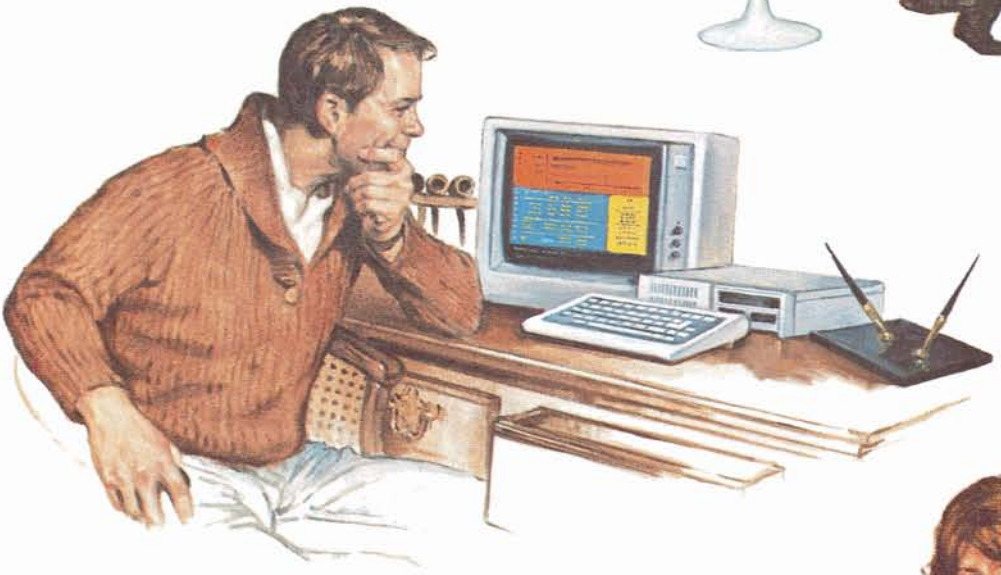
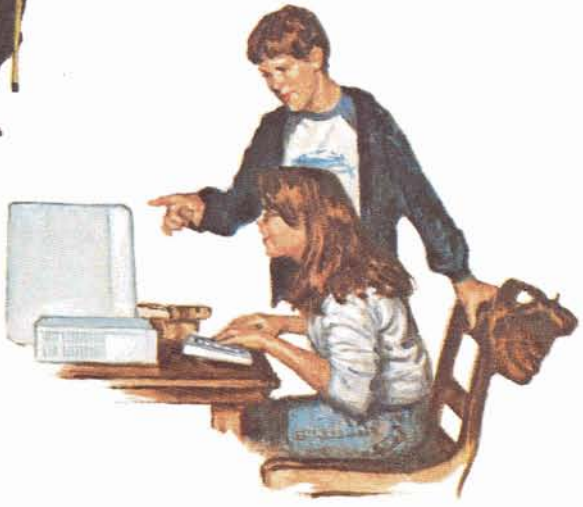
Paul Green

