Choose the best answer.

Which statement best describes the relationship between principal energy levels and atomic radius?

ATTEMPT 1

- The more principal energy levels an atom has, the smaller its atomic radius.
- **The more principal energy levels an atom has, the bigger its atomic radius.** ✓
- There is no relationship between principal energy levels and atomic radius.
- The fewer principal energy levels an atom has, the bigger its atomic radius.

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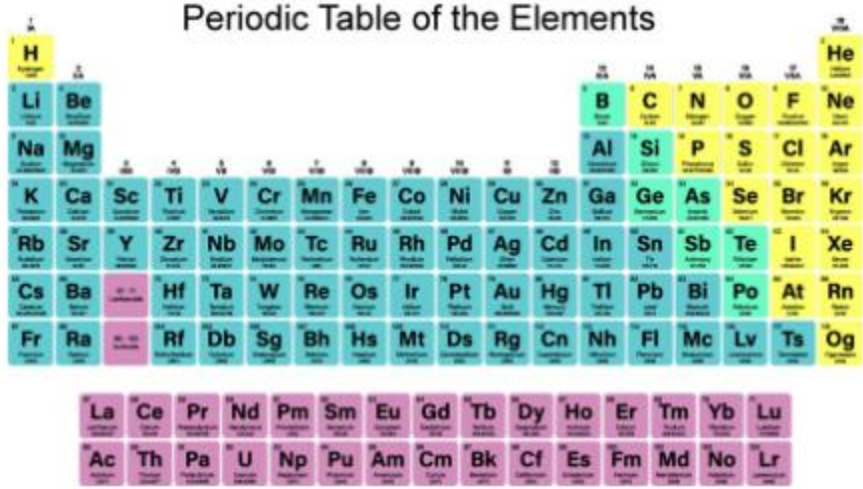
Select the best answer.

Fluorine, bromine and iodine are all elements in group 17.

The electron configuration of fluorine is $1s^2 2s^2 2p^5$

The electron configuration of bromine is $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^5$

Which of these configurations belongs to iodine?



ATTEMPT 1

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- ○ $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^6 5s^1$
- ○ $1s^2 2s^2 2p^6 3s^2 3p^5$
- ◉ $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^6 5s^2 4d^{10} 5p^5$ ✓
- ○ $1s^2 2s^2 2p^5 3s^2 3p^6 4s^2 3d^5$

Select the best answer.

Which statement is true about electrons that are in an atom's highest energy levels?



ATTEMPT 1

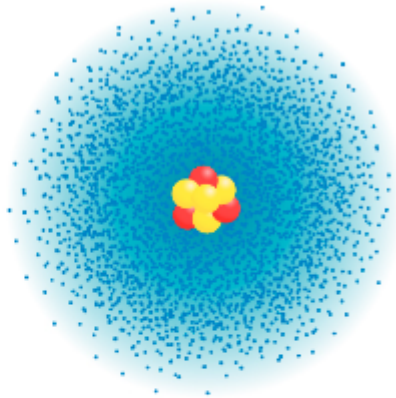
- Electrons in the highest principal energy level have the lowest energy.
- Electrons in the highest principal energy level are closest to the atom's nucleus.

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- ✓ Electrons in the highest principal energy level are furthest from the atom's nucleus.
- Electrons in the highest principal energy level are referred to as the inner electrons.

Select the best answer from the drop-down menu to complete the sentence.

If you are looking for one specific electron, you will have a 1. 90 ✓ percent chance of finding it in an area within the atom's electron cloud.



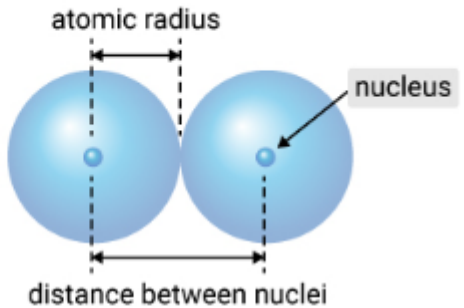
1. 90

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✓

Select the best answer from the drop-down menu to complete the sentence.

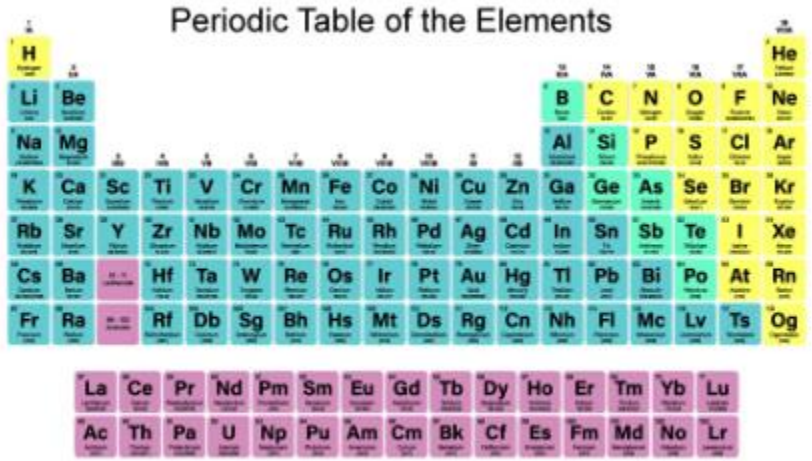
The 1. atomic radius ✓ is a measure of the size of an atom. The atomic radius is the average distance between the center of the nucleus to the outer edge of the orbital containing the valence electrons.



1. atomic radius https://t.me/Grade10GenAdv ✓

Select the best answer.

Beryllium is located at the top of group 2 on the periodic table, while radium is located at the bottom. From this information, what can you determine about radium when compared to beryllium?



- Radium has fewer inner electrons than beryllium.
- Radium's nucleus is smaller and has more compressed particles than beryllium's nucleus.

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- Radium has fewer electrons in its outer principal energy levels than beryllium.
- ✓ In radium, the nucleus has a greater positive charge than in beryllium.