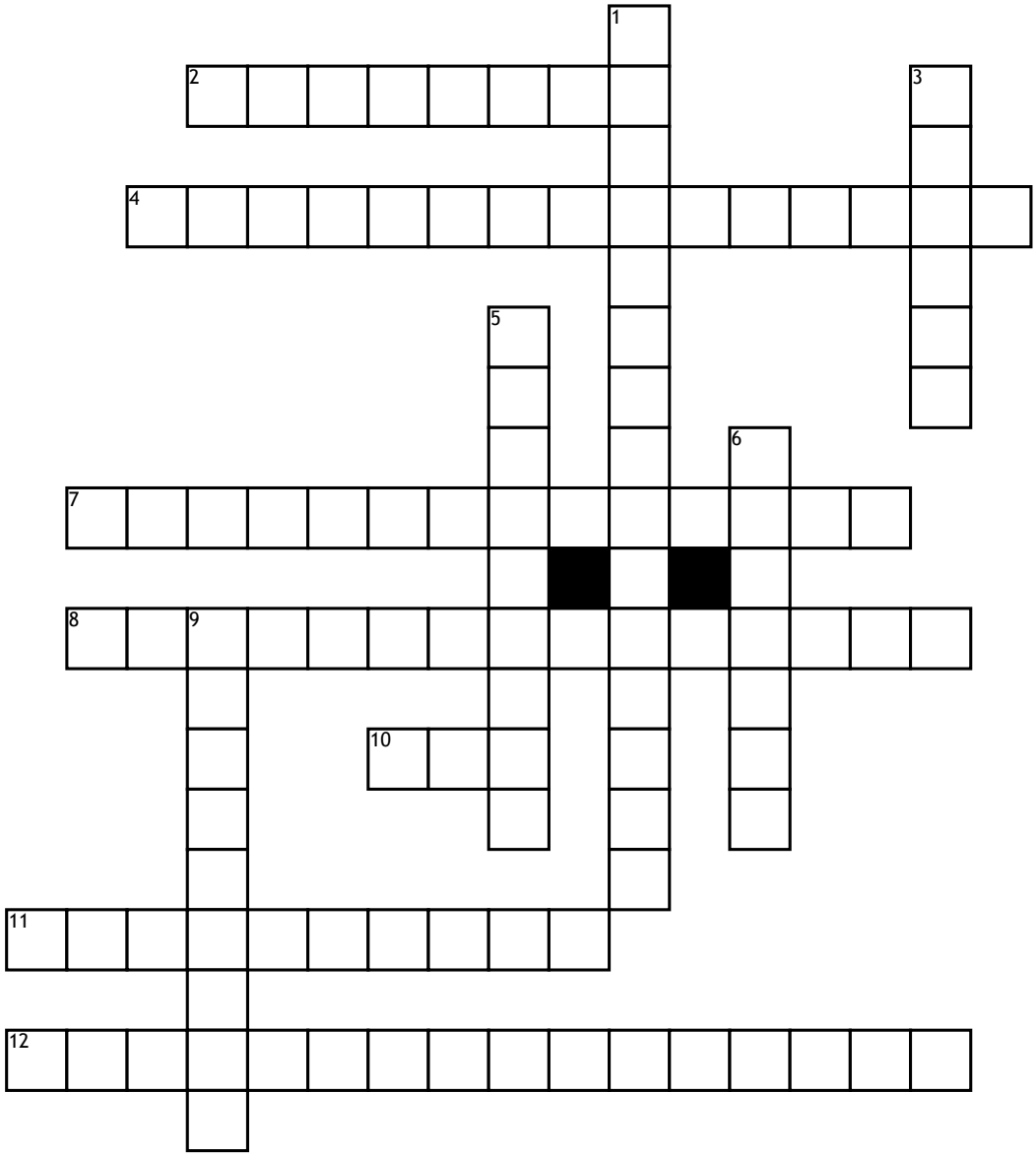
Name: _____

atomic structure



Across

2. an electron orbital.

4. in an atom or molecule, no two electrons can have the same four electronic quantum numbers.

7. are pictorial descriptions of the electrons in an atom

8. electrons orbiting one or more atoms fill the lowest available energy levels before filling higher levels

10. is the maximum amount or concentration of a chemical that a worker may be exposed to under OSHA regulations

11. the distance between successive crests of a wave, especially points in a sound wave or electromagnetic wave.

12. is the distribution of electrons of an atom or molecule (or other physical structure) in atomic or molecular orbitals.

Down

1. a kind of radiation including visible light, radio waves, gamma rays, and X-rays, in which electric and magnetic fields vary simultaneously.

3. a particle representing a quantum of light or other electromagnetic radiation. A photon carries energy proportional to the radiation frequency but has zero rest mass.

5. every orbital in a subshell is singly occupied with one electron before any one orbital is doubly occupied, and all electrons in singly occupied orbitals have the same spin.

6. of or relating to an orbit or orbits.

9. the rate at which something occurs or is repeated over a particular period of time or in a given sample.