

## Electron Affinity Quiz PDF

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**Provide an example of an anomaly in electron affinity trends and explain the reason behind it.**

**Explain why electron affinity generally increases across a period in the periodic table.**

**Discuss why elements with nearly full outer shells have high electron affinities.**

**How does atomic size affect electron affinity, and why?**

**Describe the role of electron affinity in determining an element's chemical reactivity.**

**Which of the following statements about electron affinity trends is true? (Select all that apply)**

- Electron affinity increases across a period
- Electron affinity decreases down a group
- Electron affinity is higher for larger atoms
- Electron affinity is unaffected by electron configuration

**Which unit is commonly used to measure electron affinity?**

- Joules
- Newtons
- Electronvolts (eV)
- Amperes

**Which factor does NOT influence electron affinity?**

- Atomic size
- Nuclear charge
- Electron configuration
- Number of neutrons

**Which of the following factors influence electron affinity? (Select all that apply)**

- Atomic size
- Nuclear charge
- Number of isotopes
- Electron configuration

**What is electron affinity?**

- The energy change when an electron is added to a neutral atom
- The energy required to remove an electron from an atom
- The tendency of an atom to lose electrons
- The energy required to add a proton to an atom

**Why might an element have a lower than expected electron affinity? (Select all that apply)**

- It has a half-filled orbital
- It is a noble gas
- It has a high atomic number
- It has a small atomic radius

**How can electron affinity be measured experimentally, and what challenges might arise in its measurement?****Which element is likely to have the highest electron affinity?**

- Fluorine
- Neon
- Sodium
- Lithium

**What are some applications of electron affinity? (Select all that apply)**

- Designin semiconductors
- Predictin weather patterns

- Understanding chemical reactivity
- Biological electron transfer processes

**Which elements typically have low or positive electron affinities? (Select all that apply)**

- Noble gases
- Alkali metals
- Halogens
- Transition metals

**Which of the following elements has an electron affinity anomaly due to a half-filled p orbital?**

- Oxygen
- Nitrogen
- Carbon
- Boron

**In which direction does electron affinity generally increase across the periodic table?**

- From right to left
- From top to bottom
- From left to right
- It remains constant

**Why do noble gases have low electron affinities?**

- They have high atomic masses
- They have complete valence shells
- They are highly reactive
- They have low atomic numbers

**Which elements are likely to have high electron affinities? (Select all that apply)**

- Chlorine
- Argon
- Oxygen
- Potassium

**What happens to electron affinity as you move down a group in the periodic table?**

- It increases
- It decreases
- It remains the same
- It fluctuates randomly