

# Development of the Periodic Table (from article)

Article Part # 1

Scientist discussed	Contribution to the development of the Periodic Table	Pattern that they used to organize the elements. Explain.
Dimitri Mendeleev	<ul style="list-style-type: none"> <li>• 1st formal periodic table</li> <li>→ • 63 elements</li> </ul>	<ul style="list-style-type: none"> <li>• increasing atomic weight +</li> <li>• left + space for undiscovered elements</li> </ul>
Antoine Lavoisier	<ul style="list-style-type: none"> <li>- Prior to Mendeleev - 1st list</li> </ul>	<ul style="list-style-type: none"> <li>• list of 33 elements</li> <li>• One dimensional</li> </ul>
Johann Döbereiner  Ecan-Bapiniste-1829 Dumas	<ul style="list-style-type: none"> <li>- organize elements in a meaningful way</li> <li>- organized unknown elements</li> </ul>	<ul style="list-style-type: none"> <li>- arranged in 3 groups (called triads)</li> <li>- correlation between chemical properties + atomic weight of elements</li> </ul>
	<ul style="list-style-type: none"> <li>- turned away from the idea of triads</li> <li>- Focused on mathematical equation</li> </ul>	<ul style="list-style-type: none"> <li>- equations that could account for the increase in atomic weight</li> </ul>

Group Members:

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Article Part # 2

Scientist discussed	Contribution to the development of the Periodic Table	Pattern that they used to organize the elements. Explain.
<p>Mendeleev</p> <p>Alexandre-Emile Bequer de Chauveau</p> <p>John Newlands</p>	<p>Atomic weight repetition of properties at regular intervals</p> <p>Arranged by atomic weight</p> <p>Arranged in spiral cylinder where similar elements lined up vertically.</p> <p>Discovered that when elements were arranged by atomic weight, any element eight places ahead and eight places behind showed similar properties - (The Law of Octaves)</p>	<p>repetition of properties horizontally.</p> <p>Elements arranged by atomic weight</p> <p>Elements inscribed in cylinder cut off. So similar elements lined up vertically</p> <p>Arranged by the elements atomic weight, every other eighth element had similar properties.</p>

Group Members: Ben Vogel, Julia, Nadia, Rochester, Nick Szesnat, Emma Crisafulli, Devin Jackson, Ben Carter

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## Article Part # 3

Scientist discussed	Contribution to the development of the Periodic Table	Pattern that they used to organize the elements. Explain.
- Mendeleev	<ul style="list-style-type: none"> <li>- Accredited w/ discovering modern Periodic Table</li> <li>- Discovered 7 new elements</li> </ul>	- Assorted Table based on Atomic Weight
- Anton van den Braeck	- Proposed table should be organized based on nuclear Charge	→
<ul style="list-style-type: none"> <li>- Henry Moseley</li> <li>- Ernest Rutherford</li> </ul>	<ul style="list-style-type: none"> <li>- Discovered K-Lines</li> <li>- Discovered Fundamental Quality = Atomic #</li> </ul>	<ul style="list-style-type: none"> <li>- Used Atomic # to arrange elements</li> <li>- Further explained Atomic #</li> </ul>
- Julius Lothar Meyer	<ul style="list-style-type: none"> <li>- Had similar model to Mendeleev but didn't receive credit</li> <li>- Classified some elements incorrectly</li> </ul>	- Organized Table by Atomic Weight
- William Ramsay	<ul style="list-style-type: none"> <li>- Discovered Argon + Noble Gases</li> <li>- Put Noble Gases in Table</li> </ul>	- Put Noble Gases in a new column

Group Members: Shannon, Maddie, Allison, Hailey, Emma, Jake, Aayran, Austin, Michael