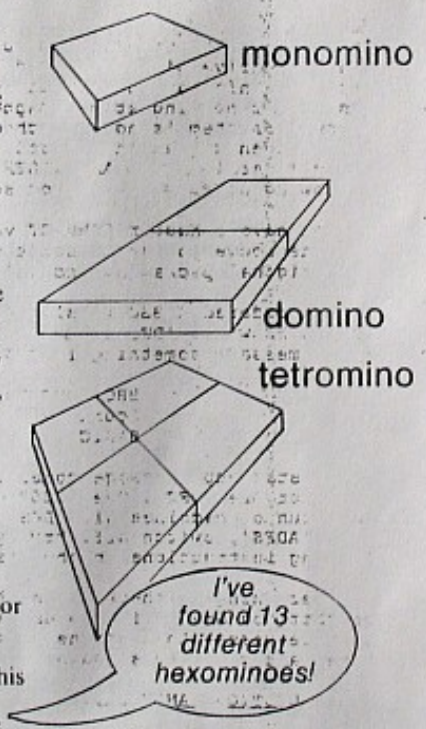
The *POLYOMINOES PROJECT PACK*, by Bob Fox, is designed to promote mathematical investigations into the properties of polyominoes. *(A polyomino is an arrangement of squares connected by their edges. There is 1 possible monomino, 1 domino, 2 trominoes, 5 tetrominoes and so on...)* The pack comprises a Teachers Guide, copyright-free Pupils' Workbook and five (yes, 5) programs:

- **TESSELLATOR** is an open-ended program which allows students to explore the properties of all or any of the possible polyominoes on a grid, either as simple patterns or pictures or in the more complex areas of tessellation and symmetry. Designs may be saved to disc for access by PRINTER and CAROUSEL.
- **PENTOMINOES** There are 12 possible pentominoes, and this program displays them all and invites you to fit them into a variety of different 60-square grids. Patterns may be saved to disc for access by PRINTER and CAROUSEL.
- **HEXMAKER** Students as young as 7 years old can derive the 12 pentominoes, but finding all 35 hexominoes is a much more demanding task – particularly for the teacher or parent, who has to check them all! HEXMAKER enables the student to test his ideas on screen, with the computer doing the checking.
- **PRINTER** works with an Epson (or compatible) printer, dumping students' designs or solutions to paper for display or as records of work.
- **CAROUSEL** allows the creation of 'slide shows' of designs and solutions. This program is intended for use at Open Days, Maths Evenings and so on, where its eye-catching qualities can be well- employed.



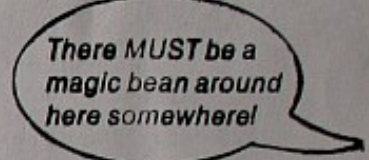
Skilled **programming**, professional **screen displays** and **ease-of-use** means that the *POLYOMINOES PROJECT PACK* challenges students of all ages. **Young children** use it to investigate spatial relationships or just to make patterns; **upper primary** and **lower secondary** pupils use it as a worthwhile maths investigation, while **GCSE students** are tackling coursework with its help. *The astute teacher will find in* **POLYOMINOES** all sorts of possibilities for investigative work, as well as pointers to the level of development of individual pupils' thinking.

POLYOMINOES

GIANT KILLER

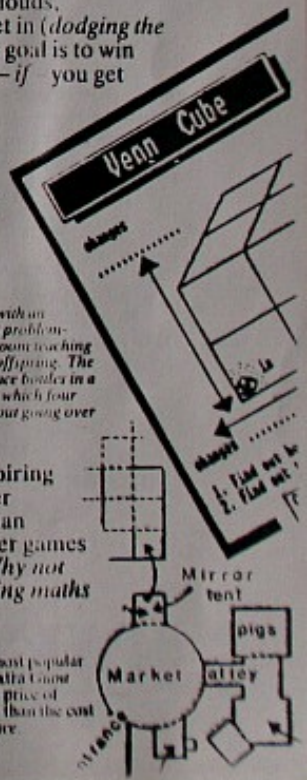
***GIANT KILLER* is our best-selling program.** Written by **Peter Killworth – author of classic games like *Philosopher's Quest*, *Countdown to Doom* and *Return to Doom* (all available from Topologika) – *Giant Killer* is an adventure game for students of 10 to 14-plus with a challenging mathematical content** which includes:

