



English B2 for Computer Science

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Unit 1 Studying Computer Science

1 In pairs, discuss the following questions.

- How did you decide to pursue a degree in computer science?
- Which areas of your studies do you find most interesting?
- Which courses are you taking this term?
- Which elective courses did you take in your previous year of study?
- What sort of practical work is included in your courses?



Focus on:

- vocabulary related to studies
- discourse markers
- strategies of terminology acquisition: word classes & derivation, collocations
- levels of formality

2 Can you explain the meaning of these words and phrases?

1	enrolment requirements, advancement requirements
2	compulsory courses, elective courses
3	seminars, lectures, tutorials, workshops
4	lecturer, professor, tutor, teaching assistant, assistant professor, associate professor
5	alumni, research fellow, scholar, academic
6	peer review, plagiarism, academic integrity, references
7	paper, assignment, presentation, abstract
8	graduate, diploma candidate, grade point average
9	degree, diploma, thesis, dissertation, grant proposal
10	scholarship, research grant, internship

3 Which words from the table above can you use in combination with these verbs?

<i>meet</i>	<i>pursue</i>	<i>defend</i>	<i>acquire</i>	<i>take</i>	<i>obtain</i>
<i>attend</i>	<i>prepare</i>	<i>give</i>	<i>submit</i>	<i>deliver</i>	<i>consult with</i>

4 Skilful use of discourse markers in conversations will help you achieve a higher level of fluency in English. What are these discourse markers expressing?

<i>apparently</i>	<i>fortunately</i>	<i>theoretically</i>	<i>incidentally</i>
<i>actually</i>	<i>obviously</i>	<i>presumably</i>	<i>clearly</i>
<i>invariably</i>	<i>arguably</i>	<i>admittedly</i>	<i>inversely</i>
<i>alternately</i>	<i>ostensibly</i>	<i>implicitly</i>	<i>presently</i>

5 Complete the phrases with the given words.

you	whole	honestly	honest	way	of
saying	speaking	speak	fact	case	truth

1. Mind ____ you ____
2. To be _____
3. Quite _____
4. To tell you the _____
5. As a matter of _____
6. As I was _____
7. On the _____
8. So to _____
9. Broadly _____
10. In any _____
11. Speaking _____ (which)
12. By the _____

6 Which discourse markers would you use in the following sentences?

- The film has had great reviews, but _____, I didn't like it very much. _____ films, how is your project coming along?
- A: Do you think you'll go back to the same hotel? B: Well, _____ we were a bit disappointed the last time we were there. It wasn't a great place to stay. _____, it didn't cost a lot.
- A: Have you started your art course yet? B: _____, I'm doing the course on digital photography.
- A: What did you think of the meeting? B: Well, _____, I thought it was successful. _____, I thought Sarah was a bit irritating - she didn't keep to the point at all.

Adapted from Word Skills Advanced

7 Which prepositions are missing in these sentences?

- a. _____ **the average**, a class of 31-40 students was most common.
- b. _____ **the ground**, meanwhile, human rights violations worsened.
- c. I had no credentials. However, _____ **luck would have it**, I knew someone who did.
- d. _____ **his credit**, he sought to introduce scientific methods into medical practice.
- e. The recognition of patterns of nature, and the seeking of explanations for them, is what science is all about. _____ **this reason**, we can safely say that astronomy is the oldest science.
- f. _____ **the sake of simplicity** / _____ **the interest of simplicity**, we call the above transformations NR-type transformations.
- g. Every project had to include specifications about the objectives to be reached. _____ **this end**, the students received continuous tutorial support from the teachers
- h. _____ **the look of things**, most of these students are in their thirties and forties.
- i. After validation, the order is accepted for processing. _____ **this stage**, an XML solution becomes especially valuable.
- j. Economic losses from severe weather events have doubled every decade. _____ **this rate**, annual losses will reach \$150 billion within ten years.

Adapted from CoCA

8 In the text below, some nouns are missing. Choose among the following ones to fill the gaps.

systems	languages	computation	range	intelligence
interaction	techniques	engineering	issues	graphics

Computer science is the study of the theoretical foundations of information and computation and of practical _____ for their implementation and application in computer systems. Computer scientists invent algorithmic processes that create, describe, and transform information and formulate suitable abstractions to model complex _____. As a discipline, computer science spans a _____ of topics from purely theoretical studies of algorithms and the limits of computation to the practical _____ of implementing computing systems in hardware and software. The IEEE Computer Society identifies four areas that it considers crucial to the discipline of computer science: theory of computation, algorithms and data structures, programming methodology and _____, and computer elements and architecture. In addition to these four areas, CSAB also identifies fields such as software _____, artificial _____, computer networking and communication, database _____, parallel computation, distributed _____, computer-human _____, computer _____, operating systems, and numerical and symbolic computation as being highly important areas of computer science.

Adapted from Bhuyan, D. (2015): A Complete Guide to Career Planning

9 Which verbs are used in the text in these phrases?

to _____ algorithmic processes
 to _____ abstractions
 to _____ something crucial to
 to _____ something as being important ...
 to _____ a range of topics

10 What is the difference between adjectives and adverbs? Underline them in the text.

11 Derive nouns, adjectives and adverbs from the given verbs.

VERB	NOUN	ADJECTIVE	ADVERB
<i>to theorise</i>			
<i>to apply</i>			
<i>to rely</i>			
<i>to suit</i>			

12 Compare the two sentences and answer the questions.

Version A

In an effort to make a positive impression on another person, the brain can cause people to adopt characteristics of the other person's speech style and even alter their accent to fit that of the person they are talking to.

Version B

If you're trying to get on well with someone, your brain can make you take on aspects of the way they talk and even change your accent to sound like theirs.

Navigate C1, p. 81

1. Is the information in both versions the same? Which version sounds more formal?
2. What differences do you notice?

13 To make a text sound more formal, i.e. to increase the level of formality of a text, use nouns instead of verbs. Here are some verbs which are frequently used in academic discourse. Turn them into nouns and combine them with suitable verbs.

to explore => to conduct, begin, offer an exploration

to investigate =>

to emphasise =>

to argue =>

to analyse =>

to describe =>

to classify =>

to illustrate =>

to assume =>

14 Transform these sentences using nominalisations instead of the underlined words.

- a. He works a lot, so he feels stressed-out. (results in)
- b. People often feel happy when they are fulfilled. (associated with, a sense of)
- c. The number of years people are expected to live has been increasing. (There)
- d. China's huge population continued to expand rapidly during the 1980s. (saw)

15 With the help of a thesaurus or corpus, replace the words in bold print with their synonyms.

During the past 10 years, the **availability** of computers in educational institutions has **increased dramatically** (James, 1999). **Progress** in computer development has been made to the point that **powerful, inexpensive** computers with **large** capacities are available in many classrooms and libraries for student use.

16 Which of these sentences are not suitable for use in (formal) written academic discourse?

- 1** When there is so much terrible poverty in the world, it is incredibly unfair that some people live in idle luxury.
- 2** Tourist guidebooks often focus on the "big sights", and do not give the reader any real insight into the local culture.
- 3** Instead of using cars, it is much, much better to use public transport, such as buses, trains, taxis, aeroplanes, ferries and so on.
- 4** Despite this, the traditional hamburger remains enormously popular, especially with children and teenagers.
- 5** There is considerably more to academic research than simply looking up facts on the internet.
- 6** It is absolutely crazy that the governments of the world cannot find solutions to even the tiniest little problems.
- 7** Regardless of the amount of preparation done beforehand, the unexpected can turn a dream holiday into a nightmare.
- 8** Unemployment is a difficult subject for me to write about, as I have never been unemployed, apart from a few weeks after I left school when I was 18, and as I was living with my parents, I did not need a job.
- 9** Can politicians always be trusted? Or are they often more interested in their own careers? Who can say?
- 10** To dismiss popular music as nothing more than light entertainment is to ignore the role it plays in millions of people's lives.
- 11** My personal opinion is that English is an easier language to learn than German.
- 12** There is no point in having too much violence in films, and anyway, violent films are often boring, too.
- 13** Tourism is a very big industry. In some ways this is good, but in other ways it is bad.
- 14** Being a parent can be stressful, boring and generally extremely difficult, but it can also, of course, be incredibly rewarding.
- 15** In general, therefore, we can conclude that, on the whole, television usually has a positive effect, overall.

Unit 2 Computer essentials

1 How would you define the term 'computer'?
What types of computers can you think of?

2 A first-year student from your faculty is looking to buy a portable computer and he has asked for your advice. Which of the following would you recommend and why? List the advantages and disadvantages of each type.



Focus on:

- vocabulary related to computer architecture;
- main tenses; the passive voice;
- describing structure and functions;
- comparing and giving advice.

	15" PC laptop	13" Macbook Pro	12.3" Chromebook
+			
-			

3 Use these prompts to form questions, then take turns in asking and answering them.

1. when / get / your first computer? What kind of computer / it?
2. what kind of computer(s) / have / now?
3. how much time a day / spend on your computer?
4. ever / build your own computer? What kind / it?
5. ever / create / your own website? How?
6. how / computers / use / in the future?

4 Can you describe the structure of a computer?

What are its main elements and functions?

