

Technical Vocabulary

section 1

Developing, planning and
communicating ideas

section 2

Materials and components

section 3

Tools, equipment and processes

**An Introduction to
Design and Technology
Vocabulary**

Acknowledgements

DATA is grateful to the many teachers, advisers and organisations who originally contributed to glossaries and word lists and suggested changes for this updated publication. Our thanks are also extended to those who commented on the draft of this publication and to Carolyn Gifford who compiled the original technical vocabulary publication.

An Introduction to Design and Technology Vocabulary was revised and updated by Bridget Hemmings and Annette Bolton.

These materials may be photocopied for educational purposes in the purchasing institution provided that their source is properly acknowledged. Under no circumstances may such copies be sold or otherwise reproduced without the prior written permission of DATA. Each purchasing institution or individual may request the contents of the publication to be sent in electronic form. Please note the small charge for this service.

Revised in 2003 by DATA
First published in 1995 by DATA

The Design and Technology Association
16 Wellesbourne House
Walton Road
Wellesbourne
Warwickshire CV35 9JB

© DATA 1995, 2003

ISBN 1 89878 809 X

Contents

Introduction	4
Section 1 – Developing, planning and communicating ideas	7
Section 2 – Materials and components	12
Section 3 – Tools, equipment and processes	17
Index	24

Introduction

The 1995 Order for Design and Technology, introduced in the Programmes of Study for Key Stages 1 and 2, the requirement that pupils should learn to 'use appropriate vocabulary'. At Key Stage 1 the Order stated that pupils should be taught to use the appropriate vocabulary for naming and describing the equipment, materials and components they use. At Key Stage 2 this was extended to include vocabulary for processes too. The new legal requirements for design and technology, set out in the 1999 National Curriculum for England, outlines the general teaching requirements for the use of language across the curriculum. The current statement is as follows: 'Pupils should be taught to express themselves correctly and to read accurately with understanding. They should be taught the technical and specialist vocabulary and how to use and spell these words.' In writing they should be taught to use correct spelling and in speaking to use language precisely. In reading pupils should be taught strategies to help them to locate and use information.

We have made reference to a number of recent publications for this rewrite. In the *DATA Guidance Materials for Key Stages 1 and 2*, published in 1995, it was decided not to place emphasis on the vocabulary used in the units of work, but to provide a more flexible support for teachers and pupils through the original technical vocabulary publication. Within the successful lesson plans, published in 2002 by DATA to accompany the Qualifications and Curriculum Authority (QCA) units of work, a list of the vocabulary to introduce was highlighted.

This book has been rewritten to help teachers and other adults in the classroom to identify those terms that their pupils need to recognise. It will be for users of the publication to determine the appropriateness of terms. Whilst this list is not intended to be definitive, it does seek to provide background to help teachers make informed judgements about the vocabulary they use.

DATA believes that whenever possible pupils should understand and use the correct vocabulary for the materials, tools, equipment and processes involved in their work in design and technology. The 'correct' term will change, however, as pupils progress through key stages. A pupil at the start of Key Stage 1 may not be able to identify plastic materials, but

should be able to do so by the end of that key stage. By the end of Key Stage 2, however, most pupils should be able to identify a plastic as acrylic. By the end of Key Stage 4 it could be expected that pupils should also know that the 'correct' name for acrylic is polymethyl methacrylate.

There are some materials, tools and equipment included in this publication that many pupils are unlikely to come into contact with when designing and making. Some pupils may gain only limited experience of work with control and not come across the use of resistors or membrane switches, but for those fortunate enough to work in-depth on such aspects, knowledge of components and their terms will be valuable.

Using this publication

The previous publication has been used in a number of ways and reached a wide audience, including; teachers within Foundation classes and at all key stages a) for information and b) as a resource; other adults in the classroom, including supply teachers and non-specialists; Key Stage 2 and 3 pupils for reference; students within initial teacher training institutions and advisory staff for training.

For older pupils this booklet has been useful as a spelling aid, containing the specific words that they are likely to use in recording their work in design and technology. Familiarity with the correct terms has not only enhanced pupils' knowledge of materials, tools, equipment and processes, it has also broadened their understanding of their purpose – why, for example, each saw has a specific name.

