**LESSON PLAN**

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| **school*:*** |  |  |  |
| **level*:*** |  |  |  |
| **subject:** | SCIENCE | | |
| **Other subjects** | English | | |
| **skills** | Looking for information, using reading strategies according to a task, expressing opinions, writing in a foreign language following a model, sharing information… | | |
| **teachers***:* |  |  |  |

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| **Transversal skills** |
| 1.Language skills: communication in a foreign language  2. Thinking skills: strategies to face a task  3. Social skills: working in a group, sharing information  4. Critical thinking skills: analyzing information, |

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| **Objectives** | **Assessment criteria** |
| -To make students aware that most of the objects we use in our daily life consume energy to work  -To find out which is the most commonly used energy source in students ‘surroundings.  -To learn that energy transforms to make things work  - To make students consider life with a lower energy consumption  - To learn vocabulary and simple structures to develop the activities and to communicate results in English. | -Students are able to identify daily objects that use energy to work.  -Students are able to identify different energy sources.  - Students know the most used energy sources in their area.  - Students are able to identify different ways to produce electric power ( solar panels, hydro power, wind power…)  -Students can decide on which energy consuming objects/ devices are necessary and which are not necessary.  -Students can name some daily devices in English.  - Students can make simple sentences in English following an example to give specific information about the topic. ( Information according to the different activities) |

***Content***

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| * Daily objects and devices that use energy to work and their names in English * Different energy sources * Energy transformation * Former alternatives to energy consuming devices that we use nowadays. |

**Activities and Procedure:**

* **Activity 1 : Energy hunt. Worksheet**

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| Objectives:  -To test students ´ starting point about energy consumption.  -To learn the name of some daily use objects and devices in English.  Procedure:\*   * Students write the name of some daily devices ( about 10 ?)that use energy to work. They can write the names in their own language if they do not know the English word, they will be less limited. * Students share their list with their mates. See what objects are repeated, discuss if all of them use energy, elicit the English vocabulary… |

* **Activity 2: Chart. Worksheet**

Objectives:

-To find out the different energy types and sources we use in our daily life.

- To learn that energy transforms.

-To learn the name of former alternatives to some energy consuming devices

-To learn some useful English vocabulary and structures to share work on the topic

Procedure:\*

* Choose some objects from the list in the previous activity ( the ones that may admit more diverse answers in the chart. You may also include new ones that give wider options.

Example: *car*- a car may use different types of energy: petrol, gas, electricity

*Heater*- can use solar panel, gas, electricity, fire…)

* Students complete the following information about each object: Is it a necessity / How is it manufactured/ which energy does it use? / where does that energy come from?/which object did they use before to do the same work?

They will be able to give some pieces of information on their own but they will have to look for some other, like : Where does that energy come from? or :Which object did they use before to do the same work?

The teacher can provide some text with the information or ask the students to find the information on their own by different means and share it with their mates.

You can do this activity either individually, in groups or in a big group.

If you do it individually:

* students share their answers with their mates so they can learn from each other, discuss and give reasons for their answers and use the language.
* Students write a short explanation about each object. That way they can present their results. They can use model structures that will be repeated again and again and that will help them learn the language.
* Example:

A ***heater*** is necessary in our lives. ***Heaters*** are manufactured in factories by ***robots and workers***. My home heaters use ***gas*** . Gas ***is a fossil fuel*** and comes from ***underground rock***. Our grandparents used ***fire place and firewood stoves*** to ***keep warm***.

* **\*These are just some ideas to face the activity. 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.**
* **You can also choose if you want to go deeper in any of the contents from the chart and if you want to involve other teachers in your research.**

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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 finishes his/her task * Student writes some items in English * Student shares the information with his/her mates * Student shows interest in mates ‘work * Student learns the English words for the objects   Activity 2   * Student completes his/ her task * Student is able to give reasons for his/her answers in his own language * Student is able to give reasons for his/ her answers in English * Student shows interest and listens to his/ her mates * Student is able to express opinions * Student can find relevant information when reading * Student knows different types and sources of energy . * Student can write a short text in English following a model * Student can share information with his/ her mates * Student is aware of own work. * Student knows English vocabulary about the topic. * Student uses new learnt vocabulary |