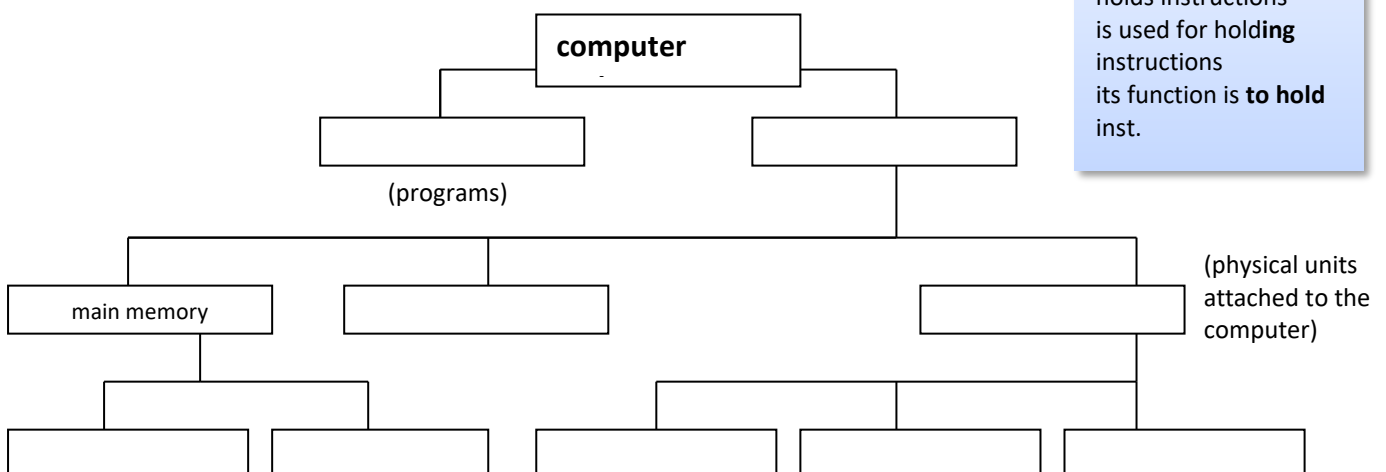
USEFUL LANGUAGE

a. structure

includes
consists of
is composed of
is made up of
can be divided into
can be classified into

b. function

holds instructions
is used for holding
instructions
its function is **to hold**
inst.



5 In the following paragraph, underline all verbs and indicate which of them are used in the passive voice.

The nerve centre of a PC is the processor, which is also called the CPU, or central processing unit. It is built into a single chip which executes program instructions and coordinates the activities that take place within the computer system. The chip itself is a small piece of silicon with a complex electrical circuit, which is called an integrated circuit.

6 Fill the gaps in the text with active or passive forms of the verbs.

<i>measure</i>	<i>perform</i>	<i>keep</i>	<i>expand</i>	<i>lose</i>
<i>execute</i>	<i>consist</i>	<i>send</i>	<i>pass</i>	<i>call</i>

The processor _____ of three main parts:

- The **control unit** examines the instructions in the user's program, interprets each instruction and causes the circuits and the rest of the components - monitor, disk drives, etc. - to execute the functions specified.
- The **arithmetic logic unit (ALU)** _____ mathematical calculations (+, -, etc.) and logical operations (AND, OR, NOT).
- The **registers** are high-speed units of memory used to store and control data. One of the registers (the program counter, or PC) _____ track of the next instruction to be performed in the main memory. The other (the instruction register, or IR) holds the instruction that _____.

The power and performance of a computer is partly determined by the speed of its processor. A **system clock** _____ out signals at fixed intervals to measure and synchronize the flow of data. **Clock speed** _____ in **gigahertz (GHz)**. For example, a CPU running at 4GHz (four thousand million hertz, or cycles, per second) will enable your PC to handle the most demanding applications.

RAM and ROM

The programs and data which pass through the processor must be loaded into the main memory in order to be processed. Therefore, when the user runs a program, the CPU looks for it on the hard disk and transfers a copy into the **RAM** chips. **RAM (random access memory)** is volatile - that is, its information _____ when the computer is turned off. However, **ROM (read only memory)** is non-volatile, containing instructions and routines for the basic operations of the CPU. The **BIOS (basic input/output system)** uses ROM to control communication with peripherals. RAM capacity can _____ by adding extra chips, usually contained in small circuit boards called dual in-line memory modules (**DIMMs**).

Buses and cards

The main **circuit board** inside your system _____ the **motherboard** and contains the processor, the **memory chips, expansions slots**, and controllers for peripherals, connected by **buses** - electrical channels which allow devices inside the computer to communicate with each other. For example, the **front side bus** carries all data that _____ from the CPU to other devices. The size of a bus, called **bus width**, determines how much data can be transmitted. It can be compared to the number of lanes on a motorway - the larger the width, the more data can travel along the bus. For example, a 64-bit bus can transmit 64 bits of data.

Expansion slots allow users to install **expansion cards**, adding features like sound, memory and network capabilities.

Adapted from: Esteras, R. (2008). *Infotech English for Computer Users. 4th Edition*

7 Answer the questions about the text above.

1. What do these abbreviations stand for?

- | | |
|-------|--------|
| - CPU | - ROM |
| - ALU | - BIOS |
| - RAM | - DIMM |

2. What is the function of registers?

3. What is the function of the system clock?

4. Which type of computer memory is permanent?

5. What is a bus?

8 Make collocations related to hardware by combining the words from the two boxes.

<i>memory</i>	<i>north</i>	<i>port</i>	<i>slots</i>
<i>parallel</i>	<i>serial</i>	<i>jack</i>	<i>cord</i>
<i>USB</i>	<i>SATA</i>	<i>connectors</i>	<i>bridge</i>
<i>microphone</i>	<i>expansion</i>	<i>stick</i>	<i>pad</i>
<i>power</i>	<i>audio</i>		

9 Which verbs can you use with the collocations from Task 8?

10 Fill the table with sample sentences for each category, then transform them into the active or passive form.

Tense	Active	Passive
Present Simple		
Present Continuous		
Past Simple		
Past Continuous		
Present Perfect		
Past Perfect		
Will - Future		

- A 5-digit Authorization Code will be sent to your inbox.
- These machines haven't been serviced for a year.
- They were cleaning the computers all day yesterday.
- These cartridges were ordered online.
- Airlines are connected to travel agencies by computer.
- I'm downloading the update right now.
- Before the war, they had removed computers containing military personnel records from the Defense Ministry.

11 Transform these sentences into the passive voice.

- You can download new updates from the Internet.
- In order to install this plug-in you must disable the antivirus.
- You should unplug the power cord before installation.
- How often do they update these computers with the latest operating systems?
- I have disabled the firewall.
- When did you last connect this computer to a network?

12 Fill the gaps with suitable verbs in the correct form.

boot / require / come / locate / arrange / make / pre-install / free / pass / load

BIOS is an integral part of your computer and _____ with it when you bring it home. (In contrast, the operating system can either _____ by the manufacturer or vendor or installed by the user.) BIOS is a program that _____ accessible to the microprocessor on an erasable programmable read-only memory (EPROM) chip. When you turn on your computer, the microprocessor _____ control to the BIOS program, which _____ at the same place on EPROM.

When BIOS _____ up (starts up) your computer, it first determines whether all of the attachments are in place and operational and then it _____ the operating system (or key parts of it) into your computer's random access memory (RAM) from your hard disk or diskette drive.

With BIOS, your operating system and its applications _____ from having to understand exact details (such as hardware addresses) about the attached input/output devices. When device details change, only the BIOS program needs to be changed.

Although BIOS is theoretically always the intermediary between the microprocessor and I/O device control information and data flow, in some cases, BIOS can _____ for data to flow directly to memory from devices (such as video cards) that _____ faster data flow to be effective.

Margaret Rouse, *TechTarget*, August 2014

WRITING ABSTRACTS

13 Fill the blanks in the following abstracts with the correct form of the given verb or a suitable suffix.

A survey on design and implementation of protected searchable data in the cloud

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Computer Science Review, Volume 26, November 2017

Abstract

While cloud computing _____ (EXPLODE) in popularity in recent years thanks to the potential efficiency and cost savings of outsourcing the storage and management of data and applications, a number of **vulnerab** _____ that led to multiple attacks _____ (DETER) many potential users. As a result, experts in the field argue that new mechanisms _____ (NEED) in order to create trusted and secure cloud services. Such mechanisms would eradicate the suspicion of users towards cloud computing by _____ (PROVIDE) the necessary security guarantees. Searchable Encryption is among the most promising solutions—one that _____ (HAVE) the potential to help offer truly secure and privacy-preserving cloud services. We start this paper by surveying the most important **search** _____ encryption schemes and their **relevan** _____ to cloud computing. In light of this analysis, we demonstrate the **inefficien** _____ of the existing schemes and expand our analysis by discussing certain **confidential** _____ and privacy issues. Further, we examine how to integrate such a scheme with a popular cloud platform. Finally, we have chosen – based on the findings of our analysis – an existing scheme and implemented it to review its practical **matur** _____ for **deploy** _____ in real systems. The survey of the field, together with the analysis and with the extensive **experiment** _____ results provides a **comprehen** _____ review of the theoretical and practical aspects of searchable encryption.