Use of correct terms has enhanced pupils' writing about work in design and technology, particularly in the evaluation of products. Young pupils often find it difficult to expand on their evaluation and restrict themselves to saying 'it is good', 'it works' or 'I like it'. Becoming familiar with the terms used in design and technology extends pupils' awareness of the concepts inherent in the design and technology process, particularly if teachers assist them by giving them prompts by asking whether it is rigid or flexible, if it is stable or what its texture is. By making this publication available in a flexible electronic format, it is now possible to copy and paste the vocabulary, with and without definitions, for planning purposes and pupil worksheets.

In this publication the term 'safety warning' accompanies a number of entries. This denotes a need for teachers and pupils to be aware of potential danger when working with these tools, equipment or materials and carry out a risk assessment.

With the exception of very familiar materials, pens and pencils, for example, all the terms in this booklet are accompanied by a definition. Where possible, the definition has been simplified so that pupils able to read the booklet can discover the meaning for themselves. The definitions should therefore be helpful both for pupils and for non-specialist teachers.

How the vocabulary is arranged

In compiling the list of vocabulary, numerous options were available from a straight alphabetical list to grouping words in a variety of sections. The system adopted divides the vocabulary into three sections. The classification is:

- developing, planning and communicating ideas
- materials and components
- tools, equipment and processes.

Within each section, words are listed in alphabetical order and every entry also appears in the index.

Section 1 – Developing, planning and communicating ideas

aesthetics	Appreciation of an object's appearance and whether it is pleasing.
annotated diagram	Labelled drawing.
appearance	The way that something looks.
artefact	Any product that has been made, whether by pupils or commercially.
brittle	Able to break easily.
card	A flat piece of thick paper.
chart:	
bar chart	Type of graph with horizontal or vertical bars representing the values.
flow chart	Diagram showing a sequence of operations, that is, the order in which they are carried out.
pie chart	Type of graph which show the proportion of parts to the whole.
components list	List of parts needed to make a product.
cross-section	A view of an object, either imaginary or made by cutting through it.
customer survey	A way of finding out what people think of a product or idea, often by a questionnaire.
design	To create a plan or scheme either from new ideas or by presenting existing materials in a new way.
design brief	A statement of what needs to be designed and/or made.
design process	Process of designing from identifying a need, generating a design, planning and making it and evaluating its performance.
design proposal	A possible solution in response to a design brief.
disassembly	Breaking down a product into its component parts, either in reality or in an imaginary way.
dismantle	To take a product apart.

Developing, planning and communicating ideas

drawing tools

Key Stage 1 and 2 pupils should be familiar with using the following equipment:

crayons
marker pens
paints
pastels
pencils
pens

and with using the following tools:

compass
protractor
stencil

Device for drawing circles.
Measuring tool showing angles.
Shaped template to draw inside for repeating patterns.

engineering

Process of applying scientific principles to designing and making products and solving problems.

enlarged view

To show greater detail by making the original larger.

equipment

The tools and materials used to carry out a task.

ergonomics

Study of how artefacts and environments can be matched to the needs of people.

evaluation

Assessment of how an artefact functions compared with its specification.

exploded drawing

A 'blown-apart' drawing showing how the components are joined to make a product.

final design

Chosen solution from a selection of design ideas.

flexible

Able to be bent without breaking.

fold

To double material such as paper against itself in the following ways:

mountain-fold
fan fold
U-fold
V-fold

As an upside-down 'V' shape.
V-folds radiating from a point.
As a rectangular 'V' shape.
Also known as a 'valley' fold.

function

The intended use of any product.

graphics

Use of pictures and words to communicate ideas and information.

graphs	Diagrams which show how two or more sets of data are related; see also chart.
grid	An ordered network of lines, often in squares as in graph paper.
ingredient	A component of a mixture, especially in food technology.
ingredients list	List of all the components needed to make a product.
investigation	In design and technology, analysing a design brief and carrying out research.
landscape	Using a piece of paper width-ways, as in a landscape picture.
malleable	Able to be worked into different shapes or bent without cracking.
mark out	To follow measuring with the appropriate marking tool i.e. pencil or chinagraph pencil.
market research	Used to find out people's needs and tastes, often by questionnaire.
mind map	Discussing all the ideas that can be thought of on a particular subject and linking ideas.
mobile	A light artefact designed to be hung and blown by air currents.
mock up	A model which allows you to try out ideas using cheaper materials/temporary joints.
model	Usually a 2D or 3D outcome of modelling.
modelling	Trying out ideas in ways which are quicker, cheaper or more convenient than making the real thing.
modify	To alter or change a design.
net	The flat or opened-out shape of an object such as a box.
opaque	Cannot be seen through.
orthographic	In an orthographic projection, an object is drawn from three views: front, end and aerial.
paper	Material made from wood pulp, used for writing, drawing, printing and wrapping.
parts drawing	Drawing showing the size and shape of components to make up a product.
parts list	List of components required to make a product.

