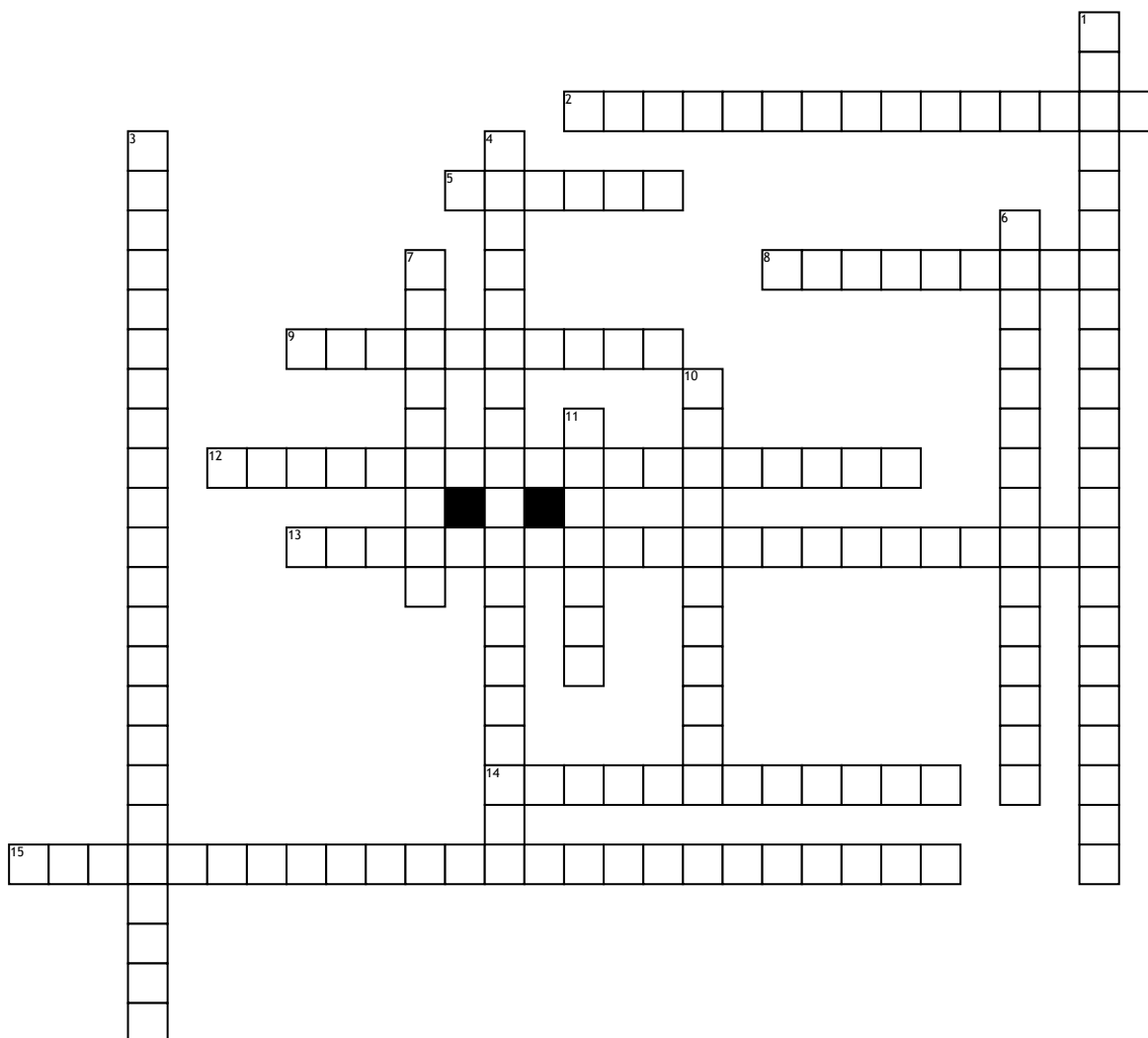


Name: _____ Date: _____ Period: _____

Week 11/8 Vocab



Across

2. another way of expressing the electron configuration of an atom. It is very useful in determining quantum numbers as well as electron pairing.

5. a particle representing a quantum of light or other electromagnetic radiation

8. 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.

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

12. the quantum mechanical principle which states that two or more identical fermions (particles with half-integer spin) cannot occupy the same quantum state within a quantum system simultaneously.

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

14. a state of a physical system (such as an atomic nucleus, an atom, or a molecule) that is higher in energy than the ground state.

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

Down

1. unique spectra of light emitted by an element when electricity is run through it or when it is viewed through a prism

3. the range of wavelengths or frequencies over which electromagnetic radiation extends.

4. the emission, or ejection, of electrons from the surface of, generally, a metal in response to incident light.

6. states that in the ground state of an atom or ion, electrons fill atomic orbitals of the lowest available energy levels before occupying higher levels

7. the number of waves that passes a given point per second.

10. the lowest energy state of an atom or other particle.

11. a discrete quantity of energy proportional in magnitude to the frequency of the radiation it represents.