INGLÉS PARA INFORMÁTICA II

CÓDIGO 3072

Guía de estudio

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CONTENIDO

PRESENTACIÓN

Esta guía de estudio está diseñada para complementar el texto *Infotech: English for computers users*, cuarta edición, del autor Santiago Remacha Esteras, el cual se enfoca en terminología informática combinada con estructuras gramaticales, con el fin de lograr la comprensión de textos técnicos.

El propósito fundamental de la guía es ayudar a los alumnos a entender, interpretar y usar el material provisto en el texto de una manera más ágil. Además, les servirá para autoevaluar su comprensión de este. Para cada unidad del libro, este documento provee la siguiente información:

1) Temas a desarrollar

2) Objetivos de aprendizaje

3) Sugerencias de cómo estudiar las unidades

4) Esquemas y fórmulas para entender mejor la gramática

5) Preguntas diseñadas para autoevaluar su conocimiento y comprensión

6) Respuestas a los ejercicios de autoevaluación

La utilización de esta guía le facilitará al estudiante la comprensión del texto sin una excesiva inversión de tiempo. Las preguntas y las prácticas de autoevaluación han sido diseñadas para elevar su nivel de competencia al realizar las tareas, los ejercicios y los exámenes ordinarios.

I. GENERALIDADES DEL CURSO Y DE LA GUÍA DE ESTUDIO

OBJETIVO GENERAL

El estudiante será capaz de comprender textos escritos en inglés relacionados con la Informática.

METODOLOGÍA

Es muy importante estudiar el material asignado para cada tutoría, realizar los ejercicios indicados y revisar las respuestas que aparecen en las *Orientaciones para el curso*. Para los ejercicios gramaticales, debe leer cuidadosamente las explicaciones que, a través de esquemas y fórmulas, se encuentran tanto en el texto como en algunas unidades de esta guía. Además, será de gran ayuda recurrir al glosario, así como de un diccionario técnico de Informática.

Los ejercicios de escucha y de conversación no serán asignados ya que el curso está orientado a la comprensión de textos técnicos.

SOBRE EL TEXTO

Infotech: English for computer users es un libro de inglés, de nivel intermedio, para estudiantes de ciencias de la computación. Su objetivo es contribuir a desarrollar una amplia variedad de destrezas del lenguaje y adquirir conocimientos sobre computadoras en el idioma inglés. Está organizado en módulos temáticos presentados de diferentes maneras y cada uno contiene de tres a cinco unidades basadas en el mismo tema, la mayoría sigue un patrón similar al siguiente:

a) una pre actividad para hacer los textos más accesibles y preparar a los estudiantes para la actividad principal;

b) una práctica enfocada en una destreza en particular;

c) ejercicios gramaticales y de vocabulario, los cuales tienen *help boxes* o cuadros de ayuda para comprender el apartado de estructura.

Aunque el marco total de cada unidad es muy parecido, la variedad de ejercicios las hace únicas. Los textos de lectura son, en su mayoría auténticos o adaptados de fuentes originales, como revistas especializadas, manuales y páginas web. Los ejercicios están diseñados para desarrollar una variedad de estrategias como el escaneo, pareo con dibujos y el análisis de textos, entre otros.

¿CÓMO LEER E INTERPRETAR TEXTOS EN INGLÉS?

Tomado y adaptado de la traducción realizada por la profesora María Julia Guzmán del artículo "Cómo leer inglés técnico y científico entendiéndolo" de Arunes Winyachitra y Chanya Apichattrakul, 1984.

Los textos técnicos contienen una gran cantidad de información de datos. Los lectores deben ser capaces no solo de extraer la información, sino también de entenderla. Por lo tanto, se requiere una lectura cuidadosa y detallada.

Leer y comprender resulta difícil para aquellos cuyo idioma nativo no es el inglés; sin embargo, los estudiantes se ven en la necesidad de hacerlo, ya que la mayor parte del conocimiento técnico está en este idioma. Para realizar esta labor, es importante conocer técnicas de lectura para manejar, entre otros, los siguientes problemas al leer en inglés:

1) interpretar ilustraciones y el significado de las palabras

2) comprender oraciones y párrafos

I. Técnicas para entender vocabulario

Al leer cualquier tipo de material en inglés, los estudiantes enfrentan un problema crucial: no conocen el significado de todas las palabras, impidiéndoles entender todo lo que leen. Para ayudarlos a superar este problema deben:

a) Buscar el significado de la palabra en un diccionario

Se obtiene un significado exacto de la palabra, aunque se interrumpe la continuidad de la lectura.

b) Buscar el significado de la palabra mediante su análisis

Es importante aprender a dividir la palabra en pequeños elementos: raíz, prefijo y sufijo.

EJEMPLO 1

colorful = *color* + *full* = raíz + sufijo

full = lleno

colorful = lleno de color = colorido

c) Inferir el significado de una palabra en el texto mediante el uso de claves dentro de este

Estas pueden ser una palabra, frases o signos de puntuación próximos a la palabra conocida.

Las claves dentro del texto son de diferentes clases:

a) Definición: un término puede estar formalmente definido o la oración puede contener suficiente explicación para aclarar su significado.

El ejemplo 2 contiene información que aclara el significado de la palabra *hardware.*

EJEMPLO 2

The first part is hardware, the physical, electronic, and electromechanical devices that are thought of and recognized as "computers".

b) Experiencia: las experiencias de cada estudiante o su imaginación hacen claro el significado de una palabra.

c) Contraste: cuando se contrastan dos términos, si el significado de uno es conocido, esto ayuda a aclarar o explicar el otro.

EJEMPLO 3

An algorithm can be described by a flowchart which may be stated in terms of a sequence of precise sentences, or a block diagram.

d) Inferencia: siempre hay suficientes claves para inferir correctamente el significado de una palabra.

EJEMPLO 4

You must hold a coin in your pocket.

II. Técnicas para entender oraciones

Cuando se lee un texto, un artículo u otro material en inglés, ocurre frecuentemente que, aunque se conozcan muchas de las palabras en una oración, no se puede comprender su significado, especialmente cuando esta es larga y complicada. Por lo tanto, las siguientes técnicas son útiles para facilitar esta tarea:

- Reconocimiento de claves de puntuación. Al igual que las palabras, los signos de puntuación ayudan al escritor a expresar sus ideas; por lo tanto, es esencial ser consciente de su significado y uso.

EJEMPLO 5

The information presented to the machine is the input; the internal manipulative operations, the processing; and the result, the output.

