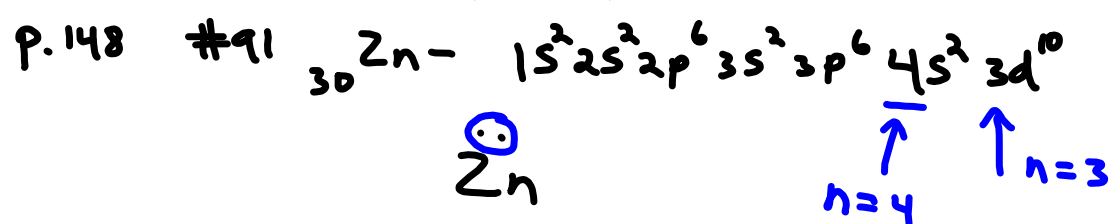
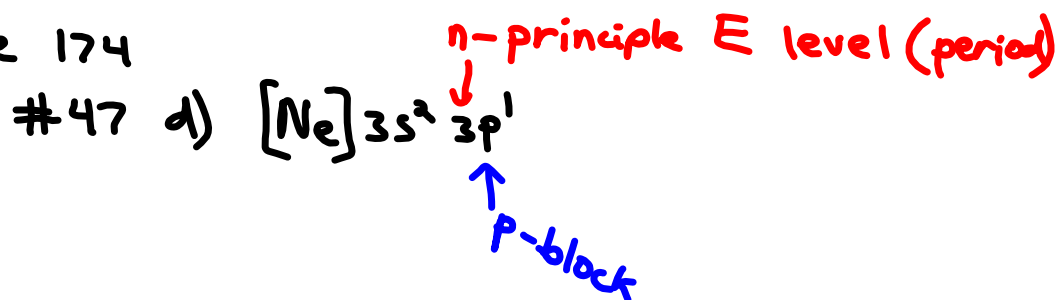


Assignment



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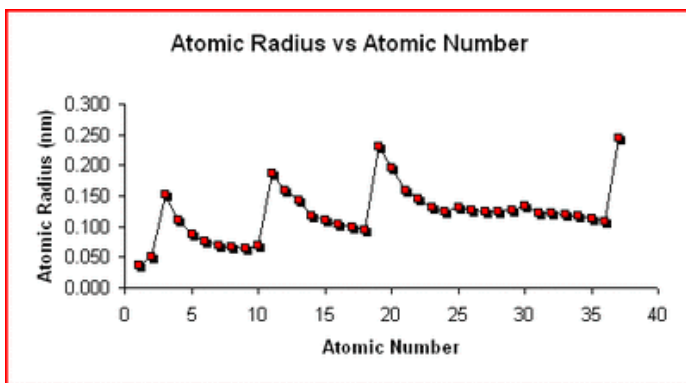


Trends in the Periodic Table

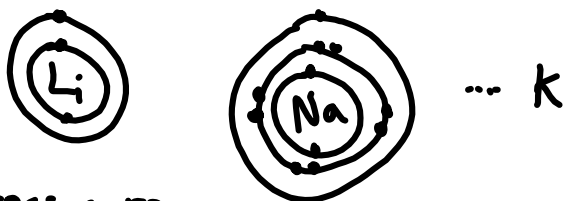
patterns ↗

Atomic Radius (Size)

- A. Down a column
- B. Across a row

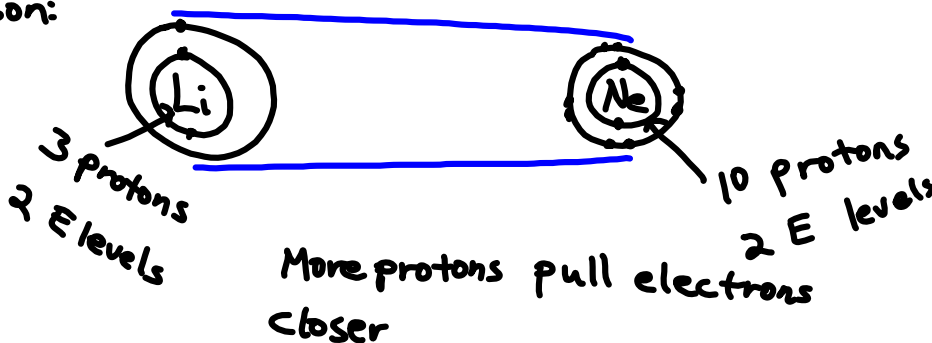


A. Down column - Atomic size increases
Reason - "energy levels"



B. Across a row -

Reason:



Example - Which atom is larger F or Cl

Same column - Cl is larger, more E

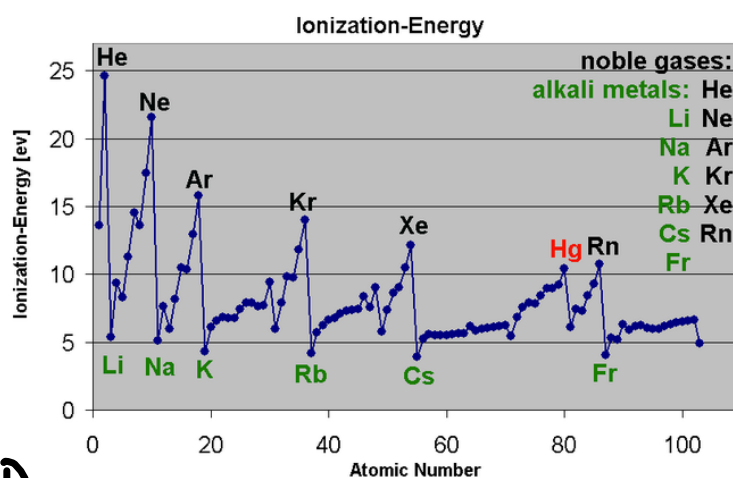
Example - Which is smaller, Na or Al? ^{levels}

- Al has more protons pulling electrons closer.

Questions p. 175 #52, 62

Trends- Ionization Energy

Definition- Energy needed to remove an e^- .



A. Down a column, ionization E decreases
Reason: Down - electrons are further from nucleus. Easier to remove.

↑
Energy levels

B. Across Row - Ionization E increases because nuclear charge increases and holds e^- tighter

↑
protons

Example 1 - Which has greater I.E.
F or Cl?

F has fewer E levels & its e^- closer to nucleus

Example 2 - Which has greater I.E.
Si or Ar ← greater # protons
(harder to remove)

Complete worksheet questions (Ch. 6)
p. 175 mixed review.

Unit 1- Atomic Structure Test Outline

1. Models of the atom
2. Quantum mechanical atom
3. Electron configuration
4. Valence electrons
5. Evidence supporting models
 - atomic size
 - Ionization energy.

Test March 1, 2021