Developing, planning and communicating ideas

pattern	A template used as a guide to cutting out shapes in paper, wood, plastic, metal or fabric.
performance	The way in which a product carries out the task which it is designed to do.
perspective drawing	Form of drawing, with vanishing points, to show depth and distance.
pictogram	Symbol, often used to record statistics, such as in a survey of favourite biscuits.
plan	A view of a building or an object, seen from looking on it from above.
planning	Setting out an aim and the ways and time by which it might be achieved.
portrait	Using a piece of paper with its narrow edge at the bottom, as in a portrait.
primary source	Original source of information as opposed to information collected from published materials, for example.
product analysis	A way of investigating and describing products in order to develop new designs.
proportion	The share of a whole, as in a pie chart which shows how the different parts of something make up its whole.
prototype	A model which is made to test whether a design will work.
questionnaire	A survey designed to find out people's feelings or likes and dislikes.
recipe	A list of ingredients and instructions for preparing food.
research	In design and technology, the part of the design process which involves finding information.
rigid	Not flexible.
risk assessment	Identifying the degree of probability of a hazard or danger and acting accordingly.
secondary source	Information collected from non-original sources, e.g. published material, the Internet, CD-ROM.
section drawing	Drawing which shows an object as though it has been cut through.
sequential diagram	Series of drawings to show how a product is made.

shape	Form of an object produced by its outline.
sketch	A rough drawing as opposed to a plan or finished drawing.
specification	Describes what a product has to do.
stable	Firmly fixed, not easily swayed or moved.
style	Used in visual judgements e.g. hi-tech, traditional, outdoor.
synthetic	Made or manufactured, rather than a natural product.
system	A series of components or products organised to perform a task.
taste test	Systematic recording of views on a food sample.
technology	The use of scientific, material and human resources to meet the needs of society.
template	A shape drawn to assist in cutting out.
tessellations	Shapes which interlock together and form regular patterns.
texture	Surface quality of being, for example, hard, soft, smooth or rough.
three-dimensional	Having height, width and length.
translucent	A material which when looked through, allows light to pass through but is not clear.
transparent	A material through which you can see, such as glass.
two-dimensional	Having height and width only, a flat representation.
work plan	Plan which shows a sequence of work and the time each stage might take up.
working drawing	Drawing which contains the information needed to make a product but is constantly updated as changes are made.

Section 2 – Materials and components

abrasive	Any material which can be used to wear away the surface of another, such as glasspaper.
acrylic	A hard, rigid and shiny plastic material available in transparent, translucent and opaque forms and in bright colours; full name: polymethyl methacrylate.
adhesive	Substance which holds materials together.
aluminium	Light, soft metal and a good conductor, for example, baking foil; used for making switches.
artstraws	Bendable straws which can interlock; useful for frameworks.
axle	Rod on which one or more wheels can turn.
balsa	Lightweight wood useful for model-making .
battery	Two or more cells which supply electrical current.
battery snaps	Clips which connect on batteries or battery holders.
beam	Long piece of timber or metal, supported at both ends.
binca	Textile with regular weave, useful for embroidery.
bolt	A metal fastener, usually used with a nut.
brass	Alloy of copper and zinc; good conductor.
bulb	Electrically powered light with a glowing filament.
bulb holder	Component which houses a bulb.
buzzer	Device which emits a noise when current is supplied.
calico	Coarse, heavyweight fabric usually used for producing prototype garments.
cam	Specially shaped wheel, or one with a hole off-centre; when it rotates, anything resting on its edge will bob up and down, as in a pull-along toy.
chassis	Base frame of a vehicle.

