

Oxford English for Information Technology

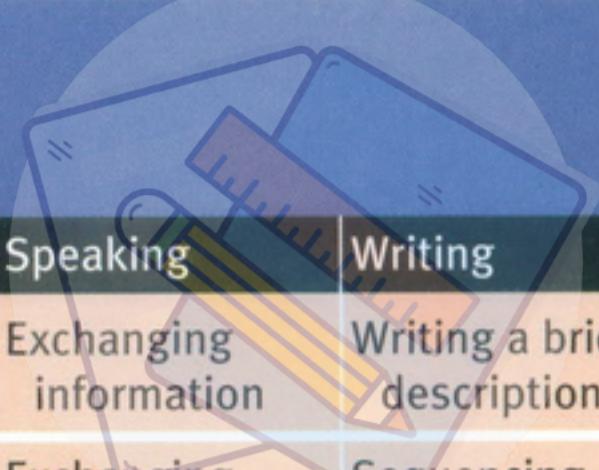
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Second Edition

OXFORD

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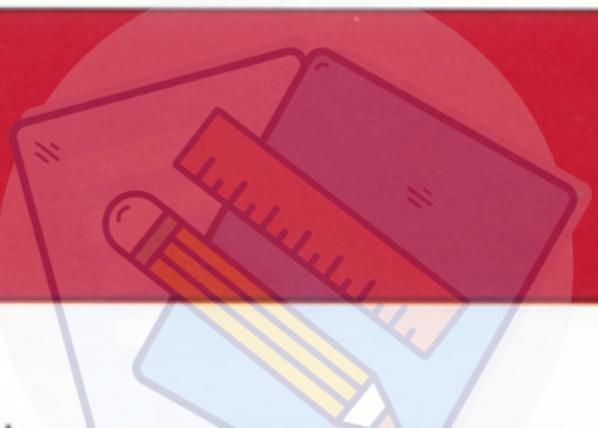
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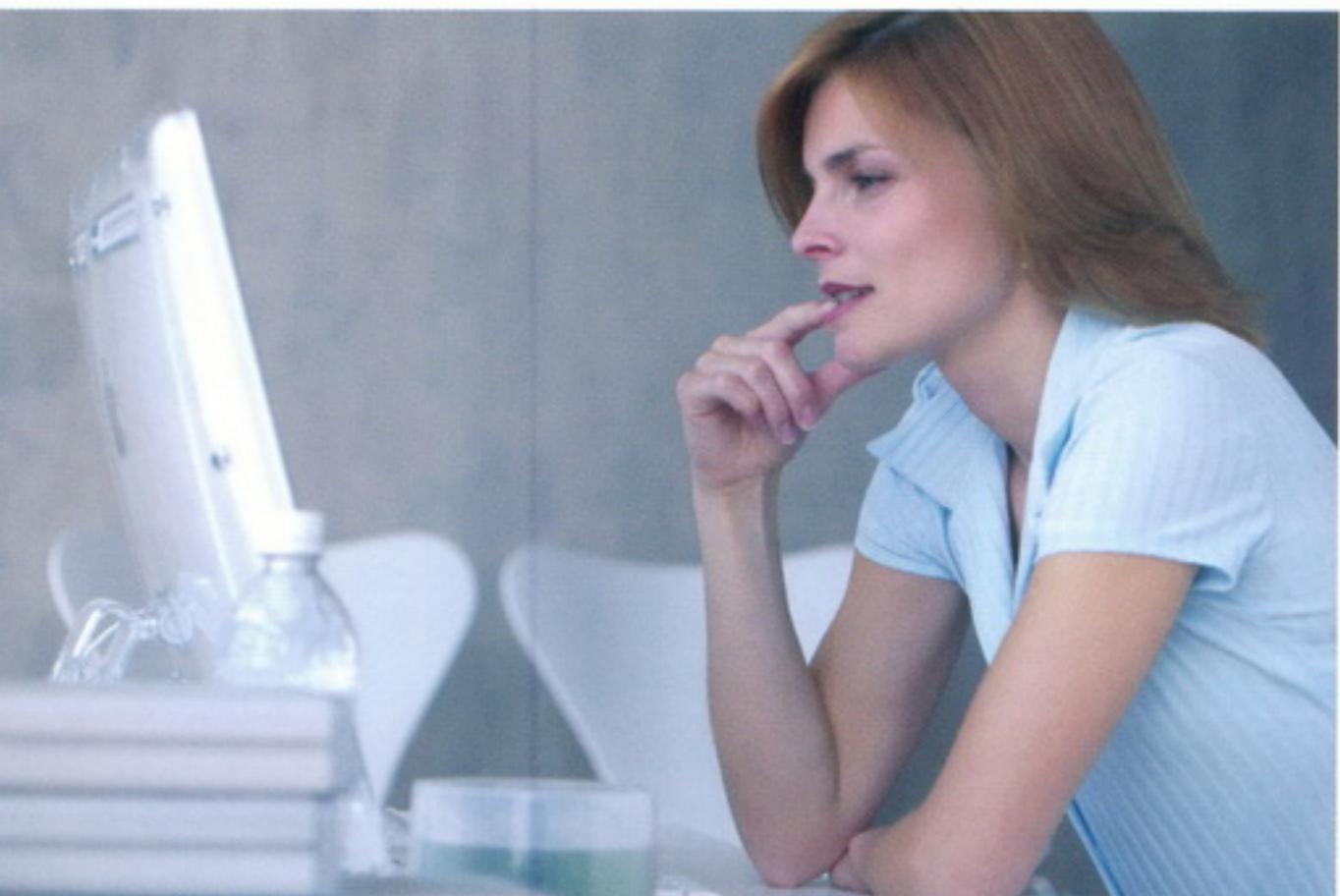
Computer Users

