

2

IT systems


- give hardware specifications
- give instructions for using a GUI
- describe different multimedia types
- explain OS installation

System specifications

Speaking 1 Work in small groups. What is the difference between peripherals and internal hardware? Name as many of each as you can. Can you install any?

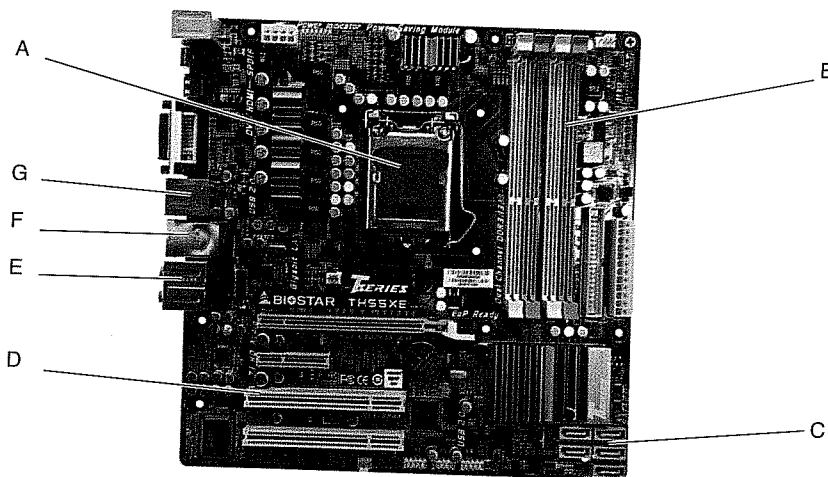
Vocabulary 2 Are these items *internal components* (I), *peripherals* (P) or *storage* (S)? For some items, there may be more than one possible answer.

- | | |
|--------------------------|---------------------------|
| 1 external drive ____ | 7 mouse ____ |
| 2 hard disk drive ____ | 8 memory ____ |
| 3 headphones ____ | 9 monitor ____ |
| 4 optical drive ____ | 10 power supply unit ____ |
| 5 keyboard ____ | 11 printer ____ |
| 6 solid state drive ____ | 12 screen ____ |

Listening 3  07 Listen to a technician describing the motherboard to a new trainee. Match these words to A–G in the photo below.

graphics card? =
video card
CPU = processor

- | | | |
|---------------------|-----------------------------|-----------------|
| 1 audio socket ____ | 4 Ethernet connector ____ | 7 USB port ____ |
| 2 CPU socket ____ | 5 graphics card socket ____ | |
| 3 DIMM slot ____ | 6 SATA socket ____ | |



Language

Large and small numbers

For **decimal values**, we say 'point' for the decimal point and pronounce the next numbers individually. We don't always mention the 0 to the left of the decimal point for values less than 1.


It's 0.54 millimetres long. ('nought point five four' or 'point five four'; NOT 'nought point fifty-four')

To express large and small numbers, we often use **prefixes**. For example, *kilo-* means '1,000'. The main stress is on the first syllable of the prefix.


a 3.6-kilobyte file

4 Match the prefixes in the box to these numbers.

dual- quad-	giga- tera-	kilo-	mega-	micro-	milli-	nano-
1 1,000,000,000,000	3 1,000,000 _____	7 1,000,000 _____				
	4 1,000 _____	8 4 _____				
2 1,000,000,000	5 0.000000001 _____	9 2 _____				
	6 0.000001 _____					

Pronunciation 5  08 Listen and underline the stressed syllables in these words. Then practise saying the words with a partner.

- | | |
|------------------------------|----------------------|
| 1 a dual-core processor | 5 18 nanometres |
| 2 a quad-speed Blu-ray drive | 6 a 26-kilobyte file |
| 3 a 3.5-millimetre socket | 7 2.4 megahertz |
| 4 a micrometre | 8 4 terabytes |

Listening 6  09 Listen to an IT manager and assistant talking about a problem with a delivery of new computers. Correct this delivery slip to show what was ordered.

Order for: Wood Publishing

5 × Expression 5710 laptop computers with the following specifications:

- Intel 2.73 GHz dual-core CPU
- 1 × 390 GB HDD
- 8 GB dual-channel DDR3 1666 MHz RAM
- Radeon 3850 1 GB graphics card
- No optical drive
- 15.6-inch WLED 1920 × 1080 screen
- 4 × USB ports
- No operating system installed
- 1 year next business day on-site service

10 × Domination 8720 desktop computers

- Intel 3.4 GHz quad-core CPU
- 1 × Eastern Digital 2 TB 7200 rpm SATA HDD
- 16 GB 2000 MHz memory
- Radeon 7950 2 GB graphics card
- 6 × Blu-ray combo optical drive (Blu-ray, DVD+/-RW & CD)
- 4 × USB ports
- 802.11n WLAN wi-fi mini card
- No operating system installed
- 1 year next business day on-site service

**Dingle
Digital
Hardware
Supplies**

Speaking 7 Work in pairs. Roleplay the conversation the IT manager in 6 will have with the supplier, Dingle Digital.

Hi, we ordered some new computers from you but the order is wrong. We ordered laptops with ... but they came with ...