circuit	Complete path through which an electrical current passes.
clay	Mouldable modelling material.
cog	Single tooth or projection on the rim of a gear wheel.
Correx	Brand name for corriflute.
corriflute	Corrugated plastic sheet.
cotton	Lightweight natural fabric or thread for sewing.
dowel	Wood cut to a cylindrical shape, available in various widths.
drive belt	The belt which connects and transfers movement between two pulleys.
dye	Natural or synthetic substance used to colour fabric.
emery cloth	Abrasive sheet, used on metals in preference to glasspaper.
fat	A nutrient found in plant or animal foods which provides energy; the solid form of oil.
fibreboard	Board made from compressed wood fibres (see also MDF).
fibres	Threads which can be spun or woven into a fabric.
flux	Chemical used to clean a joint before it is soldered.
foil	Thin sheet of metal, such as aluminium baking foil.
follower	Device which rests on and follows the movement of the cam.
Formafoam	Trade name; plastic foam which can be moulded when heated.
gear	A wheel with teeth around its edge, usually fixed to a shaft.
gear train	Gear wheels whose teeth mesh together so that when one turns so do the others.
glasspaper	Abrasive sheet.
glue	Adhesive.
hardboard	Thin board composed of wood fibre, usually smooth on one side and textured on the other.

Materials and components

hardwood	Wood from slow-growing deciduous trees such as oak and beech.
hessian	Loosely woven coarse fabric.
hinge	Movable joint.
kilojoule	Unit of measurement of the energy value of foods.
laminate	A thin layer of material, such as wood, plastic or transparent film.
lollipop sticks	Strong, pre-cut sticks useful in frame construction.
magnet	A product containing iron, which will attract other ferrous metals.
masking tape	Low tack adhesive tape
MDF	Medium density fibreboard – a board made from wood fibre, smooth on both sides and available in various thicknesses.
membrane switch	Thin switch made up from thin plastic layers or membranes of card or baking foil.
mesh	The open space between woven threads.
metal	A natural element found in the Earth's crust, such as iron or copper.
mouldable material	A material which can be shaped, such as plasticine, clay or Plastazote.
nail	A fastener made from steel wire.
nut	A hexagonal ring with an inner thread into which a bolt screws.
paper clip	Light, bendable metal fastener for paper.
parallel circuit	A circuit which has a number of possible alternative pathways which may be switched independently e.g. house lighting.
Perspex	Brand name for acrylic.
pine	A softwood.
Plastazote	Brand name for a plastic foam which can be moulded when heated.
plastic	A group of synthetic materials which includes acrylic, nylon and polystyrene; 'plastic' means able to be shaped without cracking or breaking.
plasticine	Mouldable substance used for modelling.

play dough	Mouldable material made largely from flour; can be baked.
plywood	Manufactured board made by gluing layers of thin wood together.
polycotton	Fabric made of a mix of polyester and cotton.
polystyrene	Lightweight thermoplastic material, used for model kits, disposable cutlery and as an expanded foam for cups and packaging.
pressure pad	A switch which is activated when it is pressed, as in a doormat which rings a bell when it is stepped on.
propeller	A shaft with blades.
pulley	A grooved wheel over which a rope can run.
PVA	Polyvinyl Acetate: a white, ready-mixed glue, used particularly for wood.
ratchet	Toothed wheel which a pawl fits in, ensuring that motion is in one direction only.
reclaimed materials	Materials such as packaging, which have served their original purpose, or off-cuts which would otherwise be wasted.
reed switch	A switch which is operated by a magnet.
resistor	A component which restricts the flow of electric current in a circuit.
rivet	Fastener for joining sheet metals.
rust	Corrosion which affects iron materials.
sandpaper	Common term for glasspaper.
screw	Fastener made from steel or brass, tapered for wood or used with nuts.
self-tapping screw	Fastener made from hardened steel which cuts its own thread when inserted in sheet metal or plastic.
Sellotape	Brand name for adhesive tape.
shaft	A rod which transmits motion.
silk	A natural fibre spun from the silken threads of the silkworm.
slide switch	A switch which operates when a slider is pushed.
softwood	Generally wood from coniferous trees, such as pine.

Materials and components

solder	Alloy of lead and tin, used to join metals together.
spacer	A component placed between two parts, such as between a wheel and the side of a buggy.
spring	Something that returns to its original shape after it has been stretched; coiled metal wire and elastic bands are examples.
sugar	A type of carbohydrate, often used in cooking to sweeten food.
switch	A device which makes or breaks a circuit.
terminal block	A block in which electrical wires can be joined together.
textile	A woven material.
thermoplastic	A plastic material which can be shaped when it is heated.
thermosetting material	A plastic material which cannot be shaped even when it is heated.
tilt switch	A switch which operates when tilted at an angle.
timber	Wood, often in bulk, supplied in usable forms and sizes.
toggle switch	A switch which operates when a lever is pressed.
washer	A component which distributes the load applied on it, as in underneath a nut or screw.
wheel	Circular frame or disc which rotates about a centre, enabling linear (straight-line) movement from circular motion.
winch	Device to wind string or rope on to a wheel.
wire	Metal drawn out into a thread or rod of varying thickness.
wood	Material trees are made of.
wool	Natural thread spun from the hair of sheep or goats.

