

1 Computers today

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Learning objectives

In this module, you will:

- talk and write about computer applications in everyday life.
- study the basic structure of a computer system.
- study the differences between certain types of computer.
- learn how to classify computer devices.
- learn about the structure and functions of the CPU.
- learn how to distinguish between RAM and ROM.
- learn about how memory is measured.
- learn and use relative pronouns.
- learn how to enquire about computers in a shop.
- learn how to understand the technical specs of different computers.

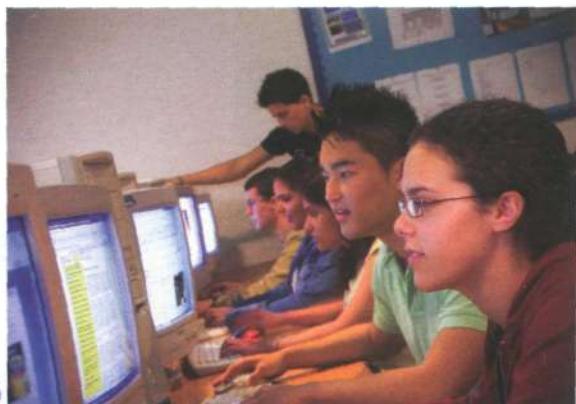
1 The digital age

A Match the captions (1–4) with the pictures (a–d).

- 1 In education, computers can make all the difference b
- 2 Using a cashpoint, or ATM a
- 3 The Internet in your pocket d
- 4 Controlling air traffic c



a



b



c



d



B How are computers used in the situations above? In pairs, discuss your ideas.

C Read the text and check your answers to B.

The digital age

We are now living in what some people call *the digital age*, meaning that computers have become an essential part of our lives. Young people who have grown up with PCs and mobile phones are often called *the digital generation*. Computers help students to **perform** mathematical **operations** and improve their maths skills. They are used to **access the Internet**, to **do** basic **research** and to

communicate with other students around the world.
10 Teachers use projectors and interactive whiteboards to **give presentations** and teach sciences, history or language courses. PCs are also used for administrative purposes – schools use word processors to **write letters**, and databases to **keep records** of students
15 and teachers. A school website allows teachers to publish **exercises** for students to **complete** online.

Students can also enrol for courses via the website and parents can download official reports.

Mobiles let you **make** voice **calls**, **send texts**,
20 email people and download logos, ringtones or games. With a built-in camera you can send pictures and make video calls in *face-to-face* mode. New smartphones combine a telephone with web access, video, a games console, an MP3 player, a personal digital assistant (PDA) and a GPS navigation system, all in one.

In banks, computers **store information** about the money held by each customer and enable staff to **access** large **databases** and to **carry out** financial **transactions** at high speed. They also control the cashpoints, or ATMs (automatic teller machines), which **dispense money** to customers by the use of a PIN-protected card. People use a Chip and PIN
30

card to pay for goods and services. Instead of using a signature to verify payments, customers are asked to **enter** a four-digit **personal identification number (PIN)**, the same number used at cashpoints; this system makes transactions more secure. With online banking, clients can easily **pay bills** and **transfer money** from the comfort of their homes.

Airline pilots use computers to help them control the plane. For example, monitors **display data** about fuel consumption and weather conditions. In airport control towers, computers are used to manage radar systems and regulate air traffic. On the ground, airlines are connected to travel agencies by computer. Travel agents use computers to find out about the availability of flights, prices, times, stopovers and many other details.

D When you read a text, you will often see a new word that you don't recognize. If you can identify what type of word it is (noun, verb, adjective, etc.) it can help you guess the meaning.

Find the words (1–10) in the text above. Can you guess the meaning from context? Are they nouns, verbs, adjectives or adverbs? Write n, v, adj or adv next to each word.

- 1 perform (line 6) *v*
- 2 word processor (line 13) *n*
- 3 online (line 16) *adj*
- 4 download (line 18) *v*
- 5 built-in (line 21) *adv*

- 5 digital (line 25) *adj*
- 7 store (line 27) *n*
- 8 financial (line 29) *adj*
- 9 monitor (line 42) *n*
- 10 data (line 42) *n*

E Match the words in D (1–10) with the correct meanings (a–j).

- a keep, save *7*
- b execute, do *1*
- c monetary *9*
- d screen *9*
- e integrated *6*
- f connected to the Internet *3*

- g collection of facts or figures *10*
- h describes information that is recorded or broadcast using computers *10* *5*
- i program used for text manipulation *2*
- j copy files from a server to your PC or mobile *4*

F  **In pairs, discuss these questions.**

- 1 How are/were computers used in your school?
- 2 How do you think computers will be used in school in the future?