8 Work in pairs. Write some specifications for a computer. Then ask and answer questions about your partner's computer. Think about these things:

- | | |
|-------------------|---------------------|
| • processor speed | • hard drive size |
| • memory | • screen resolution |

A: *How fast is the processor?*

B: *It's 2.84 megahertz.*

9 Work in pairs. Suggest specifications for computers for these people. Then compare your answers with another pair.

- 1 computers for administration staff
- 2 a computer for a designer
- 3 a server for a small business
- 4 a computer for a sales person

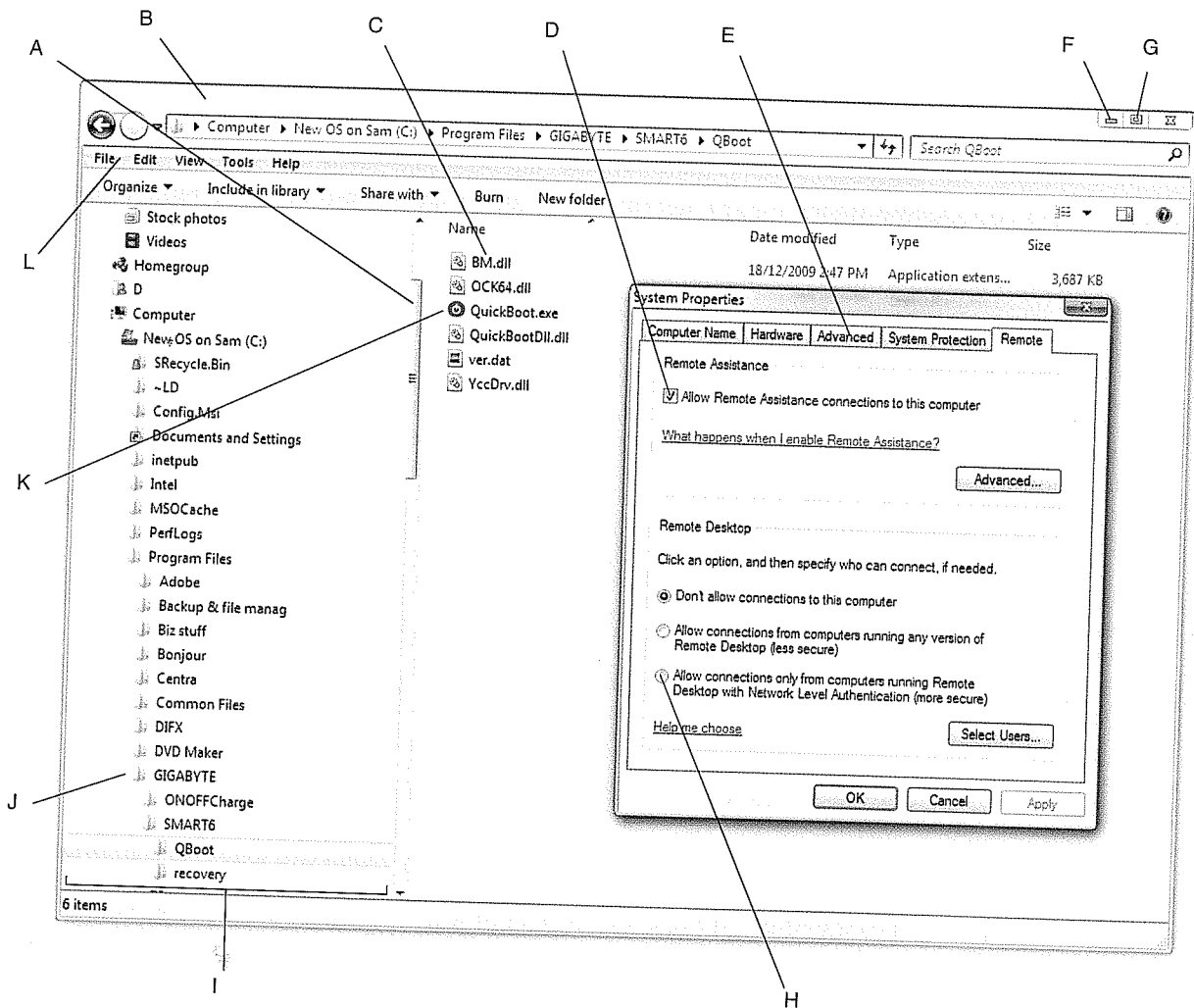
I don't think admin staff need a fast processor. They only need it for word processing and email. What about a two-gigahertz processor?

GUI operations

Speaking 1 Work in pairs. Look at the screenshot in 2. What different things can you do to a window?
 GUI = graphical user interface
You can resize it.


Vocabulary 2 Match these words to A–L in the screenshot below.

- | | | |
|---------------------|-------------|------------------|
| 1 scroll bar | 5 title bar | 9 left-hand pane |
| 2 menu | 6 icon | 10 tab |
| 3 'Minimise' button | 7 folder | 11 check box |
| 4 'Maximise' button | 8 filename | 12 radio button |



3 Work in pairs. Match actions 1–7 to their results a–g.

- | | |
|---------------------------------|---------------------------------------|
| 1 Double click on the title bar | a) to open a new menu. |
| 2 Click on a menu | b) and the window fills the screen. |
| 3 Right-click on an icon | c) if you want to move the window. |
| 4 Slide the scrollbar down | d) to hide the window. |
| 5 Click the 'Minimise' button | e) to scroll the window down. |
| 6 Drag the title bar | f) to open it. |
| 7 Select the icon | g) and its background changes colour. |

Listening 4  Listen to a help desk technician talking to an IT user. What information is the technician looking for?

5 Listen again. Number the instructions in the order you hear them.

- | | |
|---|---|
| <input type="checkbox"/> Choose 'Properties' from the menu. | <input type="checkbox"/> Choose the 'Details' tab. |
| <input type="checkbox"/> Just select 'Manage'. | <input type="checkbox"/> Just right-click where it says 'Disk 0'. |
| <input type="checkbox"/> Select 'Install date'. | <input type="checkbox"/> Can you scroll up to the top? |

Language

Giving instructions

We often use **imperatives** to give instructions. We use '**softeners**' such as *could you*, *can you* and *just* to make the instructions sound more polite.