La coma (,) después de las palabras *operations* y *result* es usada para reemplazar el verbo *is.*

- Reconocimiento de términos referenciales. Se usan con frecuencia para evitar la repetición de la misma palabra. Estos incluyen pronombres personales, demostrativos, relativos, entre otros.

EJEMPLO 6

A computer like any other machine is used because <u>it</u> does certain jobs better and more efficiently than humans. (En este caso en particular se usó el pronombre personal *it*)

- Sobre el uso de algunas palabras. Algunas de las palabras más comunes y frecuentemente usadas son las que:

    a) significan adición: *and, as well as, also, besides*

    b) muestran relación causa- efecto: *accordingly, hence, due to, as a result, therefore, thus, as a consequence*

    c) condición**:** *if, when, unless, provided*

    d) contraste: *but, though, although, still, yet*

    e) comparación: *like, unlike, likewise, in the same way*

    f) énfasis: *above all, really, in effect, especially*

    g) duda o hipótesis: *possibly, perhaps, probably*

    h) secuencia u orden: *in the beginning, first, later, then, next, later on*

    i) ejemplos: *for example, that is to say, namely, such as*

III. Técnicas para analizar párrafos

A veces el alumno entiende todas las oraciones del material en forma aislada, pero no como un todo; esto sucede porque no sabe como este está organizado. Para comprenderlo, tiene que encontrar:

1) El tema principal. El estudiante debe identificar el tema, el cual tiene que ser preciso, en otras palabras, ni muy específico ni muy general.

2) La idea principal. Después de reconocer el tema, se debe buscar la idea principal, la cual puede ser una definición, una clasificación o una explicación; frecuentemente aparece en la oración principal.

3) Los detalles principales que sustentan el tema. Reconocer los detalles que modifican la idea principal y sus funciones, las cuales son:
    a) definir
    b) clasificar
    c) explicar
    d) ilustrar y ejemplarizar
    e) comparar y contrastar
    f) mostrar relaciones causa- efecto
    g) restablecer la idea principal repitiéndola de una forma u otra

IV. Interpretación de gráficos e ilustraciones

Gran cantidad de textos técnicos van acompañados por gráficos e ilustraciones para ayudar al lector a entender mejor las ideas presentadas. Lo que se usa comúnmente son dibujos lineales, gráficos, tablas, diagramas y fotografías.

SUGERENCIAS PARA ESTUDIAR LAS UNIDADES

1) Concéntrese en las palabras más importantes y su significado dentro del texto.

2) Lea cuidadosamente las instrucciones para cada ejercicio asignado.

3) Aplique la técnica adecuada para cada lectura (ver las técnicas en esta guía).

4) Use el glosario y las explicaciones gramaticales presentadas en las *help boxes*.

5) Realice con antelación los ejercicios asignados para cada tutoría.

6) Las respuestas a los ejercicios asignados para cada tutoría los encuentra en las "Orientaciones para el curso".

II.   PRIMERA TUTORÍA

CONTENTS: Units 16, 17, 18, 19, pp. 79-98

UNIT 16: The Internet and email, pp. 79-83

TOPICS

- Getting online
- Internet features
- Email features
- Grammar: Yes/no questions / Wh questions

LEARNING OBJECTIVES

- To use vocabulary related to the Internet and email.
- To distinguish how the Internet works.
- To identify the anatomy of an email.
- To write different types of questions correctly.

VOCABULARY

modem / Internet Service Provider(ISP) / wireless router / online / TCP/IP / broadband / ADSL/WI-FI / wireless access point / hotspot / power-line Internet.

ACTIVITIES

Do exercises 2, 3, 4 A, pages 79-83 of the textbook.

I. Vocabulary

A. Make a circle around the correct answer.

1. The language used for data transfer on the Internet is called

a. HTTP   b. TCP/IP   c. ADSL

2. What is a collection of websites called?

a. the Internet   b. a website   c. a homepage

3. If you want to connect multiple computers to the Internet without using cables, you need a

a. wired router   b. modem   c. wireless router

4. This technique encodes data so that the unauthorized users can't read the information

a. decryption   b. encryption   c. firewall

5. Which device is used to connect a computer to the telephone network?

a. a modem   b. a USB connector   c. a hub

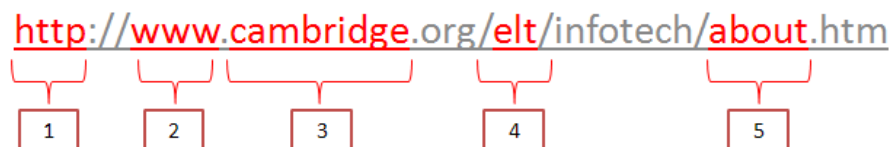B. On the blanks provided, write in English the parts of the following Internet address.

Figure 1.1. Internet address
Taken and adapted from *Infotech, English for computer users. Teacher's book.*

1) _____

2) _____

3) _____

4) _____

5) _____

II. Grammar

A. Finish the questions for Bill Tomas for each of his answers by using the *Wh* words given. Check the tense you have to use before you start writing.

1. Bill first used Internet in 1998.

When _____?

2. He uses Dream Weaver to design web pages.

What _____?

3. He chats with his family three times a week.

How often _____?

4. He sends emails to friends and colleagues.

Who _____?

5. He worked for an IBM company last year.

Where _____?

B. Unscramble these words to make sentences or questions.

Example: get-you-how-online-do-?

Answer: How do you get online?

1. is-junk-given-name-to-mail-spam-the

_____

2. a-to-used-network-FTP-files-transfer-is-over-TCP/IP

_____

3. Telnet-a-program-is-protocol-and-a

_____

4. much-cost-does- how-access-broadband?

_____

UNIT 17: The Web, pp. 84-88

TOPICS

- A typical web page
- Web phenomena
- E-commerce and online banking
- Language: collocations

LEARNING OBJECTIVES

- To distinguish the basic features of the web.
- To use collocations related to the web and the Internet.
- To manage vocabulary related to the web, e-commerce and online banking.
- To recognize and define words with the prefixes e- and cyber-.

VOCABULARY

website / hyperlink / search engine / download / upload / blog / podcast / peer-to-peer / wikis / e-tailer / RSS feed / shopping cart / Internet auction / publishing / parts of a web address

ACTIVITIES

Do exercises 1 (A, B), 2 (A, B, C) 3, 5 , pages 84-86, 88 of the textbook.

