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Lesson Plan: The Periodic Table

**Unit Topic or Theme:** Science

**Grade:** 6

**Lesson Topic or Theme:** The Periodic Table

**Lesson Objectives:**

* The students will be able to identify elements on the periodic table
* The students will know the sub-groups of the periodic table
* The students will know how to figure out how many protons, neutrons, and electrons are in any given element.
* The students will know how to identify the atomic symbol, atomic number and the atomic mass of each element

**Instructional Technique:**

* Video
* Working in pairs
* Computer work
* Class game

**Instructional Materials:**

* Computers
* Introductory activity video clip on the periodic table <http://www.youtube.com/watch?v=d0zION8xjbM>
* Blank Periodic Table <http://cactus.dixie.edu/smblack/chem1010/images/Unit_1/1D_periodic_table.jpg>
* TravelQuest web site on the periodic table
* Bingo Cards <http://education.jlab.org/beamsactivity/6thgrade/elementbingo/elementbingoclassset.pdf>
* The worksheet for homework <http://pleasanton.k12.ca.us/avhsweb/kawashimae/Downloads/ichp%202/Periodic%20Table%20Worksheet.pdf>

**Theoretical Perspective:**

This information is important for students to learn because everything is made up of elements which are used in everyday life. The periodic table is a basic component of science which will be used in future years of education. This lesson helps the students apply their knowledge about the periodic table in different ways.

**Procedure:**

1. Introductory Activity
* The students will watch a short clip reviewing the elements on the periodic table.
1. Step-By-Step
2. The students will color in a blank periodic table according to the different sub-groups, which they can reference while completing the TravelQuest.
3. After watching the short clip, the students will break into pairs and sit at a computer together.
4. The website, “The Periodic Table” will be up on each computer so the students do not have to navigate to try and find it.
5. The students will work together in pairs to complete the travel quest with Eddie the elephant based on the periodic table. The teacher will be walking around if the students have any questions about how to use the computer or about the questions themselves.
6. When they finish, they will take a quiz. They can use their periodic tables they colored in earlier on the quiz.
7. Closure
* The students will play “Element Bingo”. They will each get a bingo card with different elements on it and the winners will get a homework pass.
1. Adaptations

 - For the visually impaired students:

\*They will be able to hear the video clip and get the same review as the other students

\*For the TravelQuest, since the students are already working in pairs their partner can read aloud each question.

 - For the hearing impaired students:

 \*They will able to watch the video clip.

\*They will be able to complete the TravelQuest and the quiz without any assistance.

1. Homework
* The students will complete a worksheet for homework.

**Evaluation:**

1. How/when will you determine if you have met your objectives?
* The students will show that they can identify elements on the periodic table when they take the quiz.
* The students will demonstrate that they know the sub-groups of the periodic table by coloring in the periodic table correctly.
* The students will know how to figure out how many protons, neutrons, and electrons are in any given element by completing the quiz.
* The students will know how to identify the atomic symbol, atomic number and the atomic mass of each element by completing the quiz.