Drag the window to the left.

Could you just double click on the bottom icon?

We use **sequencers** (e.g. *first*, *then*, *next*, *after that*, *finally*) to show the order of the steps.

First, just click on the 'Start' button. **Then** select 'Shut down' in the bottom right corner.

6 Look at the instructions in 5. Underline the imperatives. What softeners does the speaker use?

Speaking 7 Work in pairs. Take turns being an IT help desk technician and an IT user. Use these prompts to explain to your partner how to follow the steps for each action.

'Start' button → 'Control Panel' → 'System and Security' heading → under 'System': 'View amount of RAM and processor speed'

A: *First, could you click on the 'Start' button?*

B: *Sure.*

A: *Then select 'Control Panel'. A box will appear.*

B: *OK.*

A: *Click where it says 'System and Security', then 'View amount of RAM and processor speed', under 'System'.*

B: *Got it! Thanks very much.*

- 'Start' button → Mozilla Firefox → double click/title bar
- right-click on 'c:' drive → 'Properties' → 'Sharing' tab → 'Advanced Sharing' → 'Share this folder' check box → 'OK' → 'Close'
- press 'Start' key and 'E' key to open Windows Explorer → 'Uninstall or change a program' at top → find 'Anki' → right-click → select 'Uninstall'
- find clock on bottom right of screen → right-click it → 'Adjust date/time' in pop-up menu → 'Change time zone' button → '(UTC+09.00) Osaka, Sapporo, Tokyo' in drop-down menu → 'OK' → 'OK'
- 'Start' button → 'Control Panel' → 'Appearance and Personalization' heading → 'Display' heading → 'Magnifier tool' link

8 Work in pairs. Take turns to explain these actions. Look at the prompts in 7 or use your own ideas.

how to close a program

First, go to the 'File' menu. Then click 'Exit'. Or click the 'x' in the top right-hand corner of the window.

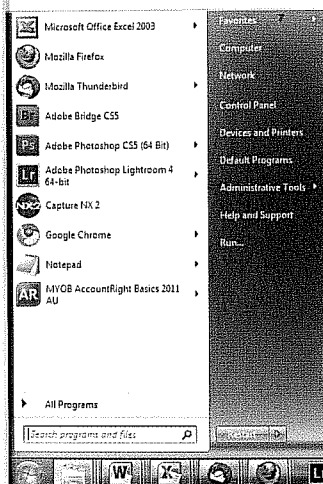
1 how to open a program

3 how to change a program's settings

2 how to save a file

4 how to delete a file

Writing 9 Write an email explaining the steps for one of the actions in 7.



Multimedia hardware

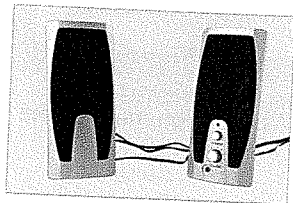
Speaking 1 Work in pairs or small groups. Answer these questions.

- 1 What do you use computers for? List as many uses as you can.
- 2 Which items on your list from question 1 use the items in the box?
- 3 Which other computer tasks use the items in the box?

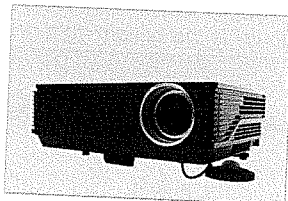
audio graphics images video

Vocabulary 2 Label the photos with the multimedia equipment in the box.

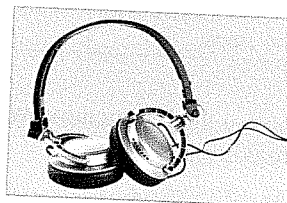
headphones microphone projector speakers video camera
virtual reality goggles webcam



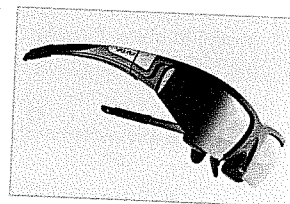
1 _____



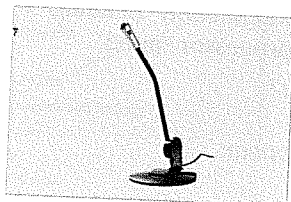
2 _____



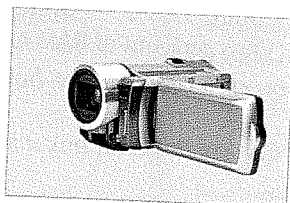
3 _____



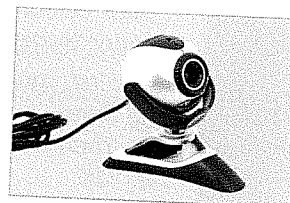
4 _____



5 _____



6 _____



7 _____

Speaking 3 Work in pairs. Who might use each of the items in 2? What might they use them for?

Reading 4 Read this email quickly. What does Kamal want to do?

Inbox

Delete
Junk

Reply
Reply All
Forward

Print
To Do

Subject: Connecting a projector

Hi Kamal,

It should be quite easy to connect your laptop to a projector. First, check that both the laptop and the projector are off. Then connect the projector cable to the laptop: just plug it into the video socket. Most laptops have one, usually at the back or side. After that, insert the projector's power cable into a power socket and turn on the computer and the projector. Next, the computer has to find out the projector's resolution: press the 'Function' key ('Fn') on the laptop and, at the same time, press the key with a picture of a screen on it. The 'Fn' key is usually on the bottom left, near the 'Shift' key, and the key with the screen picture on it is usually on the top row of keys, on the left.

Don't forget to switch off the equipment and unplug the projector from the computer when you've finished.

Best wishes,
Natasha

Vocabulary 5 Match words 1–8 from the email in 4 to words a–h with a similar meaning.