- calculation
- tessellations
- mapwork
- topology
- number patterns
- time and space
- logic
- compass directions



Giant Killer **is based (loosely) on the tale of Jack and the Beanstalk. As Jack – or Jackie – your mission is to go to market to buy a pig. They've all been sold, so you spend your mum's last groat, tackling some irresistible mathematical games stalls, winning – you've guessed it – a magic bean. Planting it (*where?*), you climb the instant beanstalk to the clouds, circumnavigating a castle (*what shape?*), figure out how to get in (*dodging the Giant's cat – and mouse*) and how to beat him at chess. Your goal is to win points and collect treasures that will please your mum when – *if* – you get home. *Giant Killer* comes complete with:**

- Worked Solution (helps you keep one step ahead)
- 24 page Information Booklet (introduces adventure games and suggests ways of using the program in the class/home situation)
- 12 page Player's Guide
- copyright-free puzzle clue sheets



Des Thomas, A & B Computing, November 1987: *"In addition to providing children with an amusing diversion from ordinary maths and the opportunity to participate in important problem-solving activities, GK provides a framework for the teacher to organise his or her classroom teaching in original ways, or for the parent to enjoy some 'modern mathematics' with his or her offspring. The puzzles are ... among the most interesting... The bottle stall, in which the user has to place bottles in a crate so that there are an even number in each row and column; the Giant's seaweed, in which four networks of threads, all with 14 nodes, provide circuits which have to be traversed without going over a line twice..."*

Giant Killer **is stretching individuals (including parents), inspiring small groups and challenging whole classes** in schools all over Britain. **It's a computer game that involves thought rather than physical dexterity, that challenges parts of the brain that other games don't reach, rather than appealing to the 'killer' instinct...** *Why not give your class, daughter or son the chance to try this fascinating maths investigation?*

SPECIAL OFFER *Giant Killer* **is available for a whole range of micros including most popular home computers (see order form). Why not sell the program to your class?** For every extra *Giant Killer* that you order from us, we'll give you a credit note to the value of 10% of the full price of *Giant Killer*. This means that by selling 10 copies of Giant Killer you can recover more than the cost of your own copy... *Orders must be placed with us direct, and must be paid for in advance.*

PUNCTUATE!

Punctuate! provides the opportunity for children to practise the skills of punctuation *without picking up a pen. It uses the power of the computer to motivate children to want to improve their punctuation.*

Stories are displayed on the screen with pre-selected punctuation marks deleted. Children rebuild the passage using memory, context, and syntax. Working in groups they read the story aloud, trying a full-stop here, a comma there, until the story 'sounds right'. Scoring encourages accuracy. They work against the computer at a pace which can be varied from untimed (ideal for children with special educational needs) to 'whirlwind'. In addition to controlling the speed at which the program works you can:

- control which punctuation is deleted for particular children
- choose which texts are presented to particular children
- create your own bank of single or multi-screen texts
- store texts on disc for later use

The texts that you create can be taken from published works (maybe the current class reader or non-fiction drawn from the current topic), stories that you've written featuring the children themselves, or even the childrens' own stories. They can even **type them in themselves** – its that easy! Several 'starter texts' are provided, as is a **comprehensive on-screen tutorial** which explains clearly how to use the program. This is backed up by a detailed manual.

Punctuation is a skill that some find easy; others, despite regular exercises and explanations, enter adulthood with only a crude idea of what it's all about. **Punctuate!** *gives them another opportunity to come to terms with this important basic skill. It suits learners from* **7 up**, and is increasingly popular in centres dealing with **adult literacy**.

