**Lesson 2 Andreu Mut Portes L1G1**

* Comments on previous lesson.
* Today’s lesson activities.

**Practice 1**

**PART 1**

**Page 150** of your Book (Meet the expert)

**Activities 2, 3b**

**Activity 2 – Correct order (just write the letter):**

1. \_e
2. \_d
3. \_b
4. \_a
5. \_c

**Activity 3b – Just write the missing words:**

1. \_predict
2. \_ center of the
3. \_ afect
4. \_very detailed
5. \_remoted control helicopter
6. \_eruption
7. \_hundred metters
8. \_
9. \_seventy two hours
10. \_policy makers

\*If you have made any mistakes, please correct your mistakes using a different colour.

**PART 2 - Green computing using next-generation nanotechnology**

**Amalio Fernández-Pacheco | TEDxZaragoza**

Watch this video twice (without subtitles) and make notes to answer the questions below.

<https://www.youtube.com/watch?v=bMWMFcDBUu4>



1. What caused this scientist’s interest in research?

The consumtption of the power by all the devices around the world

1. What does “integrated” in the expression “integrated circuit” mean?

Transistors are made directly into the chip.

1. What are the consequences of having powerful devices?

Implies large power consumption

1. What is the relation between data centers and green computing?

All data centers in the same place in the world, will be like a small country that produces a lot of heat

1. What are Fernández-Pacheco’s research areas of interest?

Nanotechnology and magnetism

1. What do he and his team want to achieve?

They want to make a nanowire

1. Why are nanowires a green alternative?

They are made of magnetic materials so they don’t need as energy as other wires.

1. What change does the use of nano wires in the fabrication of integrated circuits imply?
2. How do he and his team plan to fabricate 3D nano structures?

Using a ElectronMicroscope

1. Is the technique already produced massively? Why?

No. They must find a way to produce them faster and cheaper.

1. What is the objective of trying new structures with novel functionalities?

Do the activities on this document and upload it on POLIFORMAT – TAREAS.

Deadline: During today’s class time

**PART 3 –** **Record your answer in 3 minutes on FLIPGRID.**

**(you will find the flipgrid tab in our TEAM) – click on the tab.**

* **Summarise** the content in the video in **1 minute**.
* **Answer** these questions in **2 minutes:**
* **What’s your opinion of the project? Do you think it is too ambitious / realistic…?**
* **What other examples of green computing do you know?**

If you don’t know any other examples, **how would you like to contribute to green computing?**

**Speaking Topic 2**

**Discuss these topics in the chat room:**

Which of the effects of global warming do you think is the most dramatic?

OR:

What can people do to be more environmentally friendly?

**Record a 1-minute summary with the main conclusions.**

Summer is hotter and winter is disappearing.

The radical changes in weather.

CO2 is raising up and that makes temperature to raise up too.

Light pollution

Water contamination