Section 3 – Tools, equipment and processes

appliqué	Describes method of stitching/gluing patches on to fabric (originally to mend holes in clothes).
apron	Protective item of clothing.
baking sheet	Flat metal sheet for baking pizzas, rolls etc.
basin	China or plastic bowl for mixing ingredients in.
batik	Method of dyeing material in which parts to be left uncoloured are waxed.
bench hook	Device which hooks over the edge of a table or tightened into bench vice to provide a platform on which to work with materials.
bench vice	Holding device for components or materials so they may be worked on.
bodkin	Large-eyed blunt needle for weaving or threading.
bradawl	Hand tool used to make small holes in wood before inserting screws and nails.
can opener	Device for opening metal cans.
chopping board	Board (nowadays usually plastic) used for chopping ingredients.
cladding	The use of sheet material to cover a frame structure.
compass cutter	Hand tool for cutting holes in paper or card.
compression	The application of pressure to squeeze an object.
computer control	The use of programming a computer in order to instruct a device to carry out a sequence of actions.
conductor	A material which allows heat or electricity to pass through it.
construction kit	Kit of parts ready to assemble to make models or structures.
control	Process of making an action take place; computer control involves programming the computer so it will instruct a device to carry out an action.

Tools, equipment and processes

coping saw	Saw with removable blade, used for cutting curves in wood or plastic; its teeth face the handle so it cuts on the pull stroke (safety warning).
crank	Mechanism that can change circular movement to linear (straight-line) movement.
crocodile clip	Device shaped like a clothes-peg, used to attach wires to electrical components.
current	Flow of electricity through an electrical circuit.
cutting mat	Protective surface on which to cut paper or card without scoring through it.
decoration	To add attractive detail.
dishcloth	Soft cloth used in washing dishes.
drill	Tool for making holes in wood, plastic or metal; can be mounted in a drill stand for extra safety (safety warning).
effort	The force which is put into a mechanical system.
electricity	A form of energy.
energy	Capacity to do work, supplied by burning fuel, whether it is food for people, petrol for cars or electricity for machines.
file	Hand tool used to shape and smooth rough edges on wood, plastic or metal.
food preparation:	
bake	To cook in an oven.
baste	To coat with oil while roasting.
beat	To mix with a fork or whisk.
boil	To cook in water held at boiling point.
dice	To cut into cubes.
glaze	To coat with egg or milk to give a shiny finish after baking.
grill	To cook close to a heat source.
knead	To form a dough mixture.
roast	To baste with hot oil to keep food moist while cooking in an oven.
rub in	To mix together flour and fat using the fingertips until it resembles fine breadcrumbs.
set	To allow a liquid or runny mixture to solidify when cooled.

simmer	To almost boil, but where bubbles only break the surface from time to time.
force	Something that changes the speed or direction of an object.
framework	A structure made by joining together a number of pieces of wood, metal, card or plastic.
friction	The resistance trying to prevent two surfaces moving against each other.
fulcrum	Point which supports a lever or on which a beam will balance.
G clamp	To secure work or equipment e.g. bench hook to table.
gearing	A gear train set up to increase or decrease speed.
glue gun	Electrical device which heats sticks of glue; low-melt versions are safer for classroom use (safety warning).
goggles	Eye protectors, essential for many activities in design and technology and science.
grater	Device with rows of cutting edges for grating cheese, lemon peel or vegetables.
hammer	Hand tool with a metal head for striking nails or other tools; the range includes small pin hammers, claw hammers and specially headed hammers for beating metals (safety warning).
healthy eating	To eat the correct balance of a variety of food to maintain good health.
hole punch	Punch for making holes in paper or card.
hydraulics	Using a liquid such as water to transmit force over a distance to make actions take place.
hygienic	To maintain health through cleanliness.
input	What goes into a system.
insulation	Protecting from change in temperature, so that gloves insulate hands against cold weather.
insulator	A material which does not allow electricity to pass through it, or which slows down heat transfer.
jig	Holding device for materials and tools, to aid cutting, drilling or forming.