**STARTER**

1 Work in groups. Share information on how you use computers in your free time. Compare answers with other groups and make a list of uses for your class.

LISTENING

2 You are going to hear four people talk about how they use computers. Before you listen, try to predict the uses they describe.



| User | Possible use |
|-------------------------|--------------|
| primary school teacher | |
| Open University student | |
| girl (Louise), aged 6 | |
| artist | |



3 Now listen to the recordings and note the actual uses described.

| User | Actual use |
|-------------------------|------------|
| primary school teacher | |
| Open University student | |
| girl (Louise), aged 6 | |
| artist | |

4 Now listen to the recordings again to find the answers to these questions:

- 1 How does the story-telling program encourage children to work together?
- 2 In what way is the children's reaction to this program different from other uses they make of computers?
- 3 What is the OU student studying?
- 4 What opportunity has she to meet other students?
- 5 What can you do with Pets 3?
- 6 What does Louise do with clipart?
- 7 How did the artist display work to dealers in the past?
- 8 What is the difficulty in selling through a website?

LANGUAGE WORK

Revision: Past simple and Present perfect

Study these examples of the Present perfect from the recording of the artist.

- 1 I've scanned in about a third of these photographs.
- 2 I've organised the paintings into themes.
- 3 I've added a sound track.

Why doesn't the speaker use the Past simple?

- 4 I scanned in about a third of these photographs.
- 5 I organised the paintings into themes.
- 6 I added a sound track.

We use the Present perfect to describe past actions with present relevance. The artist uses the Present perfect because he is describing a CD he has just made and what he is going to do with it in the near future.

We use the Past simple to describe completed actions in the past. It is often used with time expressions such as *last year*, *before PCs were introduced*, *in 1998*. Note these examples from the recording:

- 7 I made one for Mary's birthday *last week*.
- 8 We tried it out *last term*.



5 The artist is being interviewed. Make questions to match his answers. Use the correct form of the Past simple or Present perfect, whichever is correct. For example:

Question: What *did you do yesterday?*

Answer: Worked on the computer.