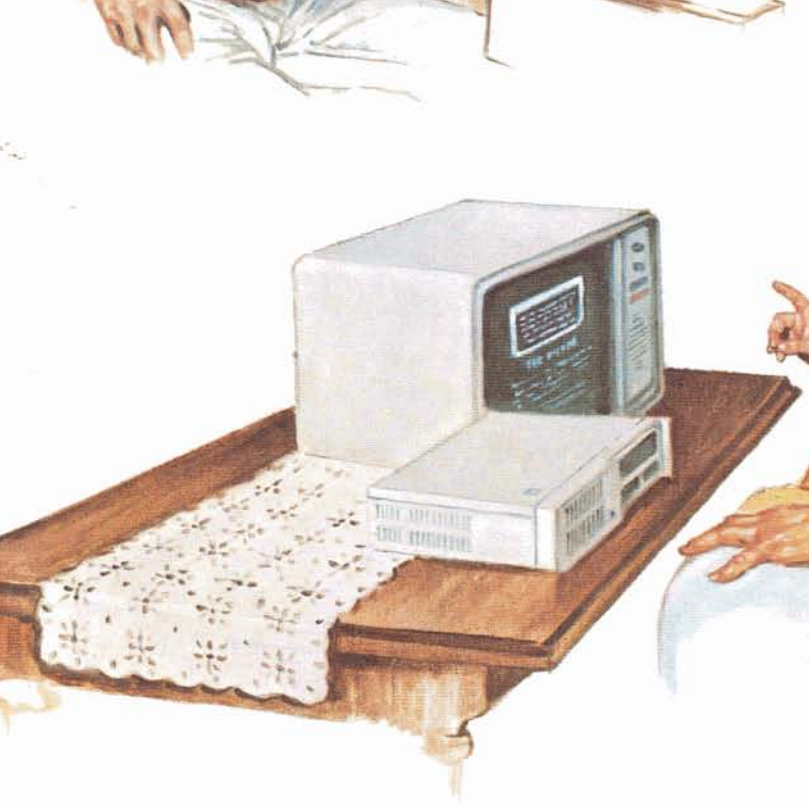
IBM PC*jr*

The easy one for everyone

IBM







MONSTER
MATH
GAME CHOICES

Junior: A *very* personal computer

The easy-to-use IBM PC*jr* is a bright little addition to the growing family of IBM Personal Computers. Junior is proving that even the most compact and most affordable personal computer from IBM can meet a wide variety of needs at home, at school, and at the office.

What makes the IBM PC*jr* a *very* personal computer? It's personally sized, for one thing. The IBM PC*jr* is compact and lightweight, so you can take it wherever it's needed. And Junior is very easy to learn and use, so just about everyone can benefit from its versatile capabilities, which can be expanded by adding options that give Junior the power to compute and store more information, to print documents, to exchange information over standard telephone lines, and more.

Perhaps the most personal touch associated with Junior is its price. The IBM PC*jr* is very affordable, so it will fit nicely into your budget as well as your lifestyle.

What can your IBM PC*jr* do for you? Junior can help you manage your finances by presenting a clear picture of where your money is coming from and where it's going. Help you get organized by reducing paperwork and clutter. Exchange electronic mail with other personal computers. Help children with their studies by acting as a smart classmate. Play a variety of interactive computer games. Connect with large information networks for financial data and stock prices, news and weather reports, movie reviews, airline schedules, "shop-by-computer" services, and more. Junior can even help teach you and your family how easy personal computing can be.

What are the IBM PC*jr*'s elements? The IBM PC*jr*'s standard elements are the System Unit—which does all the actual computing—and a cordless, typewriter-like keyboard that uses infrared signals to communicate with the System Unit, similar to the way a hand-held remote control operates a TV set. To start computing, just insert your software—the instructions that tell the computer what to do—into the System Unit, pick up the keyboard, and you're ready. Junior comes with a "Keyboard Adventure" program that introduces you to the keyboard and its functions.

You can use a wide range of software with your IBM PC*jr*. The System Unit contains two slots for software cartridges, including those published by IBM exclusively for the IBM PC*jr*. And the optional slimline diskette drive enables you to use many of the existing diskette programs that are available for the IBM PC and IBM PC XT.*