- | | |
|----------------|-----------------------|
| 1 cable | a) push |
| 2 plug (into) | b) put (into) |
| 3 insert | c) connect |
| 4 power socket | d) connector |
| 5 turn on | e) turn off |
| 6 press | f) electricity socket |
| 7 unplug | g) switch on |
| 8 switch off | h) disconnect |

6 Complete these prepositional verbs.

- | | |
|-----------------|--------------------|
| 1 connect _____ | 3 unplug _____ |
| 2 plug _____ | 4 disconnect _____ |

Language

Sentences with two objects

Some sentences have **two objects**. We often use a preposition between the two objects (verb + object of verb + preposition + object of preposition).

*I unplugged **the cable** from **the computer**.*
*Insert **the plug** into **the socket**.*

7 Read the email in 4 again and complete these instructions. Use two objects where appropriate.

Switch off the computer and the projector.

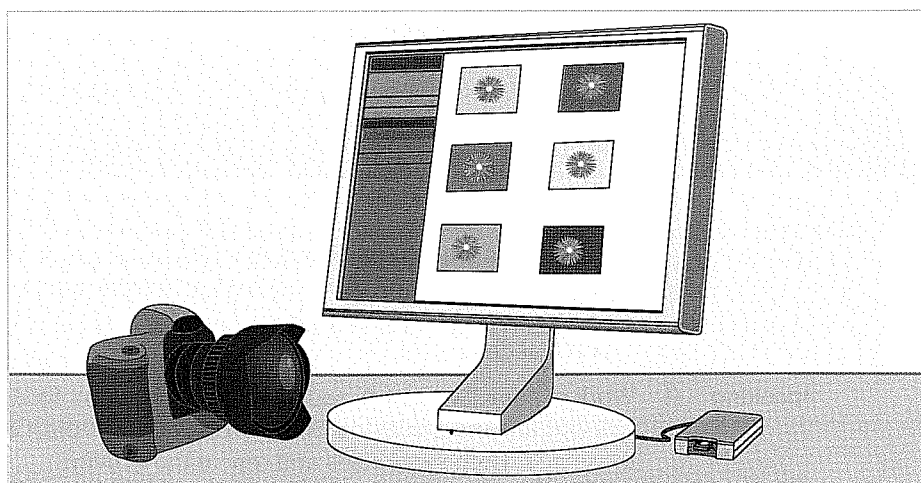
- | | |
|-----------------|------------------------------|
| 1 Plug _____. | 4 Push _____. |
| 2 Plug _____. | 5 When finished, turn _____. |
| 3 Switch _____. | 6 Disconnect _____. |

Writing 8 Work in pairs. Read the email in 4 again and mark the features below. What other forms of greetings and signing off can you think of?

- the greeting
- a paragraph
- signing off

9 Write an email explaining how to transfer photographs from a digital camera to a computer. Give instructions for the steps below. Include the features from 8 in your email.

- card reader → computer
- open software
- select card reader/drop down menu
- select destination folder
- 'OK' button



Operating systems



Reading 1 Work in pairs. Put these steps in reinstalling an operating system in the correct order.

- ☐ During the process, the computer will restart by itself several times.
- ☐ Near the end of the process, you can partition the hard drives.
- ☐ In the BIOS, set the first boot drive to DVD. Then reboot again.
- ☐ At the end of the process, the operating system will ask for the product key, time, date, network type and details for user accounts.
- ☐ First, put the installation DVD into the optical drive. Then reboot the computer while you press the 'F2' key. The BIOS will now start.
- ☐ This time, the computer will boot from the DVD and installation will begin.
- ☒ Before you start, back up everything.
- ☐ Near the start of the process, it will ask you to agree to the licence terms.

Vocabulary 2 Find words in 1 that match these definitions.

- 1 start again _____
- 2 split a hard drive into parts that act like separate drives _____
- 3 software built into a computer that controls how it starts up _____
- 4 the drive that the computer reads first when starting up _____
- 5 software comes with this to show you are the owner _____
- 6 settings for a user _____
- 7 switch a computer off and on again _____
- 8 a series of actions to do something _____
- 9 copy data to another place so that you don't lose it _____
- 10 rules about how you can use software _____

Language

Expressing reason and purpose

We can use these forms to express reason and purpose:

- *for* + noun phrase
- *so that* + clause
- *to*-infinitive
- *because* + clause

Why should I update my OS?

For the new features.

So that you can use the new features.

To use the new features.

Because it has new features.

3 Work in pairs or small groups. Match 1–6 to a–f. Then complete the gaps with *because*, *so*, *to* or *for* to make sentences.