- 1 Q What ...
A Worked on a CD of my paintings.
- 2 Q How many ...
A About a third.
- 3 Q What ...
A I destroyed them.
- 4 Q How ...
A I scanned them in.
- 5 Q How ...
A I've organised them into themes.
- 6 Q Have ...
A Yes, I've added a sound track.
- 7 Q How long ...
A It's taken me about a week.
- 8 Q When ...
A I started about ten years ago.
- 9 Q What ...
A Before I had a computer, I had to use slides.
- 10 Q Have ...
A Yes, I've sold a few.

6 Put the tenses in this dialogue in the correct form: Past simple or Present perfect.

- 1 A What (do) today?
- 2 B I (work) on my project. I (search) the Web for sites on digital cameras.
- 3 A (find) any good ones?
- 4 B I (find) several company sites – Sony, Canon, ... but I (want) one which (compare) all the models.
- 5 A Which search engine (use)?
- 6 B Dogpile mostly. (ever use) it?



- 7 A Yes, I (try) it but I (have) more luck with Ask Jeeves. Why don't you try it?
- 8 B I (have) enough for one night. I (spend) hours on that project.
- 9 A I (not start) on mine yet.
- 10 B Yeh? I bet you (do) it all.

PROBLEM-SOLVING

7 How do you think these professions might use computers?
Compare answers with others in your group.

architects
interior designers
farmers
landscape gardeners
musicians
rally drivers
sales people

SPEAKING

8 Work in pairs. Find out this information from your partner.
Make sure you use the correct tense in your questions. For example:

download music from the Internet [what site]

A *Have you ever downloaded music from the Internet?*

B *What site did you use?*

| | | |
|---|-------------------------------|------------------|
| 1 | send a video email attachment | [who to, when] |
| 2 | fit an expansion card | [which type] |
| 3 | replace a hard disk | [what model] |
| 4 | fix a printer fault | [what kind] |
| 5 | make your own website | [how] |
| 6 | have a virus | [which virus] |
| 7 | watched TV on the Internet | [which station] |
| 8 | write a program | [which language] |

WRITING

9 Describe how you use computers in your study and in your free time.

SPECIALIST READING

A Find the answers to these questions in the following text.

- 1 Name some types of devices that use 'computers on a chip'.
- 2 What uses of handheld computers are mentioned in the text?
- 3 What are the benefits of using computers with the following items?
 - a Security systems
 - b Cars
 - c Phones
- 4 What smart devices are mentioned in the text?
- 5 What are smart cards used for?
- 6 What are the advantages of multimedia?
- 7 What can medical expert systems do?
- 8 How can computers help the disabled?
- 9 What types of computing systems are made available to people in remote locations using electronic classrooms or boardrooms?
- 10 What aspects of computing can people power determine?

Computers Make the World Smaller and Smarter

The ability of tiny computing devices to control complex operations has transformed the way many tasks are performed, ranging from scientific research to producing

5 consumer products. Tiny 'computers on a chip' are used in medical equipment, home appliances, cars and toys. Workers use handheld computing devices to collect data at a customer site, to generate forms, to control

10 inventory, and to serve as desktop organisers.

Not only is computing equipment getting smaller, it is getting more sophisticated. Computers are part of many machines and devices that once required continual human

15 supervision and control. Today, computers in security systems result in safer environments, computers in cars improve energy efficiency, and computers in phones provide features such as call forwarding, call monitoring, and

20 call answering.

These smart machines are designed to take over some of the basic tasks previously performed by people; by so doing, they make life a little easier and a little more pleasant.

25 Smart cards store vital information such as health records, drivers' licenses, bank balances, and so on. Smart phones, cars, and appliances with built in computers can be programmed to better meet individual needs.

30 A smart house has a built-in monitoring system that can turn lights on and off, open and close windows, operate the oven, and more.

