. The

Cover Lessons in Food and Textiles

Lisbeth Pownall and Mary Hartley
The Chalkface Project: £25.00
ISBN: 1 86025 244 3
Orders: 01908 340340 Fax: 01908 340341

Appropriate content	////	Generic use
Pupil/student use	////	One of a series =
Teacher resource	////	Photocopiable =
Visuals	////	Pupil/student activities =
Overall style	////	Cross-curricular

SPICE RACK

What might you add to your food before you eat it? Why?

Fill in the missing words in the illustration below.

Make a decorative tea-towel design, showing how herbs and spices are used in particular dishes.

pupil pages consist of concisely written tasks and large clear diagrams relating to the topic. Each has a catchy title and is easy to follow. The pupil sheets are not designed to be written on they only serve as information sheets, thus once photocopied they can be re-used.

The Teacher Notes that accompany each task include valuable information outlining the aims of the activity, suggestions for its classroom management, answers to the questions posed on the pupil page (ideal for non-specialist cover staff) and suggestions for extension activities.

The activities are set out in a way that could be easy to use for both cover staff and pupils and are flexible in that they can be adapted to be appropriate within mixed ability classes and tailored to the

length of the lesson. The extension activities would be valuable for developing the activity with more able students, where lessons are longer, for homework activities or if a follow on cover lesson is necessary.

The activities require varying amounts of teacher input as outlined in the classroom management section of the Teachers' Notes, if followed these would enable the cover teacher to deliver the lesson with confidence without specialist knowledge.

As with other photocopiable resources the pack is not cheap, however the initial expenditure of £25.00 could be considered well worth it when balanced against the time involved in providing relevant resources and assistance to non-specialist colleagues.

Textiles Activities for Key Stage 3

Reviewed by Helen Wilson, Head of Textiles, Plantsbrook School

This is a photocopiable pack of activities designed to provide Key Stage 3 students with an understanding of textiles through written work and practical experiences. The activities are designed to support the National Curriculum and a content guide outlines how each activity addresses the programmes of study in the 1995 orders.

The pack is divided into two main sections: focused tasks which are designed to last for an hour's lesson, and design and make tasks which are designed to cover six to seven 1 hour lessons. It is intended that the design and make tasks are used in conjunction with selected focused tasks as much of the practical work depends on knowledge gained in the focused tasks. Thus the pack has the potential to be used to create schemes of work covering a term by combining a design and make activity with the appropriate focused tasks.

The focused tasks are grouped into seven topic areas:

- All Sewn Up; four activities related to using the sewing machine.
- Let's Design; five activities that explore different aspects of design work.
- Fabric Fun; four activities covering aspects of fibres, fabric construction, unusual uses, selection and testing.
- Colour Shop; printing, dyeing and painting fabrics.
- Let's Decorate; appliqué, quilting, hand and machine embroidery.
- ICT Activity sheets; market research, packaging and CAM.
- Product Analysis Sheets; considering socks, pencil cases and heat resistant products.

There are three design and make activities which focus on designing and making simple kites, a CD or computer disk holder and a mini enterprise activity designing and making ties. Each design and make activity gives a suggestion as to how to award National Curriculum levels 4 or 5 depending on the nature of the work produced by the pupils.

Teachers' Notes
DYE HARD

Aims Students produce an example of tie-dye work.

Preparation Materials for each student to tie-dye will be needed. (Rubber bands work well for the tying). You could also have other examples of materials dyed in different ways to show students.

Classroom Management Students may work individually or in pairs. Once they have identified the method shown in the picture, you may wish to show them other examples of dyed products. The second part of the opening activity is to raise awareness about health and safety: students will need protective clothing and also need to be aware that many dyes are poisonous.

During the main activity, it is important that each student's work is clearly marked with his or her name. Fabric markers or pencils will do for this.

The idea for students to draw what they think will be their design is to enable them to realise that they could eventually do work with an intended pattern, and that tie-dye is not all haphazard!

If the fabric cannot be dyed and dried quickly in a tumble dryer, students could check their designs in the next lesson.

Extension Activities Students could investigate what mordants and fixatives are used for, and which ones would be most suitable for this type of work.

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An Appendix includes a pattern for the CD holder project and reference sheets for using the sewing machine. The diagrams of the sewing machine are produced as cartoon style images which relate to no one specific type of sewing machine consequently pupils could find these confusing. When producing worksheets relating to activities using the sewing machine (i.e. threading up) a suitable diagram of the machines used within the school could be supplemented for those used in the pack.

The pack is set out in a double page format with a photocopiable pupil worksheet and a corresponding Teachers' notes page. The Teachers' notes provide comprehensive information outlining the aims of each activity, the preparation required, suggestions for classroom management and extension activities. At the front of the pack there is a page of general guidelines which gives additional suggestions for lesson preparation, management and follow up work.

The pupil worksheets for each of the activities is set out in a similar format. The text includes information, discussion points and instructions for carrying out the activity. There are also large, cartoon style illustrations related to the task that have instant pupil appeal. The worksheets, once photocopied, are not

designed to be filled in by the pupils hence could be re-used as pupils work on separate paper.

The pack could be a valuable resource for departments where textiles is taught by non-specialist teachers, recently qualified teachers or teachers who have previously taught textiles with a mainly 'Art' bias. The pack does not replace the need for planning schemes of work and teacher preparation but could be used as a sound starting point in developing schemes appropriate to the specific requirements of individual school situations. It could also be used to complement existing schemes of work through using some of the focused activities as stand alone lessons. As the pack is a photocopiable resource it is inevitably more expensive than a text book at £25.00.

Textiles Activities for Key Stage 3

Jane Voogd and Sarah White
The Chalkface Project: £25.00
ISBN: 1 86025 242 7

Orders: 01908 340340 Fax: 01908 340341

Appropriate content	////	Generic use	
Pupil/student use	////	One of a series	=
Teacher resource	////	Photocopiable	=
Visuals	////	Pupil/student activities	=
Overall style	////	Cross-curricular	

Focus Tasks: Textiles

Reviewed by Helen Wilson, Head of Textiles, Plantsbrook School

This pack is part of a series of photocopiable packs designed to assist the delivery of textiles activities at Key Stage 4. Other linked packs include 'Textile DMAs Key Stage 4' and 'Extension Topics for Textiles'. *Focus Tasks: Textiles* is designed to provide activities covering various aspects of Key Stage 4 Textile Technology courses. The activities are written and presented so that they can be used as stand-alone lessons or as introductory lessons to other tasks within the course.

The pack has been designed to be suitable for use with students of average or below average ability preparing for full or half GCSE or Certificate of Achievement courses. They could also be used as source ideas with more able pupils. The activities are aimed at both boys and girls with some activities more specifically targeted to meet the interests of boys. The activities towards the end of the pack are more demanding than those at the start and rely on students having gained knowledge and skills in order to carry out the suggested tasks.