Keywords: Searchable encryption; Security; Cloud computing; Cloud storage

Near infrared face recognition: A literature surveySajadFarokhi^{a,b} JanFlusser^a UsmanUllah Sheikh^c

Computer Science Review, Volume 21, August 2016

Abstract

As a primary modality in biometrics, human face recognition _____ (EMPLOY) widely in the computer vision domain because of its performance in a wide range of applications such as **surveill** _____ systems and forensics. Recently, near infrared (NIR) imagery _____ (USE) in many face recognition systems because of the high **robust** _____ to illumination changes in the acquired images. Even though some surveys _____ (CONDUCT) in this infrared domain, they _____ (FOCUS) on thermal infrared methods rather than NIR methods. Furthermore, none of the previous infrared surveys _____ (PROVIDE) comprehensive and critical analyses of NIR methods. Therefore, this paper _____ (PRESENT) an up-to-date survey of the well-known NIR methods that _____ (USE) to solve the problem of illumination. The paper _____ (INCLUDE) a discussion of the benefits and drawbacks of various NIR methods. Finally, the most promising avenues for future research _____ (HIGHLIGHT).

Keywords: Literature survey, Biometrics, Face recognition, Near infrared, Illumination invariant

14 In the second abstract, underline the phrases which are used to present the contents and structure of the paper.

15 Change these phrases in the first abstract to make them more impersonal.

PASSIVE VOICE IN BUSINESS CORRESPONDENCE

16 Use the passive voice to make this business letter more impersonal.

Dear Ms Binks,

(1) **Our Order Department has forwarded** your email of 2 April to me. I was sorry to learn of the problems you experienced with our recent service and that (2) **we damaged** the goods in your last order during transportation. I understand that the damage was caused because (3) **we had not packed** the goods securely. (4) **I have investigated** the matter and (5) **we are reviewing** our packing procedures.

I hope you will accept my apology for the way (6) **our Order Department treated you**. I do accept that (7) **Ms Smith did not handle** the matter properly. As a gesture of goodwill (8) **I am crediting** the sum of \$300 to your account. I apologise for any inconvenience (9) **this company has caused you**.

Yours sincerely,
Ivan Hough
Customer Relations Manager

Unit 3 Computer advertisements and reviews

1 In pairs, discuss the following questions.

- Where do you buy computer hardware/digital devices?
- Do you often read IT product reviews?
- Which sources/reviewers do you trust most and why?
- Have you ever written a review yourself?



Focus on:

- language of reviews and advertising: phraseology
- language of contrast and comparison

2 Read this computer advertisement and match the paragraphs with their headings (there is one too many). Then, translate the phrases in bold.



Forget your password?

Powerfully immersive sound in every mode

Think it, ink it

Stylish & tough

Life's better in 4K

A price worth a shout

Seize the day with the power of AI

Tactile luxury

Introducing Intel® Evo™ platform

A mode for every mood

Ever sleeker

1. Our Yoga 900 line advances 2 in 1 technology with the world's first rotating sound bar, expertly crafted to **deliver truly immersive sound**. Thanks to the 3D-surround audio of Dolby Atmos®, Yoga **elevates your entertainment to new heights**.
2. Yogas are engineered to think smart so you can focus on what matters. Passwords: Optional. Use your face or fingerprint to securely sign into your Windows PC with Windows Hello (facial recognition IR cameras available on select models.)
3. Crafted from aerospace-grade metal, Yoga 2 in 1 laptops offer smooth, stable 360° rotation as you transition from tablet to laptop mode and back.
4. Our designers and engineers strive for ever thinner and lighter designs, with precise attention to detail that **ensures not a single millimeter is wasted**. With models starting under 3lbs/1.36kg, Yoga laptops are designed to go anywhere.
5. As Yoga continues **to drive ultraslim design toward ever sleeker profiles**, precious aluminum alloy plays an essential role. Thanks to its lightness and durability, metal provides the perfect foundation for a **premium build**. Achieved with precision-stamped, all-aluminum construction, Yogas offer both design and substance.
6. Yoga laptops are as stylish as you are, offering unique finishes including **sleek** metal, leather, and fabric for a **more tactile experience**.

7. Exceptional experience, anywhere. The perfect combination of responsiveness, battery life, and stunning visuals, Yoga laptops **set the bar for** advanced mobile performance. They're also equipped with a range of smart features that **will streamline your day**.
8. Do more for longer, with AI-powered Intel® processors and an optimized battery that dynamically reacts to your needs to extend power by up to 20%. You'll never **feel anchored to an outlet**. And when you do **need a boost**, 15 minutes plugged in will buy you an extra few hours of battery life.
9. See every detail in more accurate colors than ever before, with up to 4K resolution on a VESA400 HDR display optimized with microborders and the brilliance of Dolby Vision™. With up to 500 Nits of brightness on select models, Yoga laptop and desktops **offer enhanced viewing** in any environment.
10. Yoga 2 in 1 laptops combine world-class craftsmanship with thoughtful design that **puts your experience first**. Innovative features are built directly into the chassis, including the Yoga C940's garaged digital pen that charges in its compartment **for handy access**. You'll never lose your pen—or an idea—again.

Adapted from <https://www.lenovo.com/us/en/yoga>

- 3 Browse the web to find available models and their prices. Which one would you be interested in? What are its specifications?
- 4 Now read the advertisement below and provide the missing words.

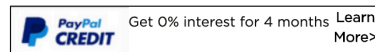


ASUS ZenBook Flip 13 UX362FA-EL142T 13.3" Full HD Touchscreen Convertible Laptop (Intel Core i5-8265U Processor, 8GB RAM, 256GB SSD, Windows 10)

In stock

- Intel Core i5 (8th Gen) 8265U 1.6GHz Max Turbo 3.9GHz Quad-Core Processor
- 8GB RAM, 256GB SSD
- 13.3" Touchscreen Full HD Display (1920 x 1080) Resolution
- Integrated Intel UHD Graphics 620
- Windows 10 Home

£899.99



Qty:

1

+

-

ADD TO CART

<https://uk.store.asus.com/laptops/zenbook-series/asus-zenbook-flip-13-ux362fa-el142t-13-3-full-hd-touchscreen-convertible-laptop-intel-core-i5-8265u-processor-8gb-ram-256gb-ssd-windows-10.html>

360° of creative power

Combining versatility with the ultimate mobility, ZenBook Flip 13 _____ a new frameless NanoEdge design that _____ it almost 10% smaller than its predecessor. Its 13-inch display _____ ultra-narrow bezels on all four sides, giving a 90% screen-to-body _____ that allows a much more compact chassis design. With its 360°-flippable ErgoLift hinge, the latest Intel® Core™ processors, active-stylus support and innovative NumberPad dual-function touchpad, ZenBook Flip 13 is _____ (=multi-purpose), powerful and supremely portable.

Unique 360° ErgoLift hinge

The 360° ErgoLift hinge on ZenBook Flip 13 has a silky-smooth, stepless action that holds the display

8 Visit a website offering computer reviews in English and read a review. Which phrases are used to emphasise positive and negative characteristics of the products reviewed?

	Product:
+	
-	

LANGUAGE OF COMPUTER REVIEWS

9 Which verbs would you use in the following sentences and phrases?

- It _____ solid, if not spectacular, performance and reasonable battery life
- A well-priced family laptop that _____ strong performance
- doesn't _____ many sacrifices when it _____ to performance
- the discrete Nvidia GPU doesn't _____ graphics performance as much as we'd expect
- this system can certainly _____ demanding tasks, but it can't _____ desktop workstation performance.
- And although it didn't _____ any performance records, its battery life was excellent.
- it may be light on features, but it doesn't _____ in the performance department.
- but we found the ProBook _____ in terms of performance
- it _____ a bit short on battery life and price to be a must-have product
- battery life _____ behind other slim laptops
- battery life is key, but this _____ short of our expectations
- An ambient light sensor helps _____ battery life by _____ the screen where appropriate.

struggle
boost
come
break
dim
make
match
deliver
handle
skimp
fall
conserve
offer

10 Which adjectives are often used with the given nouns?

POSITIVE	NEGATIVE	
		<i>performance</i>
		<i>design</i>
		<i>build quality</i>
		<i>price</i>

11 Use the corpus of laptop reviews and find other compound adjectives for the nouns in the right-hand column.

COMPOUND ADJECTIVE	NOUN
top-of-the-line	<i>model</i>
entry-level	<i>Laptop</i>
island-style	<i>keys</i>
red-backlit	<i>keyboard</i>
glass-covered	<i>screen</i>
super-slim	<i>chassis</i>
screen-to-bezel	<i>ratio</i>

12 Can you explain the phrases in bold print?

- ~ There are also gaps where pieces of the chassis come together, a **far cry from** the unibody designs
- ~ it certainly **won't win any beauty contests**, but it performs well and **doesn't cost the earth**.
- ~ The bootup time was fine, about 20 seconds, but the resume from sleep was **a mixed bag**.
- ~ That said, **I would not have thumbed my nose at** a 1,920x1,080-pixel option, especially as the screen is clear and bright, and has excellent off-axis viewing angles.
- ~ The benefit of 500GB of storage space **is not to be sniffed at**
- ~ the graphic benchmarks **left a lot to be desired**.
- ~ the keyboard **leaves us a little cold**
- ~ the XPS 13 certainly **turns heads**.
- ~ it's still more than capable of serving most people's needs, while **offering head-turning style** that few competitors can offer.
- ~ We readily admit that it's **jaw-droppingly attractive**.
- ~ having the option for a wired internet connection and the use of an external monitor **is music to our ears**.
- ~ it has only **one foot in** the netbook camp.
- ~ Graphically demanding newer games **are** definitely **a no-no**, though.
- ~ it **doesn't do quite enough to justify its steep price tag**.
- ~ it offers **excellent value for money**