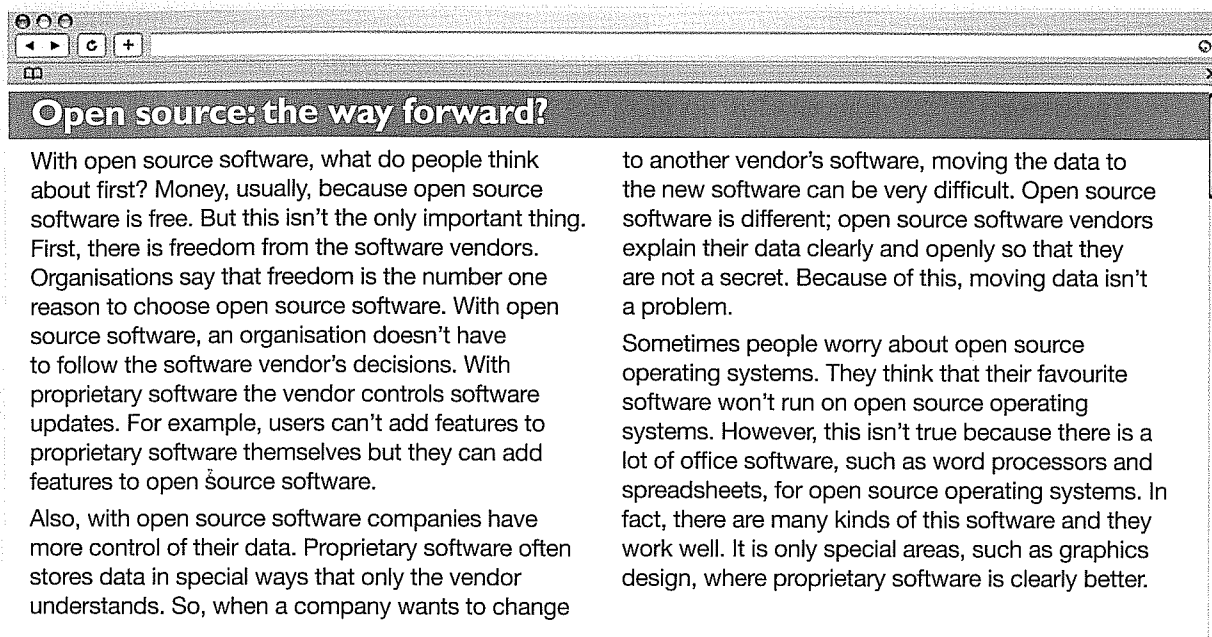
- | | |
|---|--|
| 1 Back up everything | a) _____ enter the BIOS. |
| 2 Put the DVD in the drive | b) _____ that the computer restarts from the operating system DVD. |
| 3 Press 'F2' while rebooting the computer | c) _____ use the different partitions for different purposes. |
| 4 During the installation process, the computer will ask you some questions | d) _____ safety. |
| 5 You might want to partition the hard drive | e) _____ that the process can start. |
| 6 Change the boot drive to the optical drive | f) _____ it needs to know some information, such as where you are. |

Speaking 4 Work in pairs. Student A, you are an IT technician. Student B, you are an IT user. Ask and answer questions using 1–6 in 3 as prompts. Give different reasons from those in 3. Then swap roles and repeat the activity.

Business matters

- 1 Work in small groups. What do you know about open source software? How is it different from proprietary software? Think about cost, who writes it and how much people use it.

Reading 2 Read this web article and check your answers in 1.




Open source: the way forward?

With open source software, what do people think about first? Money, usually, because open source software is free. But this isn't the only important thing. First, there is freedom from the software vendors. Organisations say that freedom is the number one reason to choose open source software. With open source software, an organisation doesn't have to follow the software vendor's decisions. With proprietary software the vendor controls software updates. For example, users can't add features to proprietary software themselves but they can add features to open source software.

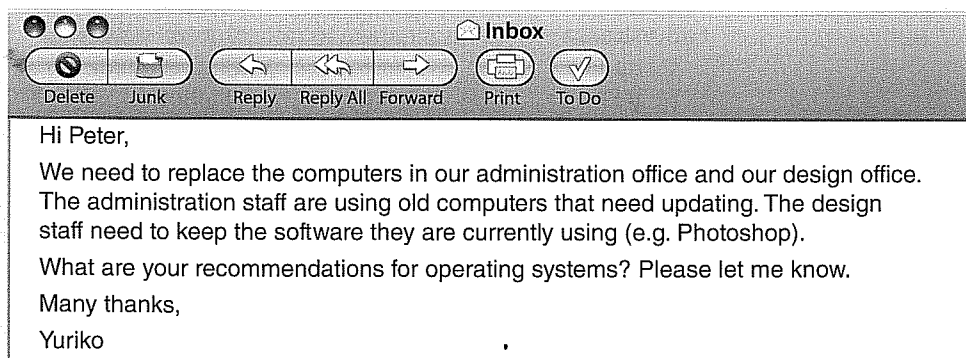
Also, with open source software companies have more control of their data. Proprietary software often stores data in special ways that only the vendor understands. So, when a company wants to change to another vendor's software, moving the data to the new software can be very difficult. Open source software is different; open source software vendors explain their data clearly and openly so that they are not a secret. Because of this, moving data isn't a problem.

Sometimes people worry about open source operating systems. They think that their favourite software won't run on open source operating systems. However, this isn't true because there is a lot of office software, such as word processors and spreadsheets, for open source operating systems. In fact, there are many kinds of this software and they work well. It is only special areas, such as graphics design, where proprietary software is clearly better.

Listening 3  Listen to a spokesperson for a major operating system company giving a speech: 'Why open source is a bad idea'. What reasons does the speaker give to use proprietary software? Make a list.

Speaking 4 Use the article in 2 to make a list of reasons to use open source software. Then work in pairs. Give reasons for your answers and discuss any differences.

- 5 Work in small groups. You are technicians in an advertising company. You look after operating systems and software. Look at this email from your manager and decide whether to use an open source OS, a proprietary OS or some of each. Then explain your decision to the class.



Inbox

Delete Junk Reply Reply All Forward Print To Do

Hi Peter,

We need to replace the computers in our administration office and our design office. The administration staff are using old computers that need updating. The design staff need to keep the software they are currently using (e.g. Photoshop).

What are your recommendations for operating systems? Please let me know.

Many thanks,

Yuriko

Writing 6 Write an email to your manager giving your recommendations. Use the Language box on page 18 and the information about writing emails on page 17.

3

Data communication

- describe browser problems
- define network concepts
- explain advantages of mobile devices
- specify information about email

Internet browsing

Speaking 1 Work in pairs. Discuss these questions.

- 1 Which websites do you visit most often?
- 2 Which browsers do you use? Which is your favourite? Why?
- 3 What kind(s) of device(s) do you use to access the internet?