SELF-EVALUATION EXERCISES

I. **Vocabulary**

A. Write 5 expressions with *the prefix e-* related to activities that take place on computers or online.

   1) _____

   2) _____

   3) _____

   4) _____

   5) _____

B. Define the following words in English.

1.cybercrime_____

_____

2. cyberstacker_____

_____

3. cyberculture_____

_____

C. Complete the sentences with the following group of words:

wikis / RSS / podcast /search / box bit / torrent

1. _____ is a peer-to peer protocol.

2. _____ is an open-source, editable web page.

3. _____ is an audio broadcast distributed over the Internet.

4. _____ helps you look for information.

5. _____ keeps you constantly informed about fresh, new content on

your favorite. websites.

D. Match the information you have on column B with the one on column A to

make collocations. Write the number in the parentheses.

COLUMN A	COLUMN B
a) portable ( )	information
b) hack into ( )	on the web
c) highly sensitive ( )	a computer
d) freely available ( )	a bank account
e) log onto ( )	player

UNIT 18: Chat and conferencing, pp. 89-92

TOPICS

- Online chats and instant messaging
- Internet telephony
- Cybercafé
- Netiquette
- Videoconferencing

20

LEARNING OBJECTIVES

- ▪ To practice specific vocabulary related to online chatting and videoconferencing.
- ▪ To use abbreviations in online chats.

VOCABULARY

chat room/ virtual reality buddy / list / avatar / nickname / instant messaging / videoconference/ Internet telephony netiquette / FAQ/ flame war/ spamming

ACTIVITIES

Do exercises 1, 2, 3, 4 (A, B), pages 89-92 of the textbook.

SELF-EVALUATION EXERCISES

I. Vocabulary

A. Complete the sentences with the following expressions:

virtual reality environment / webcam / rate/ MI / avatar

1) _____ is a character used when interacting with people online.

2) _____ means at a fixed price.

3) _____ is needed to videoconference.

4) _____ stands for Instant Messaging.

5) _____ is used to play 3-D games.

B. Write what the following acronyms stand for.

1. IMO _____

_____

2. BFN _____

_____

3. GL _____

_____

4. TIA _____

_____

5. ur _____

_____

6. c _____

_____

7. b _____

_____

8. BTW _____

_____

9. BBS _____

_____

10. IOW _____

_____

II. Reading comprehension

A. Do the following readings very carefully. Then write the heading that best fits above the correct paragraph (1-4).

Headings:

       a) *Rules for talking online*

       b) *Invading privacy*

       c) *The Golden Rule*

       d) *Culture and Netiquette*

1. _____

People in the West shake hands when they first meet. Good friends in Middle Eastern cultures kiss each other three times on the cheeks. The Japanese bow their heads to show respect and the Thais bring their hands together in front of their face.

The online community, too, has its own culture and customs. Good Internet behavior is called Netiquette.

2. _____

The Internet is an international means of communication when you can talk to people online. Asking questions is fun but making jokes about people from other cultures can lead to misunderstanding and bad feelings. Sending hurtful or insulting messages, or flames, to people is bad behavior. Bad language is no cool. Everyone is happy when people are friendly.

3. _____

Netiquette includes more than good spelling and grammar. Typing in upper case is bad as it is the same as SHOUTING. Not starting your sentences with capital letters is lazy. Sending e-mails with 'Hello' and 'Thank you' is nice. The Golden

Rule is 'Treat others in the same way that you like to be treated'. Remember real people read what you type.

4. _____

It is also bad Netiquette to send people spam. This kind of unsolicited e-mail means people have to cancel something that they did not ask for in the first place. When you send Cc: instead of Bcc: you send to other people's e-mail addresses without their permission. This is an invasion of their privacy and breaks the Golden Rule.

B. Tick (√) the things which are good netiquette and put a cross (X) by those that are bad netiquette.

1. correct spelling   _____

2. using Bcc:instead of Cc: _____

3. sending e-mails that people do not want   _____

4. greeting someone in an e-mail   _____

5. making jokes about people's culture   _____

6. typing in capital letters   _____

7. flaming people   _____

<div align="center">Taken and adapted from Information Technology. Oxford University Press.</div>

UNIT 19: Internet security, pp. 94-98

TOPICS

- Security and privacy on the Internet
- Safety online for children
- The history of hacking
- Computer crimes

- To understand the basic ideas related to security and privacy on Internet.

- To be able to discuss controversial issues related to the Internet.

- To use the past tense correctly.

VOCABULARY

Internet security/ username/ password/ firewall/ hacker/ cracker/ cookies/ worm/ Trojans/ spyware/ adware/ digital certificate/ encryption/ decryption/ filtering program/ Internet crime: piracy, plagiarism, malware, spreading, phishing, cyberstalking, IP spoofing

ACTIVITIES

Do exercises 1(B) 2, 4 (A), 5, pages 94-97del libro de texto.

SELF-EVALUATION EXERCISES

I. Reading comprehension

Read the text and answer the questions that follow it.

*Some Types of Computer Crimes Hacking***:** The activity of breaking into a computer system to gain an unauthorized access is known as hacking. The act of defeating the security capabilities of a computer system in order to obtain an illegal access to the information stored on the computer system is called hacking. The unauthorized revelation of passwords with intent to gain an unauthorized access to the private communication of an organization of a user is one of the widely known computer crimes. Another highly dangerous computer crime is the hacking

of IP addresses in order to transact with a false identity, thus remaining anonymous while carrying out the criminal activities.

Computer Viruses: Computer viruses are computer programs that can replicate themselves and harm the computer systems on a network without the knowledge of the system users. Viruses spread to other computers through network file system, through the network, Internet or by the means of removable devices like USB drives and CDs. Computer viruses are after all, forms of malicious codes written with an aim to harm a computer system and destroy information. Writing computer viruses is a criminal activity as virus infections can crash computer systems, thereby destroying great amounts of critical data.

Cyberstalking: The use of communication technology, mainly the Internet, to torture other individuals is known as cyberstalking. False accusations, transmission of threats and damage to data and equipment fall under the class of cyberstalking activities. Cyberstalkers often target the users by means of chat rooms, online forums and social networking websites to gather user information and harass the users on the basis of the information gathered. Obscene emails, abusive phone calls and other such serious effects of cyberstalking have made it a type of computer crime.

Identity Theft: This is one of the most serious frauds as it involves stealing money and obtaining other benefits through the use of a false identity. It is the act of pretending to be someone else by using someone else's identity as one's own. Financial identity theft involves the use of a false identity to obtain goods and services and a commercial identity theft is the using of someone else's business name or credit card details for commercial purposes.

