

Some Atom Questions!

1. How many electrons can be in an orbital?

2

2. How many electrons are in the outer shell of a F⁻ ion?

8

3. How many pairs of electrons are in an atom of iron?

11

4. How many dots are in the electron dot formula of Fe? of Sb?

2,5

5. How many dots are in the dot diagram of the noble gases?

8 (except for He which has two)

6. How does the electron configuration of Ar compare to that of Cl⁻ ?

They are the same

7. What is the first element to have energy level “overlap”?

potassium – 4s1

8. If $l = 3$, then $m = ?$ -3,-2,-1,0,1,2,or 3

9. The energy of electrons in the same orbital is about the same? T or F

true

10. How many pairs of electrons are in the outer shell of Po?

2

11. What is the maximum number of quantum numbers any two electrons can have in common?

3

12. Two electrons in the same sublevel but in different orbitals would have how many quantum numbers in common?

At least two and maybe three

13. How many neutrons are in U-235?

142

14. How many electrons are in a Cu⁺² ion?

27

15. Are positive ions larger or smaller than their atoms?

smaller