Vocabulary 2 Match these words to A–F in the screenshot of a browser below.

URL (uniform resource locator) = web address
favourites = bookmarks

- 1 web address ____
- 2 bookmarks bar ____
- 3 'back' button ____
- 4 tab ____
- 5 link ____
- 6 'refresh' button ____



3 Match verbs 1–8 to nouns a–h to make collocations for things you can do on the internet. For some items, there may be more than one possible answer.

- | | |
|----------------|----------------|
| 1 follow | a) video |
| 2 take part in | b) a password |
| 3 stream | c) your status |
| 4 update | d) a webinar |
| 5 post | e) photos |
| 6 download | f) web pages |
| 7 browse | g) a comment |
| 8 enter | h) a link |

Speaking 4 Work in pairs. What do you do on the internet? Tell your partner. Use the collocations in 3.

Listening 5 12 Listen to an admin assistant telephoning an IT specialist about a new browser. Does the IT specialist solve his problem? What does the admin assistant like about the new browser?

6 Listen again. What three things does the admin assistant need help with?

Present simple vs present continuous, stative verbs

We use the **present simple** to talk about something we do regularly. We use the **present continuous** to talk about an action happening now or a temporary situation.

*I **work** in an IT Department. This week I'm **managing** the department because my manager is away.*

Stative verbs (e.g. *like, know, understand*) describe states rather than actions. We don't usually use the present continuous with stative verbs.

*I **know** how to use HTML.*

- 7 Underline the present simple and circle the present continuous verbs in these sentences from 5. Why did the speaker use the tense in each case?

- 1 I'm having trouble with the new browser we're using on our PCs.
- 2 I understand that now. But something else is confusing me.

- 8 Complete this telephone conversation between an IT help desk assistant and an employee. Use the correct present simple or present continuous form of the verbs in the box.

check know not work open type in


A: There's a problem with this browser. I usually just (1) _____ my user ID and password and a new window (2) _____. But it (3) _____ now!

B: OK, I think I (4) _____ what the problem is. Probably your pop-up blocker is on.

A: Hmm ... I (5) _____ it now. Yep, you're right. It's OK now. Thanks!

- Speaking** 9 Roleplay telephone conversations for these situations. Take turns being the IT help desk assistant and the caller. Use the conversation in 8 as a model.


- 1 problem: video streaming/usually no problem/now not work
solution: internet connection problem/check the connection
- 2 problem: website images/usually all appear/now no pictures
solution: leave 'Automatically load images' unchecked
- 3 problem: often visit this website/now error message
solution: enter 'www' in the web address, not 'wwwwww'

- Listening** 10  13 Listen to part of a telephone conversation. Complete 1–5 with the correct symbols from the web address the speaker dictates.

www.d-o-socialwork.gov.ae/schools_2.html?72

- | | | |
|-------------|-------------------|----------------------|
| 1 dash ____ | 3 slash ____ | 5 question mark ____ |
| 2 dot ____ | 4 underscore ____ | |

forward slash =
slash = stroke

- 11  14 Listen to part of a telephone conversation. Which web address does the speaker dictate?

- 1 www.agamy.com/search/results_78.aspx?p
- 2 www.agamy.com/search/results/78.aspx-p
- 3 www.agamy.com/search/results_78.aspx-p

- Speaking** 12 Work in pairs. Student A, look at the information on page 68. Student B, look at the information on page 70. Follow the instructions.

Networks

Speaking 1 Work in pairs. Ask and answer these questions.

PIN = personal identification number

- 1 What computing devices do you use in your daily life (e.g. ATMs)?
- 2 Do you think they are on a network? Is it wired or wireless?
- 3 Are these devices secure? What security features do they have (e.g. a PIN)?

Reading 2 Read this web page. Match the paragraphs (1–3) to these points.

- a) types of software and devices on networks ____
- b) the main types of networks ____
- c) the arrangements of computers in networks ____

What is a network?

A network is a group of linked computers or other devices. There are two kinds of networks that are in common use. In Local Area Networks (LANs) computers are close together – perhaps in the same building. They might be connected directly to each other by cable or through a wireless network such as wi-fi. In contrast, wide area networks (WANs) cover a larger area and usually use telephone lines or a mobile phone system to connect. A LAN can be a part of a WAN.

There are different types of wired networks. One is a star system. In this, each computer (or other device) is connected to a central server. Another type is a ring system. This is a network that has each computer linked to two others. In a bus system there is a central cable which is called a bus, and each computer is linked to it. Some large networks use a mesh. In this, each computer is linked to several others. This has one big advantage: if one connection breaks, the data can use other connections. Therefore, it is difficult to break a mesh network.

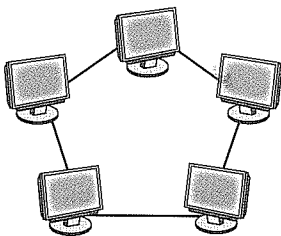
Many networks work on a client-server system. In this, servers are special computers that store data, serve websites and have other similar functions. Generally, a client program will ask the server for data and the server will then send the data back to the client. For example, when you type a web address into a browser, the browser (the client) will ask the server for a web page, which then sends the web page back.

3 Read the web page in 2 again. What do these words refer to?

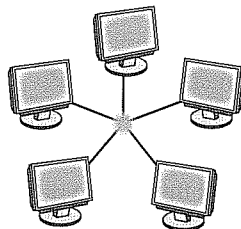
They (line 5) *computers*

- | | |
|--------------------------------|------------------------|
| 1 One (line 11) _____ | 4 it (line 17) _____ |
| 2 this (line 12) _____ | 5 this (line 17) _____ |
| 3 Another type (line 13) _____ | 6 This (line 18) _____ |

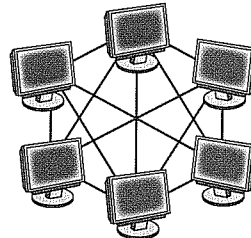
4 Read the text in 2 again and label these types of network.



