

44

Since elements are listed in the periodic table in order of increasing atomic number and arranged so that elements with similar properties fall into the same group, the periodic table can be used to predict similarities and differences between elements.

- a. Bromine and fluorine are both in group 17 (7A) of the periodic table. Describe **two** properties of bromine and fluorine that are the same.
- b. Bromine and fluorine are in different periods in the periodic table. Describe **two** properties of bromine and fluorine that are different.
- c. Based on their positions in the periodic table, bromine and fluorine are **most likely** to form ionic compounds with an element from which group: group 1 (1A), group 14 (4A), or group 18 (8A)? Explain your choice.