Tools, equipment and processes

Jinks' corner	A method of joining frameworks together and strengthening them by triangulating the corners.
joint	Place where two or more things are joined together, can be rigid or flexible.
junior hacksaw	Small saw with removable blades for cutting small sections of wood, metal or plastic. Its teeth face forwards so it cuts on the push stroke (safety warning).
knives	Cutting tools, from paring and grapefruit knives to craft knives (safety warning).
ladle	Deep, long-handled spoon for soups or sauces.
laminating	Putting thin layers of material together as in plywood or covering with a thin layer.
layering	The use of several layers to stiffen sheet materials.
lever	A mechanism which allows a greater force to be exerted, such as a spoon used as a lever on the lid of a tin.
linear	Arranged in a straight line or moving in a straight line as in linear movement.
linkage	A means of connecting components together usually so they can move.
load	Force acting on a structure.
loom	Device for weaving yarn, ranging from peg looms to frames.
machine	Equipment designed to apply mechanical power to perform a function.
measuring jug	Jug with levels marked for quantities of liquids or solids such as flour.
measuring spoons	Set of spoons to measure amounts of ingredients, such as teaspoonful.
mechanism	A device for changing the direction and/or amount of movement.
meshing	The connecting of gear wheels as they come together.
mixing bowl	Bowl for mixing ingredients.
motion	Movement.

motor	A device which converts electrical energy into mechanical energy and can be used to drive a product.
mould	A pattern or template used to make a product to a required shape.
needles	Range includes fine crewel needles, bodkins and tapestry needles.
oscillate	To move to and fro, like a clock pendulum.
output	What comes out of a system.
palette knife	Blunt, flat-bladed knife for applying paint or for spreading in cookery.
pan	Range includes saucepans, frying pans, omelette pans and steamers.
paper drill	Hand tool for making holes in paper, card and corrugated plastic.
pastry cutters	Cutting discs, often with a fluted edge, for cutting out e.g. pastry for tarts, or scones.
pincers	Hand tool with a cutting edge for wire or plastic.
pins	Stainless steel for holding material in place.
pivot	Point which supports a lever or on which a beam will balance.
pizza tray	Flat round baking tray.
pliers	Hand tool used to grip items.
pneumatics	Using air to transmit force over a distance to make actions take place.
pulley system	Arrangement of pulleys working together.
push fit	A joint which holds together without glue.
quilting	Stitching two layers of material together with a layer of padding between them.
rasp	Type of rough file with rows of individual teeth (safety warning).
reamer	A pointed tool for making holes in plastic bottles, Correx or card.
resistance	In an electrical circuit, the opposition to the current flowing through it.
rotary	Movement in a circular direction.

Tools, equipment and processes

ruler	Tool for measuring a straight edge; safety rulers are advised when cutting with a sharp knife.
safety ruler	Ruler with a raised centre and groove to guard fingers.
saw	Cutting tool; see also coping saw, junior hacksaw, shaper saw, tenon saw (safety warning).
scales	Device for measuring weight.
scissors	Hand tool for cutting (safety warning).
scoring	To mark a line to make paper or card easier to fold.
screwdriver	Hand tool for inserting and removing screws.
seam allowance	Extra fabric allowed for joining together – 15mm for domestic patterns, 10mm for industry.
sensor	Device which detects changes in its surroundings, such as light and dark, temperature or movement.
series circuit	A circuit with only one possible path for the current. Any switch in this type of circuit will affect all the components in it e.g. Christmas tree lights.
set square	Drawing instrument for drawing lines on paper and card at set angles, usually 30°, 45°, 60° and 90°.
sewing terms:	
back-stitch	Stitching where each stitch overlaps the previous one.
blanket stitch	Hemming stitch, particularly on the edge of blankets.
cross-stitch	Stitches which form a cross shape.
running stitch	Stitches which do not overlap.
tacking stitch	Light stitching to hold material in place.
tie and dye	Method of tying parts of a piece of cloth before dyeing so that patterns are achieved.
weaving	Interlacing threads running in two directions.
shaper saw	Electric powered saw for cutting out complex shapes such as jigsaw pieces (safety warning).

