**LESSON PLAN**

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| **school*:*** |  |  |  |
| **level*:*** |  |  |  |
| **subject:** | SCIENCE,STEM | | |
| **Other subjects** | English | | |
| **skills** | Using reading strategies according to a task, applying recently acquired knowledge to design different objects or machines , writing in a foreign language following a model, sharing information, using scientific method to correct mistakes. | | |
| **teachers***:* |  |  |  |

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| **Transversal skills** |
| 1.Language skills: communication in a foreign language,  2. Thinking skills: strategies to face a task, applying knowledge to practice, using scientific method, developing creativity  3. Social skills: working in a group, sharing information, appreciating different ideas  4. Critical thinking skills: analyzing information, giving opinions, expressing positive and negative facts about a certain situation, correcting mistakes, changing previous ideas through evidence and arguments. |

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| **Objectives** | **Assessment criteria** |
| - To know the different simple machines and their application.  -To use their recently acquired knowledge about simple machines and non- electrical power sources to create a working model  -To use scientific method to correct their mistakes in order to make their design work  - To be able to explain how things work  - To learn vocabulary and simple structures to develop the activities and to communicate results in English. | -Students are able to identify simple machines.  -Students use simple machines for clear purposes.  -Students can apply their knowledge to practical examples  - Students can describe how things work.  - Students can make simple sentences in English to describe how things work.  -Students can distribute tasks in a group  -Students use many attempts to find and solve problems and to argue how to face challenges  -Students make scientific deductions to solve possible problems |

***Content***

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| * Simple machines * Recyclable material: carton, plastic bottles, bottle caps, hose….. * Instruction text: Describing how things work, describing how things are made. * English structures: too+ adjective/ past simple/ * Simple past |

**Activities and Procedure:**

* **Activity 1 : Design and build a device using their recently acquire knowledge**

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| Objectives:  -To put research into practice by creating working models related to their previous learning process.  - To detect problems and think of possible ways to solve them.  Procedure:\*   * Present the task to students. * Activate previous knowledge. * Watch some videos to help students develop their own design. * Divide the class into small groups. Each group will decide the task to carry out. * Sketch their own design and name the different parts. * Make a list of the materials they will need for each part. * Build their gadget * Detect and solve problems. |

* **Activity 2: Write a text about how their gadget work. And how they built it**

Objectives:

- To be able to explain how things work

- To learn vocabulary and simple structures to develop the activities and to communicate results in English.

Procedure: \*

* Students will write about the different parts their gadget has, how it works and how they made it.
* They will also focus in each part to report the difficulties they had when making it, what the problem was and how they solved it.
* **Activity 3: making their model public**

Objectives:

* To share their model and their creative process with their school mates and with the European partners

Procedure:

* Students will use the texts they wrote to tell their friends about their work in an on- line meeting
* **\*These are just some ideas to face the activities. Each school can find the way that is closer to your teaching method, only that way it will make sense for you. Diversity enriches the project as far as we share methods with partners.**

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| **Assessment tools: [**oral and written productions, surveys, rubrics, ….), |
| * Students´productions * Rubrics and checking lists * Students´participation * Students´ opinions about own work |

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| Possible check list. The items can change depending on the way you develop the activity.  Checking list Activity 1   * Student takes part in the activity * Student knows the names of the simple machines and gadgets in English * Student knows what each simple machine is used for * Student can apply his/ her knowledge to design a working device * Students can communicate their ideas in a group through English * Students can detect and solve problems by observation, discussion, trial and error, … * Student can relate cause and effect.   Activity 2   * Student knows the language structures and vocabulary to write a text in English * Student can order activities in a process. * Student can write about cause and effect and the reason why things happen   Activity 3   * Student can explain a creative process * Student is aware of his/her part in a group task and feels responsible for its success |