Subject: Reading and Writing, 11th Grade
Self-Study Guide n°6 for Week: June 1st to June 5th
Scenario: Scenario: Scenario: From the Wheel to the Drone / Living in a Tech World

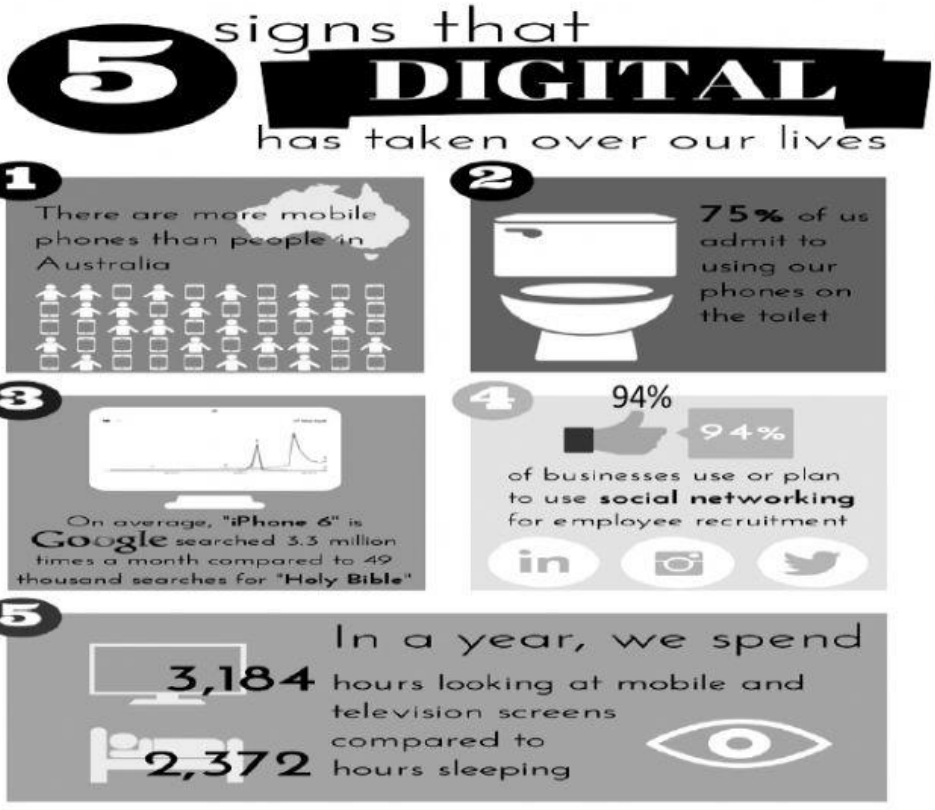
School: Liceo Experimental Bilingüe de Belén
Teacher's name: _____
Student's full name: _____
Group/Section: _____
Date: _____

1. Getting ready to do my self-study guide

Suggested Materials	• Notebook, pencil, pen, eraser, highlighters, etc. • Self- study guide #6 for 11th Grade • Computer & Internet access if possible
Conditions of the place to study	• Work in a place where you do your assignments and homework daily.
Expected time to work on this guide	• **60** minutes

2. Recalling what I have learned/What I am about to learn

Context/ General Instructions	The following activities will give you a preview of what are we going to work in this study guide such as essential vocabulary, general information and structures.
- **Pre-Activity** - **Questions** - **Important language**	1. Look at the Technology Facts infographic and write two ideas that caught your attention.



	2. Important vocabulary to cover in this unit: 1. Online 2. Owner 3. Programmer 4. Proponent 5. Prototype 6. Research 7. Resources 8. Retail 9. Screen 10. Service 11. Social network 12. Solution 13. Sophisticated 14. Specialized 15. Speed



3. Putting into practice what I have learned

Main activity/activities	*Specific Instructions:* You are about to start practicing for the English Test, so we are going to start working on some readings about technology

Task 1. Based on the text, choose the appropriate alternative to answer each question.

Nanotechnology

Have you ever imagined having a computer in your jacket to monitor your body temperature? Or miniature robots that circulate in your blood stream, detecting and destroying cancerous cells? Or that you could build your house with materials stronger than steel, yet 10 times lighter and cheaper? Or fabrics that never get dirty or discolored? Or vehicles that run without fuel... Yes, it's true, it sounds like magic or science fiction, but all these fantasies could shortly become a reality. Nanotechnology is under development. Get to know it so it does not take you by surprise. It is impossible to explain what nanotechnology is without describing first a few other basic concepts. We can begin by defining it as a multidisciplinary technology capable of manufacturing things from the individual assembly of atoms and molecules, producing as a result highly efficient new materials and devices that generally are no bigger than a bean, and in many cases, are simply invisible to the human eye. It still sounds like science fiction, doesn't it? When materials on the minuscule scale of atoms and molecules (nano scale) are being manipulated, their elements demonstrate totally new behavior and physical and chemical properties. Electrical conductivity, heat, resistance, reactivity and elasticity of the materials will make things behave in a different way at an anatomical level. So, nano scientists can create strong and innovative materials at a low cost and with unique properties.