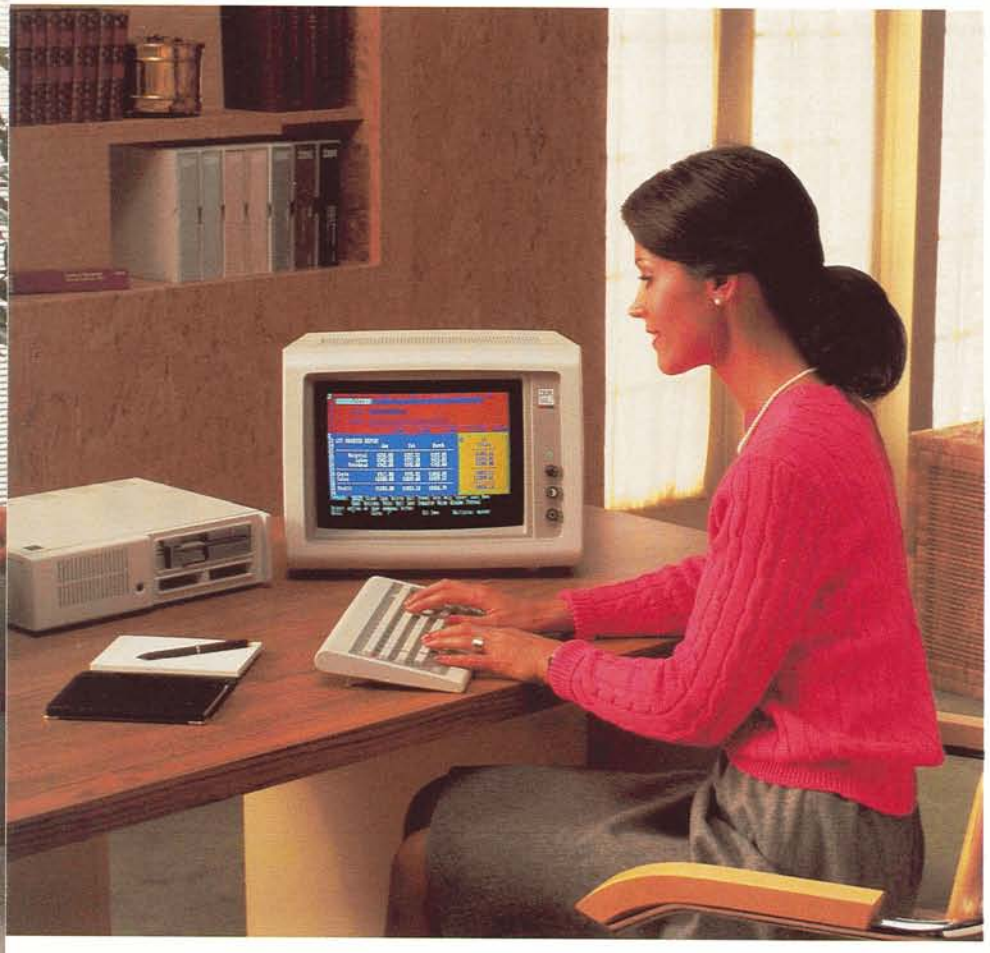
To view your IBM PC*jr*'s information, you'll need a display—such as the IBM Color Display, a TV set, or a video monitor—and its corresponding adapter cable.† You may then want to further customize your system by selecting from a range of options for the IBM PC*jr*, such as a printer, joysticks, and others. Of course, the way you choose to tailor your system will depend on your own personal computing needs.

Read on, and find out how many ways Junior can help you work, plan, analyze, organize, learn and have fun. We think you'll agree that the IBM PC*jr* is the easy one for everyone.

*Please refer to the software compatibility chart on page 12 for the IBM Personal Computer software diskettes that can operate on the IBM PC*jr*.

†Television sets, video monitors, light pens, cassette players/recorders, external modems and their adapter cables are not part of the IBM PC*jr* system offering and must be purchased separately. The IBM Monochrome Display is not compatible with the IBM PC*jr*.

Manage your finances with Junior.



When you sit down to sort through your finances, make it a point to have Junior with you. Junior will show you that you don't need accounting or bookkeeping experience to realize how much more easily and accurately you can manage your money. With the IBM PC*jr*, you can convert a sea of statements, bills and receipts into concise groupings of data from which to evaluate your financial picture...and map out a strategy to improve it.

Junior can provide you with a graphic picture of where your money is coming from–and where it's going. With "spread sheet" programs such as Multiplan,* for example, you can turn your display screen into an income and expense statement, checkbook register, home finance journal, or almost any other worksheet-type document that uses a column-and-row format. You can categorize income and expenses into individual accounts for easy reference. Set up charge and savings accounts as well as expense accounts for food, rent or mortgage, utilities, travel, auto maintenance, entertainment, and more.

Together, you and the IBM PC*jr* can devise a financial plan to balance your budget. For example, you can allot specified amounts for each expense account you create, and Junior can help you monitor them throughout the month and indicate if you've gone over budget.

And while you're keeping a close eye on your expenses, keep yourself prepared for income tax time, too. You can record tax-deductible expenses at the time they are incurred, then call up a report whenever you need it.

You can also broaden your financial horizons. With the optional internal modem – a compact electronic device that lets your computer communicate over standard phone lines–that was specifically designed to fit neatly inside the IBM PC*jr* System Unit, you can link Junior to the massive information resources of various commercial data bases. Track the performance of your investments–stocks, bonds and Treasury issues–and receive other up-to-the-minute Dow Jones* data with a single phone call.