A page of general guidelines for lesson preparation and management is given within the pack along with a contents guide showing how each of the activities relates to different aspects of the syllabus.

The layout of the pack is similar to other publications in the Chalkface project range in that each activity is presented as a double page spread. Each activity includes a photocopiable pupil worksheet and a Teachers' notes page.

The Teachers' notes include details of the aims of the task, preparation required, suggestions for classroom management, differentiation, links with other activities in the pack, answers, extension activities

Focus Tasks: Textiles

Heather Cullinan and Neil Denby
 The Chalkface Project: £25.00
 ISBN: 1 86025 246 X
 Orders: 01908 340340 Fax: 01908 340341

Appropriate content	////	Generic use	
Pupil/student use	////	One of a series	☐
Teacher resource	////	Photocopiable	☐
Visuals	////	Pupil/student activities	☐
Overall style	////	Cross-curricular	

LEARNING TERMS



All subjects have their own technical terms – special words that are used for particular things. Textiles technology is no different. Brainstorm the new words that you have learned in your studies so far. Use the picture to help you.

Now look for other textiles words around the room that are new to you. Start your own textiles glossary by making a list of all these words and their meanings.

Compare your list with a partner's. Add any words from his or her list that you don't already have. Which words do you find hard to understand? Which are easy? When would your word list be useful?

Work with your partner to test yourself on what you've learned. Take it in turns to ask for definitions of words. Keep a score to see which of you does better.

and homework. There is also a reference to links with the NEAB syllabus for designing and making although this is not explained within the pack for those of us following alternative syllabi.

The activities covered include the sewing machine, pattern markings, developing making skills through a range of simple to more complex projects (i.e. pillow cases, drawingstring bags, toys for children), drawing/designing skills, using decorative techniques, problem solving, recycling, developing co-ordinated ranges of clothes, fabric choices and care, disassembly, labelling and packaging, factory planning and evaluating.

The pupil worksheet for each activity is presented with sections of text giving information, discussion questions, written

and practical activities with bold cartoon style illustrations which would appeal to the age and ability range intended. The amount of text is adequate to explain the task and to act as a useful aid to discussion without being daunting to the less able student. The students carry out their written or design work on separate paper using the worksheets for reference thus once photocopied the worksheets can be re-used.

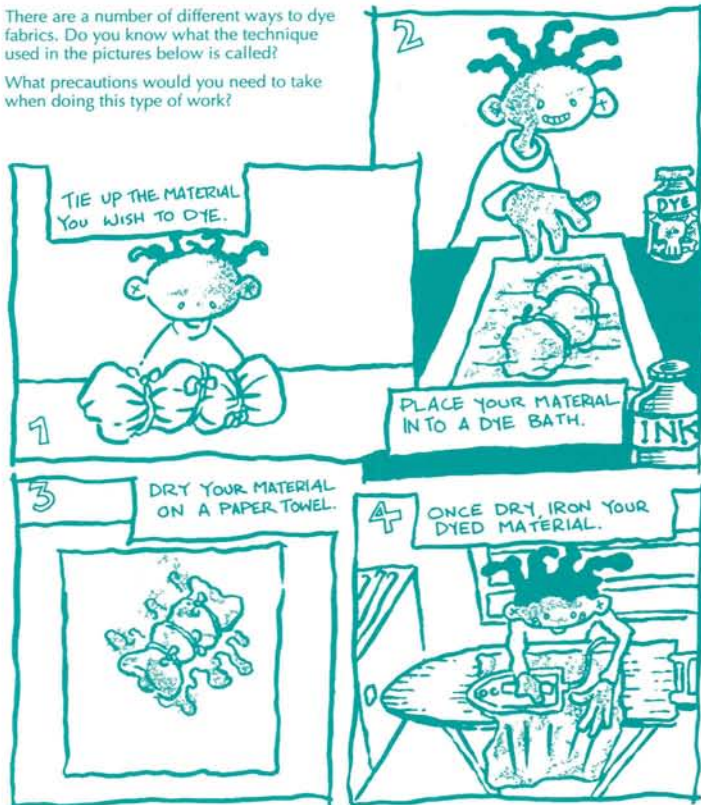
The range of topics covered and the style of presentation would make this pack suitable for use with Key Stage 4 students as identified earlier, some of the activities could also be used with Key Stage 3 students. The pack would indeed be a useful additional resource for teachers developing schemes of work for Key

Stage 4 courses in textiles technology. The tasks could be used in conjunction with other activities to develop knowledge and skills covering a range of topics contained within the syllabus of any GCSE course. The pack would be of particular value to recently qualified teachers, Textiles teachers with an 'Arts' background or non-specialist teachers. The pack costs £25.00, this is considerably more than a standard text book due to the photocopiable nature of the content, however it could be a useful addition to the resources providing the busy teacher with lessons that could be integrated with existing schemes of work.

DYE HARD

There are a number of different ways to dye fabrics. Do you know what the technique used in the pictures below is called?

What precautions would you need to take when doing this type of work?



You are now going to try dyeing your own material. You will need to tie your fabric tightly to ensure no dye creeps in, then proceed to dye your material, as shown in the pictures above.

While you are waiting for the fabric to dry, see if you can draw out the pattern that will be made.

Did your pattern come out as you expected?

**Products and Packages:
A Partnership Investigated**

*Reviewed by Anne Riggs, Head of
Science and Technology Dept,
University College of St Martin*

This useful, updated, resource is concerned with an area of design which some teachers feel is one which is difficult to address in depth. Not surprisingly, it increases awareness of the importance of packaging. The title *Products and Packages: A Partnership Investigated*, indicates the nature of this resource and the partnership or relationship between the product and its packaging is evident and is investigated in appropriate detail. It should be noted that the products, and hence the type of packaging, have been carefully chosen thus the case studies deal with packaging well known products: frozen food, television, four pack of cans, aspirin, chocolates and a washing up liquid. The case studies are described as 'additional' material provided so that pupils can make comparisons with similar processes in industry while undertaking design-and-make activities at school.

The cardboard wallet contains, in addition to the case studies, teacher's notes, a booklet that includes design and make activities and focused tasks, and four IDEAS exercises. The teacher's notes suggest two main approaches to using the resource. The teacher could present a Design and Make Activity at the beginning of a term for pupils to think about but not to start practical working at that stage. The pupils would work through some of the focused tasks using the IDEAS sheets as part of their research. After this preparation the pupils could then complete the Design and Make activity. The second suggestion is to present some of the focused tasks for pupils to complete and then present the Design and Make activity for pupils to

Products and Packages: A Partnership Investigated

Martin Coleman, Liz Hankin, David Dunn
Hobsons Academic Relations: £5.95
Orders: 01933 228953

Appropriate content	////	Generic use	
Pupil/student use	////	One of a series	=
Teacher resource	////	Photocopiable	=
Visuals	////	Pupil/student activities	=
Overall style	////	Cross-curricular	

CASE STUDY 1

Televisions

— a product we buy before we see its packaging

Product background

TVs can last well over 12 years so we do not often buy a new one. When we do buy one, we want it to work and be in perfect condition. If it arrived with a scratch on the cabinet we would send it back to the shop.