Identity cloning: It is the use of another user's information to pose as a false user. Illegal migration, terrorism and blackmail are often made possible by means of identity theft.

Adapted from<http://www.buzzle.com/articles/types-of-computer-crimes.html>.

1. What is the name of the criminal activity in which the person transacts with a false identity to remain anonymous while carrying out the crime?

_____

_____

2. List three ways computer viruses spread through other computers.

_____

_____

_____

3. What does 'commercial identity theft' mean?

_____

_____

4. What are the three ways cybertalkers use to gather information to damage the users?

_____

_____

_____

II. Vocabulary

Define the following expressions in English.

1. cookies_____

_____

2. malware_____

_____

3. spyware_____

_____

4. digital certificates_____

_____

5. freeware_____

_____

III. Grammar

Complete this part of the history of computers with the simple past of the verbs in brackets.

1. In 2000 BC, the abacus (emerge) _____ in Asia, allowing people to make calculations.

2. In 1642, AD-Pascal (invent) _____ the first mechanical adding machine, the Pascaline.

3. In 1941, Konrad Zuse (build) _____ the first binary digital computer, called z3.

4. In 1969, the US Dept of Defense (create) _____ ARPANET, the precursor of the Internet.

5. In 1971, Intel (release) _____ the first microprocessor, and Ray Tomlinson (develop) _____ an email program.

6. In1975 Bill Gates and Paul Allen (found) _____ Microsoft.

III. SEGUNDA TUTORÍA

CONTENTS: Units 20, 21, 22, 23

UNIT 20: Graphics and design, pp. 100-104

TOPICS

- 2-D and 3-D graphics
- Graphics software: tools and functions

LEARNING OBJECTIVES

- To apply vocabulary related to graphics software.
- To identify the function of different graphics tools.
- To discuss the applications of computer graphics.
- To describe graphics.
- To use the –ing form correctly

Vocabulary

graphics / raster graphics / vector graphics / resolution / jagged / filters / composite / CAD / wireframe / solid modeling / rend / fractals / GIS /

toolbox: marquee select tools, move tool, crop, paintbrush, eraser, paint bucket, eyedropper, zoom, color palette

ACTIVITIES

Do exercises 1, 2 and 4 pp. 100-102, 104 of the textbook.

I. Vocabulary

Complete the sentences with the following group of words:

　　　raster graphics / toolbox / attributes / vector graphics /primitives

1. Graphics programs have a _____ that enables you to draw, paint and edit images on the computer.

2. Bitmaps, or _____, are stored as a series of tiny dots called pixels.

3. _____ are created using mathematics formulas describing shapes, lines and curves. They are used by drawing programs to create images that can be scaled without loss of quality.

4. The basic elements used to construct graphical objects are called _____

5. Line objects can have different kinds of _____, such as thickness and colour.

II. Grammar

Correct the mistakes in these sentences.

1. Composing is combine multiple images together to form one final image.

_____

_____

2. You can view the images by click on this button.

_____

_____

3. While computers are very fast at process some kinds of information, they don't have the flexibility of the human brain.

_____

_____

4. Gnofract 4D is a program that allows you to create fractals amazing.

_____

_____

UNIT 21: Desktop publishing, pp. 105-109

TOPICS

Desktop publishing (DTP)

Steps in a DPT publication

E-publishing versus paper publishing

Grammar: order of adjectives

LEARNING OBJECTIVES

- To describe the basic features and vocabulary related to desktop publishing.
- To distinguish the pros and cons of e-publishing versus paper publishing.
- To order adjectives within a sentence.

VOCABULARY

DTP page layout/ font/ kerning/ text flow/ master pages/ toolbox/ PDF file/ service bureau/ Computer-To-Plate (CTP)/ platesetter

ACTIVITIES

Do exercises 1, 2, 3 (A, C) 4, 5 (A), pages 105-109 of the textbook.

SELF-EVALUATION EXERCISES

I. Vocabulary

Write the definition of these expressions in English.

1. font _____

_____

2. kerning _____

_____

3. text flow _____

_____

4. printing plate _____

_____

5. service bureau _____

_____

II. Grammar

Unscramble the following words to make phrases.

       Example: plates/some/printing → some printing plates

1. Chinese/processes/different

_____

2. software/new/easy

_____

3. system/interesting/publishing

_____

4. web designer/young/high/skilled

_____

5. material/printing/good

_____

III. Reading comprehension

A. Read the following information very carefully. Then write the right heading (a-d) above the correct paragraph (1-4).

Headings:

     a) Changes can be made

     b) The main advantages of e-publishing

     c) Long projects can be a hassle to edit

     d) Publishing work can be expensive

1. _____

First, there are fewer overheads such as printing and distribution cost. Second, more information can be stored electronically than on paper. Third, e-Published material can be sent across the globe in a few seconds. Last, publishers can publish manuscripts much faster than they would if they were printed.

2. _____

Many individuals now publish their own work using *e-publishing* which allows them to have as many or as few copies manufactured as they want. Also because

there are fewer overheads involved in the process the writer can make more money from royalties than they might have done previously. Also for those who wish to publish their own work they can do so at a fraction of the cost it might have cost them five or ten years ago.

3. _____

With *e-publishing* your novel, thesis, whatever it happens to be, can be as long or as short as you like. With *e-publishing* most documents are sent across the Internet electronically as PDF or compatible word processing documents. As these documents are traditionally small –unless laden with hefty artwork and pictures– the documents can be less than a megabyte so editing your work down need not be an issue.

4. _____

Again this is something that many writers find they want to do with the manuscript after it has gone to the publishers and sometimes by the time they decide a change is necessary the manuscript is being printed up. At this stage in the process it is difficult not to mention costly to make changes or corrections to your manuscript so a publisher will invariably say no unless the changes are fundamental to the outcome of the work.

<p style="text-align:center">Adapted from <http://www.scribblepad.co.uk/advantages-epublishing.html/>.</p>

UNIT 22: Multimedia, pp. 110-113

TOPICS

- Multimedia technologies and applications
- Grammar: first and second conditional sentences

LEARNING OBJECTIVES

- To identify the main components and applications of multimedia systems.
- To manage specific vocabulary related to multimedia software.
- To use conditional sentences correctly.

VOCABULARY

Multimedia / hypertext / interactivity / hypermedia / sound card / MIDI / digital audio

ACTIVITIES

Do exercises 1, 3, 4, 5 (A), pages 110-113 of the textbook.