- ~ at this price it's **an absolute steal**.
- ~ is a great choice that won't **break the bank**.
- ~ An upscale 13-inch laptop **to give** even the MacBook Air **a run for its money**,
- ~ there's little to make this computer really **stand out from the** Ultrabook **crowd**.
- ~ But it **won't win over fans** looking for performance and portability
- ~ It **won't win points for** elegance... / **won't win any awards/prizes for** its looks
- ~ You'll **have to make do with** the standard VGA Out connection
- ~ While 3D will appeal to some, others **might not be converted yet**
- ~ The only drawback is it's a little **on the small side**.
- ~ It's a problem, but **not a deal-breaker**.
- ~ OLED technology gives the display **ample punch and pop**
- ~ It looks super-modern **without being too cool for school**
- ~ That should be **enough oomph** to boot the OS from cold **in no time at all...**
- ~ It's **up there with the biggest and baddest** systems
- ~ When it comes to battery life, Acer's TravelMate 8481T **is the laptop to beat**.
- ~ stick to tapping the surface for mouse clicks. It's a little **hit and miss**, but might save your blood pressure.
- ~ The portability of this laptop is **beyond question**.
- ~ The B&O audio is **nothing short of astounding**
- ~ is **nothing to write home about**
- ~ And the tray-loading optical drive **does nothing for thickness and weight**

HEDGING

appears to be / seems to be / tends to be / feels / might be / may be / can be
 isn't exactly a beauty / isn't as crisp as it could be / isn't the thinnest on the market / isn't entirely
 silent
 sometimes / often / in places / at times
 perhaps
 somewhat / a bit / rather / a little too / quite

13 How would you make these statements more tentative?

The shiny silver plastic hinges look cheap.

The screen rotation is slow.

The chassis is plasticky.

The 250GB hard drive is too small.

Typing is constricted and there is a lot of flex around the edges of the chassis.

The sparse collection of ports is a letdown: there's room for more.

Its silvery edges are cheap-looking.

- 14 Work in pairs. Ask each other questions about your personal computer and fill in the table.

Processor type	
Processor speed	
Memory capacity	
Memory type	
Screen size	
Hard disk capacity	
Operating system	
Graphics	

- 15 Write a short paragraph describing your classmate's computer using the phrases you have learnt in this unit.

Unit 4 Academic Writing

Skim through an academic article and answer the following questions:

1. What are the main sections of the article?
2. What is the purpose of the abstract?
3. Order the following parts of the abstract as they appear in the paper and write out the phrases used in each one:
 ___ RESULTS
 ___ METHODS
 ___ CONCLUSION
 ___ PURPOSE
4. Which of the following is not given in the Introduction?
 - General information about the topic of the paper
 - Why this topic is important
 - Previous research
5. What information is included in the conclusion?



Focus on:

- reading academic/scientific articles
- writing academic papers
- article and abstract structure
- paraphrasing and citing sources

- The aim of the study
- Discussion of its results

6. What is the meaning of the following abbreviations?

i.e.
e.g.
et al.

cf.
n.d.
fig.

pp.
ibid.

7. Here are some phrases serving different functions in academic texts. Can you provide the missing words?

Indicating the focus, aim, argument of a paper

The central theme _____ of this paper is that

The aim _____ of the paper is to provide a conceptual theoretical framework based on....

The purpose of this paper is to review recent _____ research into the

This paper investigates _____ the usefulness of ...

Research questions or hypotheses

This research seeks to answer _____ the following questions:

The hypothesis that will be tested _____ is that

The key _____ research question of this study was whether or not

Synopsis of the research design, method, source(s) of data

Data for this study were c_____ using ...

This work takes the form of a c_____ -study of the ...

Both qualitative and quantitative m_____ were used in this investigation.

The research data in this thesis is drawn from four main s_____:

Previewing sections of text

The p_____ of this chapter is to review the literature on X. It begins by

This chapter is divided into four main s_____, each of which presents the results relating to one of the research q_____.

Introducing a new topic or aspect of a topic

With r_____ to X,

As far as X is co_____,

In t_____ of X,

In the c_____ of X

Reintroducing a topic

As has been p_____ out in the introduction to this paper,

As explained earlier,

As dis_____ above,

Referring to literature

In recent years, there has been an i_____ amount of literature on ...

A large and growing b_____ of literature has investigated ...

Recent evidence s_____ that (Smith, 1996; Jones 1999; Johnson, 2001)

Ac_____ to Smith (2002), ...

Many scholars h_____ the view that ...

Smith (2013) q_____ whether mainstream schools are the best environment for...

Smith (2013) d_____ the challenges and strategies for facilitating and promoting ...

Rao (2013) h_____ the need to break the link between economic growth and...

In c_____ to Smith, Jones (2013) argues that ...

A broader perspective has been a_____ by Smith (213) who argues that ...

Reporting results

There was a significant positive c_____ between ...

From the chart, it can be s_____ that by far the greatest demand is for ...

The results, as shown in Table 1, i_____ that ...

Together these results provide important i_____ into ...

These results provide further support for the h_____ that ...

Adapted from Morley, J. (2014): *Academic Phrasebank*. The University of Manchester

8. How are the findings of other authors referenced in the paper?

9. What is the purpose of making references/citing sources?

10. Which of the following would be considered as plagiarism?

- a) Not providing a reference when you have used somebody's idea or claim.
- b) Copying a few sentences from an article on the internet without giving a reference.
- c) Not giving a reference when you use commonly accepted ideas, e.g. Cybercrime is a growing problem.
- d) Giving the reference but not using quotation marks when you take a sentence from another writer's article.
- e) Taking a paragraph from a classmate's essay without giving a reference.
- f) Presenting the results of your own research.

To avoid plagiarism, and also to save having lengthy quotations in your work, it is necessary to **paraphrase and summarise** the original. Instead of this, students sometimes hope that changing a few words of the original will avoid charges of plagiarism. Clearly, you are not expected to alter every word of the original text, but your summary **must be substantially different** from the original (at least 90%).

Bailey, S. (2006): Academic Writing. A Handbook for International Students. Second Ed. London, Routledge

PARAPHRASING STRATEGIES

- using **synonyms** (thesaurus; COCA Corpus: [=word])
- changing **negative to positive** (sales rose slowly > sales did not rise quickly)
- a **replacement subject** (it was increasing > there was an increase in...)
- changing **active to passive / passive to active**
- changing the **order** of information

Examples

It is important that you understand the work you are using in your writing.

- a. *It is crucial that you completely understand the works you use in your paper [Gratz 2006].
- b. You must have a clear understanding of the reference papers that you quote from in your own manuscript [Gratz 2006].
- c. If you cite any works by other authors in your own paper, it is vital that you really understand the full meaning of what the other authors have written [Gratz 2006].
- d. Researchers should ensure that they fully grasp the meaning of any of the literature that they cite in their papers [Gratz 2006].

(Wallwork, A. (2011): English for Writing Research Papers)

11. Paraphrase these sentences:

- a. Most websites use interactive online forms as the main contact point between users and the company.
- b. The design of these forms can be a crucial factor for the success of online transactions.
- c. Since their introduction over 40 years ago, digital entertainment games have become one of the most popular leisure activities globally.
- d. Virtual environments provide a model of the world that can simulate real spaces or represent new, previously unexplored worlds.
- e. Effective navigation within these virtual worlds is a key to user satisfaction and goal achievement.

CITATION TYPES

Direct citations

- Park et al. **claim** that their study "provides more detailed results since it investigated a total of twenty-five regions" (2010).

Indirect citations

- Hunter (2005) **states that** ... (date of publication in brackets when **referring verb** is used)
- Rathbone (1997) **demonstrates** the limitations of video-conferencing.
- The users tend to use only the hand when they use a mobile device. (Karlson et al., 2006)

Use referring verbs to introduce a direct quotation or to summarise other people's ideas

argue	claim	consider	hypothesise	suggest	believe	think	state
show							

(Bailey, S. (2006): Academic Writing)

In her latest article Morton **explains** how information technology is changing society.

Morton **provides an explanation** as to how information technology is changing society.

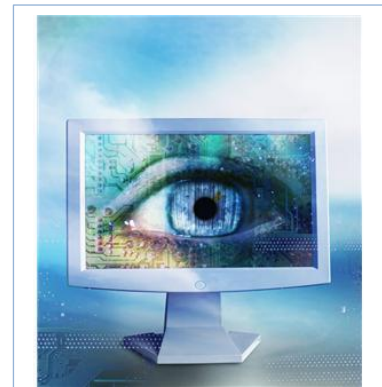
12. Rewrite the following sentences using referring verbs.