AMSTRAD – ARCHIMEDEDES – BBC – NIMBUS

! ' , ? " " : ; ( )

YES Chancellor!

Economy Role-playing Game

Move into 11 Downing Street to see if you can run Britain's biggest business better than the Chancellor!

Yes Chancellor! attempts to help anyone with an interest in the economy – housewife, student, teacher or layperson – to get to grips with some of the Chancellor's problems. Governments have to be elected, so the object of the game is to stay in power by winning an election every five years. Survive for fifteen and you'll win a Life Peerage!

Based on a simplified but in principle correct model of the problem of raising and spending money, **Yes Chancellor!** takes you through key decisions... Will you sell some of your Reserves? What tax rate will you set? How much will you raise by borrowing? How will you share the revenue between Defence, Law and Order, Education and Social? Will you settle strikes amicably or seek confrontations? What bank rate will you choose? Foreign trade? Random numbers are used to reflect the uncertainties of the real world, but these are kept within the bounds of probability so that all program developments are logically tied to your decisions. This means that you can explore the impact of particular strategies on the economy. **Will you follow Mrs Thatcher's lead, or try something more akin to Mr Kinnock's?**

The booklet included with the pack takes you through the program step by step, and includes notes on terminology, factors to be taken into account when considering particular decisions and of the many and varied statistics and graphic displays provided.

Yes Chancellor! has been a great success in British schools and colleges. Author Tom Tutte is an economics graduate of London University. He has wide experience of both the nitty-gritty and policy sides of taxation, being awarded the O.B.E. in 1977. He has written a book and occasional articles on the technical aspects of taxation, and does regular selection interviewing for the tax inspectorate.

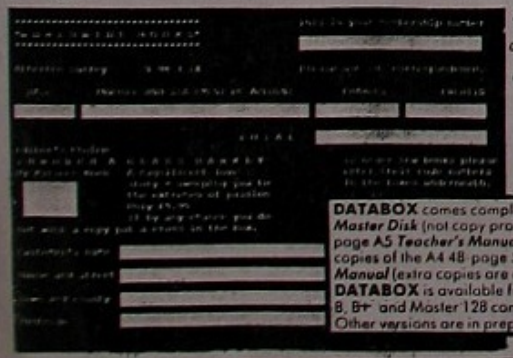
Understanding what's happening to Britain's economy is no mean challenge. Indeed some would say that even the government doesn't know exactly what's going on – that the uncertainties of the world's monetary systems make it more of a game than a science. **Yes Chancellor!** gives you or your students the chance to join in the game without the responsibility of really affecting peoples' lives.

AMSTRAD ... ARCHIMEDES ... ... IBM ... NIMBUS

DATA BOX

Like any other **data maintenance package**, DataBox allows the student to create a database and to edit, merge, search and sort it. However, unlike just about every other such package, DataBox was designed from inception for **GCSE Computer Studies project work**. It therefore allows the student to demonstrate and record ***skills which the Examiner will be looking for*** and includes the following features:

- **Design Data Capture Forms** - students can design their own forms on screen, and print them out.
- **Print Command List** - DataBox automatically stores all the commands that students use in defining data capture forms or in searching. **These may be** printed out as part of the Project Report.
- **Create an Original Database** - the program is completely content free so that students can come up with their own project ideas. However, the comprehensive **Student's Manual** has lots of suggestions.
- **Include Validation Checks** - students can incorporate these at any stage. Types available include length and range checks, data type and presence checks, hash totals, etc.
- **Print screens** for inclusion in the final report.
- **Pupil Workbook** - helps in the preparation of a project report and is bound and punched to fit files.
- **File save feature** - once a file has been saved to disk it is never overwritten. This means that students can save and recall files in order to create printouts showing the effects of their file manipulations.
- **Source documents match screen displays** - greatly eases Examiners' verification task!