With small computing devices available for

35 performing smart tasks like cooking dinner, programming the DVD recorder, and controlling the flow of information in an organization, people are able to spend more time doing what they often do best – being creative. Computers

40 can help people work more creatively.

Multimedia systems are known for their educational and entertainment value, which we call 'edutainment'. Multimedia combines



text with sound, video, animation, and

45 graphics, which greatly enhances the interaction between user and machine and can make information more interesting and appealing to people. Expert systems software enables computers to 'think' like experts.

50 Medical diagnosis expert systems, for example, can help doctors pinpoint a patient's illness, suggest further tests, and prescribe appropriate drugs.

Connectivity enables computers and software

55 that might otherwise be incompatible to communicate and to share resources. Now that computers are proliferating in many areas and networks are available for people to access data and communicate with others,

60 personal computers are becoming interpersonal PCs. They have the potential to significantly improve the way we relate to each other. Many people today telecommute – that is, use their computers to stay in touch

65 with the office while they are working at home. With the proper tools, hospital staff can get a diagnosis from a medical expert hundreds or thousands of miles away. Similarly, the disabled can communicate more

70 effectively with others using computers.

Distance learning and videoconferencing are concepts made possible with the use of an electronic classroom or boardroom accessible to people in remote locations. Vast databases

75 of information are currently available to users of the Internet, all of whom can send mail messages to each other. The information superhighway is designed to significantly expand this interactive connectivity so that

80 people all over the world will have free access to all these resources.

People power is critical to ensuring that hardware, software, and connectivity are effectively integrated in a socially responsible

85 way. People – computer users and computer professionals – are the ones who will decide which hardware, software, and networks endure and how great an impact they will have on our lives. Ultimately people power

90 must be exercised to ensure that computers are used not only efficiently but in a socially responsible way.

B Re-read the text to find the answers to these questions:

- 1 Match the terms in Table A with the statements in Table B.

Table A

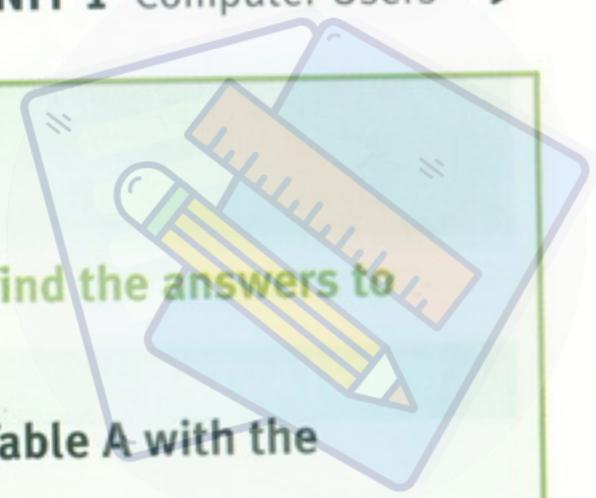
- a Edutainment
- b Multimedia
- c Expert system
- d Telecommute
- e Information superhighway

Table B

- i Software that enables computers to 'think' like experts
- ii Use computers to stay in touch with the office while working at home
- iii Internet system designed to provide free, interactive access to vast resources for people all over the world
- iv Multimedia materials with a combination of educational and entertainment content
- v A combination of text with sound, video, animation, and graphics

- 2 Mark the following statements as True or False:

- a Desktop organisers are programs that require desktop computers.
- b Computers are sometimes used to monitor systems that previously needed human supervision.
- c Networking is a way of allowing otherwise incompatible systems to communicate and share resources.
- d The use of computers prevents people from being creative.
- e Computer users do not have much influence over the way that computing develops.



Computer Architecture

STARTER

- 1** Name these different types of devices. Then match the possible users below to each type. Justify your choice.



Fig 1

- 1 student using a computer for entertainment while travelling
- 2 large company processing payroll data
- 3 travelling salesperson giving marketing presentations
- 4 large scientific organisation processing work on nuclear research
- 5 businessperson keeping in touch with clients while travelling
- 6 graphic designer
- 7 secretary doing general office work

- 2** What do these abbreviations mean? Use the Glossary if necessary.