The way to make sure that it does not get scratched or get broken is to package it properly.

This packaging can also be designed to help attract people to the product, but there is not much point in doing this for a TV. We buy a TV because of its price, how well it works and how it looks in the showroom.

We only see the packaging when we collect the TV or have it delivered.



Research

When developing a new TV, a manufacturer has to make a specification and organise the supply of its packaging.

A TV is bulky and heavy, with an uneven weight distribution. Its fragile components can be damaged simply by its own weight if it is dropped. It will need to be boxed but the box will also need padding to protect the TV from shock damage. It must also be protected from dust. The box will need to carry basic information about the product.



Other products we buy before we see their packaging:






think about. Pupils will work on the IDEAS sheets as part of their research.

The focused tasks are divided into four groups: Experimentation e.g. 'A test of strength', Research e.g. 'Counting the Cost' which 'focuses on the energy used in winning and disposing of materials used in packaging', Hands-on Skills e.g. 'Keep it shut' which examines locking closures and Evaluation e.g. 'Who will buy?' All the photocopiable pupils' sheets for the focused tasks include Extension activities the details of which are included in the teacher's notes.

The photocopiable IDEAS (Investigating, Disassembling and Evaluating Activities) require pupils to complete report sheets on the types and properties of different plastics, carton materials, dispensing systems and information included on the packaging. Finally six design and make activities, again on photocopiable sheets, are included. The Design Brief for each activity relate, not unsurprisingly, to the activities in the focused tasks, IDEAS and case studies.

This is one of a number of resources commissioned by INCPEN (The Industry Council for Packaging and the Environment) and has been developed by The University of Salford Technology Education Development Unit and Hobsons Academic Relations. It has been devised, written and tested by practising teachers. This, and the fact that it is evident that it has been well planned with carefully chosen and integrated activities, means that it will be a very valuable resource. Given that it has been thought about so carefully, it is, however, a pity that more photographs of people are not included. There are three male and two female photographs, one of the latter is very unflattering with a woman looking at a production line. Depictions of females in the cartoon drawings in the case studies are also problematic for women are either engaged in stereotypical activities, washing up, picking onions, shouting at a child in a shop or are passive taking delivery of a television and receiving advice from a male pharmacist.

Aliens in our Food

Reviewed by Ali Farrell, Independent Consultant

'Aliens in our Food' is a teaching resource containing a number of elements that may be used together or separately. These are: a teacher's guide, photocopiable pupil worksheets, posters and a CD-ROM. There is also a related web site that can be accessed at www.FoodHygieneControl.hea.org.uk to provide additional information for teachers and stretch more discerning pupils.

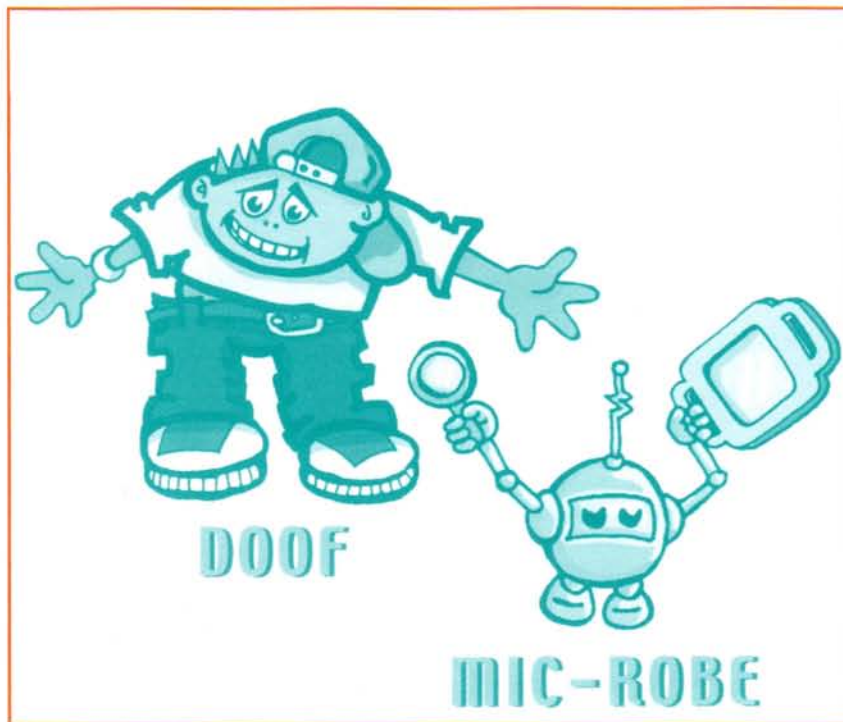
The teaching resource has been developed in response to research showing that four out of five children in the UK over the age of 11 prepare food in the home, but that many are not aware of the need for safe storage, preparation and cooking of food. It is part of an initiative undertaken in all 15 European Union member states. It has been designed to help pupils learn about the basic rules of food hygiene and the underpinning principles.

The Teacher's Guide sets out the key learning points that could be taught through food technology, home economics (in Scotland and Northern Ireland), science and/or PSHE. The guide presents six one-hour lesson outlines devised to offer a complete course in food hygiene. Alternatively, the lesson ideas may be selected and adapted as the teacher chooses to fit into their own lesson plans. The objectives for each lesson are clearly thought through and presented. Realistically, I would judge that each lesson as presented would need two (rather than one) one-hour lessons, plus homework time, to thoroughly cover the principles and to reinforce these through practical application. Teaching tips are included with the lesson outlines, suggesting how the teaching and tasks may be organised. These are quite scant,

Aliens in our Food

Health Education Authority: Free
 Orders: Health Education Authority
 Trvelyan House
 30 Great Peter Street
 London SW1P 2HW
www.FoodHygieneControl.hea.org.uk

Appropriate content	////	Generic use	
Pupil/student use	///	One of a series	
Teacher resource	///	Photocopiable	=
Visuals	///	Pupil/student activities	=
Overall style	///	Cross-curricular	=



although food specialist teachers should have no problem in extending the outlines from the material provided.