An example of a Data Capture Form

DATABOX comes complete with ***Master Disk*** (not copy protected), 28-page ***A5 Teacher's Manual***, and 4 copies of the A4 48-page ***Students Manual*** (extra copies are available). **DATABOX** is available for the BBC B, B+ and Master 128 computers. Other versions are in preparation.

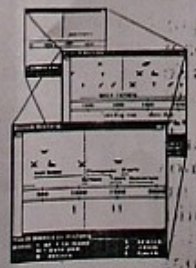
Junior & Secondary

TIME LINES

...is more than a historical data base

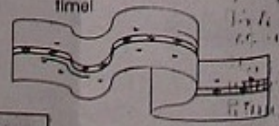
Scroll backwards and forwards through time. Key dates are marked as symbols with eras and spans as lines.
The package includes a general world history data base but the teacher or children can create their own bases or incorporate their base alongside an existing one.

Zoom from a date to an era and history comes into perspective. A class or individual project can be seen alongside other historical events. Even a local history study can be easily incorporated.



Design your own symbols to fit individual projects.

Print a date or the whole of time!



Order: Time Lines
Versions: BBC B/B+/Master
Price: £21.50 plus VAT
Discounts: Yes
Network: £43 plus VAT
On Approval: Yes
ISBN: 0 948808 60 8

Note: The Archimedes, Nimbus and IBM clone versions will be available from late summer.

Flip to the card catalogue and then flip through the stack of cards or conduct a search using dates, subjects, symbols or the cross referencing system.
The particulars shown on this page are derived from a data base which compares English and American histories from 5000BC to the present day.
Time Lines can be used for your dinosaur project or a detailed study of Guy Fawkes.

Write

or Draw your own entries and then file them in the card catalogue. These entries will be automatically placed on the Time Line screen.

Change almost any aspect of the data base to fit your class or project requirements.

The package comes complete with a general British/World History data base, full manual, reference cards and worksheets to copy.

TOPOLOGIKA
P.O. Box 39, Stilton, PETERBOROUGH, PE7 3RL
Tel: 0733 244682

Extra Data Base: European History, AD 378-1500.
Price: £7.50 plus VAT.
Other titles in preparation.

CRASH COURSE

The **Typing Crash Course** gives beginners a quick, 3 to 4 hour grounding in the basics of touch typing, and contains plenty of interesting practice material (all about computers) to help build speeds up to 40 wpm and more. Proper words and sentences are typed right from the beginning – *no boring, meaningless drills like 'asd jkl'* – as are continuous lines of text, just like using a word processor. **Crash Course** even 'word-wraps' just like a word processor does. It is the ideal way to get newcomers started on this essential skill.

TWO FINGERS

How many of your students – and staff for that matter – come to you with highly developed 2, 3 or 4 finger 'hunt and peck' skills? The unique **Two Fingers To Touch Typing Conversion Course** helps experienced keyboard users convert painlessly to fast, accurate touch typing in four intensive sessions, weaning you step by step from your old habits. You do not need the manual to use Crash Course or Two Fingers. Instructions appear on the screen when you need them. The screen explains in plain words everything you need to know about how to type. You don't have to start again from scratch and your typing speed hardly drops while you're learning.

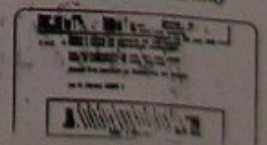
THE QUICK AND EASY WAY TO FLUENT TYPING'
Both programs have the same sophisticated features with the same aims: *to give instant feedback on progress and to keep students interested and eager to learn.* They include:

- constant feedback of speed and accuracy
- full progress record of each individual user
- 'proper' words from the start – no boring drills
- no copy protection – runs on hard disk and networks

- adaptable for supervised or unsupervised learning
- suitable for all types of reluctant senior teachers or keen trainees
- very straightforward to load and run
- cheaper than a set of text books or photocopied exercises
- runs on IBM PCs and compatibles (including Nimbus PC, Amstrad 1512, 1640, PPC), PCWs (8256, 8512 9512) and CPC 6128
- versions also available in **French** and Spanish

The programs are comprehensively packaged with a quick reference How-to-Card, Getting Started instructions, Disk with full program and instructions, Registration Card, Guarantee. **Warning:** students may find the course addictive!