1. Homology is "functionally equivalent to identity" /Hamad, 1990/
2. "This method is not worthy of consideration." /Davies, 2008/
3. The touch key location significantly affects performance measures. /recent studies/
4. "Frequently used touch keys should be located in the center area of a touch screen." /Park et al., 2009/

Unit 5 Operating Systems

1. In pairs, discuss the following questions:

- What is an operating system? What is its function?
- What is your experience with the most popular desktop, tablet and mobile operating systems today?
- What qualities do different users look for in operating systems?
- What is the advantage of running multiple operating systems on a single device?



Focus on:

- discussion skills
- definite/indefinite articles
- gerund, infinitive
- OS-related collocations

2. Read the text and insert the missing words, then answer the questions below the text.

processing	interface	applications	supervisor	storage
resident	hardware	operations	package	function

When a brand new computer comes off the factory assembly line, it can do nothing. The hardware needs software to make it work. Are we talking about _____ software such as word _____ or spreadsheet software? Partly. But an applications software _____ does not communicate directly with the hardware. As shown in Figure 1, between the applications software and the hardware is a software _____ - an operating system. An operating system is a set of programs that lies between applications software and the computer _____. The most important program in the operating system, the program that manages the operating system, is the _____ program, most of which remains in memory and is thus referred to as _____. The supervisor controls the entire operating system and loads into memory other operating system programs (called non-resident) from disk _____ only as needed.

An operating system has three main functions: (1) manage the computer's resources, such as the central processing unit, memory, disk drives, and printers, (2) establish a user interface, and (3) execute and provide services for applications software. Keep in mind, however, that much of the work of an operating system is hidden from the user; many necessary tasks are performed behind the scenes. In particular, the first listed _____, managing the computer's resources, is taken care of without the user being aware of the details. Furthermore, all input and output _____, although invoked by an applications program, are actually carried out by the operating system.

- What is the difference between applications software and operating systems?
- Why is the supervisor program the most important operating system program?
- What is the difference between resident and non-resident programs?
- What are the main functions of an operating system?

(Glendinning, McEwan (2006): *Oxford English for Information Technology*)

3. Compare two OS user interfaces. What are their similarities and differences? Which features do you prefer from each interface?

4. Match the halves of the phrases and sentences in the table. Which OS does the table refer to?

1	to resize		your mouse at the Show desktop button without clicking it
2	to point		your search results by date and file type
3	to pin		open windows by dragging them to the edges of your screen
4	to expand		past all your open windows straight to the Windows 7 desktop
5	to reveal		the contents of a file
6	to peer		a favourite program to your taskbar
7	to narrow down		commands
8	to run		all your hidden icons and gadgets.
9	to execute		a window to full screen size
10	to preview		a different program

GERUND or INFINITIVE

VERB + GERUND

begin/start, stop/finish, like, enjoy, miss, remember/recount/recall, report, consider, imagine, risk, propose, bother, admit, need, avoid + DOING

VERB (+ OBJECT) + PREPOSITION + GERUND

succeed in, specialize in, involve in, engage in + ING

focus/concentrate on, plan on, count on, depend on, insist on + ING

begin/start by, cause by, respond by + ING

aim at, direct at, hint at, fail at, to be accomplished at + ING

admit to, to be accustomed to, to be committed/devoted to, restrict ... to, limit to + ING

describe as, quote as, dismiss as + ING

VERB + INFINITIVE

to be forced, trained, required, expected, prepared, programmed... + TO DO

suppose, want, need, fail, intend, seem, learn, ... + TO DO

VERB + GERUND/INFINITIVE – difference in meaning

remember doing / remember to do

5. Use the verbs in brackets in infinitive or gerund form (DOING / TO DO).

Example: If you use an upgrade version of Windows 7, don't use a program from another software

manufacturer **to format** your hard disk **before installing** Windows 7.

1. A theme includes a desktop background, a screen saver, a window border colour, sounds, and sometimes icons and mouse pointers. Use the whole theme or create your own customized theme by _____ **(change)** the pictures, colours, and sounds individually.
2. You can make the text and other items, such as icons, on your screen easier to see by _____ **(make)** them larger. You can do this without _____ **(change)** the screen resolution of your monitor or laptop screen. This allows you _____ **(increase)** or decrease the size of text and other items on your screen while _____ **(keep)** your monitor or laptop set to its optimal resolution.
3. Desktop gadgets are customizable mini-programs that can display information, such as continuously updated headlines or a picture slide show, without _____ **(have)** to open a new window.
4. Windows Easy Transfer is a step-by-step guide for _____ **(transfer)** files and settings from one computer running Windows to another. It helps you choose what _____ **(move)** to your new computer, such as user accounts, Internet favourites, and e-mail. It also lets you decide which method _____ **(use)** and then performs the transfer.
5. Use Windows Defender _____ **(help)** prevent spyware and other potentially unwanted software from _____ **(install)** on your computer without your knowledge.
6. It's important _____ **(back)** up your files and settings regularly so that if you get a virus or have any kind of hardware failure, you can recover your files.

[\(http://windows.microsoft.com/en-US/windows7/products/features/\)](http://windows.microsoft.com/en-US/windows7/products/features/)

The woes of Windows 10

Why so many PC users refuse to upgrade to Microsoft's latest operating system

The Economist

Science and technology

Jan 31st 2017

DESPITE its **being / having been** available for 18 months, three out of four PC owners have not bothered **to upgrade / upgrading** their computers to the latest version of Microsoft's operating system, Windows 10. More than 700m of the world's 1.5bn or so computers continue **to run / running** on Windows 7, a piece of software three generations old. A further 300m users have stuck with other versions—half of them stubbornly clinging to 16-year-old Windows XP that Microsoft pensioned off three years ago. In a recent study by Softchoice, an info-tech consultancy, corporate computers were found **to run / to be running** a wide range of legacy versions of Windows. Fewer than 1% of them had been upgraded to Windows 10.

That said, some 400m or so copies of Windows 10 are now thought **to be / to being** in circulation. Normally, such a market penetration, after only 18 months, would be considered a huge success. It is what Windows 7 achieved during its first 18 months. Though XP started slowly in 2001, it went on **to become / to becoming** Microsoft's most successful operating system of all time, with over a billion copies eventually in use around the world.

Can Windows 10 do the same? Only if those Windows 7 holdouts have a change of heart. Come January 2020, when Microsoft ends support for Windows 7—and thus offers no more bug fixes and security patches—a lot of users will inevitably make the leap. But Microsoft cannot afford **to wait / of waiting** that long. It recently admitted it is unlikely **to meet / meeting** its goal of **to have / having** Windows 10 on a billion computers by 2018.

Things were dandy during the first 12 months following Windows 10's carefully orchestrated launch in July 2015, when upgrades were free for existing users of Windows 7 or 8.1. But once the free downloads ceased, in July 2016, the uptake of Windows 10 has depended almost exclusively on people **buying / to buy** new laptops, desktops and tablets that came with the latest operating system already installed.

Windows 10's share has inched up several percentage points since the free upgrade ended, while Windows 7's has remained rock steady and still nearly twice as big. The task Microsoft faces is how to persuade all those Windows 7 fans **to dump / for dumping** their friendly old operating system for what is widely perceived **to be / of being** an overly complex program with a fairly steep learning curve.

There is no question that Windows 10 is an impressive piece of software, and quite the most secure operating system ever devised. But it is still very much a work in progress—even the program's troubleshooter needs a troubleshooter. In its current form, Windows 10 demands serious expertise when it comes **to knock / to knocking it into shape** so ordinary users can work the way they prefer. It is also guilty of **trample / trampling** far too much on people's privacy, **by keep / keeping tabs of all their comings and goings**. A number of Windows 7 holdouts who have the choice could jump ship to the user-friendliness of a Macintosh or Chromebook—and no one would blame them **to do / for doing** so.

For Microsoft, the obvious answer is **to focus / focusing** primarily **to get / on getting** enterprises **to upgrade / upgrading**. Rather than offer incentives, the company has resorted **to spread / to spreading** FUD (fear, uncertainty and doubt) among its corporate customers—as IBM did back in the 1970s whenever customers threatened **to desert / deserting** Big Blue for rival suppliers. Since the start of the year, Microsoft's corporate users have been warned that, even with security updates, Windows 7 simply does not have the architecture **to cope / of coping** with today's threats. The remedial work needed **to recover / to recovering** from malware attacks can only drive up operating costs.

Windows 7 users will soon lose access to a stand-alone toolkit for mitigating zero-day exploits. The company's justification **for cutting / to cut** them off is that the toolkit's security features are now an integral part of Windows 10. The implications are clear: corporate users who want the extra protection had better start **to plan / planning** their upgrade path to Windows 10. A word of warning, though: such upgrades do not necessarily go without a hitch. A Windows 10 tablet your correspondent relied upon for much of his mobile computing was broken irreparably when a recent update corrupted the display driver, rendering the touchscreen useless. With no way **to navigate / for navigating** around the operating system and download a replacement driver, let alone roll the system back to a previous restore point or even reset the device to its original factory settings, the little Hewlett-Packard tablet was reduced **to be / to being** an expensive paperweight. Despite their idiosyncrasies, Macintosh and Linux have never looked so attractive.

6. There are some idiomatic expressions used in the article (underlined). Can you explain what they mean?

7. Decide if the following nouns are countable or uncountable.

computing entertainment interface technology security spyware information email

DEFINITE AND INDEFINITE ARTICLE

- Countable nouns must have a determiner (**a, the, my, this**, etc.) in the singular, although this is not necessary in the plural.