*Multiplan is a U.S. trademark of Microsoft Corporation. Dow Jones is a trademark of Dow Jones & Company, Inc.

Get organized with Junior.

The IBM PC*jr*'s ability to organize and manage information can help you reduce clutter and its familiar by-products: disorganized or misplaced personal records; indecipherable lesson plans; overlooked birthdays, anniversaries, and other special occasions; and more. With Junior to help you meet your information handling needs, you could become more organized, more productive, and more efficient.

Maintain a complete computer file on just about anything. Using software such as pfs:*FILE and pfs:REPORT, you can store, retrieve, update, revise and print out the kind of detailed information that would muddle a notebook or card file. Keep an orderly grade book, client listing, organization membership roll, or gourmet recipe file...any of which can be displayed on your screen quickly and easily.

Write a letter...or a term paper. With programs such as EasyWriter* and HomeWord,* Junior can be used as a word processor, so you can type a memo, a shopping list, a letter, or even a term paper. Store your text, then retrieve and revise it at any time. You can then print your document easily with one of the optional IBM printers.

Plan your day, week or month more efficiently. IBM PC*jr* software includes programs such as Time Manager,* which will help you keep track of engagements, appointments and assignments, and also remind you of important dates throughout the year, such as birthdays and holidays.

Expand your information resources with the optional internal modem or an external modem. Either way, you can use standard phone lines to tie into the data banks of large information and service networks for news and weather reports, airline schedules, shop-by-computer services, and more. You can also exchange information with larger computers or other IBM Personal Computers. And, with the Personal Communications Manager program and a modem, you can even send electronic mail to similarly configured IBM Personal Computers throughout the building, around the neighborhood, or across the country.

*pfs: is a registered trademark of Software Publishing Corporation. EasyWriter is a trademark of Information Unlimited Software, Incorporated. HomeWord is a trademark of Sierra On-line, Inc. Time Manager is a trademark of The Image Producers, Incorporated.

Make learning fun with Junior.

Add a whole new dimension to learning–one of fun and enjoyment. Junior can act as a friendly tutor in various subjects while familiarizing both children and adults with the increasingly important world of computing.

There is a growing library of educational software for the IBM PC*jr*. Current programs have been designed to teach children multiplication tables and other math skills.

There are also educational programs that can keep pace with students as they learn. Logo, for example, is a flexible, interactive program that provides basic lessons for preschoolers and grade schoolers, then progresses to more advanced lessons, such as mathematical, logical and geometric relationships.

Several programs use an enjoyable game approach to learning. Adventures in Math challenges students to use math skills to explore a castle filled with various treasures. In Monster Math, the student comes face to face with a monster that can be erased from the screen only by solving a number of math problems.

Many programs are designed for students at specific grade levels. For example, Bumble Games,* Bumble Plot* and Juggles' Butterfly* use colorful circus figures and friendly extraterrestrial creatures to teach young children concepts such as left/right, greater than/less than, and so on. Other programs are designed for high school and college students.

As an added benefit, word-processing programs–such as HomeWord and EasyWriter–are ideal for writing essays and term papers, as well as keeping class notes on file for immediate recall when they are needed. And the versatile Word Proof program will check spelling on any document that's been created and offer the correct spellings of misspelled words.

Learn personal computing with Junior.

Every day, people are discovering how computers can help them be more productive, more creative, and more efficient. And as the use of computers continues to grow and affect our lives, it makes sense to know how to use a computer and to understand its functions and capabilities.

