**LESSON PLAN**

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| **school*:*** |  |  |  |
| **level*:*** |  |  |  |
| **subject:** | SCIENCE | | |
| **Other subjects** | English | | |
| **skills** | Looking for information, using reading strategies according to a task, technical drawing, making diagrams using information, writing in a foreign language following a model, sharing information, apply knowledge according to needs. | | |
| **teachers***:* |  |  |  |

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| **Transversal skills** |
| 1.Language skills: communication in a foreign language,  2. Thinking skills: strategies to face a task, choosing relevant information, summarizing, making diagrams, organizing information in a discontinuous text  3. Social skills: working in a group, sharing information, appreciating different lifestyles  4. Critical thinking skills: analyzing information, giving opinions, expressing positive and negative facts about a certain situation, applying previous knowledge. |

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| **Objectives** | **Assessment criteria** |
| - To know the different simple machines and their application.  -To identify simple machines bases in the tools and engineering used by former workers and factories (non-electrical powered machinery)  -To understand how old machinery used natural energy sources (water, wind, strength...)  - 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 can name the simple machines.  -Students are able to identify simple machines bases in more complex machinery.  - Students can describe how things work.  - Students can make simple sentences in English to describe how things work. |

***Content***

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| * Simple machines * Natural powered factories * infographic * Describing how things work |

**Activities and Procedure:**

* **Activity 1 : Learn about simple machines**

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| Objectives: https://www.generationgenius.com/videolessons/simple-machines-video-for-kids/  -To learn the name and use of the 6 simple machines: pulley, lever, screw, inclined plane, wedge, wheel and axel  -To recognize these simple machines in everyday´s objects and in more complex machinery.  Procedure:\*   * Introduce the 6 simple machines o students and let them think about what they can use them for and where they can find them. * Collect their ideas and check whether they were right. Make a list of objects based in simple machines. |

* **Activity 2: Search for examples of non- electricity based factories:**

Objectives:

-To appreciate how our grandparents produced what they needed for a living without the help of electrical appliances and machinery.

- To learn how some factories worked in the past by using only simple machines and natural energy

Procedure: \*

* Choose an example of an old factory close to childen´s experiences and culture (mill, iron foundry, sewing factory…)
* Ask them to imagine what kind of energy and tools they used to elaborate their product.
* Let students explain their ideas to the rest of the group.
* Check whether they were correct through any possible means; visit, internet, encyclopedia, …
* Once they have the information, students rebuild their knowledge and write an instruction text and make pictures make an info- graphic.
* **Activity 3: info-graphic**

Objectives:

* To learn how to summarize information in a discontinues text.
* To make an info- graphic to share information with other students

Procedure:

* Students use their previous text to make an info- graphic and find or draw pictures to illustrate it
* They present it to their mates
* **\*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 in English * Student knows what each simple machine is used for * Student can recognize simple machines in commonly used objects   Activity 2   * Student can express his/ her ideas in front of the class in his/ her own language * Student can understand how energy is produced out of natural sources * Student can change his/ her previous ideas when he finds the proper answers. * Student can explain in simple oral and written English how some factories used to elaborate their materials   Activity 3   * Student can summarize information in a discontinuous text. * Student can use simple structures in English to share information with his/ her mates. |