2 Language work: collocations 1

A Look at the HELP box and then match the verbs (1–5) with the nouns (a–e) to make collocations from the text on pages 2–3.

- | | |
|------------|-----------------|
| 1 give | a money |
| 2 keep | b a PIN |
| 3 access | c databases |
| 4 enter | d presentations |
| 5 transfer | e records |

B Use collocations from A and the HELP box to complete these sentences.

- 1 Thanks to Wi-Fi, it's now easy to acces the internet from cafés, hotels, parks and many other public places.
- 2 Online banking lets you transfer money between your accounts easily and securely.
- 3 Skype is a technology that enables users to make calls over the Internet for free.
- 4 In many universities, students are encouraged to complete exercises using PowerPoint in order to make their talks more visually attractive.
- 5 The Web has revolutionized the way people store information – with sites such as Google and Wikipedia, you can find the information you need in seconds.
- 6 Cookies allow a website to do research on a user's machine and later retrieve it; when you visit the website again, it remembers your preferences.
- 7 With the latest mobile phones, you can send texts with multimedia attachments – pictures, audio, even video.

HELP box

Collocations 1

Verbs and nouns often go together in English to make set phrases, for example *access the Internet*. These word combinations are called **collocations**, and they are very common. Learning collocations instead of individual words can help you remember which verb to use with which noun. Here are some examples from the text on pages 2–3: *perform operations, do research, make calls, send texts, display data, write letters, store information, complete exercises, carry out transactions*.

3 Computers at work

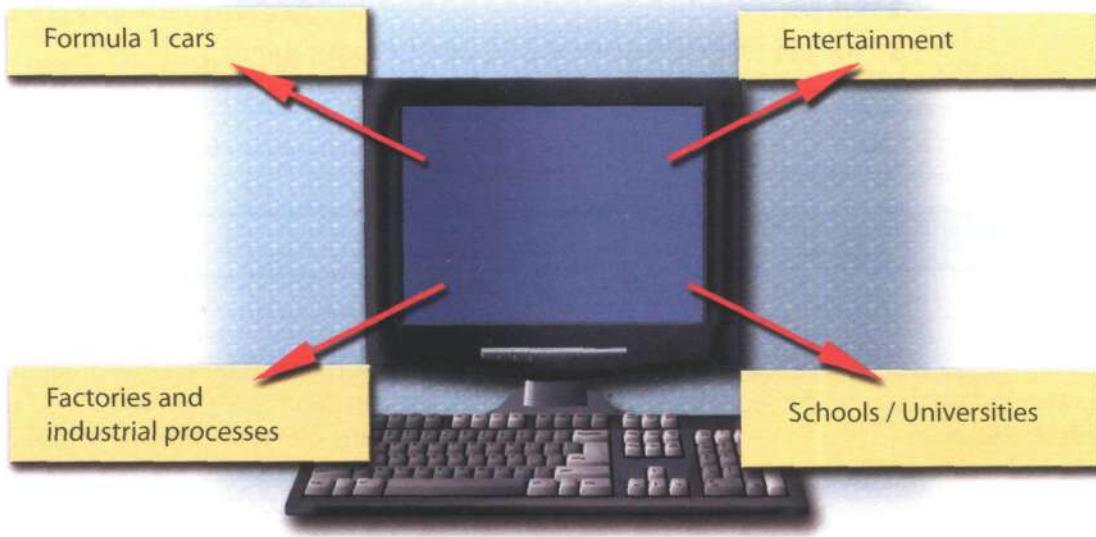
A  Listen to four people talking about how they use computers at work. Write each speaker's job in the table.

	electrical engineer	secretary	librarian	composer
Speaker	Job	What they use computers for		
1				
2				
3				
4				

B  Listen again and write what each speaker uses their computer for.

5 Other applications

A  In small groups, choose one of the areas in the diagram below and discuss what you can do with computers in that area. Look at the *Useful language* box below to help you.



Useful language

Formula 1 cars: design and build the car, test virtual models, control electronic components, monitor engine speed, store (vital) information, display data, analyse and communicate data

Entertainment: download music, burn CDs, play games, take photos, edit photos, make video clips, watch movies on a DVD player, watch TV on the computer, listen to MP3s, listen to the radio via the Web

Factories and industrial processes: design products, do calculations, control industrial robots, control assembly lines, keep record of stocks (materials and equipment)

School/University: access the Internet, enrol online, search the Web, prepare exams, write documents, complete exercises online, do research, prepare presentations

Computers are used to ...

A PC can also be used for ...

People use computers to ...

B  Write a short presentation summarizing your discussion. Then ask one person from your group to give a summary of the group's ideas to the rest of the class.