On the pupil worksheets, characters from the CD are used to present a question-and-answer type conversation around the topic e.g. 'This food poisoning sounds bad news, what happens when you become ill?' This is a successful and pupil-friendly way of raising questions that pupils learn to answer. The worksheets include 'information bursts' which are useful presentations of key facts. Tasks on the worksheets include surveys, scientific investigation, design and make a leaflet on food poisoning (a better graphics task than food technology specifically), identifying safety and hygiene hazards, the design and making of foods demonstrating correct food handling procedures. There is also a quiz sheet that can be used at the beginning and/or end of the unit. It only tests understanding at a superficial level and is more a fun quiz than a serious assessment tool. Some of the tasks on the pupil worksheets require additional teacher input or reference to other materials for pupils to carry them out but do not say so. Most of the tasks in themselves are well-constructed and are of the type likely to be part of many food teachers' programmes already. However, there is something of an imbalance of different types of design and technology activity across the set of lessons as a whole, i.e. too many tasks that are presented as

design and make which would more accurately be described (and better taught) as focused tasks involving some decision-making and food preparation.

Overall this is a visually attractive pack. It could be argued that the space-age characters and context are more suited to Key Stage 2 than Key Stage 3 pupils. Certainly some Key Stage 3 pupils might find the characters on the CD to be too childish to identify with. There is some danger that the male character and 'aliens' theme chosen for the pack could appeal more to boys of 11-14, than girls. Whilst this could, therefore, help to address the demotivation factor with boys, it may have reduced impact with, and fail to engage girls. Since it is meant for both, several characters rather than one, or a more gender neutral character with broader appeal might have been better.

The CD-ROM is straightforward to install and navigate. It includes much useful information in the form of databanks that can be accessed as required during the tasks. Pupils are asked to trace the alien Doof's steps from the supermarket where the journey of his food shopping and the preparation of a chicken sandwich began to the kitchen. At each stage they learn about food safety and hygiene risks and procedures, and are set a number of challenges to reinforce and test their understanding. As is the case with much educational software, the interactive nature of the medium is not utilised to the

fullest extent, although pupils are required to engage with the software by carrying out and responding to a range of on-screen problem-solving tasks. It does, at least, offer an addition to a growing range of food technology software.

There are some childish, yet potentially confusing, 'alien' terms to get to grips with on top of the 'real-life' glossary of terms introduced as an important part of understanding the topic, e.g. pupils are told that Doof's "toilet visitation is completed without implementation of hygiene rules" which seems an unnecessarily verbose way of saying that he didn't wash his hands after the loo, and that he is headed for the "humanoid food dispenser known as a supermarket". There is a fine line to tread between presenting material in a novel and engaging way and giving due seriousness to the topic. Teachers' and students' views on whether this balance has been successfully achieved will probably vary. There is also a fine line to tread between fantasy and reality. If I was a hungry alien landed on Earth in search of food, the last thing I would do is go shopping for a 10lb chicken, a large loaf of bread, a pack of tomatoes and a tub of spread – just to make a sandwich. If I was only given two minutes to select the necessary ingredients from the supermarket and it took me several tries to get the chicken in the trolley and being told I had run out of time and had to start again, I might just give up and pick up a ready-prepared sandwich from elsewhere in the supermarket – and maybe run less risk of food poisoning by so doing. But that's just me. Maybe children of 11–14 will go along with the fact that Doof doesn't know any better for the sake of playing the game.

As a free piece of software it would be churlish to suggest that this resource did not have some use and application in supporting food technology and related curriculum areas. It is not a remarkable resource, but some teachers will like it and so it will make a contribution to the teaching of food hygiene. Its style and content will appeal to and motivate some children more than others, so teachers would be advised to consider whether and how they can make best use of it. The CD is only one part of the pack, but teachers will expect it to live up to the potential of ICT. It is more a computer game, with some educational application, than an educational programme. Since this resource was developed and made freely available to schools with a considerable sum of EU funding, precisely to address the shortfall in young people's understanding of a topic crucial to their well-being, many will be disappointed that this was considered the best possible use of funding to meet these ends.

Design in the Making: Resistant Materials

Reviewed by John Durrell, Senior Lecturer in D&T, Greenwich University

General

The two books to be reviewed are part of a series. The areas of design and technology covered in this series are textiles, food and resistant materials. Each area has a student book and a teacher's guide. The two books to be reviewed are those dealing with resistant materials. Both the student book and teacher's guide are in paperback format.

The series is designed for students in Key Stage 3 and appears to provide an appropriate level of language and content for that age range. The teacher's guide has a range of photocopiable pages (presumably reflected by its price tag). The student book is not photocopiable but could be used as a stand alone if teachers wanted to produce their own lesson plans and worksheets.

Students' book

The students' book is arranged in seven sections dealing with the following areas:

- safety
- making things
- wood and joining materials
- machines and movement
- electronics
- metals
- product evaluation.

Each area is very well presented, making good use of colour photographs and diagrams as well as line drawings. Some pages simulate web sites in their appearance. The content is very well presented, although some of it could be gained from other sources and it is felt that the section on wood joints could be

further developed, as some joints shown could confuse the students. The final section on product evaluation is very good, taking children through a case study having laid out points which make up a product evaluation framework before doing so. This allows children to pick up on these points as the case study unfolds. The sections generally work well and have been clearly and logically interwoven within both the student book and the teacher's guide.

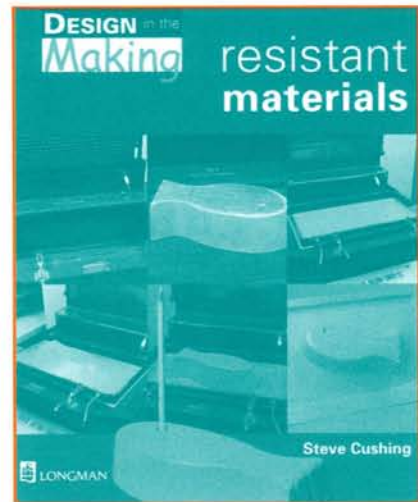
Teacher's guide

The teacher's guide has three main sections:

- **An introduction** – this outlines such issues as the National Curriculum design and technology coverage within the scheme, the use of ICT in design and technology, students' self-assessment statements and hints and advice on inspections.
- **Lesson plans** – which build on the content of the student guide and formulates this into a series of 19 lesson plans. The lesson plans provide a general outline of how a lesson could be constructed around the content being dealt with in the student book. It is however left to the teacher to complete the classroom management and organisational details to suit their own needs.
- **Worksheets** – there are 49 worksheets produced using good quality line drawings. These in the main reinforce and test knowledge gained from the students' guide. One of the worksheets (No.25) outlines the 'core' of a project showing the basic box and mechanism from which an automata is to be designed by the students. This appears to be a very good starting point from which students can begin to individually design the remainder of the automata. It is a pity that the author did not include other such 'cores' to cover other areas of resistant materials.

Overall

The two books complement each other very well. The students' book is rich in content, has good presentation with an extremely good product evaluation section. It is written at a level appropriate for its Key Stage 3 readers, and at the price tag of just £9.75, it is a must for those teaching lower secondary or the upper middle school age range.



The teacher's guide draws upon the knowledge and skills outlined in the student book and organises this material into a series of lesson plans that can form the basis of the teacher's planning, although obviously particular issues relating to classroom organisational management will need to be inserted by the teacher.

