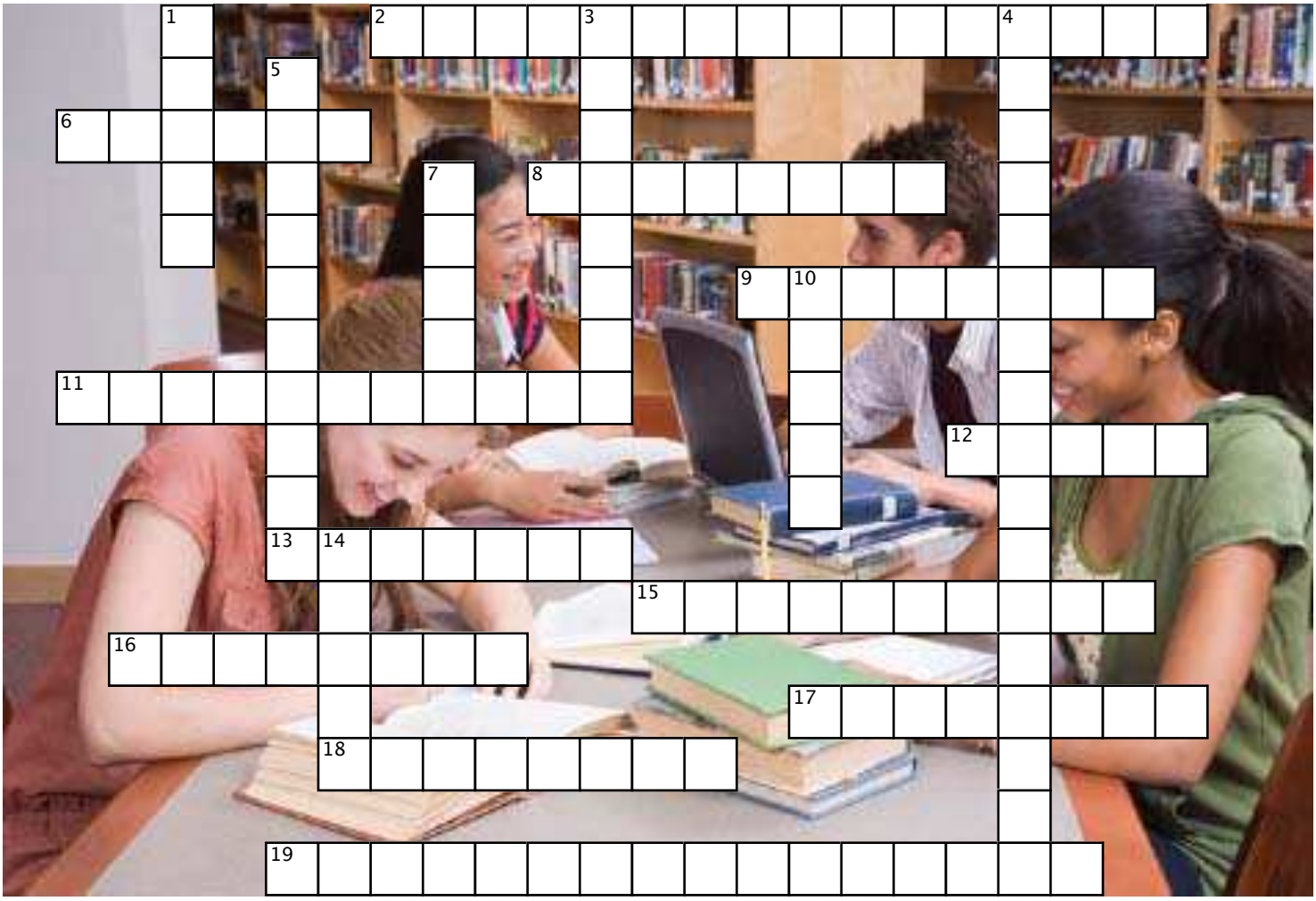
4.2 Ions, Molecules, and Compounds



Across

2. In a _____ _____, two or more atoms, all of the same element, are joined by covalent bonds.
6. Ion batteries depend on atoms of reactive _____.
8. The elements hydrogen, sulphur, phosphorus, nitrogen, and all the _____, such as fluorine, exist as molecules.
9. A _____ is a combination of two or more atoms held together by covalent bonds.
11. A _____ element is an element that can form an ion in more than one way.
12. The names of binary molecular compounds that do not contain hydrogen atoms use _____ prefixes to indicate how many atoms of each element are present in a compound.

Down

1. _____ is a molecular compound in which each hydrogen atom shares one pair of electrons with an oxygen atom.
3. A _____ bond is a connection, usually between the atoms of non-metals, in which the two atoms share a pair of electrons.
4. When atoms of two or more different non-metals combine, a pure substance known as a _____ _____ is formed.
5. The more reactive the metal, the more _____ energy it can potentially produce.
7. The positive and negative charges in an ionic compound must be _____.
10. One form of oxygen is called _____. It is essential in the upper atmosphere to filter out deadly UV rays.

Across

13. _____ ion batteries are now so safe that they are used in medical devices such as pacemakers.
15. A _____ ion is a group of atoms, usually of different elements, that act as a single ion.
16. Most common polyatomic ions have a negative charge. However, one common polyatomic ion has a positive charge and that is the _____ ion.
17. A _____ molecule is a molecule that is made from two atoms.
18. Ionic compounds form _____ that have an alternating arrangement of positively charged ions and negatively charged ions.
19. The name of KBr is _____ _____.

Down

14. An _____ compound is a compound that is formed from one or more positively charged ion(s) and one or more negatively charged ion(s).