short circuit	An incorrect route taken by the current in a circuit, which misses out certain components and may cause the circuit to fail.
sieve	Meshed device for sifting out different sizes of particles such as lumps in sugar.
snips	Scissors used for cutting thick card or soft metal.
soldering	Joining two pieces of metal together with molten metal (solder).
spanner	Hand tool for tightening and loosening bolts.
spatula	Smooth-edged flat hand tool for smoothing cake fillings etc.
stapler	Device for joining thin pieces of card or paper.
storyboard	The sequence of telling a story or planning the making.
structure	A framework made to contain or support something.
surform	Hand tool like a plane, with rows of individual teeth, used to shape wood (safety warning).
tablecloth	Protective material used to cover a table.
tenon saw	Type of saw for wood, with a solid back to keep it straight (safety warning).
tension	A force pulling on a material or structure.
thimble	Protective finger shield for sewing.
tongs	Holding device for used for picking up objects.
triangulation	The use of triangular shapes to strengthen a structure, such as Jinks' corners.
whisk	Device for beating eggs, cream etc.
wire strippers	Pliers used for stripping plastic coating from electrical wires.
wooden spoon	A spoon made from wood, used for mixing foods. e.g. creaming butter and sugar together.
zester	Tool for removing peel from citrus fruit.

Index

A			
Abrasive	12	Bradawl	17
Acrylic	12	Brass	12
Adhesive	12	Brittle	7
Aesthetics	7	Bulb	12
Aluminium	12	Bulb holder	12
Annotated diagram	7	Buzzer	12
Appearance	7	C	
Appliqué	17	Calico	12
Apron	17	Cam	12
Artefact	7	Can opener	17
Artstraws	12	Card	7
Axle	12	Chart	7
		Chassis	12
B		Chopping board	17
Back-stitch	22	Circuit	13
Bake	18	Cladding	17
Baking sheet	17	Clay	13
Balsa	12	Cog	13
Bar chart	7	Compass	8
Basin	17	Compass cutter	17
Baste	18	Components list	7
Batik	17	Compression	17
Battery	12	Computer control	17
Battery snaps	12	Conductor	17
Beam	12	Construction kit	17
Beat	18	Control	17
Bench hook	17	Coping saw	18
Bench vice	17	Correx	13
Binca	12	Corriflute	13
Blanket stitch	22	Cotton	13
Bodkin	17	Crank	18
Boil	18	Crayons	8
Bolt	12	Crocodile clip	18
		Cross-section	7
		Cross-stitch	22
		Current	18
		Customer survey	7
		Cutting mat	18
		D	
		Decoration	18
		Design	7
		Design brief	7
		Design process	7
		Design proposal	7
		Dice	18
		Disassembly	7
		Dishcloth	18
		Dismantle	7
		Dowel	13
		Drawing tools	8
		Drive belt	13
		Drill	18
		Dye	13
		E	
		Effort	18
		Electricity	18
		Emery cloth	13
		Energy	18
		Engineering	8
		Enlarged view	8
		Equipment	8
		Ergonomics	8
		Evaluation	8
		Exploded drawing	8
		F	
		Fan fold	8
		Fat	13
		Fibreboard	13
		Fibres	13
		File	18

Final design	8	Hinge	14
Flexible	8	Hole punch	19
Flow chart	7	Hydraulics	19
Flux	13	Hygienic	19
Foil	13		
Fold	8	I	
Follower	13	Ingredient	9
Food preparation	18	Ingredients list	9
Force	19	Input	19
Formafoam	13	Insulation	19
Framework	19	Insulator	19
Friction	19	Investigation	9
Fulcrum	19		
Function	8	J	
		Jig	19
G		Jinks' corner	20
G clamp	19	Joint	20
Gear	13	Junior hacksaw	20
Gear train	13		
Gearing	19	K	
Glasspaper	13	Kilojoule	14
Glaze	18	Knead	18
Glue	13	Knives	20
Glue gun	19		
Goggles	19	L	
Graphics	8	Ladle	20
Graphs	9	Laminate	14
Grater	19	Laminating	20
Grid	9	Landscape	9
Grill	18	Layering	20
		Lever	20
H		Linear	20
Hammer	19	Linkage	20
Hardboard	13	Load	20
Hardwood	14	Lollipop sticks	14
Healthy eating	19	Loom	20
Hessian	14		
		M	
		Machine	20
		Magnet	14
		Malleable	9
		Mark out	9
		Marker pens	8
		Market research	9
		Masking tape	14
		MDF	14
		Measuring jug	20
		Measuring spoons	20
		Mechanism	20
		Membrane switch	14
		Mesh	14
		Meshing	20
		Metal	14
		Mind map	9
		Mixing bowl	20
		Mobile	9
		Mock up	9
		Model	9
		Modelling	9
		Modify	9
		Motion	20
		Motor	21
		Mould	21
		Mouldable material	14
		Mountain-fold	8
		N	
		Nail	14
		Needles	21
		Net	9
		Net	14

