Elements in the Universe

Summary
Students will use a graph of the relative abundance of elements in the Universe to determine relationships between size of the atoms and their abundance.

Main Core Tie
Science - Chemistry
Standard 1 Objective 1

Time Frame
1 class periods of 60 minutes each

Group Size
Individual

Materials
- overhead of chart (attached)
- student worksheet (attached)
- periodic table of the elements

Student Prior Knowledge
Students need to know what an element is and how they are different from each other.

Instructional Procedures
Create a chart showing the abundance of something like shirt colors, hair colors, or types of shoes, etc.. Show students how the total number of objects is divided into the individual type to produce the percentage.
Graph the example on the board. Ask students if they see a trend and can explain what it means.
Read the introduction on the student sheet to the students and discuss any questions they have.
Direct the students to a periodic table and illustrate where the atomic number is located.
Read the procedures and give students time to work.
Have students share their conclusions and select a few to read theirs to the class.
This graph shows the trends for the entire periodic table: You may wish to make an overhead of the graph to share with the students after they are done. There is an enlarged version of it at the end of the activity.

Bibliography
Lesson Design by Jordan School District Teachers and Staff.

Authors
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