

Creating a Periodic Table

Name: _____

Purpose: To create a periodic table based on the properties of the fictitious elements in the list provided.

Procedure: Work in a group. Write the symbol and list of 20 imaginary elements and properties each on a small card. Rank the elements from lowest to highest mass and create a periodic table based on properties. Where do you begin a new row? There are four gaps, so predict the properties of the missing elements. You will make a rectangular grid, but you do not know the size before you begin. How many elements per row and how many rows are there? Columns should have similar properties.

Element (symbol)	Mass (g)	State	Density (g/cm ³)	Reactivity
Lockium (L)	2.0	Solid	2.0	Very reactive
Chanium (Cn)	4.0	Solid	2.5	Reactive
Pattysonium (P)	6.0	Solid	3.0	Reactive
Sokolovian (Sk)	8.0	Liquid	2.0	Reactive
Elesium (El)	12	Gas	0.1	Not reactive
Bekkium (B)	14	Solid	3.0	Very reactive
Wongium (W)	18	Solid	5.0	Reactive
Samrium (S)	20	Solid	6.0	Reactive
Yuenium (Yu)	22	Gas	0.2	Very reactive
McNeillium (N)	24	Gas	0.3	Not reactive
Chienium (Ch)	28	Solid	4.0	Reactive
Dymytrium (D)	30	Solid	6.0	Reactive
Blockium (Bl)	32	Solid	7.0	Reactive
Ghtaurium (G)	34	Solid	7.0	Very reactive
Luimium (Lu)	36	Gas	0.5	Not reactive
Kangrium (K)	38	Solid	4.0	Very reactive
Wilsonium (Wi)	40	Solid	6.0	Reactive
Marzoukium (Mz)	42	Solid	7.0	Reactive
Kamberium (Km)	46	Solid	7.5	Very reactive
Lanium (Lm)	48	Liquid	2.0	Not reactive

When you have created your periodic table, glue your pieces of paper onto another paper.

Questions:

1. What are the dimensions of your periodic table? How many rows and how many columns?
2. In which column do you find the very reactive solids?
3. In which column do you find the non-reactive gases?
4. What are the properties of your four missing elements? Give names to your missing elements.
5. How does density change as you read through your periodic table?
6. Explain why the word "periodic" is used in the name of the table of elements.
7. How is your activity similar to the process Mendeleev used to classify the elements? How is it different?

<p>Lockium</p> <p>L</p> <p>2.0 g Solid 2.0 g/cm³ Very reactive</p>	<p>Chanium</p> <p>Cn</p> <p>4.0 g Solid 2.5 g/cm³ Reactive</p>	<p>Pattysonium</p> <p>P</p> <p>6.0 g Solid 3.0 g/cm³ Reactive</p>	<p>Sokolovian</p> <p>Sk</p> <p>8.0 g Liquid 2.0 g/cm³ Reactive</p>
<p>Elesium</p> <p>El</p> <p>12 g Gas 0.1 g/cm³ Not reactive</p>	<p>Bekkium</p> <p>B</p> <p>14 g Solid 3.0 g/cm³ Very reactive</p>	<p>Wongium</p> <p>W</p> <p>18 g Solid 5.0 g/cm³ Reactive</p>	<p>Samrium</p> <p>S</p> <p>20 g Solid 6.0 g/cm³ Reactive</p>
<p>Yuenium</p> <p>Yu</p> <p>22 g Gas 0.2 g/cm³ Very reactive</p>	<p>McNeillium</p> <p>N</p> <p>24 g Gas 0.3 g/cm³ Not reactive</p>	<p>Chienium</p> <p>Ch</p> <p>28 g Solid 4.0 g/cm³ Reactive</p>	<p>Dymytrium</p> <p>D</p> <p>30 g Solid 6.0 g/cm³ Reactive</p>
<p>Blockium</p> <p>Bl</p> <p>32 g Solid 7.0 g/cm³ Reactive</p>	<p>Ghtaurium</p> <p>G</p> <p>34 g Solid 7.0 g/cm³ Very reactive</p>	<p>Luimium</p> <p>Lu</p> <p>36 g Gas 0.5 g/cm³ Not reactive</p>	<p>Kangrium</p> <p>38 g Solid 4.0 g/cm³ Very reactive</p>
<p>Wilsonium</p> <p>Wi</p> <p>40 g Solid 6.0 g/cm³ Reactive</p>	<p>Marzoukium</p> <p>Mz</p> <p>42 g Solid 7.0 g/cm³ Reactive</p>	<p>Kamberium</p> <p>Km</p> <p>46 g Solid 7.5 g/cm³ Very reactive</p>	<p>Lamium</p> <p>Lm</p> <p>48 g Liquid 2.0 g/cm³ Not reactive</p>