O				
Opaque	9	Pliers	21	Rub in
Orthographic	9	Plywood	15	Ruler
Oscillate	21	Pneumatics	21	Running stitch
Output	21	Polycotton	15	Rust
		Polystyrene	15	
		Portrait	10	S
		Pressure pad	15	Safety ruler
P		Primary source	10	Sandpaper
Paints	8	Product analysis	10	Saw
Palette knife	21	Propeller	15	Scales
Pan	21	Proportion	10	Scissors
Paper	9	Prototype	10	Scoring
Paper clip	14	Protractor	8	Screw
Paper drill	21	Pulley	15	Screwdriver
Parallel circuit	14	Pulley system	21	Seam allowance
Parts drawing	9	Push fit	21	Secondary source
Parts list	9	PVA	15	Section drawing
Pastels	8			Self-tapping screw
Pastry cutters	21	Q		Sellotape
Pattern	10	Questionnaire	10	Sensor
Pencils	8	Quilting	21	Sequential diagram
Pens	8			Series circuit
Performance	10	R		Set
Perspective drawing	10	Rasp	21	Set square
Perspex	14	Ratchet	15	Sewing terms
Pictogram	10	Reamer	21	Shaft
Pie chart	7	Recipe	10	Shape
Pincers	21	Reclaimed materials	15	Shaper saw
Pine	14	Reed switch	15	Short circuit
Pins	21	Research	10	Sieve
Pivot	21	Resistance	21	Silk
Pizza tray	21	Resistor	15	Simmer
Plan	10	Rigid	10	Sketch
Planning	10	Risk assessment	10	Slide switch
Plastazote	14	Rivet	15	Snips
Plastic	14	Roast	18	Softwood
Plasticine	14	Rotary	21	Solder
Play dough	15			

Soldering	23	Toggle switch	16
Spacer	16	Tongs	23
Spanner	23	Translucent	11
Spatula	23	Transparent	11
Specification	11	Triangulation	23
Spring	16	Two-dimensional	11
Stable	11		
Stapler	23	U	
Stencil	8	U-fold	8
Storyboard	23		
Structure	23	V	
Style	11	V-fold	8
Sugar	16		
Surform	23	W	
Switch	16	Washer	16
Synthetic	11	Weaving	22
System	11	Wheel	16
		Whisk	23
T		Winch	16
Tablecloth	23	Wire	16
Tacking stitch	22	Wire strippers	23
Taste test	11	Wood	16
Technology	11	Wooden spoon	23
Template	11	Wool	16
Tenon saw	23	Work plan	11
Tension	23	Working drawing	11
Terminal block	16		
Tessellations	11	Z	
Textile	16	Zester	23
Texture	11		
Thermoplastic	16		
Thermosetting material	16		
Thimble	23		
Three-dimensional	11		
Tie and dye	22		
Tilt switch	16		
Timber	16		

An Introduction to Design and Technology Vocabulary has been revised and updated by a team of classroom teachers to support teachers and pupils with the teaching and learning of design and technology. It will help to guide them through technical and specialist vocabulary used when designing and making across a range of material areas.

The publication acknowledges the legal requirements for design and technology, set out in the 1999 National Curriculum for England, outlining the general teaching requirements for the use of language across the curriculum. 'Pupils should be taught to express themselves correctly and to read accurately with understanding. They should be taught the technical and specialist vocabulary and how to use and spell these words.' References have also been made to a number of recent publications including, the successful lesson plans, published in 2002 by DATA to accompany the QCA units of work.

This book is aimed at:

- teachers
- adults other than teachers in the classroom
- supply teachers
- non-specialist teachers
- students at initial teacher training institutions
- pupils
- advisory staff.

This publication is now available in part in electronic format for the purchasing institution, to allow users to copy and paste the vocabulary, with and without definitions, for planning purposes and pupil worksheets. Apply by email to Pam Osborne: pam@data.org.uk



THE DESIGN AND TECHNOLOGY ASSOCIATION

**16 Wellesbourne House,
Walton Road, Wellesbourne,
Warwickshire CV35 9JB
Telephone: 01789 470007
Fax: 01789 841955
E-mail: data@data.org.uk
Website: www.data.org.uk**

**The Design and Technology Association
is an educational charity.
Charity Registration: 1062270
Company Registration: 3089012**