*I deleted **the file** yesterday.*

*I lost **more than 300 files** when my computer crashed.*

- The definite article **the** means *you know which one/ones I mean*.

***An icon** is a small graphic.*

***The icons** on the toolbar are used to ...*

- We don't use **a/an** with uncountable nouns.

Not: a robotics

- We don't use **the** in generalizations with uncountable nouns or plural countable nouns.

*I like **music**.*

Not: I like the music.

***Computer programs** are expensive. **Not: The computer programs** are expensive.*

(Esteras, R. (2008): *Infotech English for Computer Users. 4th Edition*. CUP)

8. Complete the text with a , an or – if no article is necessary.

Like so much else at _____ Sun, **Solaris** now belongs to _____ Oracle, and this is _____ first major release of its operating system since the acquisition, and since _____ official closure of **OpenSolaris**. Oracle is trying to position this release of **Solaris** as _____ cloud operating system. But it's still _____ operating system full of _____ free software, including _____ Gnome desktop and _____ native implementation of _____ ZFS file system, which puts it into _____ same category as BSD for _____ Linux users – an interesting side project that could give Linux some great ideas.

Thanks to _____ cloud focus, you can grab _____ OS as _____ traditional text-based installer, _____ live CD for testing _____ desktop environment, but also as _____ virtual machine image for _____ use with VirtualBox (_____ project also owned by Oracle). We tried both _____ installer and _____ virtual image, and while it's not as easy as _____ Ubuntu to get running, it's nowhere near as difficult as Arch either.

(Adapted from Morrison, G. "Oracle Solaris 11", Linux Format Magazine, UK Edition, January 2012)

Unit 6 History of the Internet

1. In pairs, exchange your thoughts on these quotes.

“The Internet is the most important single development in the history of human communication since the invention of call waiting.” Dave Barry

“There are three kinds of death in this world. There's heart death, there's brain death, and there's being off the network.” Guy Almes

“Internet is so big, so powerful and pointless that for some people it is a complete substitute for life” Andrew Brown



Focus on:

- discussion skills
- reported speech
- prepositions
- reading and listening comprehension

<http://www.bbc.co.uk/programmes/p006b7cy>

2. Discuss the following questions:

1. How would you define the Internet?
2. Which main types of services can it be divided into?
3. What do you know about its history?
4. What problems does the Internet create for the society? What problems does it solve?
5. In your opinion, what is the most important feature of the Internet?
6. What do you know about the digital divide?
7. What are the effects of digital divide on individuals, businesses, and the society?
8. What can be done to tackle this problem?

3. Watch the video. Answer the questions and fill in the missing words.

1. What is the difference between the web and the internet?
2. When and where did the development of the internet begin?
3. When was e-mail created?
4. How could users get the information from the network back then?
5. What had to be developed to create the web?
6. Who participated in the project at CERN?
7. What was the purpose of the system Tim Berners-Lee was developing?

And at CERN, on _____, the first website went online. Berners-Lee's system has become the universal means of connecting all computer content. His critical _____ was to marry an existing idea called _____, a way of linking between documents, to the infrastructure and _____ of the internet. To do this, he assigned documents a _____. These were the first web pages, created and formatted in a new universal language called _____, that could link to other web pages on any networked computer, anywhere.

REPORTED SPEECH

A. STATEMENTS

The verb in reported statements often goes back a tense, but you do not need to change past simple to past perfect. *Would, should, could, might* and *used to* do not change.

4. Complete the table:

I'm not working on Friday.	He said (that) he wasn't working on Friday.
I don't like conferences.	She explained (that)
I flew first class to Rio.	She said (that)
I wasn't feeling well.	He said (that)
I haven't seen Colin.	She told me (that) she hadn't seen Colin.
I have been working all day.	She explained (that)
I can't understand it.	She told me (that)

(McCarthy, M. (2009). Grammar for Business. Cambridge UP)

B. QUESTIONS

The word order in a reported question is the same as a statement: 1. subject, 2. verb.

Don't use DO / DID in reported questions.

Where is the meeting?	He asked where the meeting was .
Do you speak any other languages?	He asked if/whether she spoke any other languages.

(McCarthy, M. (2009). Grammar for Business. Cambridge UP)

5. What do the following expressions mean?

pay-as-you go
on-demand entertainment
line rental
peak times
IPTV (internet protocol TV)
bundles

one-off HD activation fee
is subject to your location
upfront payment
a voucher
ongoing monthly cost
bolt-ons included

CONDITIONAL SENTENCES

ZERO CONDITIONAL

IF + PRESENT TENSE , PRESENT TENSE
General truths, habitual reactions
We don't process our orders the same day if we receive them after 3 pm.

FIRST CONDITIONAL

IF + PRESENT TENSE , WILL (may/can)+ INFINITIVE
Probable future situations
If you look at their website, you'll find their address.

SECOND CONDITIONAL

IF + PAST TENSE , WOULD (could)+ INFINITIVE
Hypothetical present
If we had a good database, we wouldn't waste so much time.

10. In the conversations below, choose the most suitable expressions:

- If you _____ the purchase agreement now, you _____ a 5% discount on your next purchase. (sign, receive)
- If two calls _____ in at the same time, _____ the internal call first and put the other on hold. If there _____ a call waiting, the light _____. (come, pick up, be, flash,)
- You _____ important documents if your hard drive _____. (lose, crash)
- If we _____, say, 1000 pieces, what sort of discount _____? (order, give)

Alternatives for IF: *unless (=except if), provided (=only if), in case, as long as, suppose, imagine, assuming*

11. In the conversations below, choose the most suitable expressions:

- A: Are you willing to pay in 60 days?
 B: Yes, of course, **as long as / in case** you increase the discount to 7%.
 A: **If / as long as** you choose option 2, you will have to pay more upfront.
 B: All right, we agree, **on condition that / unless** you sign a two-year contract.
 A: Will you give us a longer payment period?
 B: I'm afraid not, **unless / provided** you sign a three-year contract.

(McCarthy, M. (2009). Grammar for Business. Cambridge UP)

Unit 7 Web browsers

1. Study this URL (Uniform Resource Locator). Which part is which and what does it tell you?

<http://www.hw.ac.uk/libWWW/irn/irn.html>

1	protocol prefix		The university is in the UK.
2	country code		This is a web page.
3	document name		The type of transmission standard your browser must use to access the data.
4	domain name extension		This points to the computer where the data is stored.
5	domain		This is where the webpage is stored in the computer.
6	Web service		This is a university.
7	directory path		This uses the Web service.

2. Make collocations by matching the words from both boxes:

thumbnail	download	address	manager	controls	sites
home	applications	parental	search	blocker	bar
customizable	bookmarked	pop-up	box	previews	

3. Discuss the following questions:

1. What are browser wars?
2. How many do you know of? Who are/were the main rivals?
3. What is the current situation in browser rivalry?

DESCRIBING GRAPHS

4. The verbs in the box are commonly used to describe changes represented on line graphs. Answer the following questions:

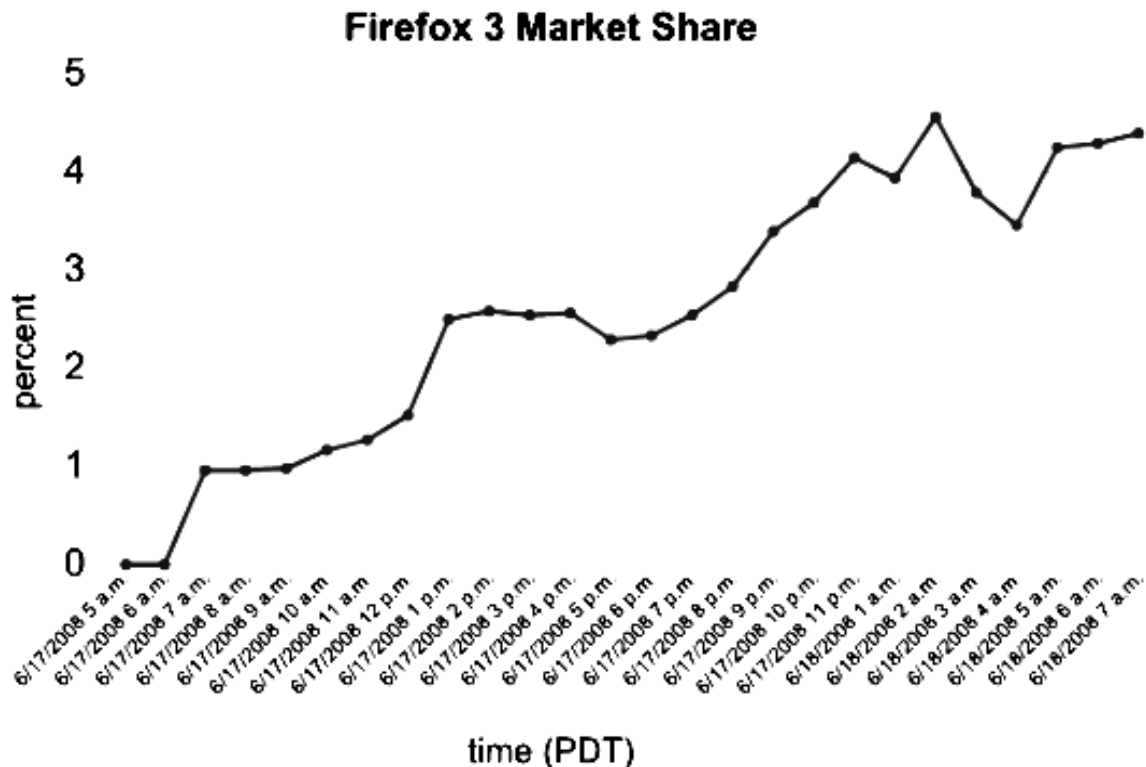
plummet	peak	increase	soar	rocket	rise
fluctuate	level out	decrease	drop	decline	fall

1. Which verbs mean go up?
2. Of these, which mean go up suddenly?
3. Which verbs mean go down?
4. Which verb means reach its highest level?
5. Which verb means stay the same?
6. Which verb means go up and down?