The worksheets have in the main been constructed to reinforce and test knowledge gained by the student. It is a pity however that more practical projects have not been incorporated into the scheme. At a price tag of £35, it may initially seem expensive. However it is photocopiable, and will save the teacher many hours of work.

Design in the Making: Resistant Materials

Steve Cushing

Longman Group UK Ltd: £9.75 (pupils' book) £35.00 (teacher's guide)
 ISBN: 0582 36589 9 (pupils' book) 0582 36587 2 (teacher's guide)

Appropriate content	////	Generic use	
Pupil/student use	////	One of a series	◀
Teacher resource	////	Photocopiable	◀
Visuals	////	Pupil/student activities	◀
Overall style	////	Cross-curricular	

The Technology Programme, Design and Make It! 2

Reviewed by David Spendlove, Senior Lecturer, Liverpool John Moores University

Overall, this collection of five programmes including systems and electronic products, graphic products, textiles, food and resistant materials (each divided into three five-minute blocks) was very disappointing and represents a missed opportunity to stimulate and provide an impact. The narration is unfortunately often dreary and fails to sufficiently provide or highlight technical vocabulary (on average two processes highlighted in each programme). There are no questions to consider or suggested follow on activities for students or teachers (the occasional ‘pause your video and discuss the following’ would have significantly improved this as a resource).

Equally the illustration of processes and techniques was limited by what appears to be a desire to keep the programmes short. For example an excellent opportunity was lost with the rapid prototyping section when showing the sterelithography process. Considering this series is for use with GCSE students much more could have been achieved.


By far the best programme of the series is graphic products. This programme highlighted some good contexts for design, illustrated careers in graphics and allowed the designers to talk through projects with colleagues, which is excellent for identifying appropriate technical language.

By far the weakest of the five programmes however, was the ‘systems control and electronic products’. I actually stopped the video to check if this was the correct title because there were so many excellent opportunities for discussing electronics being missed. The context (music in space) was good, but very little

The Technology Programme. Design and Make it! 2

Channel 4 Schools £17.99
Contact: Fax: 01926 436446
Phone: 01926 436444

Appropriate content	✓✓	Generic use	=
Pupil/student use	✓✓	One of a series	=
Teacher resource	✓	Photocopiable	
Visuals	✓✓	Pupil/student activities	
Overall style	✓✓	Cross-curricular	




Design and Make It! 2 Science Picture 110

Design and Make It! 2 new

Apr 14 - 16 AUTUMN
Fri 11.00 - 11.15

This new unit visits factories, workshops and laboratories, where designers and their clients come up with new ideas. The camera follows the manufacturing and product evaluation processes.

- 1. Systems and Control and Electronic Products** 5 Nov
Sound beam, electronic pig farm, the Guardian. Looking at the interaction between product and electronic circuit. Where should quality checks be made in the system?
- 2. Graphic Products** 12 Nov
HarperCollins, Channel 4 Website. Sorry. There is more to producing a book than words and pictures. Collecting ideas for a new design is always exciting, but it is also part of a larger process of selling the book.
- 3. Textiles Technology** 19 Nov
Virgin Airways uniform, Bristol Uniforms (five-proof clothing), Courtaulds socks. The structure of fabrics and fibres affects their functions. We see how fabrics can be used in high fashion, to save lives, and to promote corporate image with eye-catching uniforms.
- 4. Food Technology: Transforming food** 26 Nov
Simmonds Bakery pastries, the work of a health inspector, Nutricia dietary products. A few basic foods can be transformed into a multitude of dishes. But when proper procedures are not followed in the kitchen, unseen villains may creep in, poisoning food.
- 5. Resistant Materials** 3 Dec
Lego, Dyson vacuum cleaners, Liverpool University (a prototype for safety lighting). Single items are relatively easy to produce, but when the numbers required are increased, quality, cost and wastage become increasingly important.



Design and Make It! 2 Integrated Circuit Board © Science Picture 110

Design and Make It! 1

Apr 14 - 16 AUTUMN
Fri 11.00 - 11.15


The unit is linked to the *Design and Make It!* textbooks which support GCSE Design and Technology from the NEAB

Design and Make It! 1 shows production planning and quality control systems in action in a variety of design and manufacturing industries.

- 1. Food Technology** 24 Sept
Chocolate manufacture, cook-chill products and designer meat
- 2. Resistant Materials** 1 Oct
Car bodies, flat-packed furniture and musical instruments
- 3. Textiles Technology** 8 Oct
Fibre/fabric magic and CAD/CAM technology
- 4. Electronic Products** 15 Oct
PCBs in security bugs, electronic personal organisers and atmospheric control systems
- 5. Graphic Products** 22 Oct
Movie posters, packaging cosmetics and exhibition design

Design and Make It! 1

Teachers' Guide
Includes suggestions for design and make assignments, information for the teacher, learning objectives and key vocabulary and concepts
18/01/07 £4.95




Textbooks

Design and Make It!
These books can be used as resource books or as complete courses for the full or 'short' GCSE options. Published by Stanley Thomas

Food Technology: 210643 £10.00
Resistant Materials: 210621 £10.00
Textiles Technology: 210661 £10.00
Electronic Products: 210641 £10.00
Graphic Products: 210627 £10.00

Video

5 x 15-minute programmes
21001 £13.99



Design and Make It! 2 new

ICT

Net Notes new
Programme notes are available on our Website: www.channel4.com/schools/netnotes

Video new
5 x 15-minute programmes
21276 £17.99

How to order ☎ 01926 436444 📠 01926 436446 ✉ sales@schools.channel4.co.uk
online shop: www.channel4.com/schools/shop

was explained about the technical issues involved.

The food and textiles programmes were better, but again five minutes was a very short period of time to discuss some important issues and a lack of continuity failed to build upon each programme.

This video series is likely to make very little impact within schools, as the discrete units are too small. Fifteen minutes to deal with any of the subject areas is not enough let alone dividing each one into three five minute blocks. By making each programme separate, continuity was lost and subsequently the impact is minimal.

Finally why do so many school videos have to play silly music in the background? It is an insult to GCSE students as well as a distraction from the minimal content.

REVIEWS

The Journal of Design and Technology Education Volume 5 Number 1

77

The University of Greenwich Design and Technology Resource Materials: Resistant Materials and Mechanical Systems

*Jim Golden and Ken Webster
Reviewed by Michael Lawrance, Head of Faculty, Art, Design & Technology, Bishop Fox's Community School*

Set 6 is part of a series of sets of project sheets in the series to “support teaching and learning at KS3, KS4 and post-16”, and relates to “a variety of different working drawings ... for projects manufactured in resistant materials”. The most significant difference to previous sets is the change from A4 size to B4, though the actual graphic context still only covers A4 landscape, so I would prefer to see even more of the drawings and less of the unnecessarily large coloured borders. Nevertheless, whether displayed on a board or held up in front of a group or class, larger format graphics are more visible and therefore more comprehensible. They also score over certain examples of working drawings appearing in textbooks which, however high their quality, are often reduced to really tiny proportions.