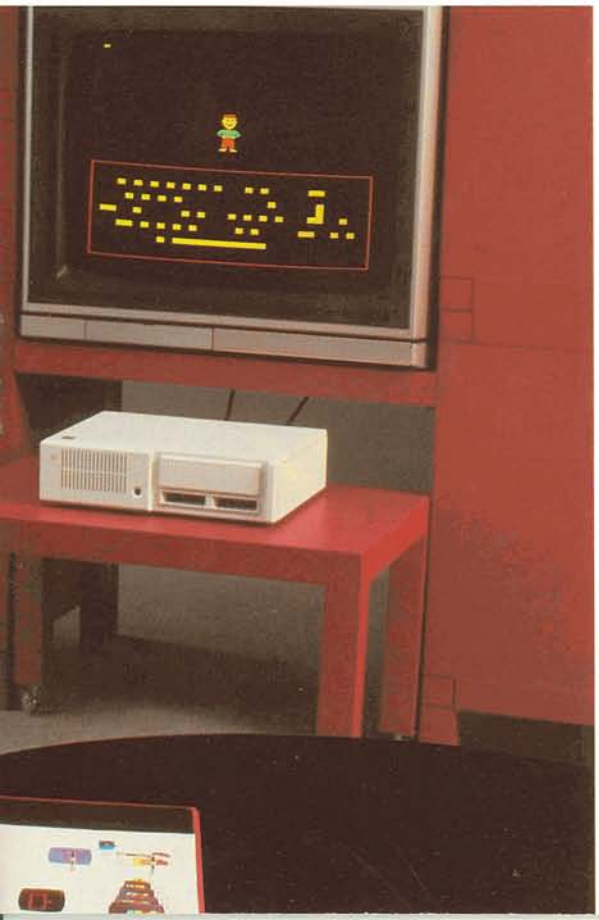
Junior is ready when you are, with an array of software designed to help you become familiar and comfortable with personal computing.

A "Keyboard Adventure" program comes with your IBM PC*jr* system. With this program, you control the movements of a friendly on-screen cartoon character who shows you how Junior's keyboard works. Also included in every system is a *Guide to Operations* manual, as well as *Hands-On BASIC*, a step-by-step manual that teaches you about the BASIC language and important concepts in computer programming.

If your IBM PC*jr* has a diskette drive, you receive an "Exploring the IBM PC*jr*" program. This program shows you how the keyboard is used for various applications and introduces you to the IBM Disk Operating System, the BASIC language, and the optional printer.

In addition, there are several software packages designed to introduce you and your family to the world of computing. One such package is Turtle Power, an entertaining program that turns the display screen into a "computer drawing board" and invites children to use the keyboard to create their own video art while learning about computers.

*Bumble Games, Bumble Plot and Juggles' Butterfly are trademarks of The Learning Company.



Have fun with Junior.

Junior is tireless not only as a worker, but as a playmate as well. And there's a wide variety of exciting entertainment programs for you and Junior to enjoy.

The IBM PC*jr*'s entertainment software includes games that take advantage of Junior's cartridge compatibility. IBM PC*jr* cartridge games include:

- Mouser, in which you're cast as a farmer whose house is overrun by mice; your goal is to de-mouse the house.
- ScubaVenture, in which you control a scuba diver who goes after sunken treasures and encounters the deadly hazards of the deep.
- Crossfire, which puts you at the helm of a ship that must repel a swarm of hostile insects by firing missiles at them.
- Mine Shaft, in which you drive a mining car through a diamond mine and retrieve the precious gems while fending off dangerous mining robots.

But that's not the limit to Junior's game-playing capabilities. In addition to cartridge games, a variety of existing IBM Personal Computer diskette game programs can be run on the IBM PC*jr*, provided your system contains the 360KB diskette drive. These games include Adventure, Casino Games, Adventure in Serenia, Strategy Games, and others. Junior's games are made even more enjoyable by vivid graphics and sound capabilities.

Be sure to ask your Authorized IBM Personal Computer Dealer for a complete list of current IBM entertainment software.

Let Junior show off for you.

You can expect the same quality service for the IBM PC*jr* that has become a hallmark for the entire family of IBM Personal Computers.

It starts with a one-year warranty that comes with the IBM PC*jr*. If the system requires any type of service during its first year of use, just bring it into the location where it was purchased –or to any Authorized IBM Personal Computer Dealer–for reliable, professional service.

After your warranty expires, you can obtain reliable service through your Authorized IBM Personal Computer Dealer or IBM's nationwide network of Service/Exchange Centers. Or you can mail the unit to one of IBM's Regional Repair Centers.

Take the next step. Let Junior show off for you. Visit the Authorized IBM Personal Computer Dealer nearest you and ask for a hands-on demonstration of the IBM PC*jr*. See for yourself how this powerful yet compact personal computer from IBM can help you at home, at school, and at the office...all at a very affordable price.

