

3	Lead	$1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^6 5s^2 4d^{10} 5p^6 6s^2 4f^{14} 5d^{10} 6p^2$
4	Bromine	$1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^5$
5	Copper	$1s^2 2s^2 2p^6 3s^2 3p^6 3d^{10} 4s^1$
6	Cesium	$1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^6 5s^2 4d^{10} 5p^6 6s^1$

2. List the elements in the increasing order of their electronegativity. Give reasons for your answer.

Type your response here: The element with the least electro negativity on the list is Cesium. Next, Strontium has the second lowest electro negativity, and then comes Lead with the third least. Copper has the third most electro negativity, and after is Bromine being the second most electronegative. And finally, Krypton has the most electro negativity in this group of elements. My reasoning for this answer is that the electro negativity trend follows an increasing role going from left to right on the period table. Electro negativity also increases when going from the bottom and up in the groups on the periodic table.

3. Which element among elements 2, 4, and 6 has the lowest ionization energy? Explain your answer.

Type your response here: Element 6 has the lowest ionization energy. The definition of ionization energy is the energy required to remove one electron from an atom or an ion. Element 6, being Cesium has the lowest I.E. and this fact makes sense. The I.E. trend follows an increasing role as you go up in group and from left to right in a period. Cesium, located in the bottom left of the periodic table (where I.E. is the lowest), has the lowest I.E. compared to Strontium and Bromine. It has the most electron shells out of these three elements, making it easier for it to lose an electron and it also has one valence electron – in which it wants to lose.

Resources

[history of the periodic table](#)

Evaluation