For teachers who want to boost their displays or add a variety of technical drawings to their existing collection, the pack priced at £15.50 for 24 sheets represents a good investment and would grace any display board or A3 presentation folder. Some may be attracted by the actual products themselves because they relate to the same or similar projects already planned or part of a curriculum. For the finer details of the actual type of working drawings, the 24 sheets break down as follows:

1-3: Embossing tool project; Third Angle projection; exploded isometric and rendered 2 pt perspective of final product.

4-5: Bath overflow alarm (electronics); Third Angle; rendered exploded isometric.

6: Rain alarm; Third Angle and cross-section.

7: Electronic sensing device; First Angle projection and hidden detail.

8-11: Sensing device (different to 7); Third Angle; detail drawing; exploded isometric – assembly view; exploded isometric of mould for vacuum-forming.

12-16: Pinhole cameras; Third angle and sectional views, casings, simple and complex examples.

17-18: Caterpillar mechanical toy; First angle; section views and mechanisms detail.

19: Hand-held navigation system – product graphics.

20-21: Policeman mechanical toy – Third Angle; very complex drawings in great detail; parts lists; separate orthographics of mechanisms and housing and character.

22: Frogs – mechanical toy; First Angle in detail with cross-section.

23-24: Child's printing press – Third angle of mechanisms and housing, exploded isometric of final design. Highly complex drawings.

The subject matter means the sheets are bound to be predominantly line drawings, however astute positioning of graphic insets in colour or photographs do provide balance and aid understanding.

The text accompanying each sheet in this pack is concise, relevant and a good example of how annotation can add to a drawing to explain a critical area of development of a design. The relevance of this pack could extend beyond pupils and qualified teachers to benefit students during training or who have graduated to their first post.

Set 7 comes in the same size format as set 6 and communicates in detail the design phases from research to final evaluation of a mechanical toy, namely a Pull-along-clown with cam-operated features. This is undoubtedly one of the most popular projects across the nation's schools, though it is often seen as an 'old favourite' or 'old chestnut' depending on how freshly it is managed in departments.

The excellent recent publication by the Cabaret Mechanical Theatre on automata and how they work plus feature articles in *Designing* have also confirmed the opportunities and learning value such projects offer and will ensure they stay in many schemes of work for a long time. Examination Boards frequently use a similar focus to test pupils on Mechanisms. Moreover, the University of Greenwich has published two packs already on the subject, in A4 format. Given the similarity of subject material between the A4 and A3 packs there will inevitably be repetition to a certain degree. Many sketches and development sheets provide little that has not been seen before.

There is an abundance of freehand sketching in 3D as well as orthographic, isometric, perspective and section drawings. Cam profiles, developments and scale are also covered and assembly drawings, cutaway views and exploded views will give pupils plenty to digest. I was disappointed, however, by the poor quality of reproduction in a few sheets, predominantly the word-processed Brief, Specification and analysis (sheets 3, 4). Generally, there is an over-reliance on graphite sketchwork and I feel a number of sheets could have been explored in other media (crayon, marker pen) to stimulate other pupils to use them in presenting quality ideas. The sheets are marketed as 'Resource and Display' and consequently have a certain obligation to impress pupils in all kinds of media.

It is obvious that the researchers have not intended the two portfolios to rival each other, but rather to extend the range of exemplar material available to schools exploring “possible contexts for applying mechanical systems”. This is still good news for schools. While I have certain reservations about Set 7, its chief advantage appears to be its span as a whole project and its larger size, the kind produced by a pupil pursuing a Full Course in Resistant Materials. It is still good to see undergraduates and graduates being involved by a University in promoting our subject and producing teaching and learning aids of this kind. The project managers could continue this kind of service by turning to Food Technology and Textiles for future subject material. The need in those areas for affordable project portfolios is equally comparable to the market for mechanical toys.

Materials and Mechanical Systems

Ken Webster and Jim Golden
The University of Greenwich: £15.50 each inc. p&p
ISBN: 1 86166 135 5 (RM)
1 86166 134 7 (MS)
Orders: 0181 331 8040
j.w.golden@gre.ac.uk
k.w.webster@gre.ac.uk

Appropriate content	✓✓✓	Generic use	
Pupil/student use	✓✓✓	One of a series	⇐
Teacher resource	✓✓✓	Photocopiable	
Visuals	✓✓✓✓	Pupil/student activities	⇐
Overall style	✓✓✓	Cross-curricular	

Food Technology through Diagrams

Reviewed by Jonty Kinsella, Deputy Head of Department, Orleans Park School

I was delighted to be asked to review this book as I have already suggested that my GCSE pupils buy one for their home use. It is the nearest stand in for me that has so far been available. As teachers we repeat the terms 'specifications', 'CCPs', 'evaluating' remorselessly yet pupils seem to draw a blank in their fear of the terms. I use the NEAB syllabus and this year we were asked to improve the pupil's use of technical terms. This book will undoubtedly help the more motivated to check their meanings and reduce their dependency on me. The book is not tied to a particular syllabus and there is an analysis of the slight differences in each syllabus at the beginning.

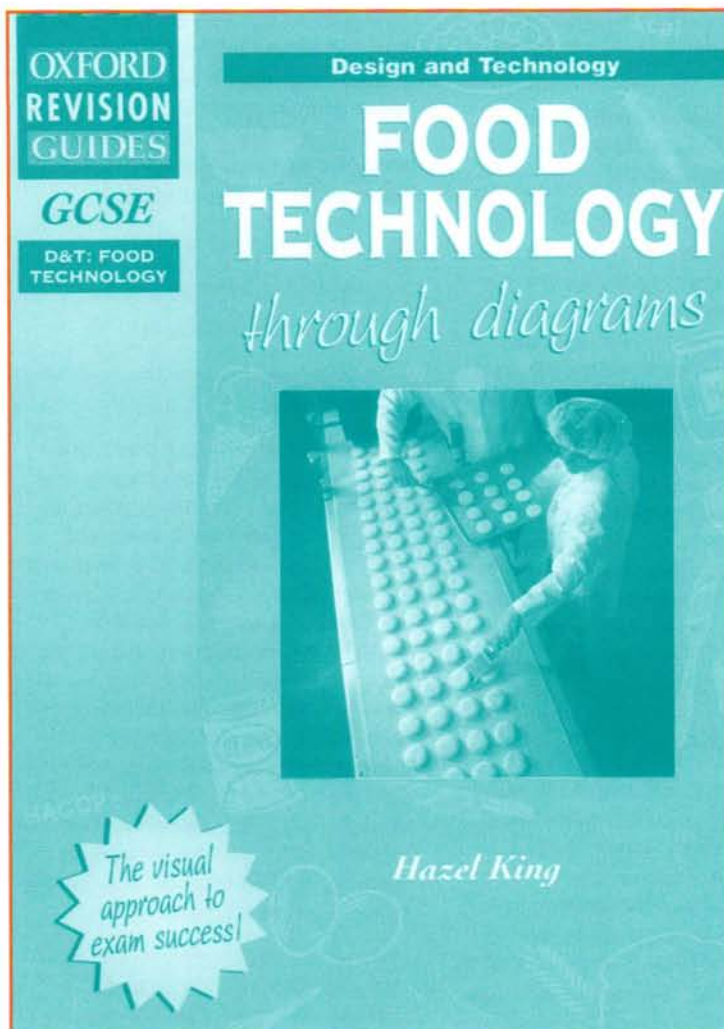
Layout is fairly standard. All the pages are in diagrammatic format and stand alone in their content. The diagrams are in simple black and white style as pencil outlines. Differential shading assists comprehension. Most pages vary in font size, some text being very small. This can in some cases make a page overloaded especially for poor readers and children who cannot scan easily.

