

## WARM UP

Do you have a network in your house?

It is likely that all your students have some kind of household network at home. The network will be formed by:

- DSL Router for internet connection and Ethernet adapters
- Antenna for wireless devices.
- Cables for wired connections.
- Decoder for internet television.

What devices are connected to it?

It should have, among other components:

- The DSL router.
- Devices such as telephones, videogame consoles, laptops connected to the wireless network.
- Desktop computers for family members connected through CAT-5 cables.

## WORKING WITH THE TEXT

1.-

- a.- The most important hardware at Transport layer is the Router.
- b.- DSL wireless router is both a Router and a switch.
- c.- The OSI reference model subdivides communication systems in 7 layers.
- d.- The Routers can do "load balancing".
- e.- A Switch will examine the packet to locate where the information is addressed and the packet and will be forwarded to the right port.
- f.- A router only has 3 interfaces, to the wired network segment.

2.-

- a) Switch
- b) Cable
- c) Wireless Access Point
- d) Router
- e) Wireless receiver

f) NIC

## VOCABULARY

Use the following verbs and nouns to detail how to assemble a personal computer:

open	attach	insert	plug	check	turn	install	secure	connect	remove	run	put	
power supply	graphics card	thermal compound	cables	motherboard	heat sink	modules	fastener	case	slots	hard drive	socket	fan

1º H **Open** the side doors of the computer **case**.

2º I **Insert** the **power supply** and **turn** the screws until they are tight.

3º C **Install** the memory **modules** in their **slots**.

4º B Insert the processor in its **socket** and apply **thermal compound**.

5º A Place the **heat sink** and fan on top of the processor and **secure** it with the **fastener**.

6º E Lay the case on its side and **put** the **motherboard** in place tightening the screws.

7º D **Connect** the **hard drive** and the optical drive to the SATA connectors.

8º J **Remove** a back plate on the case and **attach** the **graphics card**.

9º F **Plug** all the **cables** and connect the keyboard and screen.

10º G Start the computer and **check** if the system **runs** properly.

## PRACTICE

1.-

a.- The program will display a window to help you complete the task.

b.- We will have connected all the computers by 3 o'clock tomorrow.

c.- When the ink supply is used up, the printer will stop printing.

d.- Upon receipt of the faulty item, SP Lab will process your request and arrange a return or replacement.

e.- Tomorrow at 4 pm he will be presenting new software at the IT International Center.

f.- We will work closely with the members of the New Technological Center.

g.- Compressing a file will not affect data integrity.

2.-

When are you closing the factory in L.A.?

Where and when are you opening a new factory?

Who is moving to Buenos Aires?

When are the manager assistants moving to Buenos Aires?

How long will they be interviewing qualified workers?

When are you hiring the workers?

How long is their training period going to be? Or How long will the training period be?

There are other possible questions.

## **REMEMBER**

**Capital letters.**

Paul, I need your report on known bugs by Thursday at the latest. Mr. Evans is attending a meeting with S.P. Corporation on Friday and he needs to know the results of the testing done beforehand.

Keep in mind that those results will be published in next month's issue of *Updated Computer*, so please, be conscientious.

Susan

## **LISTENING**

### **TRANSCRIPTION**

#### **Technology and the future of work**

A plethora of new technological developments, combined with social, political and economic changes, are leading to significant changes in the way we work. Some of these changes will happen in the next five to ten years, but many will take decades longer.

Key technologies include Artificial Intelligence (AI), particularly based on big data and machine learning; automation and robotics; autonomous vehicles, connected homes, smart cities, wearable technologies, Internet of Things, mobile communications and the cloud, are singly and collectively enabling new ways of working and living. Other significant developments include the sharing economy, new business models, Virtual Reality, and 3D printing.

However, the future is highly uncertain. Some developments are predictable but many are not. Just because something is technologically feasible does not mean it will be adopted. For every successful technological innovation (such as the iPhone), there are plenty more tech flops - just look at Google Glasses; Apple Watch; and 3D TV. The same could even happen to AR and VR, although many big tech firms are currently betting on them. I would like to believe that they will succeed in the next couple of years.

[...]

The biggest problem with debates about technology and future of work is that people often mix up different perspectives, issues at different levels; and the phenomenon, their consequences, and the business and policy measures to address them. The future of work will change, by and large for the better, for the majority of people. Nevertheless, there will be painful transitions for many people, which call for interventions at the policy, business and individual levels. The future is bright, but some of us might have to experience some pain to get there.

Extracted from <https://www.city.ac.uk/news/2017/march/technology-and-the-future-of-work>

**Listen to the audio and answer the questions:**

1. a)
2. AR / VR
3. False, "However, the future is highly uncertain".
4. Key technologies: AI, Machine learning, Automation and robotics, Smart cities, Internet of things  
Other developments: Virtual Reality, New business models, Sharing economy, 3D printing.
5. Artificial Intelligence.

## WRITING

**What are the advantages and disadvantages of the use of new technologies (smartphones, tablets, internet, ...) by kids.**

USEFUL EXPRESSIONS

In my opinion/From my point of view	We must keep/bear in mind	Some drawbacks
On the one hand... on the other...	Firstly,	Furthermore, Finally,

## ENGLISH IN CONTEXT

### BOOKING A FLIGHT WITH A TRAVEL AGENCY

Abby: Hi, I'd like to book a flight from Columbus, Ohio to Madrid, Spain. Can you help me find the best deal?

Travel agent: Sure, no problem. Do you need a one-way ticket or round trip?

Abby: I will be staying for 10 months. Can I book the return flight now? I need to leave on August 17th and return on June 1st.

Travel agent: Yes, we can do that. Since this is an international flight, you will need to have your passport with you to board the plane.

Abby: Ok, that's fine; I already got it a month ago.

Travel agent: Do you prefer a window seat or an aisle seat?

Abby: I would like a window seat if that's possible.

Travel agent: Alright, the cheapest flight I could find leaves on August 17th at 2 p.m. You will have a connecting flight in Philadelphia. If there are no delays, you will arrive in Madrid at 8 a.m. the following morning. On June 1st, your flight will depart from Madrid at 2:30 p.m. You will have a connecting flight in New York City and your estimated time of arrival in Columbus is 10:40 p.m. What do you think?

Abby: That sounds great to me. This is my first time flying; can you give me some tips for the airport?

Travel agent: Sure, when you get to the airport, you will need to check your baggage with the airline you will be flying with. They will give you your boarding pass at the desk after you show them your passport and check your baggage.

You will have to go through customs when you arrive in Madrid and then again in New York City when you return. When you arrive at the airports for your connecting flights, you should check to see if the flights are on-schedule or delayed. Do you have any other questions?

Abby: Is there an extra cost for luggage and/or my carry-on?

Travel agent: You can check 1 suitcase for free if it is under 50 pounds. If it weighs more than 50 pounds, you will have to pay a fee. There is also a charge for each additional suitcase. All carry-on items are free with this airline.

Abby: Ok, I think those are all the questions I had. Thank you very much for your help.

Travel Agent: Anytime; have a good day.