

Computer Architecture

STARTER

A. Name these different types of computers. Then match the possible users below to each type. Justify your choice.



Figure 1: Types of Computer

- | | |
|--|-----|
| 1. Marketing research person collecting data from the general public | [] |
| 2. Large company processing payroll data | [] |
| 3. Travelling salesperson giving marketing presentations | [] |
| 4. Large scientific organization processing work on nuclear research | [] |
| 5. Businessperson keeping track of appointments while travelling | [] |
| 6. Graphic designer | [] |
| 7. Secretary doing general office work | [] |

HOW TO READ A COMPUTER AD.

1. Intel Pentium IV 1.7GHz Processor
2. Mini Tower Chassis
3. 256MB Rambus RD RAM
4. 60GB Hard Drive
5. Embedded Intel 3D Direct AGP video with 64MB SDRAM
6. 64-voice wavetable sound
7. 48 X CD-ROM Drive
8. 19" (17.9" VIS) Colour SVGA monitor
9. Microsoft Windows XP
10. 1.44MB 3.5" Floppy Drive
11. Microsoft Intellimouse
12. 105-key keyboard



Figure 2: Computer Advertisement

1. The main processing chip that operates at a clockspeed of 1.7 thousand million cycles per second.
2. A small size of tall and narrow style of case containing the computer system.
3. 256 megabytes of Rambus dynamic type of main memory chips that constitute the computer RAM.
4. A hard drive internal storage device with a capacity of approx. 60 thousand million bytes.
5. A video controller for controlling the monitor screen that is built on to the computer motherboard. It can process 3D images using the AGP type of video bus interface. It also contains approx. 64 million bytes of synchronous dynamic random access memory that is used as video memory.
6. A sound card that has 64 voices and generates sounds using the wave table system.
7. A CD-ROM storage device that operates at 48 times the speed of the original CD-ROM devices.
8. A colour monitor for displaying output on a screen at resolutions determined by the SVGA standard. The diagonal measurement of the whole screen is 19 inches but the diagonal measurement of the actual viewable area of the screen is only 17.9 inches.
9. The operating system that is used to control the system

GLOSSARY

CD-ROM :
 RDRAM :
 MB :
 GHz :
 AGP :
 SDRAM :
 SVGA :

B. Now study the text below to find this information:

1. What is the memory size of this PC?
2. Which input devices are supplied?
3. What size is the monitor?
4. How fast is the processor?
5. What is the capacity of the hard drive?
6. Which operating system does it use?
7. What multimedia features does the computer have?

C. Match each item in Column A with its function in Column B. Then describe its function in two ways.

A Item	B Function
RAM	a. controls the cursor
processor	b. displays the output from a computer on ascreen
mouse	c. inputs data through keys like a typewriter displays the output from a computer on a screen
clock	d. reads DVD-ROMs
3.5" floppy drive	e. reads and writes to removable magnetic disks
monitor	f. holds instructions which are needed to start up the computer
keyboard	g. holds data read or written to it by the processor
DVD-ROM drive	h. provides extremely fast access for sections of a program and its data
cache	i. controls the timing of signals in the computer
ROM	j. controls all the operations in a computer

Let's speak

D. Work in pairs, A and B. Find out as much as you can about your partner's computer

- Feature:*
- processor type
 - processor speed
 - bus speed
 - memory (RAM)
 - memory type
 - hard disk capacity
 - hard disk type
 - monitor size
 - monitor resolution
 - CD-ROM drive speed

Prepositions of place : at, in, on

In general, we use:

- **at** for a POINT
- **in** for an ENCLOSED SPACE
- **on** for a SURFACE

LANGUAGE WORK

Prepositions of place

Study these examples of prepositions of place.

1. Data moves between the CPU and RAM.
2. Data flows from ROM to the CPU.
3. A program is read from disk into memory.
4. Data is transferred along the data bus.
5. The address number is put onto the address bus.
6. The hard disk drive is inside a sealed case.
7. Heads move across the disk.
8. Tracks are divided into sectors.

E. Complete each sentence using the correct preposition.

1. The CPU is a large chip the computer.
2. Data always flows the CPU the address bus.
3. The CPU can be divided three parts.
4. Data flows the CPU and memory.
5. Peripherals are devices the computer but linked..... it.
6. The signal moves the VDU screen one side the other.
7. The CPU puts the address the address bus.
8. The CPU can fetch data memory the data bus.

Let's write

F. Please describe your own computer's specification.

My laptop is _____