Content is of several types. Pages on background knowledge are scattered throughout the book but appear mostly in sections 'Food as a material', 'Food processing', 'Food production' and 'Food manufacture'. This information is usually available in text books, on the Internet and in the usual places. For example, the pages on Sensory Analysis are as in the NEAB textbook. The difference here is that the salient points are diagrammatic – a head with the senses written in the appropriate place (no feel mentioned but this can be easily altered), a taste booth, a simple way of showing the triangle test etc.

Food Technology through Diagrams

Hazel King
Oxford University Press: £7.00
ISBN: 0 19 8328176
Orders: 01536 400552

Appropriate content	////	Generic use	=
Pupil/student use	////	One of a series	
Teacher resource	////	Photocopiable	=
Visuals	////	Pupil/student activities	
Overall style	////	Cross-curricular	



As a way of focusing on or defining a term, diagrams that may be called spiders or brainstormers are used. This treatment is given for example to sauces, pastries, and design ideas. Useful drawings of basic equipment are given. The seven pages of 'Check your knowledge' contain short questions and their answers, also there are exam style questions, again with proposed answers. The index is fairly full and therefore useful.

The pages I find most helpful are those that will assist pupils to do their coursework; in the section headed as such. I have copied some of these onto OHP film and use them to illustrate my points. As the book is slim A4 size this is an easy exercise. A copy glued into the pupil's notebook reinforces my lesson when they need to copy up or do their work at home when alone; for example the pages which differentiate the types of specification – design and product, and how to set about writing such specifications.

As ever and in every book there is always room for improvement. By making the following comments I do not wish to detract from this very useful text. For the next edition, perhaps there could be a reduction in the information that is in small print and which is easily accessible. Larger drawings and print would give easier access for the less able and dyslexic. Flow charts are meagre and do not really match our teaching of the real way of doing such a production plan. Survey instructions are limited and there could be directions in clear detail of how to use say 'WORD' to do them and the results that flow from proper setting of such a research tool.

Collins Study and Revision Guide: D&T Resistant Materials GCSE Key Stage 4

Reviewed by David Foster, Head of Technology Faculty, Tibshelf School, Alfreton, Derbyshire

This book is an attractive addition to the design and technology library. It represents excellent value for money at the cover price of £12.99. Throughout the 184 pages the main elements that require reinforcement at this level are distilled. At first flick through the format is pleasant to browse through and exceptionally well illustrated. I know from first hand experience that if this initial impression is not good, then the chances of pupils utilising this resource are slim. First hurdle out of the way then, what about the contents. The cover boasts that the contents have 'Everything that you need from the start of your course to the final exams – in one book.' If this is so, we have a real gem here!

The book begins with a colourful layout that seeks to explain its purpose to the student. This simple initial three sides explains that it is able to respond to a variety of syllabus, it has short manageable sections, it allows easy checking of the progress of the student by the student. There is a section about how to upgrade your exam result with an excellent format that includes questions with answers and then comments on the appropriateness of the answers *by real examiners!* This section alone makes this book worthwhile. The pupils I have shown this to think that this takes away a lot of the mystery surrounding the examination. Whilst most schools will run a recent past paper as a Mock Examination, they will only have the feedback of the teacher whereas this provides something of a more official line.

Revision Time also is effectively covered, pointing out to pupils that they should learn the gap areas in their knowledge rather than simply revising what they already know. The Examiners' comments section is especially helpful and contains four main areas. These include:

- how to tackle the questions
- common mistakes to avoid
- how marks are awarded
- how to improve your answer to boost your grade.

This is then followed by a final section about how to use the final revision time for which Colin Chapman produces an Examination Checklist. I, along with many colleagues have written simplified versions of the syllabus which relate to the marking of the work. Colin has provided here an excellent example which relates to the main Examination Boards and would allow teachers to develop one of their own for inclusion in the Departmental Handbook or used directly from the book for pupil usage. The actual examples of pupils' work are an excellent resource and an area that most pupils feel supported by. Reflection on these samples by the examiner is a vital element.

The majority of the centre section deals very effectively with the usual theory elements one might come to recognise, teaching this course. It is all covered in an interesting style with massive amounts of actual examples of project work from pupils and professional designers. All of this is valuable. Colin has done a magnificent job here and has produced a book which I believe is a vital component in the Departmental Library. There really is everything here for the teacher and the pupil alike. I would further suggest that this is placed on the reading lists for intending teachers of design and technology. I work with student teachers and I know that they would feel supported and encouraged by this book.

Collins Study and Revision Guide: D&T Resistant Materials GCSE Key Stage 4

Colin Chapman
 Collins Educational: £12.99 (pb)
 ISBN: 0 00 323523 8
 Orders: 0141 306 3455

Appropriate content	////	Generic use	◁
Pupil/student use	////	One of a series	
Teacher resource	////	Photocopiable	
Visuals	////	Pupil/student activities	◁
Overall style	////	Cross-curricular	

NewFoods CD-ROM

Reviewed by Jenny Jupe, Reviews Editor

This CD-ROM should be a welcome addition to any food technology course for the following reasons:

- changes to the National Curriculum for September 2000 re-defining product analysis as an integral part of design and technology capability
- increased demand upon design and technology teachers to make a valid and appropriate contribution to students' ICT capability
- the introduction of post-16 courses at AS/A level and new GNVQ manufacturing specifications.

These points taken alongside national initiatives such as the NGfL and the New Opportunities Fund training increase the need for teachers to access software relevant to the developing curriculum. So what is the NewFoods CD?

Within the food industry

NewFoods is an ICT tool used to provide product intelligence information to the food and drink industry. It builds upon established and comprehensive data gathering exercise carried out by Campden and Chorleywood Food Research Association (CCFRA) and is designed to make information directly accessible to users; to bring information on what is new in the marketplace (and available to consumers) into the product development laboratory or the marketing office.