5. **Changes can be described in more detail by using adverbs.**

considerably significantly slightly slowly steadily rapidly gradually moderately dramatically

6. **Now decide which parts of the graph below can be described using the given verbs and adverbs.**



Firefox 3 gained market share rapidly, even before it was 24 hours old.

http://news.cnet.com/8301-10784_3-9971672-7.html#ixzz1K8pPK7pl

7. **Change the structure of these sentences from VERB + ADVERB to ADJECTIVE + NOUN.**

Example: Sales **increased slightly** > There was **a slight increase** in sales.

In August, the number of downloads **dropped moderately**. >

Last month the download rates **rose sharply**.>

Over the next two months, the figures continued to **fall dramatically**.>

Security costs **have grown steadily**. >

8. Provide the missing prepositions in the following descriptions of market share trends:

a. Chrome's present market share stands _____ 10.70%. The report brought by Net Applications also revealed that though overall share of Microsoft's Internet Explorer (IE) dropped _____ 57.08% _____ December 2010 _____ 56% _____ January 2011, version 8 of IE grew _____ 33.02% _____ 34.17% _____ the same period. The report also revealed that while Firefox's market share fell just _____ 0.06% (from 22.81% to 22.75%). While Safari clocked a growth _____ 7% (from 5.89% to 6.30%), Opera gained 2.2% (from 2.23% to 2.28).

http://en.wikipedia.org/wiki/Internet_Explorer

b. After having fought and won the browser wars of the late 1990s, Internet Explorer gained almost total dominance of the browser market. Having attained a peak _____ about 95% _____ 2002 and 2003, its market share has since declined _____ a slow but steady pace.

<http://www.winrumors.com/internet-explorer-market-share-reaches-all-time-low-as-chrome-hits-10/>

Unit 8 Cybercrime

1. To familiarise yourself with different types of cybercrime, visit <http://cybercrimeglossary.netfirms.com/>

2. Read the following news article and answer the questions below.

'Modem hacker' caught after advertising blitz Feb 1st 2010 by Emma Woollacott

A Connecticut man faces up to 40 years in jail after trying to sell illegally-modified cable modems to the FBI. Matthew Delorey, 26, is charged with conspiracy and wire fraud. He ran a website called Massmodz.com - it's gone now - which sold modems hacked to allow free internet access. They'd been modified to spoof the Media Access Control (MAC) address, allowing Comcast customers to sneak onto the internet for free. Delorey got caught after trying to sell two of the devices to an FBI agent.

A Massmodz video, posted on the internet and showing how it's done, may not help his case terribly much. It's titled *MassModz.com Cable Modem Hack Cable Modem Mod*. Indeed, Delorey was far from discreet about his activities. He advertised in Craigslist and posted several YouTube videos with titles such as *Massmodz.com How to Get Free Internet Free Cable Internet Comcast or any Cable ISP—100% works*.

On the Metacafe video site, his company profile reads: "We specialize in Modifying Cable Modem so that people can obtain free uncapped internet. We also deal with TV hacking as well as other neat stuff, check us out!" He adds: "Legal is in the eye of the beholder." It isn't, mate.

<http://www.tgdaily.com/hardware-features/48256-modem-hacker-caught-after-advertising-blitz>

1. What is the man accused of?
2. How did he get caught?
3. What evidence is there against him?
4. Has he been sentenced?

3. Match the verbs in the left-hand column with the phrases in the right-hand column.

1	commit		somebody with a crime
2	arrest		somebody to court
3	charge		evidence
4	take		a crime
5	give		guilty/not guilty
6	plead		up to 5 years in prison
7	face		somebody for a crime
8	find		somebody of a crime
9	acquit/convict		somebody to 10 years in prison
10	send		somebody (not) guilty
11	sentence		somebody (£500)
12	fine		somebody to prison

4. Can you guess which words are missing in the following excerpts?

a. Kenneth Kwak, a network security employee of the DoE, put software on his supervisor's computer to gain _____ to his personal files and Internet activities. After viewing his supervisor's information, he would then disclose it to other employees. Kenneth Kwak was _____ to 5 months in prison in 2006 with 3 months of home _____ that includes electronic monitoring. He also has to pay a _____ of \$40,000.

<http://www.brighthub.com>

b. Michigan resident Jason Arabo was _____ with conspiracy to order destructive computer attacks on business competitor's websites. In 2004, with help from 16 year old hacker, Sigh Cheema, about 2,000 PCs were _____ with programs by using "bots" that allowed him remote _____. Sigh used Denial of Service _____ (DOS) to take down websites of competitors. The cybercrime case was uncovered through an FBI _____. In 2006, Jason Arabo was _____ to 30 months in prison and ordered to pay \$504,495 in damages. Sigh Cheema was _____ to 5 years in youth detention and was required to pay \$32,000 in restitution.

<http://www.brighthub.com>

c. Two teenagers have been _____ for their alleged involvement in the world's largest English-language cybercrime forum. The two males, aged 17 and 18, were arrested on suspicion of encouraging or assisting crime, unauthorised _____ under the Computer Misuse Act and conspiracy to _____ fraud.

theregister.co.uk

THIRD CONDITIONAL

IF + PAST PERFECT , WOULD HAVE + PAST PARTICIPLE (3rd form)
Possibilities in the past that did not happen
<i>If I had known about it, I would have told you. (might have / could have)</i>

5. Choose a suitable pair of verbs and fill the gaps in these third- conditional sentences:

not go / not find

not have / not arrest

get/not become

take / not refund

1. If the police _____ any evidence, they _____ him.
2. Would you _____ the company to court if they _____ your money?
3. He _____ away with it if we _____ suspicious.
4. She _____ to prison if they _____ her guilty.

6. Complete the sentences with a suitable form of the verb.

acknowledge / acquiesce / agree / approve / even if / only if / unless / whether or not

1. Some people have accused the mayor of _____ in the illegal activities of his friends. _____ he didn't benefit from what they were doing, he must have known about it.
2. He has _____ that a close friend of his was involved in one of the projects, but _____ it was illegal is still unclear.

3. He has claimed that he wouldn't have _____ any projects _____ they were legal.

4. He has said that he will _____ to cooperate in the investigation _____ it is clear that he himself is not being accused of any wrongdoing.

(Oxford Practice Grammar Advanced, Supplementary Exercises)

7. In pairs, write two third-conditional sentences about the news article on the previous page.

8. Work in groups of three. You will each read a news article about cybercrime. Read it and summarise it to the group. Then create third conditional sentences about each story.

Case 1

Case 2

Case 3

Unit 9 Careers in Computing

1. Find more information on possible careers in computer science .

<http://www.prospects.ac.uk>

> Careers Advice > Options with your Subject

2. Choose one and present to the rest of the class which qualifications, skills and abilities are required for the job.



Focus on:

- job applications, skills and experiences
- letters of application, CVs
- job interviews

3. Provide the missing prepositions in the following phrases.

1	to be familiar _____ the main data manipulation languages
2	to be able to work _____ tight deadlines _____ pressure;
3	the ability to create and maintain strong working relationships _____ colleagues and/or customers
4	a willingness to keep _____ to date _____ developments _____ new technology
5	commitment _____ continuing professional development
6	to possess/ have the ability to interact confidently _____ clients
7	the ability to work with people _____ all levels in an organisation
8	flexible and able to adapt quickly _____ changing market needs or develop original solutions
9	ensuring that all IT equipment complies _____ industry standards
10	the ability to take _____ a variety of tasks
11	with excellent / high attention to detail
12	to be good _____ keeping deadlines while maintaining a high quality of work
13	willing to follow rules, to seek _____ new experiences, to accept new challenges
14	possessing a logical approach _____ problem solving
15	an interest _____ current affairs, and an appreciation of their impact _____ the market
16	ability to deliver software projects _____ agreed deadlines
17	experience obtained _____ undertaking part-time work

CURRICULUM VITAE

5. Download and complete the Europass CV form (English template):

http://europass.cedefop.europa.eu/en/home?loc=ro_RO

Describing education:

- levels of national qualification, ISCED levels
- secondary school graduate, passed the *matura* examination (holds a *matura* certificate)
- technical / general / vocational secondary education
- academic / professional higher education
- achieved an average grade of ...
- 1st cycle (Bachelor's degree), 2nd cycle (Master's degree), 3rd cycle (PhD)

Phrases to use when describing work experience:

actively participated in ...

dealt effectively with ...

co-developed / helped establish ...

took the lead in ...

was responsible for coordinating... including...

implemented training sessions...

identified and fixed errors in software...