- | | |
|----------|---------|
| 1 CD-ROM | 5 FSB |
| 2 TFT | 6 SDRAM |
| 3 MB | 7 XGA |
| 4 GHz | |

READING**3**

Now study the text below to find this information:

- 1 What is the memory size of this PC?
- 2 What storage devices are supplied?
- 3 What size is the display screen?
- 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?

HOW TO READ A COMPUTER AD.

- 1 Intel Pentium 4 processor (3GHz, 800MHz FSB)
- 2 Mini-tower chassis
- 3 1GB dual channel DDR2 SDRAM
- 4 200GB Serial ATA hard drive (7200 r.p.m.)
- 5 128MB PCI-Express video card
- 6 Integrated audio
- 7 48X CD-RW drive
- 8 19" TFT flat panel XGA (1024 x 768) monitor
- 9 Microsoft Windows XP Professional



Fig 2
Computer ad

1 The main processing chip called a 'Pentium 4' that was designed and manufactured by the Intel Corporation. It operates at a clock speed of three gigahertz and has a front-side bus that operates at a speed of eight hundred megahertz.

2 A small, tall and narrow style of case containing the computer system.

3 Synchronous dynamic random access memory with a capacity of one gigabyte. It is a high bandwidth, double data rate memory.

4 A hard drive with a capacity of two hundred gigabytes that uses a type of connection interface known as Serial ATA i.e. it has a serial data connection rather than the original parallel connection. It rotates at a speed of seven thousand, two hundred revolutions per minute.

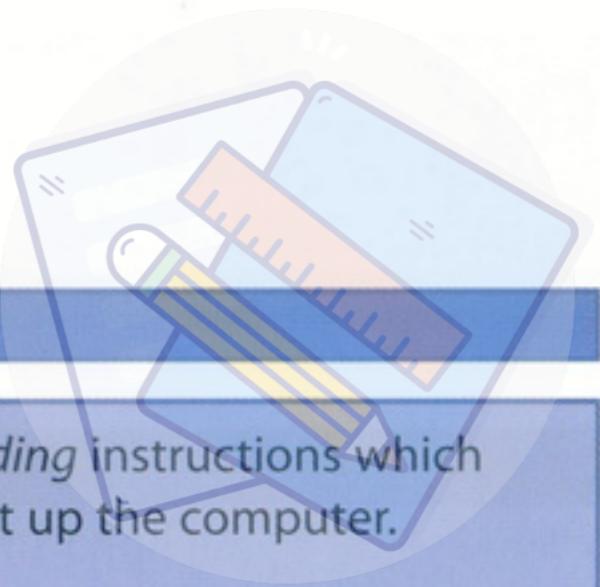
5 Electronics for driving the graphics output that has a memory capacity of one hundred and twenty-eight megabytes and uses a type of connection interface known as PCI-Express.

6 Electronics for controlling the sound output that is built into the main electronics of the computer.

7 A compact disk read/write disk drive that operates at forty-eight times the speed of the original CD drives.

8 A nineteen inch, flat display screen made from thin film transistors with a resolution of 1024 by 768.

9 The operating system that is used to control the system.

**LANGUAGE WORK****Function of an item**

We can describe the function of an item in a number of ways. Study these examples.

Using the Present simple

- 1 ROM *holds* instructions which are needed to start up the computer.

Used to-infinitive, Used for + -ing form

- 2 ROM is *used to hold* instructions which are needed to start up the computer.

- 3 ROM is *used for holding* instructions which are needed to start up the computer.

Emphasising the function

- 4 *The function of ROM is* to hold instructions which are needed to start up the computer.