TOPOLOGIKA



PRICES INCLUDE VAT

	BBC B Master Compact	CPC disc	PCW	AM-IBM PC	Nimbus	Archimedes 310	Spec +3 disc
Acheton	14.95	11.95	14.95	17.50	17.50	★	11.95
Avon & Murdac	17.50	14.95	14.95	19.95	19.95	19.95	14.95
Countdown to Doom	14.95	11.95	14.95	17.50	17.50	★	11.95
Crash Course	na	25.25	25.25	25.85	25.85	25.85■	na
Curves	34.45	na	na	na	♦	♦	na
Databox	22.95	na	na	na	na	na	na
Giant Killer	19.50	14.95	14.95	17.50	17.50	17.50●	14.95
Go For It!	18.95	na	na	na	na	na	na
Kingdom of Hamil	14.95	11.95	14.95	17.50	17.50	★	11.95
Philosopher's Qu	14.95	11.95	14.95	17.50	17.50	★	11.95
Polyominoes	21.85	na	na	na	♦	♦	na
Punctuate!	16.95	na	na	♦	16.95	16.95●	na
Return to Doom	14.95	11.95	14.95	17.50	17.50	17.50	11.95
Stock Pack	28.69	na	na	28.69	28.69	28.69	na
Time Lines	26.75	na	na	♦	♦	♦	na
Two Fingers	na	25.25	25.25	29.85	29.85	29.85■	na
Whale Adventure	21.00	na	na	na	na	♦	na
Whale Facts	19.00	na	na	♦	19.00	♦	na
Whale Games	19.00	na	na	na	♦	♦	na
Yes Chancellor!	na	14.95	14.95	17.50	17.50	17.50■	na

na means 'not available'
♦ means 'in preparation'
■ means Archimedes version requires PC emulator
● means Archimedes version needs BBC emulator
★ **Archimedes versions are ONLY available in the following compilations: ACHETON + KINGDOM OF HAMIL (19.95 + VAT), PHILOSOPHER'S QUEST, COUNTDOWN TO DOOM, RETURN TO DOOM (19.95 + VAT)**

ORDER DETAILS

Computer	*Product*	*Disk Tracks*	*Qty*	*Price*	*Total*
				Total	
				Postage (50p per item)	
				TOTAL	

TOPOLOGIKA

Name _____

Job Title _____

Address _____

Post Code _____ Telephone _____

Order Number _____ Sig _____

I wish to pay by ☐ ACCESS ☐ Cheque (enclosed) ☐ Invoice

Card No. _____ Expiry Date _____

SOFTWARE CATALOGUE – 1989

For our 1989 software catalogue we have gone back to the loosleaf style with which we began two years ago. Our products include:

- maths investigation packs for primary and secondary schools
- information technology resources for GCSE classes
- skills software targeted at the National Curriculum
- conservation packs – whales, dolphins, and rainforests
- classic adventure games like 'Philosopher's Quest' and 'Avon'

We hope we've enclosed all the information that you require; if not, please let us know. Prices are either on the back of this form or on product specific leaflets. Many thanks for your support and interest.

Yours sincerely,

Brian Kerslake

Brian Kerslake
TOPOLOGIKA

NIMBUS products **include BBC or PC emulation** as appropriate.

SPECIAL OFFERS exist on some products. See individual product leaflets for details of these and other **back-up materials**.

GUARANTEE All products are guaranteed for life. Return DISC ONLY with proof of purchase and 2.00 handling charge and a replacement will be sent by return.

NETWORK VERSIONS of some products may be available. **Ring**

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