SELF-EVALUATION EXERCISES

I. Vocabulary

Complete the sentences using the following expressions:

webcast / digital audio workstation / video computing / streaming / CD ripper

1._____ is a program that extracts music tracks and saves them on disk.

2. _____ let you mix and record several tracks of digital audio.

3._____ is a live event broadcast over the Internet.

4._____ is a technique for playing sound and video files while they are downloading.

5._____ refers to recording, manipulating and storing video in digital format.

II. Reading comprehension

Read the following text carefully and answer the questions about it.

Developing Multimedia

The first multimedia presentations required both quality media development (images, animation, video recording, and so forth) and complex programming skills. Only by programming could the media be displayed and integrated in an inactive way.

Although this approach is still in use, most multimedia programs are now developed using *authoring software*. Authoring software allows developers to create multimedia applications without using a full-blown programming language. For example, by defining the relationships among a paragraph of text, an illustration, and a song, and by sequencing them in an appropriate order, a developer can produce attractive and useful multimedia sequence. To support more complex presentations and greater user interaction, most authoring applications include a relatively small set of proprietary computer instructions or commands called a *scripting language*.

There are several common approaches to multimedia authoring, called 'metaphors.' The *slide show* metaphor is based on a linear presentation model, usually with minimal user interaction. A good example of the Slide Show metaphor is Microsoft PowerPoint (when multimedia elements are included).

An alternative approach is the *icon/flow-control* metaphor. Using this method, the various multimedia elements and their interaction are integrated using graphical icons and a flow chart. Authorware by Macromedia is the best example of the Icon/Flow-Control metaphor.

A third approach is the *timeline or score* metaphor. With this approach, the developer defines the relationship among the various multimedia components as a sequence of events using a timeline (like a music score). Macromedia's Director is the best example of this approach.

Last is the *page or frame* metaphor. Using the page or frame metaphor, the developer creates relationship among the various multimedia between 'pages' or screens, usually via scripting and links. *Click2Learn's ToolBook II* uses the page or frame approach.

Adapted from<http:www.umdnj.edu/idesweb/idest3400/multimedia.html>.

1. What are the two main elements required by a multimedia presentation?

_____   _____

2. What does authoring software allow developers to do?

_____

_____

3. What is a scripting language?

_____

_____

4. What is a metaphor?

_____

_____

5. Mention the four metaphors related to multimedia authoring.

a._____

_____

b._____

_____

c._____

_____

d._____

_____

UNIT 23: Web design pp. 114-118

TOPICS

- Website and blog design
- Grammar: modal verbs

LEARNING OBJECTIVES

- To distinguish the basic principles of web page design.
- To apply vocabulary related to web design.
- To use modal verbs correctly.

V<small>OCABULARY</small>

website / webpage / Homepage / Blog / HTML / web editor / cascading style sheets(CSS) /body text / background / frames / hyperlink / RSS feed / plug-in/ Java applet / file formats: wav, ra, mp3, mov, mpg

A<small>CTIVITIES</small>

Do exercises 1, 2, 3 (A, B) pages. 114-117 of the textbook.

S<small>ELF-EVALUATION EXERCISES</small>

I. Reading comprehension

Read the following text carefully and answer the questions about it.

Web page design

Web design itself refers to the process of creating a web page's appearance and to the choice of a right color scheme, page layout, fonts and more. Every single web page in a website has different content, but all the pages are using a similar graphic design. Often sites will use website templates, which contain all the basic elements of web design - the website's CSS style, buttons, backgrounds, borders and various graphic elements like hover images, bullets and header banners.

But most of the pages in a website have their own design elements. This is needed because every page has to present a different content, and the basic website style is not fully applicable for all the web pages. For example, designing a contact form will sometimes require a custom layout and design elements with which to handle the form's fields, buttons, drop-down menus, etc. All these styles, layouts, images,

etc. are often not applicable for the other website pages. So, the contact page uses the basic website template for the menus, backgrounds, header images, etc. but also has its own web page design, including the contact form's design itself and all the other elements specific for that page.

<p align="center">How to design a web page</p>

Before you start designing your web page, you have to figure out what sort of a web page it's going to be and what contents it should have. All this information is needed in order to successfully design a web page.

You need to know the type of the page, because there are different methods of approach when you design a static or a dynamic web page. You also need to know the contents of the web page, because you need to arrange them within the page's layout. There are different types of content - text, images, videos, animations and other dynamic elements. In order to create a successful web page you need to put the right content in the right place.

<p align="center">Adapted from <http:www.nchosting.com./web.design/webpagedesign.html>.</p>

1. What does the website template contain?

_____

_____

2. What does ''web design'' refer to?

_____

_____

3. What does the contact page use for the design of the menus, backgrounds and header images?

_____

_____

4. What should you know when you start designing a web page?

_____

_____

II. Grammar

Complete these sentences using the modal verbs below. More than one answer may be possible.

can / could / must / may / should

1. I _____ use a computer when I was only five years old.

2. We are looking for a webmaster who _____ design, improve and maintain our website.

3. If you want to see animations, you _____ have Flash Player on your system.

4. Before publishing your website, you _____ check that all the links work.

5. You _____ like to include a counter on your home page to show how many times it has been accessed.

IV. TERCERA TUTORÍA

UNIT 24: Program design and computer languages, pp. 120-124

TOPICS

- Steps in programming
- Computer languages
- Grammar: infinitives

LEARNING OBJECTIVES

- To describe basic concepts in programming.
- To apply vocabulary related to programming and to become familiar with word families.
- To use the infinitive correctly.

VOCABULARY

programming/ flowchart/ coding/ machine code/ bug/ debugger/ debugging/ source code/ object code/ low-level language/ high-level language

ACTIVITIES

Do exercises 1, 2 (A), 3 ,4 ,5, pages 120-123 of the textbook.

I. Reading comprehension

Answer the following questions based on the reading *Computer languages*, p. 121 of the text book.

1. Why are machine code and assembly languages called low-level languages?

_____

_____

_____

2. Mention 5 examples of high-level languages.

a. _____

b. _____

c. _____

d ._____

e. _____

3. What is the function of a compiler?

_____

_____

_____

4. What are *markup tags*?

_____

_____

_____

5. What does HTML allow people to describe?

_____

_____

_____

II. Grammar

Complete the sentences with the correct option.

