

Unit 2, Video 7: Electron Configuration

1. True or False: Every sublevel has the same number of orbitals.
2. How many energy levels would you expect an atom of calcium to have?
3. How many electrons can fit into the D sublevel?
4. What is the shape of the orbitals within P sublevels?
5. True or False: Each electron resides in its own orbital.
6. The electron configuration for oxygen is: $1s^2 2s^2 2p^4$
How many electrons are in the 2s sublevel for oxygen?
7. What sublevel comes after the 4s sublevel when writing electron configurations?
8. List the elements that the F block fits between on the periodic table.
9. What element should go in brackets when writing the noble gas electron configuration for chlorine?
10. True or False: When writing the electron configuration for a noble gas, it is sufficient to simply put that noble gas in brackets. No other information is necessary.
11. Identify the element that has the following electron configuration:
 $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^2$
12. Write the extended electron configuration for silicon (without using the noble gas configuration).
13. Write the noble gas electron configuration for tin.