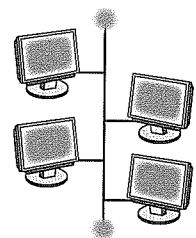
1 _____



2 _____



3 _____



4 _____

Speaking 5 Work in pairs. Use the information in the web page in 2 to answer these questions.

- 1 Do you think these use a LAN or a WAN?
 - a) home network
 - b) ATMs
 - c) computers in police cars
- 2 Which of these types of software are usually clients?
 - a) word processor (not web-based)
 - b) web browser
 - c) email program
 - d) presentation software (e.g. PowerPoint)
 - e) instant messaging software

Language

Relative clauses

We can use **relative clauses** as part of a definition, to give important information about something or someone (e.g. to explain the function of something or to say who does something). We use the relative pronouns **which/that** for things and **who/that** for people.


*She's the person **who/that** looks after networks.
The internet is a network **which/that** covers the world.*

- 6** Underline the relative pronouns in the web page in 2. Then draw an arrow to the word each pronoun refers to.

Speaking 7 Work in pairs. Take turns to explain items 1–6 from Units 1–3 to your partner. Use the nouns and verbs in the box and relative pronouns. Then choose some more words from Units 1–3 to explain.

cable/links	chip/controls	network/uses	part of a browser/helps
(peripheral) device/prints	program/shows	type of network/covers	

- A: *What's a CPU?* B: *It's a chip that controls a computer.*
- | | | |
|--------------|-------|-----------------|
| 1 browser | 3 bus | 5 wired network |
| 2 search bar | 4 WAN | 6 printer |

Listening 8  **15** Listen to a sales representative explaining a new service to a client. Answer these questions.

- 1 How secure is the current system?
- 2 How secure is a VPN?
- 3 Compared with the current system, how easy is a VPN to use?

9 Listen again and take notes on these items. Then write a definition for each item. Use the nouns in the box in 7 to help you.

- | | | |
|----------|---------|-------|
| 1 dongle | 2 wi-fi | 3 VPN |
|----------|---------|-------|

10 Work in pairs. Take turns to read your definitions from 9 to your partner. Can your partner guess the correct word?

11 In the conversation in 8, the salesperson says that with a VPN, you don't have to worry at all about security. Do you agree? Think about passwords, laptop computers, etc.

Writing 12 Look at the web page in 2. Which sentence in each paragraph shows the paragraph's topic clearly?

- | | |
|-----------------------------|----------------------|
| a) the first sentence | c) the last sentence |
| b) a sentence in the middle | |

13 Write a paragraph for an internal website about how a VPN works. Make sure that you introduce the topic of the paragraph clearly.



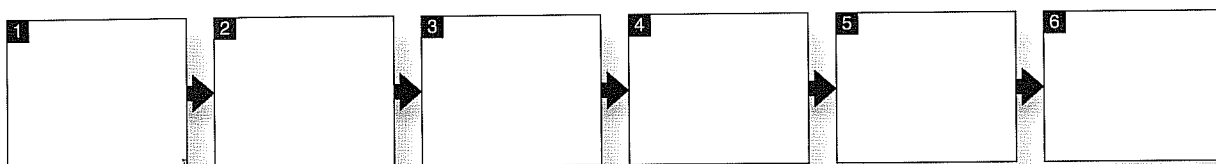
Mobile computing

Speaking

- 1 Work in small groups. What features do you use on a mobile device (e.g. GPS, maps, camera)? What do you use them for?
- 2 Work in pairs. Think about people in these jobs. How might a mobile device be useful to them?
 - 1 a company sales person who visits many client companies
 - 2 a delivery driver for a parcel delivery company
 - 3 a technician who installs entertainment systems in people's homes
- 3 Complete the flowchart with steps a–f in the correct order.
 - a) admin staff print out work instructions
 - b) admin staff send invoice asking for payment
 - c) client signs paperwork
 - d) technician finds client and installs system
 - e) technician picks up instructions
 - f) technician takes paperwork back to office




Entertainment systems installation workflow



- 4 Work in pairs. How do you think the workflow in 3 will change if the technician has a mobile device? Draw a new flowchart and complete the stages.

Listening

- 5  16 Listen to an IT specialist talking to a high-level manager, explaining how their entertainment system installation technicians can use new tablet computers. Check your answers in 3 and 4.

Language

Zero and first conditionals

We use the **zero conditional** to talk about something that usually or always happens as a result of an action or situation.

*If you **drop** a tablet, it **breaks**.*

*If you **use** a tablet, you **can send** documents easily.*

We use the **first conditional** to talk about the result of a future action or situation.

*If we **have** a problem, we'll **send** a message.*

We use a comma between the two clauses when the *if*-clause comes first but not when it comes last.

*If we **buy** tablets, we'll **save** money.
We'll **save** money if we **buy** tablets.*

- 6 The company in 5 is now using the tablets. Complete these zero conditional sentences.
 - 1 With the tablets, if the technician _____ (not know) the way to a job, he or she _____ (use) GPS to find the best way there.
 - 2 If the customer _____ (be) happy with the job, he or she _____ (sign) using the tablet's screen.
 - 3 If a customer _____ (change) their order, the system _____ (update) the details on the tablet.
 - 4 If a technician _____ (need) to order a new part, he or she _____ (send) a message electronically.

Speaking 7 Work in pairs. Look at the flowcharts in 3 and 4. Describe how efficiency and flexibility will improve if the company uses tablets. Then look at audio script 16 on pages 74–75 to check your answers.

