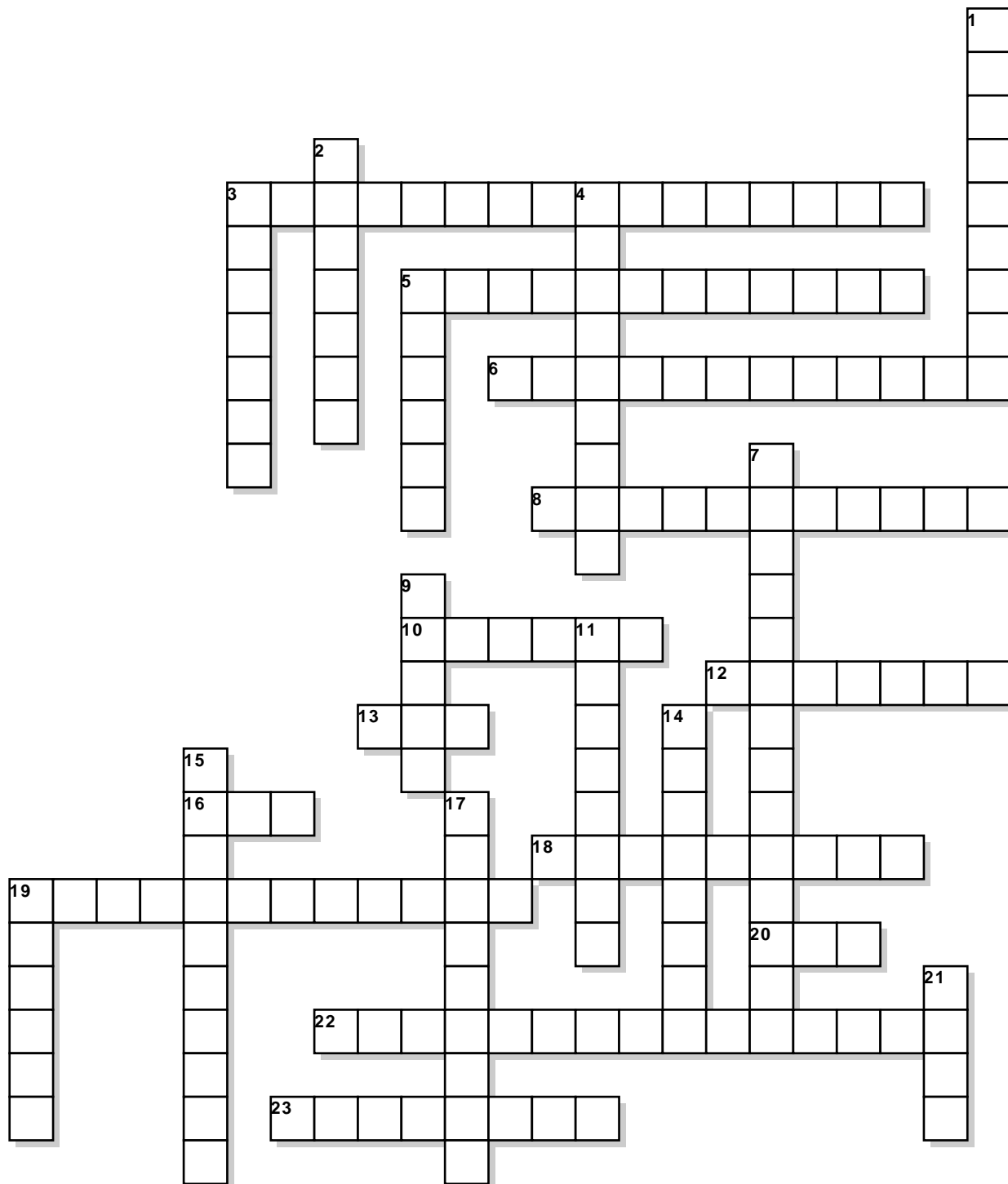


Chapter 13: Chemical Bonding



Across

- 3 A molecule that is made of only two atoms.
- 5 A bond that is formed as the result of two atoms sharing one or more pairs of electrons.
- 6 A force that holds atoms or ions together.
- 8 A diagram that only shows the valence electrons is called a _____ diagram.
- 10 This stable ion has a -2 charge.
- 12 This stable ion has a +2 charge.
- 13 How many electrons would an electron dot diagram of sulfur have?
- 16 Atoms in this group are metals with only one valence electron.
- 18 Atoms in this group are all non-metals and have 7 valence electrons.
- 19 A bond where the electrons can flow freely throughout the substance.
- 20 A charged particle.
- 22 A molecule that is made of 2 of the same elements.
- 23 Water is a _____ molecule.

Down

- 1 A bond that is formed as the result of the gain or loss of electrons.
- 2 The electrons located in the outer shell and are involved with forming bonds are the _____ electrons.
- 3 The ability to be stretched like chewing gum.
- 4 The ability to bend without breaking.
- 5 This atom has 4 valence electrons.
- 7 A regular pattern in which the particles of a crystal are arranged.
- 9 Table salt (NaCl) is an _____ compound.
- 11 Atoms in this group are stable and rarely form chemical bonds.
- 14 The smallest unit of a substance that contains all the properties of that substance.
- 15 These elements are stable as atoms.
- 17 These types of atoms tend to form negative ions.
- 19 These types of atoms tend to form positive ions.
- 21 A neutral particle.