IBM PC*jr* features

- System Unit with:
  - –16-bit 8088 processor
  - –64KB RAM
  - –64KB ROM (permanent memory)
  - –RS-232 interface
  - –Audio tone generator
- Connectors for options* such as:
  - –IBM Color Display, television or video monitor
  - –Serial printer
  - –External modem
  - –Cassette player
  - –Joysticks
  - –Light pen
- Infrared keyboard link
- Optional 5¼" 360KB slimline diskette drive (standard with enhanced model)
- 2 cartridge slots
- Cordless, 62-key, color-coded infrared keyboard

Other options:

- Keyboard Overlays
- Keyboard Cord
- Internal Modem
- 64KB Memory and Display Expansion (standard with enhanced model)
- Parallel Printer Attachment
- Adapter Cable for the IBM Color Display
- Connector for TV (RF modulator)
- Adapter Cable for Serial Devices
- Adapter Cable for Cassette
- Attachable Joysticks
- Carrying Case

Technical Data: System Unit

- 4.77 MHz clock frequency
- 64KB ROM
  - –Access time 250ns
  - –Cycle time 375ns
- 33 Watt Power Supply
- Dimensions:
  - –Width 13.9 in (354mm)
  - –Depth 11.4 in (290mm)
  - –Height 3.8 in (97mm)
- Weight: less than 9 lbs. with diskette drive, less than 6 lbs. without diskette drive
- Electrical: 120V AC, 60Hz, 33 watts
- Air Temperature:
  - –System on 60°- 90°F (15°-32°C)
  - –System off 50°-110°F (10°-43°C)
- Humidity:
  - –System on 8-80% RH
  - –System off 8-80% RH

Technical Data: Keyboard

- Dimensions:
  - –Width 13.45 in (341.5mm)
  - –Depth 6.61 in (168mm)
  - –Height 1.02 in (26mm)
- Weight: 22 oz. without batteries, 25 oz. with batteries

Technical Data: Power Supply

The transformer is a standard, step-down, 60-volt-ampere type that is separately housed.

- Air temperature: 60°-90°F (15°-32°C)
- Humidity: 8-80% RH
- Altitude: to 7000 feet

IBM PC*jr* Software Compatibility Chart

Program Name/ Version	Operates on IBM PC*jr*	Comments*	Requires DOS 2.10	Requires IBM PC*jr* BASIC cartridge	Display
Adventure 1.00	Yes	7	No	No	Any compatible
Adventure In Serenia 1.00	Yes	1	No	No	Any compatible
Adventures In Math 1.00	Yes		No	Yes	Any compatible
Animation Creation 1.00	Yes	8	No	No	Any compatible
APL (A Programming Language) 1.00	No		N.A.†	N.A.	N.A.
Arithmetic Games (Set 1) 1.00	Yes	2	Yes	Yes	Any compatible
Arithmetic Games (Set 2) 1.00	Yes	2	Yes	Yes	Any compatible
Asynchronous Communications Support 2.00	No		N.A.	N.A.	N.A.
BASIC Compiler 1.00	Yes	3	Yes	No	Any compatible
BASIC Primer 1.00	No		N.A.	N.A.	N.A.
BASIC Programming Development System 1.05	Yes	4,5	Yes	No	Any compatible
Binary Synchronous 3270 Emulation 1.00	No		N.A.	N.A.	N.A.
BPI Accounting Software (All)	No		N.A.	N.A.	N.A.
Bumble Games 1.00	Yes		No	Yes	Any compatible
Bumble Plot 1.00	Yes		No	Yes	Any compatible
Casino Games 1.05	Yes		No	Yes	Any compatible
COBOL Compiler 1.00	No	6	N.A.	N.A.	N.A.
Decathlon 1.00	No		N.A.	N.A.	N.A.
Diskette Librarian 1.00	Yes		Yes	Yes	Any compatible
Dow Jones Reporter 1.00	Yes		Yes	Yes	Any compatible
EasyWriter 1.15	Yes		Yes	No	Any compatible 80 column
Fact Track 1.00	No		N.A.	N.A.	N.A.
FileCommand 1.00	Yes	5	Yes	No	Any compatible 80 column
Fixed Disk Organizer 1.00	No		N.A.	N.A.	N.A.
FORTRAN Compiler 1.00	No	6	N.A.	N.A.	N.A.
Home Budget, *jr* 1.00	Yes		Yes	Yes	Any compatible
HomeWord 1.00	Yes		No	No	Any compatible
Juggles' Butterfly 1.00	Yes		No	Yes	Any compatible
Learning DOS 2.00	No		N.A.	N.A.	N.A.
Learning to Program in BASIC 1.00	No		N.A.	N.A.	N.A.
Logo 1.00	Yes		Yes	No	Any compatible