8 Work in pairs. How are these mobile device features and functions useful?

calculator	calendar	camera	e-book reader	GPS
long battery life	torch	USB recharger		

If the phone has a GPS, we can use it to find places. If the battery life is long, ...

9 Work in pairs. What is the person in the photo doing? What is her job? How might a mobile device help her in her job?



Vocabulary 10 Read the advertisement and find words in the text that match these definitions.

- 1 change something to make it suit a special purpose _____
- 2 add electronic information to something, e.g. a photo _____
- 3 the position of something _____
- 4 changing written or printed words to data that a computer can understand _____
- 5 give information _____
- 6 a word used to show that something is completely correct and true _____
- 7 stored information, e.g. on a computer _____
- 8 a small part inside smartphones and other devices that measures change of speed, e.g. if someone drops it _____

Your mobile workers can be more productive!

With our fabulous new hand-held devices, your mobile workers can be safer and more productive at the same time! Have no more paperwork that takes up workers' time and that can get lost! Know where your workers are at any time!

We can customise devices for any situation. As an example, let's look at devices that we've customised for traffic wardens:

- The devices have cameras and GPS so the warden can take photographs of illegally parked cars. The device automatically tags the photographs with location and time. Then optical character recognition (OCR) technology can read the car's registration number from the photograph and transmit it wirelessly to a central database. The warden saves time because there is no data entry.
- The devices continuously report the warden's location back to the control centre. So if there is a problem, the control centre knows exactly where the warden is and who to contact.
- Because most of the data is kept electronically, record keeping costs are lower.
- Being a traffic warden can be dangerous. The accelerometer in the device automatically sends a message if it falls, unless the user presses the 'Cancel' button immediately. Then the control centre can call the police.

Speaking 11 Work in small groups. You are technicians in the mobile device company in 10. Suggest how and why you could customise mobile devices for these jobs.

- 1 delivery driver 2 salesperson 3 nurse

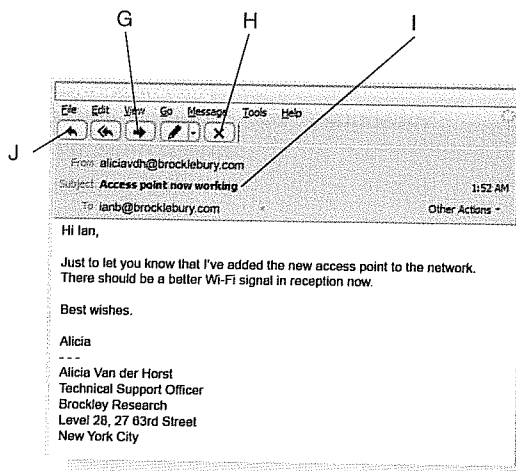
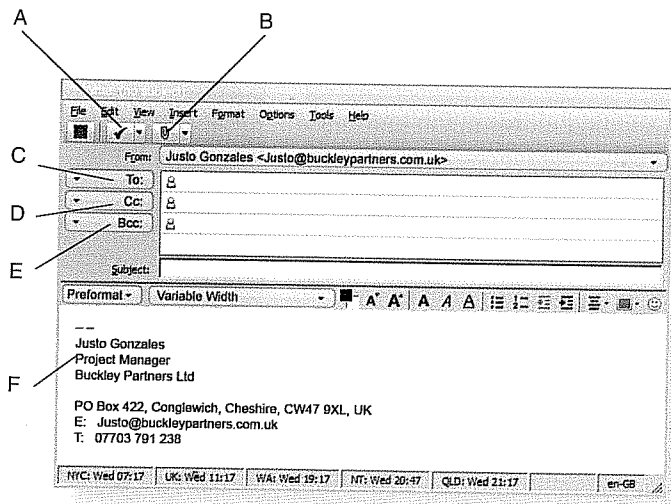
A GPS will be very useful for a delivery driver. If he or she gets lost, it'll help him or her to find his or her customers.

Email

Speaking 1 Work in small groups. How often do you use email? When do you choose email instead of instant messaging, face-to-face or telephone communication? Discuss.

Vocabulary 2 Match these words to A–J in the screenshots of email clients below.

- | | | |
|----------------------------|---------------------------|---------------------|
| 1 subject line ____ | 5 spell checker ____ | 9 copy address ____ |
| 2 recipient's address ____ | 6 forward ____ | 10 delete ____ |
| 3 email signature ____ | 7 blind copy address ____ | |
| 4 attachment button ____ | 8 reply button ____ | |



3 Note down the steps in sending an email. Then compare your notes with a partner's. Are they the same?

Language

Articles

We use **a/an** when we mention an item for the first time.

- We use **the** when the listener already knows which item we're talking about.
- We also use **the** when the item is the only one of its kind.

Please send me **a** message.

Could you send me **an** email to remind me?

Could you forward **the** email that Jack sent?

The internet is down.

4 Complete this intranet post about email guidelines with *a, an* or *the*.

Here are some guidelines for using email at RML Digital:

- Think carefully about what you write – emails can be permanent records. Even if you delete (1) _____ email, (2) _____ recipient could keep their copy. He or she might also forward (3) _____ email to other people.
- Make (4) _____ subject line clear and short.
- If you receive (5) _____ important email, try to send (6) _____ quick 'thanks' message in reply. It only takes a few seconds and it may stop someone worrying that the email didn't get through.
- If you are copying emails to people who don't know each other, use (7) _____ 'Bcc' line so that they can't see each other's email addresses.
- Check attachment size before sending! Some email systems limit attachments to 10 MB or less.
- (8) _____ standard RML Digital signature should be on all emails sent from the company.