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

| A Item | B Function |
|------------------|---|
| RAM | controls the cursor |
| processor | inputs data through keys like a typewriter |
| mouse | displays the output from a computer on a screen |
| clock | reads DVD-ROMs |
| flash memory key | reads and writes to electronic chips on a card |
| monitor | holds instructions which are needed to start up the computer |
| keyboard | holds data read or written to it by the processor |
| DVD-ROM drive | provides extremely fast access for sections of a program and its data |
| cache | controls the timing of signals in the computer |
| ROM | controls all the operations in a computer |



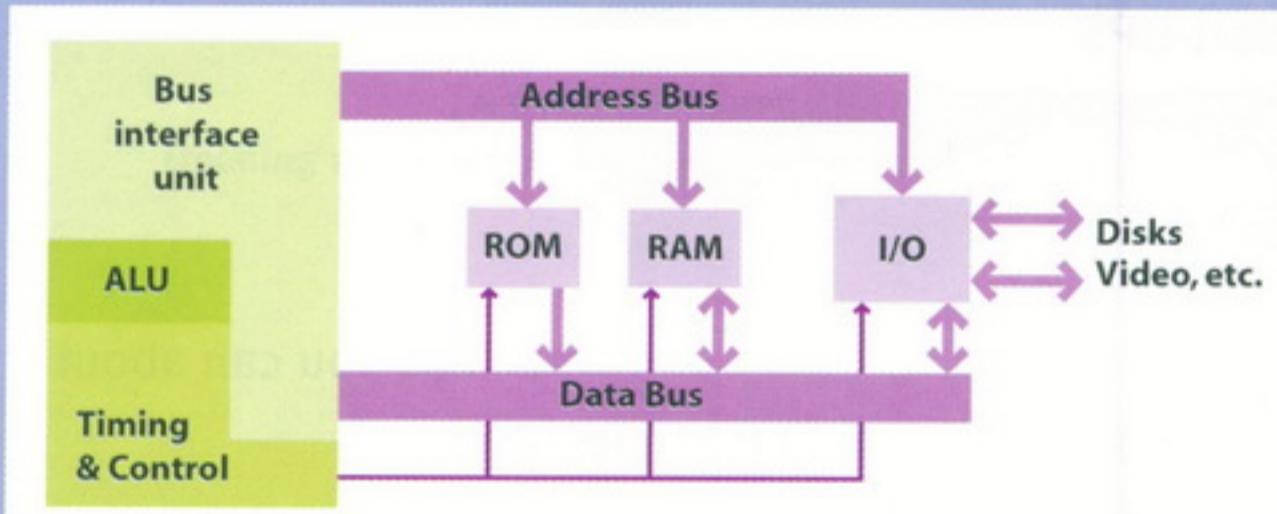
5 With the help of the Glossary if necessary, describe the functions of these items.

- | | |
|-------------------|----------------------|
| 1 scanner | 6 supercomputer |
| 2 printer | 7 mainframe computer |
| 3 ATM | 8 barcodes |
| 4 PDA | 9 swipe cards |
| 5 hard disk drive | 10 memory |

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.

