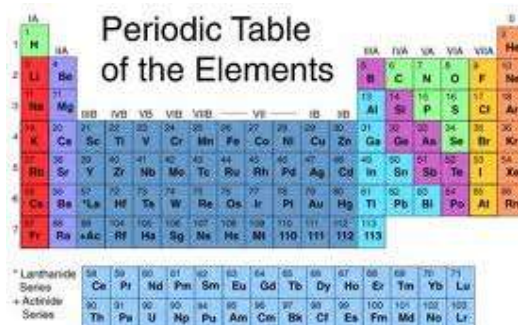


Y8 Science Enrichment Homework

This half term, in Chemistry, we will be studying the Periodic Table.



A standard periodic table of elements, color-coded by groups. It includes the main groups (IA to VIIA), transition metals (IIB to VIII), and the lanthanide and actinide series at the bottom. The title 'Periodic Table of the Elements' is centered at the top.

Periodic Table of the Elements

* Lanthanide Series
+ Actinide Series

Task: To create a game based on the Periodic Table of elements

Understanding the Periodic Table is really important for doing well in Chemistry or Dual Award Science GCSEs. This enrichment homework will improve your understanding of the elements, patterns and trends in the Table.

Your task is to **develop a game based on the Periodic Table**. This could be a board game, card game or quiz game.

A **prize** will be given to the best entry from Y8.

Consider:

- How the elements are arranged in vertical Groups and horizontal Periods.
- The trends in atomic number and reactivity up or down the Groups.
- The symbols, chemistry and economic importance of different elements.
- Where different types elements are found such as metals, semi-metals and non-metals.
- Including a set of instructions for how to play (and win) the game.

Challenge: Within the game try to include questions or facts on *electronic configuration* (e.g., Group 1 metals such as sodium have one electron in the outer shell, Group 2 have 2 electrons etc).

This homework should take you at least two hours and should be well presented; use appropriate scientific language, symbols and check your SPAG.

Deadline: The homework is due in the week beginning Monday 22nd May 2023.