

7. [2 pts] How did Newlands improve on the organizational schemes that had come before him? Was his improvement readily accepted at the time? *Explain why or why not.*

8. [2 pts] What atomic property was used by Newlands to arrange elements in early periodic tables? What property is used in the modern table? Why was this property not originally used?

9. [1 pt] The structure of Mendeleev's periodic table was not completely accepted by the scientific community of the late 1800s. What specific element was discovered in 1894, and then discovery of what similar elements occurred over the next few years that challenged the structure of the periodic table?

10. [1 pt] When the periodic table was finally arranged as indicated in #8, what two elements became properly ordered? Why had scientists thought that they had been incorrectly positioned?

11. [1 pt] According to Bohr's model, why are the Noble gases unreactive?

12. [2 pts] On the last page of the article is an alternative to the standard periodic table. Find one *other* alternate periodic table (e.g. on the Internet). Paste an image and link onto a blank page, then explain what it is designed to illustrate that makes it different from our standard periodic table.