

Technology for KS3 – ISBN 0 71957183 9

This latest TEP book from the publishers John Murray, is quite outstanding in covering a wide breadth of material for teachers and pupils.

TECHNOLOGY For Key Stage 3

It brings to the subject a unique reference focused on the very areas of concern for new, hesitant and established teachers of D&T. The work is co-authored by Professor John Cave of Middlesex University and Bill Nicholl, course leader for the D&T Graduate Teacher Programme at Cambridge University. The material covered draws on much of the TEP support material and resources available to schools and features high quality illustrations and photographs throughout, thanks to designer Peter Stensel.

With a foreword by well known inventor, **Trevor Baylis** this essential reference is set to emerge as a one-stop reference, especially as an accompanying CD-ROM is also available. Throughout the text a CD-ROM icon appears denoting that an appropriate animation is available to view on the CD. This is particularly useful to integrate into planned activity as a 'breakout' experience to complement and support lessons alongside the book.

The book is written in an accessible style for pupils as well as teachers and features pupil exercises throughout the sections. The sections are colour coded and throughout the sections useful, 'did you know' nuggets of information pop up to support the main text and provide useful platforms to structure teaching and discussion points around.

Running to over 130 printed pages the book is laid out under six distinctive headings:

➔ What is D&T?

Looking at problems and opportunities, products and briefs with a short section on 'small miracles of product design'

➔ Getting ideas in and out of your head

Concentrates on drawing and sketching as well as rendering. Also covered is an overview of CAD/CAM as well as presentation and modelling.

➔ Materials

This section contains a wealth of useful material starting with properties and then on to metals, plastics and wood followed by smart materials and 'getting materials into shape' looking at processes and tools.

➔ Structures

Takes the reader through a journey starting with forces, onto simple structures and then, frameworks and shell structures. It also reviews failure in structures, bridge design and suggests a number of challenges for pupils.

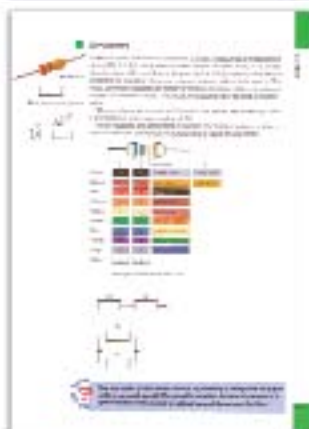
➔ Mechanisms

This section will prove a popular read with basic mechanisms and movements well illustrated and described. Hints and tips on low cost construction and on the use of kit and proprietary components is included. Animatronics and robotics are well covered too.

➔ Electronics in Control

This starts with an easy to follow theory, backed up with schematics and visuals of circuits using input and output devices as well as a range of passive components. Examples of simple useful circuits using transistors, FET's and Thyristors is also included. Integrated circuits and programmable chips are introduced including timers and TEP's IQ board. Again the end of the section is a comprehensive review of 'small miracles of electronics'

➔ Available from booksellers and through TEP this book tries hard to be both a starting point for teaching as well as an essential reference. Used with the CD-ROM animations it should prove an unbeatable asset for any D&T department.



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