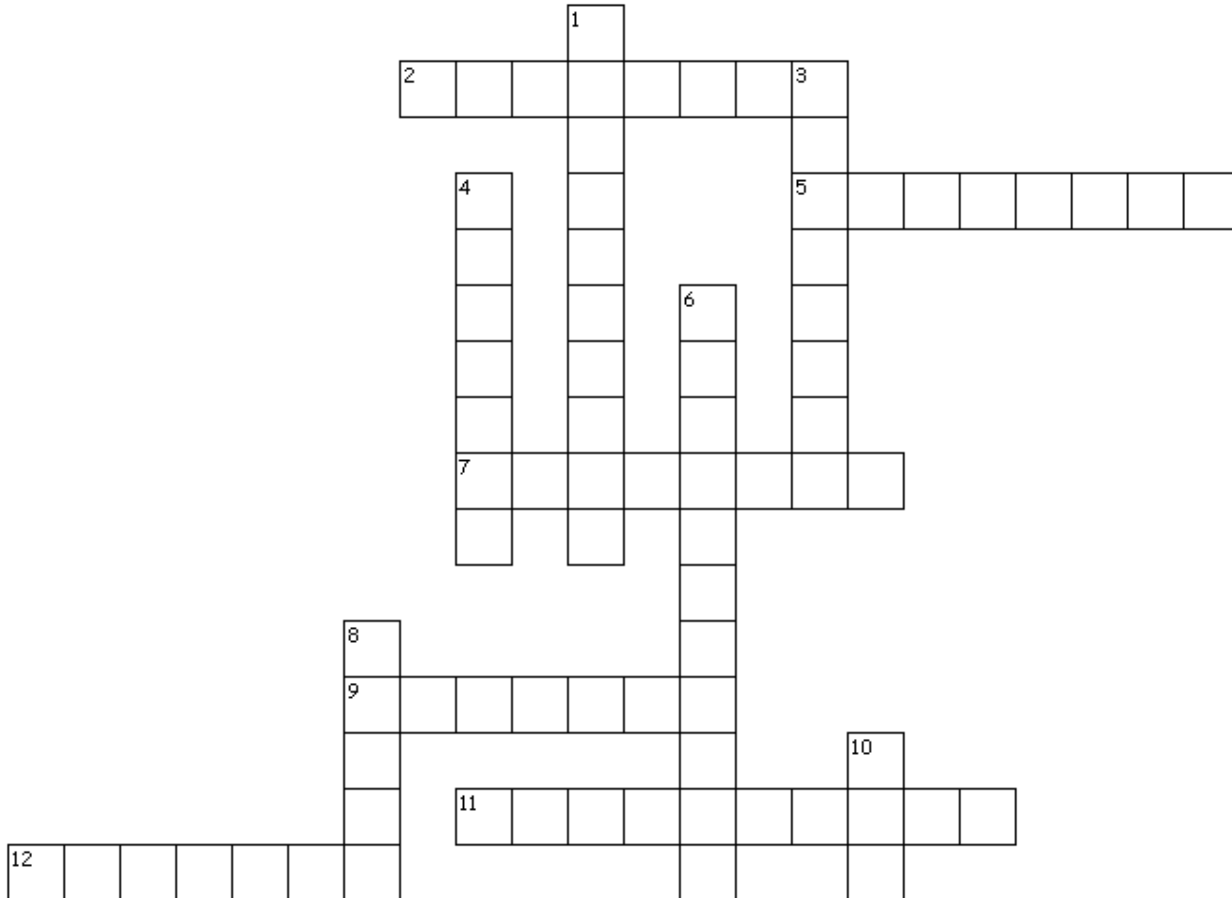


Intervention 8.1.1 Atoms & Molecules

Use the clues about atoms and molecules below to fill in the crossword puzzle.



Across

2. two or more atoms combined
 5. pure substances that each have a unique number of protons
 7. neutral parts of the nucleus
 9. scientist that discovered electrons
 11. scientist that discovered the nucleus
 12. center of atom (made of protons and neutrons)

Down

1. first scientist to introduce the idea of an atom
 3. negative part of the atom that orbits the nucleus
 4. positive parts of the nucleus
 6. first scientist who developed the electron cloud model
 8. smallest unit of matter that has its own identity (building blocks of matter)
 10. substance made of more than one element

Read the passage about atoms and answer the following questions:

1. Atoms are one of the smallest units of
2. Protons, neutrons, and electrons are particles.
3. Neutrons and protons are located in the atom's
4. Electrons are very small located outside the nucleus.
5. Each type of subatomic particle has a different electrical
6. The piece of the atom that has an electrical charge of -1 is
7. The subatomic particle that has no electrical charge is the
8. Hydrogen, helium, sodium and chlorine are examples of elements.
9. Each chemical element consists of only one type of
10. All atoms with the same number of in the atomic nucleus are the same element.
11. Another name for atomic weight is atomic
12. The only atom that does not contain a neutron is a atom.
13. If we want to know how many electrons and protons an element has, we can look at the Table.
14. The chemical element with 109 protons is
15. The six major in the living things are carbon, hydrogen, nitrogen, oxygen, phosphorous, and sulfur.

Fill in the diagram of an atom to the right using the word bank provided.