Use this chart to determine which IBM software products run on your IBM PC*jr* and what your IBM PC*jr* needs to run each program.

Program Name/ Version	Operates on IBM PC*jr*	Comments*	Requires DOS 2.10	Requires IBM PC*jr* BASIC cartridge	Display
Macro Assembler 1.00	Yes		Yes	No	Any compatible
Mailing List Manager 1.00	No		N.A.	N.A.	N.A.
Monster Math 1.00	Yes		No	Yes	Any compatible
Multiplan 1.10	Yes		Yes	No	Any compatible
Multiplication Tables 1.00	No		N.A.	N.A.	N.A.
One-Hundred-and-One Monochrome Mazes 1.00	No		N.A.	N.A.	N.A.
Pascal Compiler 1.00	No	6	N.A.	N.A.	N.A.
PeachText 1.00	Yes	4	Yes	No	Any compatible 80 column
Peachtree Accounting Software (All)	No		N.A.	N.A.	N.A.
Personal Communications Manager 1.00	Yes		No	No	Any compatible
Personal Editor 1.00	Yes		Yes	No	Any compatible
pfs:FILE 1.05	Yes		Yes	No	Any compatible 80 column
pfs:REPORT 1.05	Yes		Yes	No	Any compatible 80 column
Private Tutor 1.00	No		N.A.	N.A.	N.A.
Professional Editor 1.00	Yes		Yes	No	Any compatible 80 column
SNA 3270 Emulation/RJE Support 1.00	No		N.A.	N.A.	N.A.
Strategy Games 1.05	Yes		No	Yes	Any compatible
3101 Emulation 1.00	No		N.A.	N.A.	N.A.
Time Manager 1.05	Yes		Yes	No	Any compatible
Turtle Power 1.00	Yes		No	No	Any compatible
Typing Tutor 1.00	No		N.A.	N.A.	N.A.
UCSD p-System (All Products)	No		N.A.	N.A.	N.A.
VisiCalc 1.20	Yes		Yes	No	Any compatible
Word Proof 1.00	Yes		Yes	No	Any compatible

†Not Applicable

Diskette Programs

The programs listed above run on an IBM PC*jr* with 128KB of memory and a diskette drive, except for those which have "No" in the "Operates on IBM PC*jr*" column.

Cartridge Programs

The following programs are available on cartridge and run on an IBM PC*jr* with a television, monitor or a color display: Crossfire 1.00, Mine Shaft 1.00, Mouser 1.00, ScubaVenture 1.00 and IBM PC*jr* BASIC 1.00.

*Comments

1–Colors may vary from IBM PC.
2–No color on composite monitor.
3–Must have sufficient storage for Compile and Link.
4–Not recommended for IBM PC*jr*.
5–Use same procedure to load DOS 2.10 as for DOS 2.00.
6–Compiler output will run on IBM PC*jr* if there is sufficient storage.
7–Cannot set foreground and background colors.
8–Will run on an IBM PC*jr* with 64KB of memory.

The System Unit. The IBM PC*jr*'s System Unit is where all the actual computation and processing of data take place. The System Unit is lightweight, weighing less than nine pounds, so it can be carried easily. And its compact, low-profile design enables you to place it conveniently on a small desk top, in a tight kitchen counter space, on a bookshelf, or wherever it makes sense for you.

A lot of computing power fills this compact frame. The IBM PC*jr* has the same advanced 8088 processor used throughout the entire family of IBM Personal Computers.

Two IBM PC*jr* models are available. The entry model contains 64KB of user memory and two cartridge slots for IBM PC*jr* cartridge programs. The enhanced model contains two cartridge slots plus a double-sided 360KB slimline diskette drive for diskette programs. This means you can use many of the programs that are already available for the IBM PC and IBM PC XT. The enhanced model also comes with the internal 64KB Memory and Display Expansion, which increases user memory to 128KB and enables you to display 80 characters of text per line on your display screen.

