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| **Text Set Title :Periodic Table** | | |
| **Text Set Grade Placement:11-12** | | |
| **Enduring Understandings** | | |
| The text set is compiled revolves around the aspect of the history of the periodic table and elements.  By: Brandy Roger and Tonya Pemberton | | |
| **Text and Resources**  (Indicate in what order the supporting works are to be introduced and taught.) | | |
| **Anchor Text** | **Title:** The Disappearing Spoon:  And Other True Tales of Madness, Love, and the History of the World from the Periodic Table of the Elements Author: Sam Kean | |
| **Supporting Works** | **Book(s)** 1. Trade book: The Disappearing Spoon:  And Other True Tales of Madness, Love, and the History of the World from the Periodic Table of the Elements by Sam Kean 2. Zumdahl, S., & Decoste, D. (2008). Chemical Foundations: Elements, Atoms, and Ions. *Introductory Chemistry* (). Boston: Houghton Mifflin Company.  Article(s)  3. Periodic Table of the Elements essay | Science | Classroom Resources | PBS Learning Media. (2004, January 1). *Periodic Table of the Elements essay | Science | Classroom Resources | PBS Learning Media*. Retrieved July 21, 2014, from <http://www.pbslearningmedia.org/resource/phy03.sci.phys.matter.ptabledoc/periodic-table-of-the-elements-essay/>  4.  Poem(s)  1. **The Element Song – YouTube. (n.d.). YouTube. http://www.youtube.com/watch?v=GFIvXVMbII0**  2.  Info graphic(s)  3. Timeline of the Elements: Dates & Countries of Discovery. (2014, January 26). *Compound Interest*. Retrieved July 21, 2014, from <http://www.compoundchem.com/2014/01/26/timeline-of-the-elements-dates-countries-of-discovery/>  4.  **Other Media**  5. Chemicool Periodic Table. 7/21/2014 <http://www.chemicool.com/>  6. Pogue, D. (n.d.). NOVA “Hunting the Elements”. *Developing the Periodic Table*. Retrieved July 21, 2014, from <http://www.pbslearningmedia.org/asset/nvhe_vid_periodic/> | |
| **Standards** | Explain the origin and organization of the Periodic Table. Predict chemical and physical properties of main group elements (reactivity, number of subatomic particles, ion charge, ionization energy, atomic radius, and electronegativity) based on location on the periodic table. Construct an argument to describe  how the quantum mechanical model of the atom (e.g., patterns of valence and inner electrons) defines periodic properties. Use the periodic table to draw Lewis dot structures and show understanding of orbital notations through drawing and interpreting graphical representations (i.e., arrows representing electrons in an orbital). | |
| **Knowledge** | | **Skills** |
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| **Rich, Authentic Task** | | |
| Create a model of an atom  Create their own periodic table and explain the composition and trends throughout the table | | |