

CHEMISTRY GAME:

PERIODIC TABLE BLOCKS

*Print out the modern periodic table with 7 rows and 18 columns.

[Stationery shops may have colourful charts for a small sum]

**A period is a horizontal row of the periodic table----

- make a computer program to give any of the rows as desired - [actually 9 sets will arise because of 7 actinides and 6 lanthanides] The user asks a question : What is common among this list? Answer should be shown by the computer

*** A group is a vertical column of the periodic table, based on the organization of the outer shell electrons. There are a total of 18 groups.

make a computer program to give any of the columns as desired.
user asks a question : What is common among this list? Answer should be shown by the computer

*4 Create a game with just the first two rows [=periods] --- make individual tiles of the elements which will fit into these slots =
Total of 10 elements and they should be arranged into the skeleton provided by you [= computer]—

Even the creation of this skeleton can be left to the student - computer can help to show the mistakes one by one until the right answer comes - or give the right answer after 3 wrong attempts by the student.

*5 Play *4 above for row numbers 3 to 5. 3 or 4 or 5 one at a time. Give a clue [viz. 18 items are to be arranged in the ascending order of the atomic number] – computer should be able to check the answer and approve-

*6 Play the the game with the last column only – i.e arranging the suitable tiles in the slots

*7 Now play the game [i.e arranging tiles in the slots] with the first two columns. Only one column at a time.

Seven activities given above may be difficult in the first attempt – But these games can be played again and again and each time checking with the printed table shown to the student by the facilitator , whenever needed. After a few trials it becomes easy .

To get to that stage , play the game one at a time until you [=student] get the right result at the first attempt. Start with # 1* above and move ahead one by one.

Wherever computer is mentioned a teacher [or facilitator] can help. A little preparation on their part may be needed.

Given above is a game for self-learning [one person] with the help of a teacher or a computer . With a little planning this game can be easily extended to a pair of students [rivals] .or even a group . Those interested can write to

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THE ULTIMATE GAME OF BUILDING BLOCKS TO CONSTRUCT THE PERIODIC TABLE

1. MAKE A BOARD WITH SQUARES TO FORM A 7 ROWS X 18 COLUMN MATRIX

This can be on a cardboard [like a chess board] or on the computer monitor screen.

2. Cut 94 squares of the same size to fit into the squares on the board . or create draggable small squares on the computer
3. Neatly write the element name . mass# and atomic # on these small squares [=tiles=]—follow the current convention used on the printed display version of the periodic table.

THE AIM OF THE GAME IS TO FILL THE SQUARES WITH TILES WITHOUT
MISTAKE

4. First let the students fill up the 18th [=last] column – these are noble gases ; also called inert elements.
5. Let the students start filling one row at a time
6. When all are filled and checked, prepare extra tiles for 4a row of lanthanides and 4b row for actinides
7. Students who have successfully filled can go to #6 above.

Tile makers may use colours for effect and information – a tag may be added to naturally radioactive elements