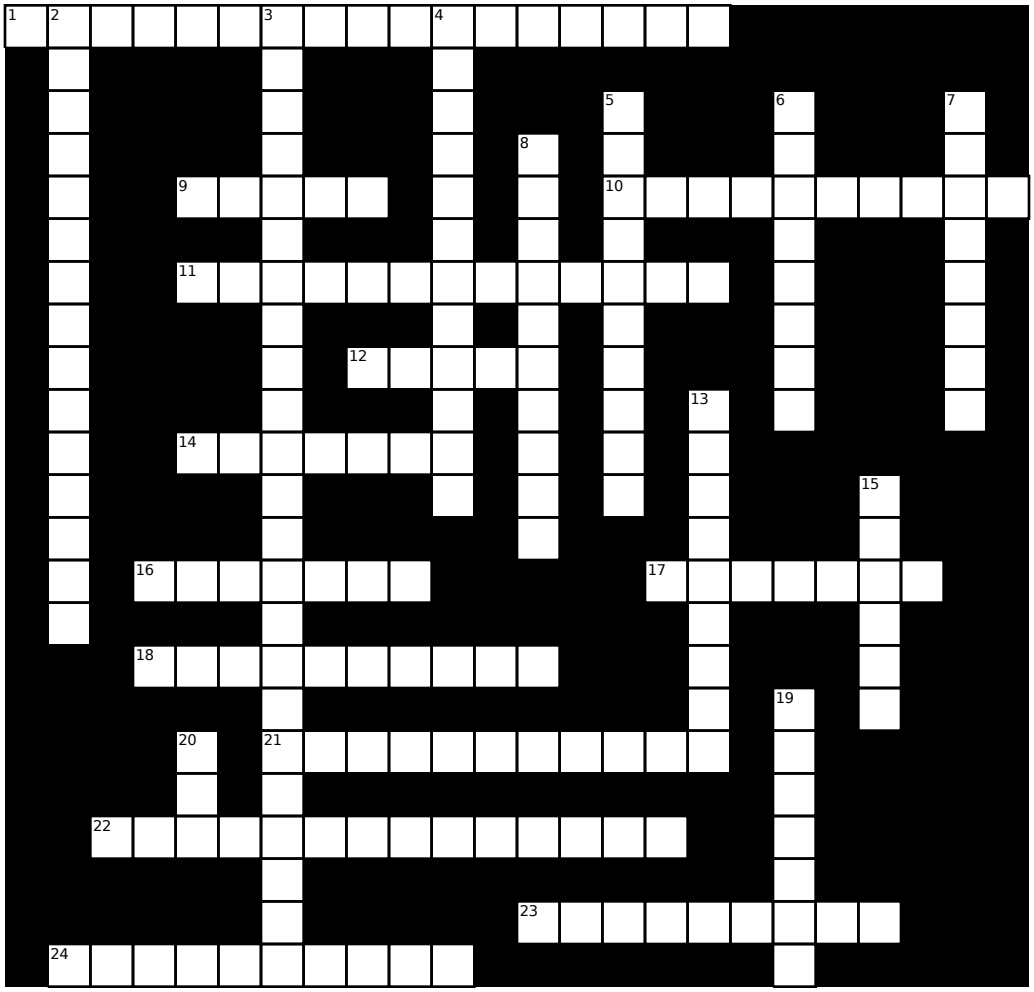
Atoms and Electron Configuration

Ammerman



Across

1 the outer most electrons in a shell: s and p
9 the rule that determines stability of the electrons
10 2 electrons, 1 orbital, spherical shape
11 the number of protons in the nucleus
12 the energy level of the Periodic Table can also be referred to as an orbital
14 an atom with a different number of neutrons than is commonly expected
16 a region in space where there is a high probability of finding an electron
17 neutral charged particle located in the nucleus
18 6 electrons, 3 orbitals, dumbell shaped
21 total number of protons and neutrons in the nucleus
22 only two electrons can fit in a subshell
23 electrons enter spinning the same direction
24 the most stable form where all e- are in the lowest energy level possible

Down

2 electrons will fill orbitals of lowest energy first
3 ways in which electrons are arranged in various orbitals around the nucleus
4 relates to a period on the Periodic Table
5 14 electrons, 7 orbitals, comples shape
6 each energy level or shell can be divided up into small units of specific shapes: s, p, d, and f
7 negatively charged particle located outside of the nucleus in orbitals
8 10 electrons, 5 orbitals, clover shaped
13 each sub shell can have specific orientations which hold up to two electrons: s=1, p=3, d=5, f=7
15 positively charged particle located in the nucleus
19 the central core of an atom containing protons and neutrons
20 atomic mass unit; 1/12 the mass of carbon