**Lesson Plan Table**

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| Subject: | Chemistry | | | | |
| Authors: | Teacher: Ana Margarida Maria  Students: Carolina Descultu, Diana Necker e Mariana Faísca | | | | |
| Date: | | | | \_\_02\_/\_05\_/ \_2019\_ | |
| Estimated time: | | 60 minutes +/- 30 minutes |  | |  |
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| Summary: | Historical evolution of the Periodic Table. Organization of the periodic table: groups, periods and blocks.  Commemoration of 150 years and International Year of the Periodic Table.  Use chemistry applications from the Google Play to make learning chemistry more attractive. | | | | |

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| **Objectives**  (Specify skills information that will be taught) | **Activity/ Information**  **Teacher Guide/ Student guide** | **Materials Needed**  (Other resources - web, book...) | **Assessment Methods**  (steps to check for student understanding) | **Time**  **Where?** |
| \* Develop a plan for greater and more efficient use of technology by students in their direct work  \* Understand and apply the concepts  ***Know Concepts or Keywords :***  \*Identify relevant scientists in the construction of the Periodic Table  \* Interpret the organization of Periodic Table based on periods, groups and blocks  ª Relate the electronic configuration of the atoms of the elements with their relative position in the TP | **Motivation Activities**  What do you remember from chemistry lessons? Let´s compete a bit.  Employ Smartphone and PC in the lesson to study the Periodic Table. | Phone or tablet with WIFI connection  PC, data projector | **Quiz** | **In Classroom**  60 minutes |

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| **Description of the activity:** | |
| **Introduction** | The subject of this class arises from the commemoration of the 150 years of the Periodic Table.  The diversity of materials of nature is the result of the varied associations of some of a few million known substances. However, the number of chemical elements that constitute them, which are organized in the Periodic Table of the elements, is very small.  Who had the idea of ​​ordering the chemical elements on such a great table?  The evolution of the structure of the Periodic Table and the organization of the elements was a slow process that resulted from the contribution of many scientists.  How was the organization of the chemical elements made?  The 118 chemical elements are arranged in 18 vertical columns, which we call groups and in 7 horizontal lines, the periods.  The elements are arranged in ascending order of their atomic number.  Elements of the same group have properties that are common to each other.  There are sets of metallic, non-metallic elements and noble gases.  As there are similar properties among several elements, they form families: alkaline metals, alkaline earth metals, halogens and noble gases. |
| **Main activity** | Advance to the interpretation of the Periodic Table by observing it and analyzing its organization.  Employ Smartphone and PC in the lesson to study the Periodic Table. |
| **Lesson Guide (Step by step)** | PowerPoint presentation: History and organization of the Periodic Table.  Video made by the students: Chemistry and Geography thight hands**.**  GAME Time: Go to Google Play (Play store) and download (See notes)  PERIODIC TABLE QUIZ. |
| **Exercises (2 or 3 levels of difficulty)** |  |
| **Conclusion and Evaluation** | PERIODIC TABLE QUIZ (Kaoot) |
| **Notes:** | Periodic Table:  Resultado de imagem para TABELA PERIODICA APP  https://tinyurl.com/staremesto |