NewFoods is a CD-ROM product designed to offer interactive searching of selected data on the 5-7,000 products launched each year in the UK, covering both branded and retailer 'own label' products. It provides a comprehensive record of information on new food and drink products, covering such aspects as product description, price, manufacturer, retailer, product ingredients and nutritional information. A full colour image of the product packaging gives a clear idea of how products are presented to consumers. NewFoods is the ultimate

'altering service' for manufacturers and retailers, as well as a key source of information for generation of new product packaging ideas.

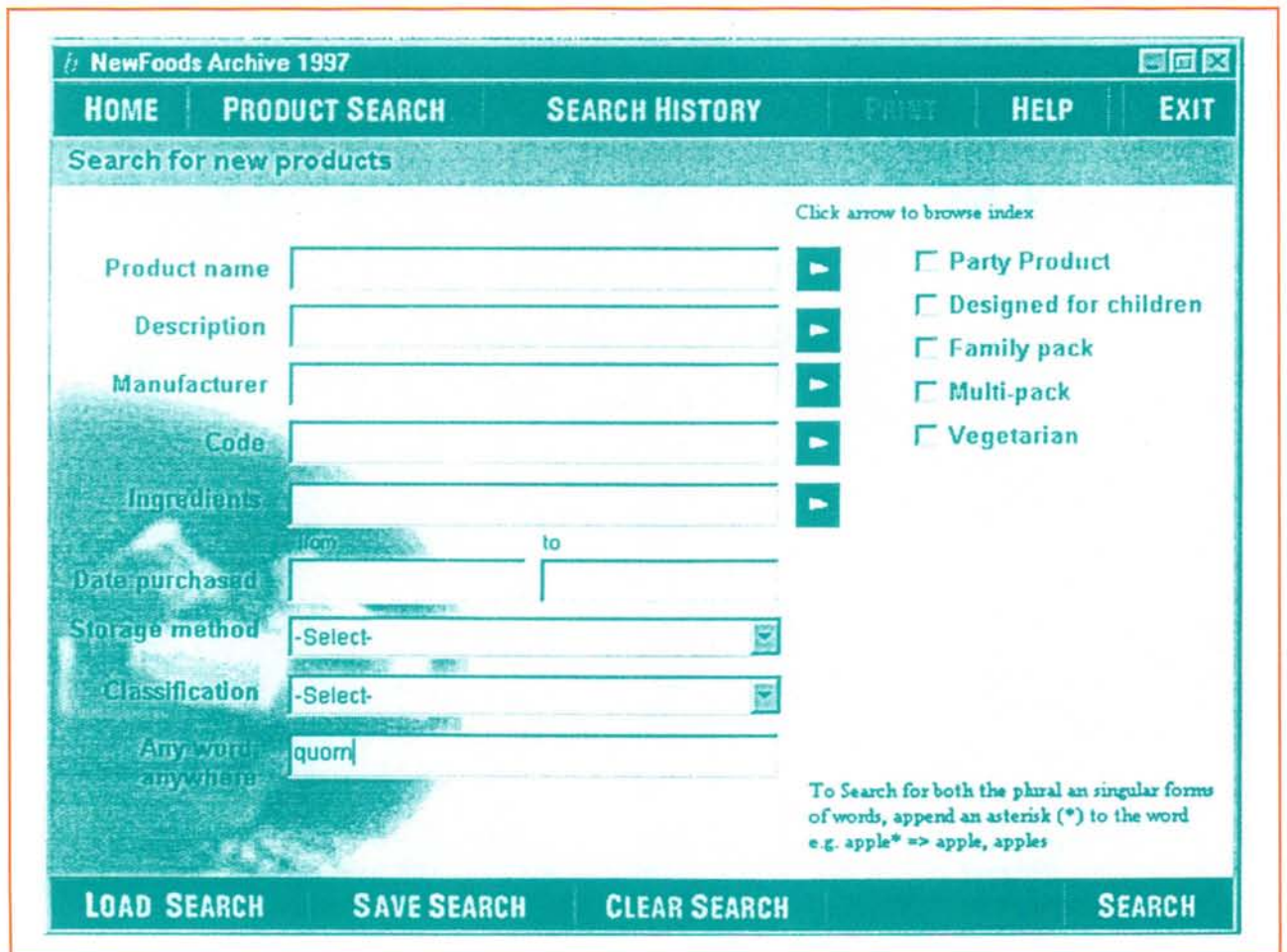
A product is deemed as new, and so eligible for inclusion in NewFoods, when it:

- appears in a major food outlet
- is previously unknown to Product Intelligence at CCFRA
- has previously been recorded by Product Intelligence but has been packaged in a different size/format which creates a new eating occasion, or new consumer purchase. For example, a new individually packaged single portion of cheesecake, which has previously only been seen as a family sized product.

Within the classroom

NewFoods provides students with an extensive database of new food products that have been launched in recent years,

Figure 1



providing valuable insight into industrial practice.

If students are uncertain whether or not a new food is included in the database they might begin by typing a word in the 'any word, anywhere' dialogue box. A positive result will produce a summary of matching foods which can then be searched in more detail. The detailed search providing product detail about cost, weight, ingredients, product description, country of origin and more (see Figure 1).

More specific searches can be undertaken using other fields, providing the student has a good idea of what type of product/component ingredients they are searching for. However, for those students with weaker literacy skills, the database does make some allowance for alternative spellings!

The software provides many students with the facility to undertake extensive product research and initial analysis as the data is sourced from a variety of retail outlets over a 12-month or longer period of time. For those students who would not otherwise have access to such information this CD-ROM will be of great benefit. NewFoods gives students an opportunity to access information and to develop further an understanding of existing products.

User notes developed by Jenny Ridgwell are available with the purchase of NewFoods. In addition to brief user guidance the notes provide ideas for classroom activities. These are not extensive in number, but will enable teachers to get started. Once students are aware of the CD-ROM they will no doubt find the database a very useful research tool and seek new ways of using it.

NewFoods does provide direct access to NewFoods website maintained by the Product Intelligence team at CCFRA. Unfortunately the on-line version of NewFoods is only available through subscription, although limited searches can be conducted on a trial basis. It would be extremely useful if the CD-ROM could be regularly updated using this on-line facility.

NewFoods CD-ROM

Campden and Chorleywood Food Research Association Group: £37.75 (includes VAT and p&p)
 Orders to Ridgwell Press, Education House, Castle Road, Sittingbourne, Kent ME10 3RL
 Tel: 01795 437323 Fax: 01795 474871

Appropriate content	////	Generic use	←
Pupil/student use	////	One of a series	
Teacher resource	////	Photocopiable	
Visuals	////	Pupil/student activities	←
Overall style	////	Cross-curricular	←