1. It is important _____ programming languages with markup languages.

a. not confuse   b. not to confuse   c. don't confuse

2. Markup languages are used _____ the structure of web documents.

a. for describe   b. describe   c. to describe

3. You must learn _____ effective business letters.

a. to write   b. write   c. writing

4. Mr. Keller has asked me _____ you these files.

a. send   b. sending   c. to send

5. This program will make this old PC _____ faster.

a. running   b. run   c. to run

UNIT 25: Java™, pp. 125-128

TOPICS

- The Java language
- Grammar: the use of the ed-form in the simple past, past participle and adjectives

- To define the basic vocabulary associated with the Java language.
- To practice the use of ed-form of verbs.

VOCABULARY

Java applet / plug-in / platform-independent / object-oriented / bytecode / multi-threaded /source code / compiler / interpreter

ACTIVITIES

Do exercises 1, 2 , 3 (A; B), pages 125-128 of the textbook.

SELF-EVALUATION EXERCISES

I. Reading comprehension

Answer the following questions based on the reading *The Java language*, p.126 of the text book.

1. What is the name of Java programs?

_____

_____

2. What is a byte code?

_____

_____

3. What does it mean that Java is multi-threaded?

_____

_____

4. What can a web page that uses Java have?

_____

_____

5. What three things are supported by Adobe Flash Technology?

_____

_____

_____

II. Grammar

Write the past tense of the following verbs.

1. stop   _____

2. program   _____

3. have   _____

4. publish   _____

5. be   _____

UNIT 26: Jobs in ICT, pp. 129-133

TOPICS

- Jobs in ICT
- Job advertisements
- Job application letter
- Curriculum vitae
- Grammar: the present perfect

LEARNING OBJECTIVES

- To understand job advertisements.
- To write a CV and a letter applying for a job in English.
- To recognize and use the present perfect.

VOCABULARY

software engineer / hardware engineer / blog administrator / help desk technician / DTP operator

ACTIVITIES

Do exercises 1(A), 2(A, C), 3, 5, 6, pages 129-133 of the textbook.

I. Vocabulary

Complete the sentences with the name of the jobs provided below.

webmaster / blog administrator / hardware engineer / help desk technician / network

administrator / computer security specialist

1. A _____ is responsible for designing and developing the electronic and mechanical parts of computers.

2. A _____ has access to the blog setting and has the ability to edit and remove posts made by other members.

3. A _____ manages the LAN within an organization.

4. A _____ regulates access to computer data and prevents unauthorized modification or destruction of information.

5. A _____ provides phone or email support on technical issues, including operation of equipment, setup problems and troubleshooting.

6. A _____ must be proficient in HTML XML and Java Script.

II. Grammar

Write the perfect simple or the past simple of the verbs in parenthesis.

1. IBM (develop) _____ Fortran in the mid-1959's to create scientific and engineering applications.

2. John (be) _____ a software engineer since May 2006.

3. Once I (realize) _____ that I had a virus, I ran my virus protection program.

4. (you ever work) _____ as a web designer?

V. CUARTA TUTORÍA

UNIT 27: Communication systems, pp. 135-139

TOPICS

- Information and communication system
- Grammar: the passive

LEARNING OBJECTIVES

- To apply specific vocabulary related to communications.
- To identify how VoIP works.
- To recognize and use the passive voice.

VOCABULARY

ICT systems / teletex / fax / digital tv / digital radio / call center/ GPS/ teleworking /
telemarketingwireless / wearable computer BlackBerry/ cyborg/ VoIP /ATA/ Wi-Fi
phone /spit/
mobile phones: LCD Screen, brand built in camera, changeable face plate, SIM
card, wireless support, keypad, ringtone

ACTIVITIES

Do exercises 1, 2, 4 (A, B), pages 135-137, 139 of the textbook.

S<small>ELF-EVALUATION</small> <small>EXERCISES</small>

I. Vocabulary

Explain the meaning of the following expressions in English.

1. teleworking

_____

_____

2. telemarketing

_____

_____

3. call centre

_____

_____

4. BlackBerrys

_____

_____

II. Grammar

Write 5 passive forms from the reading *Channels of communication*, p. 136 of the text book.

For example: Information is transmitted by

1. _____

2. _____

3. _____

4. _____

5. _____

UNIT 28: Networks, pp. 140-144

TOPICS

- Networking basis
- Types of network
- Wired networks versus wireless networks
- Grammar: verbs with particles

LEARNING OBJECTIVES

- To distinguish the basics of networking.
- To use phrasal verbs common in ICT.

VOCABULARY

wired network / wireles network / network architecture (client-server,peer-to-peer)/ network topology(bus, ring, star)/ protocol/ router/ Ethernet cables/ fibre optic cable/ wireless access point/ Wi-Fi/ Bluetooth
Abbreviations: PAN, LAN, MAN, WAN, GSM

ACTIVITIES

Do exercises 1(A), 2, 3, pages 140-144 of the textbook.

I. Reading comprehension

Benefits of using network

As your business grows good communication between employees is essential. You can improve efficiency by sharing information such as common files, databases and business application software over a computer network.

With improvements in network capacity and the ability to work wirelessly or remotely, successful businesses should regularly re-evaluate their needs and their IT infrastructure. See our guide on Mobile Technology. Properly planned, an efficient network brings a wide range of benefits to a company.You can improve communication by connecting your computers and working on standardized systems, so that:

- staff, suppliers and customers are able to share information and get in touch more easily
- sharing information can make your business more efficient - eg networked access to a common database can avoid the same data being keyed multiple times, which would waste time and could result in errors
- staff are better equipped to deal with queries and deliver a better standard of service as a result of sharing customer data

You can reduce costs and improve efficiency by storing information in one centralized database and streamlining working practices.

You can reduce errors and improve consistency by having all staff work from a single source of information, so that standard versions of manuals and directories

can be made available, and data can be backed up from a single point on a scheduled basis, ensuring consistency.

1. What are the two problems produced when the same data is being keyed multiple times?

_____

_____

2. What are two of the benefits your business get when you store information in one centralized data base?

_____

_____

3. What kind of systems do you have to connect to your computer to improve communication?

_____

_____

4. What positive things do you get when you have all staff work from a single source of information?

_____

_____

II. Grammar

Complete the following sentences with the appropriate form of the verb.

set up/ log on/ look up/ consist of/ make up/ break into

1. New mobile phones can be used to _____ to the Internet.

2. If you intend to _____ a wireless LAN, you will need a wireless router.

3. A network _____ two or more computers that are connected to share information.

4. A hacker _____ the campus computer system last Monday and the students were unable to use Internet.

5. You can use an online Thesaurus to _____ synonyms, antonyms and brief definitions of words.

6. Millions of people share their thoughts and dreams on the wires and computers that _____ the Internet.

UNIT 29: Video games, pp. 145-149

TOPICS

- Computer and video games
- Gaming platforms and genres
- Grammar: adverbs

LEARNING OBJECTIVES

- To describe different game platforms and genre.