6. Which adjectives would you use when describing skills and competences:

I possess / have _____ knowledge
 _____ interest
 _____ skills
 _____ experience in
 will be able to make a/an _____ contribution to

LETTER OF APPLICATION / COVER LETTER

7. Do or don't?

- Address your letter to the company rather than a named person.
- Use a standard introduction.
- Discuss why you need the job.
- Explain why you are interested in working for this particular employer.
- Show an understanding of what the position is likely to involve.
- Highlight particular parts of your CV that are your unique selling points.
- Give additional information that does not fit easily into a CV.
- Give the names of your referees in your CV.
- Request an interview or an opportunity for an informal discussion.
- Use complex language and elaborate sentence structure.
- Write a letter in a single paragraph.

The structure of your letter should be the following:

1. OPENING
2. PRIMARY MESSAGE
3. REASON FOR YOUR INTEREST
4. CLOSING

7. The paragraphs of this letter have been jumbled. Can you put them back in the correct order? Also decide on which preposition to use.

- [] Dear Mr Scott,
- [] **For / Since** the last three years I have been working as a software engineer for Intelligent Software. I have designed four programs in COBOL for commercial use, and **from / since** January I have been writing programs in C for use in large retail chains. These have been very successful and we have won several new contracts in the UK and Europe on the strength of my team's success.
- [] I graduated **in / on** May 2002 and did a work placement with British Gas as part of my degree. Before taking my present job I worked **for / -** a year with NCR. I stayed in this job **to / until** March 2004.
- [] I enclose my Curriculum Vitae. I will be available for an interview **in / at** any time.
- [] Two years **ago / before** I spent three months in Spain testing our programs and also made several visits to Italy, so I have a basic knowledge of Spanish and Italian. I now feel ready for more responsibility and more challenging work, and would welcome the opportunity to learn about a new industry.
- [] I am writing to apply for the position of Senior Programmer, which was advertised **on / in** 28th March in *The Times*.
- [] Yours sincerely,
- [] I look forward to hearing from you.
- [] Sarah Brown
- [] *Sarah Brown*

Here are some more phrases you may find useful:

1 OPENING PHRASES

I am writing today in response to your advertisement for a(n)(name of position) in the(date) edition of (name of publication). On my enclosed resume, you will find that I have the skills and work experience necessary to fill this position.

(name of acquaintance) suggested that I contact you regarding the opening for the (name of position) position available at your organization. I have enclosed my resume, which showcases my skills and experience.

In response to our telephone conversation on (date), regarding the job opening (name of company) has for a (name of position), I am pleased to enclose my resume for your consideration.

Please accept this letter and resume for the product marketing manager position as referenced on your company's Web site. I am sure that my work history and educational background will benefit the future endeavors of your company.

I recently met with James Smith from your firm, and he strongly recommended that I send you my resume. Knowing the requirements of your open position for a financial analyst, he concludes that I am the ideal candidate. Your opening does seem to be tailor-made for my experience at CityWide Financial Services.

2 PRIMARY MESSAGE

Please allow me to highlight some of my accomplishments that are relevant to your requirements.

My computer skills developed from childhood, plus my well-honed interest in technology advances, and my recently completed education in computer science make me a strong candidate for a position as an entry-level software engineer at your highly regarded company.

As demonstrated on my resume, I have over four years of experience working for the Tiny Tykes Day Care Center as an activities coordinator. During this time, I have created new activities programs, including a series of month-long programs designed to enhance cognitive and physical development.

I completed a number of successful projects for the physics department in my capacity as student administrative monitor. I believe the knowledge I acquired there would transfer extremely well to your engineering department.

My successful background demonstrates the skills you require in (name of position). Briefly, I offer (bulleted lists of accomplishments and achievements).

After completing two Bachelor's degrees in just four years, I believe that my education, student employment experience, and dedication to hard work and problem-solving make me an A-list candidate to join your workforce.

3 SUPPORTING PARAGRAPH

Based on your company's 13-year track record as an industry leader, I would be honored to be part of Communication Company's account team. My five years of experience in client relationship management for The Interactive Company could be beneficial as you begin development of your interactive communication division in early 2004.

In reviewing my resume, you will find that I possess all the attributes of a perfect match, from (skills) to (experience or attributes). I am excited to learn of your job opening because I have been searching for a company just like yours to make real use of my experience.

4 CLOSING

Thank you for your consideration, and I look forward to hearing from you soon to arrange an interview.

Thank you for considering me for the position of Executive Director at The Charitable Organization. I look forward to speaking with you in greater detail about this job opportunity. Please contact me at 555-888-2222 to schedule an interview.

Because my skills are best explained in person, I would welcome the opportunity to meet with you, to further discuss how I can help mitigate losses and reduce account delinquencies for M&M Commercial Printing.

I look forward to meeting with you to further discuss my background and to show you some of the (skills or competencies) that I have developed.

I look forward to speaking with you personally to discuss your specific needs and my ability to meet them.

Thank you in advance for reviewing my resume. I enthusiastically anticipate discussing my qualifications in an interview.

Thank you for your time and interest in considering my application for this position.

Cornfield, R. (2009): Preparing the perfect job application. 5th Edition

Devine F.P. (2003) Good Proof Resumes and Cover Letters. New York: Learning Express

Kennedy, J.L. (2009): Cover Letters for Dummies

JOB INTERVIEW

8. Which of these adjectives would you use to describe yourself?

flexible articulate calm organized punctual tactful sensible quick to learn reliable
 practical cooperative loyal responsible dedicated versatile creative confident assertive
 approachable hardworking capable accurate thorough perceptive committed competent
 adaptable decisive bright enthusiastic thoughtful cautious imaginative patient dependable
 dynamic friendly outgoing self-motivated serious-minded

JOB INTERVIEW

9. Read these job advertisements and decide which one (if any) you might consider applying for.

Title: Associate Software Engineer

Contract type: Permanent Location: Greater London, UK

To be a part of this talented team you need to be passionate about games and committed to being the best in the world at what you do. You need to know what matters to the people who play our games and be passionate about surpassing their and our, expectations.

The successful candidate, mentored by a senior engineer, will be working with creative people to establish technical requirements for features of a world-class video game. They will then be responsible for developing, testing and iterating those features to final quality.

Successful candidates will have a good degree (or equivalent) in computer science, maths or another related subject as well as good A-Level and GCSE grades in Maths and/or physics. We are looking for an all round junior programmer with experience in C++ and C#

<http://www.eurojobs.com/en/candidate/jobs/136573.html>

Title: Web Content Editor

University of Bath - Faculty of Engineering & Design

We are looking for a talented web editor who is as comfortable writing and editing content as he/she is at delving into the source code. The Web Content Editor will be responsible for the development of websites for the Faculty of Engineering and Design. The role will require you to make sure that your facts are correct, hunt down appealing imagery, and work with a variety of people within the University and beyond. You will need knowledge of effective marketing and communications, an ability to edit html to perfect your page layout and an appreciation for the changing nature of the web.

<http://www.jobs.ac.uk/job/ACR741/web-content-editor/>

10. Write out the questions using the appropriate tense.

"So, tell us something about yourself."

- why / choose your course and your university?
- skills / gain at university?
- extracurricular activities / you / involved in?
- aspects of your course / enjoy the most / the least?
- what / the last project / you / work on?
- why / interested in this position?
- what / attract / about this position?
- have / jobs similar to this one?
- your last job?
- what / enjoy most about it?
- what / learn / from your previous jobs?
- you / ever / have a conflict with a professor or a boss? how / resolve?
- what / your strengths / weaknesses?
- what / your plans for the next 5/10 years?
- why / you think / you / the ideal candidate for this job?

11. Can you think of any other questions you might be asked in an interview?

12. What questions would you ask the employer?

I am convinced that I have a combination of qualities to be successful in this career. I have a strong interest, backed by a solid, state-of-the-art education... love of learning, problem-solving skills, determination, strong communication skills, the ability to work hard... You won't have any regrets when you hire me.

My greatest strength is my flexibility. I have learned that work conditions change from day to day no matter where I have worked in the past.

Although it is hard to predict the future, ... years from now I see myself as a successful ... for a world-class firm like yours.

I want to grow and develop, and I want more responsibility. (Give some examples: learning new skills, experience of different areas, being in charge of projects etc.)

I have learned the importance of teamwork and of listening to other people's advice. I have also developed a good business sense.

I am an undergraduate student in ... at...

I've had many years of experience in ... I have worked with the latest technologies in my classes. For example, I helped design ... for one of my school's programs.

I enjoy the challenge and new technologies ...

I am achievement- and detail-oriented.

I would say my greatest weakness has been my lack of proper planning in the past. I would overcommit myself with too many tasks, then not be able to fully accomplish each as I would like. However, I've taken steps to correct it. For example, I now carry a planning calendar in my pocket so that I can plan all of my "to do" items.

References and further reading:

Job interview questions and tips:

http://www.prospects.ac.uk/interview_tips.htm

<http://www.whatwilltheyask.co.uk/>

<http://www.jobinterviewquestions.org>

<http://www.best-interview-strategies.com/questions.html>

http://www.quintcareers.com/job-search_elevator_speech.html

Video tutorial: <http://www.skillstudio.co.uk/resources/job-interview-questions-video.htm>