The keyboard. The IBM PC*jr*'s typewriter-like, color-coded keyboard enables you to communicate with the System Unit. You have the freedom to work or play with Junior from across a table or across a room—up to 20 feet away as long as there are no obstructions—because the keyboard is cordless and communicates with the System Unit by sending infrared signals. An optional cord that connects the keyboard to the System Unit is also available if you wish to convert the cordless keyboard to an attached keyboard.

The keyboard also features one of Junior's most useful benefits. Every one of its 62 keys is completely programmable; that is, you can assign any letter, number, function or command to any key on the keyboard and label the keys using the optional keyboard overlay. It's possible to arrange the keys alphabetically, in letter groupings...whatever suits your specific computing needs.

The display. For display purposes, you can connect your IBM PC*jr* to the IBM Color Display, your own television set, or a video monitor.* No matter which you choose, you'll be impressed by the vivid graphics. You can easily attach your display to the corresponding connector on the back of the System Unit by using its appropriate adapter cable.*

Optional devices. By using the connectors on the back of the System Unit, you can add optional devices to suit your own computing needs. Attach joysticks, an external modem, a serial printer, and/or a cassette player to run software cassette programs. Junior makes it easy for you with letters that indicate each connector to help prevent improper connections.

There is also an optional System Unit attachment that allows you to connect a parallel printer to the IBM PC*jr*, and an optional internal modem to attach Junior to a standard telephone jack. (A telephone is not required.)

*Television sets, video monitors, light pens, cassette players/recorders, external modems and their adapter cables are not part of the IBM PC*jr* system offering and must be purchased separately.

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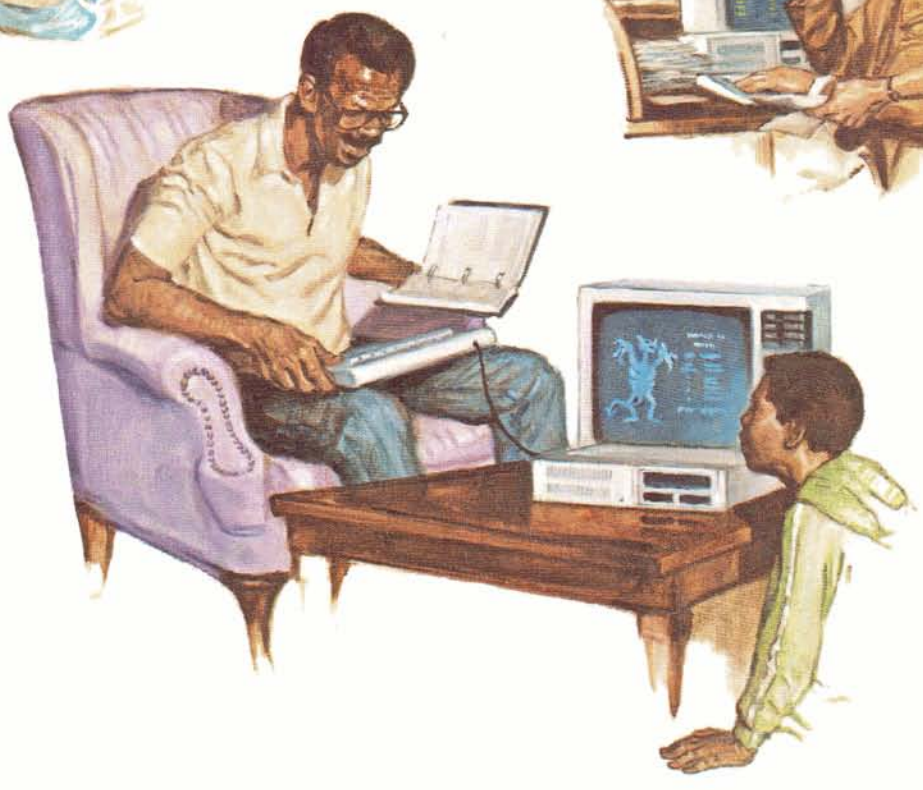

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