- To use adverbs correctly.

VOCABULARY

game platforms: PC game / console game / arcade game / handheld game / mobile phone game / multiplayer online game

ACTIVITIES

Do exercises 1 (A, B, C), 2 (A, B, C,) 3 (A, B), 5 (A), pages 145-149 of the textbook.

SELF-EVALUATION EXERCISES

I. Reading comprehension

Computer Games Continue to Gain in Popularity

Computer games are liked just as much by adults as they are by children. Computer games are not just for amusement but they can also teach you to think clearly and make rapid decisions. The computer game is normally sold on standard storage media, such as compact discs, DVD, and floppy disks. Computer games are available for the home PC or can be played in different forms at Amusement arcades and many Corner shops.

Learning With Computers

Computers have the potential to address the needs of a wide range of learning styles, and sometimes many needs can be accommodated within a single computer game program. Computer games allow you to step into their virtual worlds, to

become part of the events that are taking place within the game. Computer games offer the pleasure of mastery, both visual and intellectual. Computer software today is not really that costly compared to other forms of common entertainment. Learning can sometimes become boring and repetitive but by using computer games to help with the learning process the attention span can be captured and retained for many people including children.

Computer Games

Games are a basic part of human existence. There are many areas of computer gaming available for example, adventure, fantasy role playing and war games. Games played on home computers may utilize a keyboard, mouse or game pad (usually in some combination with each other). A broadband connection to the web is very common in most homes and allows game players to interact in multi player games with others across the world as though they are sitting next to each other in the same room. Games are objectively unreal in that they do not physically recreate the situations they represent, yet they are subjectively real to the player.

Adapted from <http://www.articlesbase.computers_articles/computer-games-continue-to-gain-in-popularity-209285.html>.

1. What are three forms of standard storage media you can get for the computer games?

_____

_____

_____

2. Why do computer games allow you to do?

_____

_____

3. What do you need to play games on home computers?

_____

_____

4. What allows game players to interact in multi player games with others across the world?

_____

_____

II. Vocabulary

Complete the sentences with the following group of words.

multiplayer / console games / game platform / game genre / arcade games / PCgames

1. The four mayor types of _____ are PCs, consoles, handhelds and the Internet.

2._____ are played on a personal computer connected to a high resolution monitor.

3. You play _____ on machines like the Xbox.

4. Some games have a _____ facility that allows lots of people to play the same game at the same time.

5. A role–playing game (RPG)is a _____ where the participants adopt a role, represented by their character, or avatar.

6. Most _____ are video games or pinball machines controlled by joysticks, buttons, steering wheels and foot pedals.

III. Grammar

Classify the following words as adjectives or adverbs. Write on the blank *adj* for adjective and *adv* for adverb.

1. easily   _____

2. well   _____

3. good   _____

4. fast   _____

5. rapidly   _____

UNIT 30: New technologies, pp. 150-154

TOPICS

- Future trends
- New technologies: nanotechnology, artificial intelligence, biometrics, smart homes, ubiquitous computing, RFID tags
- Grammar*:* future forms

LEARNING OBJECTIVES

- To make predictions about future trends.
- To use future forms correctly.

VOCABULARY

nanotechnology / anometer / nanocumputer / nanotube / artificial intelligence / robot / android / expert system / Biometrics: fingerprint, iris patterns / Smart homes: appliances, home area network, smart devices, Ubiquitous computing: sensors, embedded RFID: radio-frequency identification, tags

ACTIVITIES

Do exercises 1 (A, B, C, D), 3 (A, B), pages 150, 151 and 153 of the textbook.

SELF-EVALUATION EXERCISES

I. Reading comprehension

Smart Home Appliances for Better Quality of Life

Who Benefits from Smart Home Appliances?
Individuals who are elderly or disabled benefit the most from a home automation system that employs artificial intelligence. These systems offer those who are less mobile, or in delicate health, the opportunity to be independent, rather than staying in an assisted living facility.

Home Automation Systems for the Elderly
Instead of being forced to move into a nursing home when unable to achieve full self-care, elderly individuals can rely on their smart home appliances. An intelligent interface that monitors the residents' movements, and learns to recognize their habits, can notify loved ones if the habits are interrupted. In addition, a smart home has the capability of monitoring the vital signs of residents. If an elderly person has a medical condition that could be of concern, the vital

signs can be routinely sent to the appropriate medical facility. The smart home equipped with artificial intelligence will learn to distinguish dangerous readings, and alert medical personnel immediately.

Smart Home Appliances for Individuals with Mobility Challenges

When an individual has difficulty moving around effectively, they are often forced to depend on others for care. With the implementation of smart home appliances, such as an effective security system, those with physical challenges are often able to live on their own. A smart home security system allows the homeowner to remotely view visitors on a camera, and speak to them via microphone and speakers. If the visitor is welcome, the security system unlocks and opens the door to allow the visitor access to the home.

Adapted from <htpp://artificialintelligence.suite102.com/article.cfm/smart_home_appliances>.

1. What kind of opportunity does a home automation system give to people who are less mobile?

_____

_____

2. What does an intelligent interface monitor learn to do in the case of elderly people?

_____

_____

3. What does a smart home security system allow home owners to do when visitors come to their houses?

_____

_____

4. What does a home automation system employ to function?

_____

_____

II. Vocabulary

Write the definitions of the following terms in English.