Fig 3
Computer buses

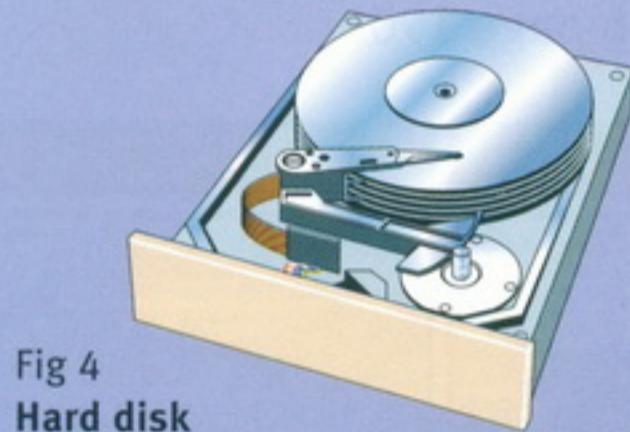
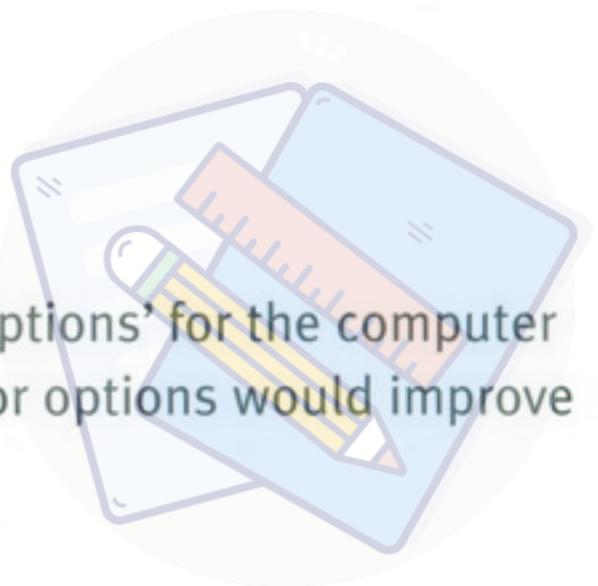


Fig 4
Hard disk

- 6 The hard disk drive is *inside* a sealed case.
- 7 Heads move *across* the disk.
- 8 Tracks are divided *into* sectors.

6 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.

**PROBLEM-SOLVING**

7 Study these ‘System upgrades and options’ for the computer described in Task 3. Which upgrades and/or options would improve these aspects of this computer?

- 1 capacity
- 2 speed
- 3 protection from damage due to power failure
- 4 network connections

Upgrades and options

- 10/100/1000 Ethernet controller
- 16X DVD +/-RW drive
- Extra memory module
- APC 1400 Smart-UPS
- 3 Year Next-Business-Day On-site maintenance

SPEAKING

8 Work in pairs, A and B. Find out as much as you can about your partner’s computer and complete this table.

Student A Your computer details are on page 184.

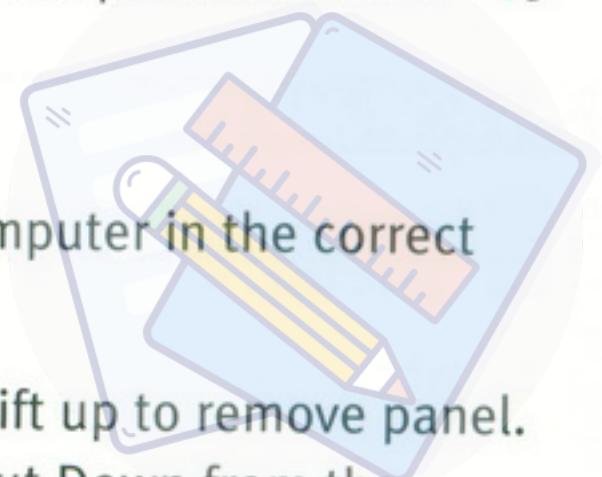
Student B Your computer details are on page 190.

| Feature | A | B |
|---------------------|---|---|
| processor type | | |
| processor speed | | |
| bus speed | | |
| memory capacity | | |
| memory speed | | |
| memory type | | |
| hard disk capacity | | |
| screen size | | |
| screen resolution | | |
| optical drive speed | | |

WRITING

9 Put these instructions for opening a computer in the correct sequence.

- a Release the two catches underneath and lift up to remove panel.
- b Shut down your computer by choosing Shut Down from the Apple menu or the Special menu.
- c If there are security screws on the vertical plate on the back of the computer, remove them with a Philips screwdriver.
- d Unplug all the cables except the power cord from your computer.
- e Pulling gently, slide the tray out.



10 Match these figures to the instructions.

Fig 5
Opening a computer



i



ii



iii



iv

11 Add these sequence words to your instructions: *first, then, next, after that, finally*.