1. Nanotechnology will be capable of _____.
A. building houses made of steel
B. making robots build your houses
C. finding cheaper fuels for your cars
D. making cancerous cells disappear

2. Nanotechnology will produce _____.
A. highly efficient new materials from atoms
B. big devices from the assembly of atoms
C. new fuels for vehicles
D. slow computers

3. Materials produces by nanotechnology will be _____.
A. strange and not real
B. cheaper and stronger
C. unaffordable and unique
D. expensive and with special properties

4. We infer from the text that nanotechnology will _____.
A. pollute the air
B. be impossible to explain
C. help human beings to live better
D. become a science fiction fantasy

Task 2. Based on the text, choose the appropriate alternative to answer each question.

Lip-Reading Computers

Scientists at the University of East Anglia (UEA), England, have created lip-reading computers that can distinguish between different languages. Although computers that can read lips are already in development, this is the first time they have been 'taught' to recognize different languages. This achievement could have practical uses for deaf people, for law enforcement agencies, and in noisy environments. Led by Stephen Cox and Jake Newman of UEA's School of Computing Sciences, the groundbreaking research will be presented at a major conference in Taiwan on Wednesday, April 22. The technology was developed by statistical modeling of the lip motions made by a group of 23 bilingual and trilingual speakers. The system was able to identify which language an individual speaker spoke with very high accuracy. The languages included English, French, German, Arabic, Mandarin, Cantonese, Italian, Polish, and Russian. "This is an exciting advance in automatic lip-reading technology and the first scientific confirmation of something we already intuitively suspected - when people speak different languages, they use different mouth shapes in different sequences," said Prof. Cox. Funded by the EPSRC, the research is part of a wider UEA project on automatic lipreading. The next step will be to make the system more robust to an individual's physiology and his or her way of speaking.

1. What's an advantage of lip-reading computers? They _____.
A. create particular lip motions
B. teach you how to speak a language
C. make you learn how to feel your lips
D. are very useful for people who cannot hear

2. How was the technology of the lip-reading computer tested? They took people who _____.
A. spoke more than one language as models
B. had automatic movement of their lips
C. had different shapes of their mouths
D. had different shapes of their lips

3. Who invented the lip-reading computer?
A. people from France
B. scientists from Taiwan
C. researchers from a university
D. researchers from an Arabic university

Task 3. Select the best answer according to the text.

TECHNOLOGY TRASH AND GARBAGE

One of the great enigmas of our times is what to do with our technological throwaways in order to rescue the environment. Computers, monitors, scanners, printers, fax machines, and cell phones do not last forever and they are not wanted in landfills, so you cannot just toss them out in the garbage. They contain poisonous components such as lead, titanium, cadmium, plastic, rubber and wires that pollute the environment.

During recent years, an environmental fair financed by the University of Costa Rica in Grecia showed that technological trash can be safely unloaded. Thus, a group of students and the biology profesor Hammer Salazar collected computers, keyboards, monitors, cell phones, ipods and printers. All those items were displayed along the Street for everyone to see and realice that technological trash can be recycled.

Salazar, who also teaches a course on health and environment, said: "normally people just don´t know what to do with their old computers and other electronics waste; however, a lot of this material can be reusable". FORTECH, a company in Cartago, specializes in recycling materials that are considered dangerous to the environment

1. Discarding technology garbage is _____.
A. an easy task to solve
B. an environmental problem
C. a good plan to save the land
D. a solution to protect the environment

2. Technological garbage is dangerous because it _____.
A. can be usable
B. disintegrates easily
C. contains contaminants
D. can be easily destroyed

3. The environmental fair was sponsored by ____.
A. the municipal officers
B. the University of Costa Rica
C. the biologist Hammer Salazar
D. all Costa Rican students in Grecia

4. Technological trash was exhibited to _____.
A. sell some items
B. raise awareness
C. collect nontoxic devices
D. finance the biology class

After the activity	*Task.* Write a 200-word paragraph about: What technologies did you use to help you in your studies? Describe how it has helped you. Use specific reasons and details to support your answer ***Specific***

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Performance Self-Assessment: *Check the box that best describes your performance.*

Initial	Intermediate	**Advanced**
I can complete **a little** from doing the task (activity/exercise/items), following the specific descriptor.	I can complete **most of** the task (activity/exercise/items), following the specific descriptor.	I can complete **the entire** task (activity/exercise/items), following the specific descriptor.

Descriptor	*Initial*	*Intermediate*	*Advanced*
a. *I can extract main ideas and specific details of texts*	☐	☐	☐
b. *I can interpret read textbook explanations, examples and many subject specific words when encountered in text about technology.*	☐	☐	☐
c. *I can explain and express opinions on familiar subjects, formulate question and points of view, briefly justify, assume and plan in a written way.*	☐	☐	☐

ANSWER KEY: Task 1. 1. A 2. D 3. C 4. B 5. C Task 2. 1. D 2. A 3. C Task 3. 1. b 2. c 3. b 4. b