Periodic Table of Elements

Each Element known by:

* Atomic Number
* Symbol
* Group
* Period

Program:

A guessing game where the user has a choice to guess one of an elements qualities. The user has a limited number of choices.

Classes:

Elements: Contains basic properties of elements

Members:

Name

Symbol

Period

Group

Methods:

Constructors

Getters and Setters

GuessByName (Abstract?)

ElementList (child of Element): Contains list of elements based on chemical group

List will be of type Elements

AtomicNum:

Methods:

GuessByNum;

GuessByName;

Symbol:

Methods:

GuessBySymbol;

GuessByName;

Algorithm:

1. Prompt the user to enter what chemical group they wish to focus on
2. Using a switch() to launch the constructors

Guess an element’s:

1. Atomic Number (The number of Protons)
2. Symbol (The Symbol of the Element)
3. Atomic Weight
4. Group (Noble Gas, Alkaline metal, etc.)
5. Number of Orbitals