BASIC words

Here is a list of the BASIC words used in this book, with short explanations of what they mean. Some of the words, such as CLS, are not standard on all computers and these words have a small star beside them. If you have a micro you should check these commands in your manual.

★ **BREAK** On some computers this stops the program running. Be careful, though, on others it erases the whole program from the computer's memory and you should use ESCAPE, or some other word instead.

★ **CLS** Clears the screen.

★ **DATA** A list of items, e.g. words or numbers, to be stored by the computer in variables. See READ.

DIM Tells the computer how many memory spaces it should set aside for a variable. E.g. DIM A$(5,4) means the variable needs five rows of four columns.

★ **EDIT** Allows you to alter a line in a program without typing in the whole line again.

★ **END** Tells the computer it is the end of a program. Some computers must always have an END statement, others, such as the BBC micro and Sinclair computers, do not need one.

FOR . . . NEXT Makes the computer loop back through the program and repeat any instructions inside the loop a fixed number of times.

GOSUB Makes the computer leave the main part of the program and go to a part called a subroutine to carry out a special task.

GOTO Tells the computer to go to another line in the program.

IF . . . THEN Compares pieces of data (e.g. numbers or words or the contents of variables) and does different things depending on the results.

INPUT A way of getting the computer to ask you for data while the program is running.

INT Converts a number with a decimal point to a whole number by ignoring all the figures to the right of the decimal point. E.g. INT(3.40) = 3.

★ **LEFT$** Tells the computer to do something with a number of characters from the left-hand side of a string. E.g. LEFT$(A$,4) means take four characters from the left of A$.

LEN Gives the length of a string, i.e. the number of characters in a variable.

LET Puts a variable label on a memory space and puts some information in it. E.g. LET N = 4 or LET B$ = "CATS".

★ **LIST** Displays the program listing on the screen.

★ **MID$** Tells the computer to do something with characters from the middle of a string. E.g. MID$(A$,4,3) means take three letters starting from the fourth letter of A$.

NEW Wipes the program from the computer's memory to clear it for the next program.

★ **NEWLINE, KEY** Tells the computer that you have finished typing in a program line or piece of input. Some computers have keys marked RETURN or ENTER.

NEXT See FOR.

★ **PLOT** Tells the computer to light up a pixel. E.g. PLOT (X,Y) means light up the pixel with co-ordinates X along and Y up.

PRINT Tells the computer to display something on the screen.

★ **READ** Tells the computer to read the information in a DATA line and store it in a variable. See DATA.

★ **READY** Some computers say this when they are ready to be given another instruction.

REM The computer ignores lines starting with REM but displays them in the program listing. They are useful to remind you what different parts of the program do.

RETURN At the end of a subroutine, tells the computer to go back to the instruction after the one where it left. See GOSUB.

★ **RIGHT$** Tells the computer to do something with the right-hand characters in a string. E.g. RIGHT$(A$,4) means take the four characters from the right of A$.

★ **RND** Picks a random number.

RUN Tells the computer to carry out a program.

SQR Tells the computer to find the square root of a number.

STEP Used with FOR . . . NEXT loops. Tells the computer when to repeat the loop.

STOP Used within a program to tell the computer to stop running the program.

THEN See IF.

★ **UNPLOT** Tells the computer to switch off a pixel.

Computer words

Array A set of variables containing several pieces of data.

Bug A mistake in a program.

CPU The central processing unit of the computer which controls all the operations and does all the work, e.g. comparing variables, adding, etc.

Cursor A small, sometimes flashing light, square or other shape on the screen which shows where the next character will be printed.

Flow chart A chart showing the main operations needed in a program. Often used as an aid to writing programs.

Graphics Ways of producing information visually on the screen.

Kilobytes (K) A unit of measurement for the memory of a computer. One kilobyte is 1024 bytes and in most micros each character takes up one byte.

Prompt A question mark or other symbol which appears on the screen when the computer asks for information after an INPUT statement.

Pixels Short for picture elements. The small squares which the computer can light up on the screen to make pictures.

Program A numbered list of instructions telling the computer how to carry out a particular task.

RAM Random Access Memory. The memory inside the computer where the program and data are stored. All the information in RAM is automatically erased when the computer is switched off.

ROM Read Only Memory. Permanent memory where information telling the computer how to operate is stored by the manufacturers.

String A series of characters for storing in a variable, e.g. "SAUSAGES" or "ABC123".

Subroutine A section of the program for carrying out a particular task which is usually repeated several times during the running of the program.

Syntax error A mistake in the BASIC in the program.

Variable A labelled memory space which contains a piece of information.