1. nanotechnology

_____

_____

2. artificial intelligence

_____

_____

3. RFID

_____

_____

4. GPS

_____

_____

5. biometrics

_____

_____

VI. RESPUESTAS A LOS EJERCICIOS DE AUTOEVALUACIÓN
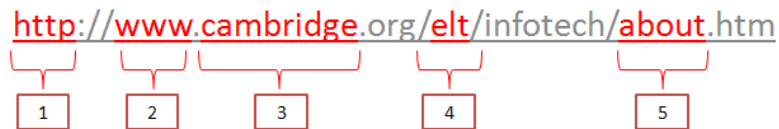
I. Vocabulary

A

1. b

2. b

3. c

4. b

5. a

B

1. the protocol used to connect to web servers

2. also known as W3 (World Wide Web)

3. domain name of the web server

4. the directory path; the place where the web page is located

5. the name of a single web page

II. Grammar

A

1. When did Bill use Internet first?

2. What does he use to design webpages?

3. How often does he chat with his family?

4. Who sends emails to friends and colleagues?

5. Where did he work last year?

B

1. The name given to junk mail is spam.

2. FTP is used to transfer files over a TCP/IP.

3. Telnet is a program and a protocol.

4. How much does broadband access cost?

UNIT 17

I. Vocabulary

A

1. e-card

2. e-learning

3. e-zine

4. e-voting

5. e-signatures

B

1. cybercrime: crimes perpetrated over the net

2. cyberstacker: employee who uses his company's internet connection during working hours to chat with friends, play games and so on.

3. cyberculture: culture emerging from the use of ICT systems.

C

1. bit torrent

2. wikis

3. podcast

4. search box

5. RSS

D

a. (5)

b. (3)

c. (1)

d. (2)

e. (4)

UNIT 18

I. Vocabulary

A

1. avatar

2. flat-ratemeans

3. webcam

4. MI

5. virtual reality environment

B

1. in my opinion

2. bye for now

3. good luck

4. thanks in advance

5. you/you are

6. see

7. be

8. by the way

9. be back soon

10. in other words

II. Reading comprenhension

A

1. d

2. a

3. c

4. b

B

1. √

2. X

3. X

4. √

5. X

6. X

7. X

UNIT 19

I. Reading comprenhension

1. Hacking

2.

a) through the Network

b) Internet

c) removable devices like USB and CDs

3. It is the use of someone else's business name or credit card details for commercial purposes.

4.

a) chat rooms

b) online forums

c) social networking websites

II. Vocabulary

1. Small files placed on hard drive by web serves.

2. Malicious software. Programs designed to infiltrate or damage your computer.

3. A type of software that collects information from your computer without consent.

4. Files that are like digital identification cards and that identify users and web serves.

5. Software that is available, free of charge, but protected by copyright.

III. Grammar

1. emerged

2. invented

3. built

4. created

5. released

6. founded

UNIT 20

I. Vocabulary

1. toolbox

2. raster graphics

3. Vector graphics

4. primitives

5. attributes

II. Grammar

1. is combining

2. by clicking

3. at processing

4. amazing fractals

UNIT 21

I. Vocabulary

1. The shape, style and size of a particular typeface.

2. The process of adjusting the spaces between letters to achieve even, consistent letter spacing.

3. A features that enable you to wrap text around images on the page.

4. A metal surface that carries the image to be printed.

5. A company that specializes in printing other people's files.

II. Grammar

1. different Chinese processes

2. new easy software

3. interesting publishing system

4. highly-skilled young web designer

5. good printing material

III. Reading comprehension

1. b

2. d

3. c

4. a

UNIT 22

I. Vocabulary

1. CD ripper

2. digital Audio Workstation

3. webcast

4. streaming

5. video computing

II. Reading comprehension

1. quality media development and programming skills

2. to create multimedia applications without using a full-blown programming language

3. propietary computer instructions or command

4. an approach to multimedia authoring

5. icon/ flow-control metaphor

timeline or score metaphor

frame metaphor

slide show metaphor

UNIT 23

I. Reading comprenhension

1. All the basic elements of web design

2. Web design refers to the process of creating a web page's appearance and to the choice of a right color scheme, page layout, fonts and more

3. The contact page uses the basic website template

4. Type of web page and contents

II. Grammar

1. could

2. can

3. must

4. should/must

5. may

UNIT 24

I. Reading comprenhension

1. Because they are closer to the hardware.

2.

a. FORTRAN

b. COBOL

c. BASIC

d. PASCAL

e. JAVA

   HTML

   XML

   Voice XML

3. The compiler translates the source code into object code.

4. Markup tags are the instructions used by the markup languages.

5. It allows people to describe how information will be displayed on web pages.

II. Grammar

1. b

2. c

3. a

4. c

5. b

UNIT 25

I. Reading comprehension

1. Applets.

2. It is a file with a class extension.

3. That a Java program can have multiple threads.

4. It can have sounds that play in real time.

5. Graphics, Action Script, and the streaming of audio and video.

II. Grammar

1. stopped

2. programmed

3. had

4. published

5. was/were

UNIT 26

I. Vocabulary

1. hardware engineer

2. blog administrator

3. network administrator

4. computer security specialist

5. help desk technician

6. webmaster

II. Grammar

1. developed

2. has been

3. realized

4. have you ever worked

UNIT 27

I. Vocabulary

1. People can work at home and communicate with their office by computer and telephone.

2. The process of selling goods and services over the phone.

3. It is the place where assistance of support is given to customers using the phone, email or online chats.

4. Let you check the email, browse the web, and connect with home or company intranets, all without wires.

II. Grammar

Possible answers

1. It has been predicted that about one third of all work could eventually be performed.

2. Support is given to customers.

3. Programs are broadcast in a native 16:9 format instead of the old 4:3 format.

4. Digital Terrestrial TV is received.

5. Some devices are equipped with a wireless modem.

UNIT 28

I. Reading comprenhension

1. waste of time, errors

2. to reduce costs, to improve efficiency

3. standardized systems

4. to reduce errors, to improve consistency

II. Grammar

1. log on

2. set up

3. consist of

4. broke into

5. look up

6. make up

UNIT 29

I. Reading comprenhension

1. compact discs, DVD, floopy disks

2. to step into the virtual worlds and to become part of the events that are taking place within the game

3. a keyboard, a mouse and a game pad

4. the broadband connection to the web

II. Vocabulary

1. game platform

2. PC games

3. console games

4. multiplayer

5. game genre

6. arcade games

II.Grammar

1. adv

2. adv

3. adj

4. adv

5. adv

UNIT 30

I. Reading comprenhension

1. the opportunity to be independent

2. to recognize the habits, to distinguish dangerous reading and alert medical personnel immediately

3. to remotely view visitors on a camera, and speak to them via microphone and speakers

4. artificial intelligence

II. Vocabulary

1. the science of making small devices from single atoms and molecules

2. the study of methods by which a computer can simulate aspects of human intelligence

3. the use of radio waves and chip–equipped tags to automatically identify people or things

4. a navigation and location system formed by various satellites and their corresponding receivers on Earth

5. biological identification of people

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