

SECTION | ELEMENTS COMBINE TO FORM COMPOUNDS.

## 2.1 Reading Study Guide B

**BIG IDEA** The properties of compounds depend on their atoms and chemical bonds.

**KEY CONCEPT** Elements combine to form compounds.

### Review

Atoms react with different atoms to form compounds.

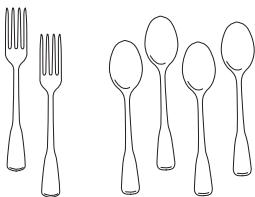
### Take Notes

#### I. Compounds have different properties from the elements that make them. (p. 41)

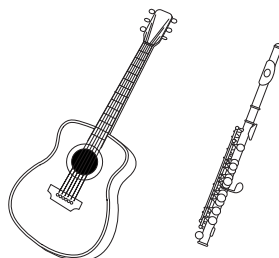
- Complete the following sentences.
  - A compound is a substance made of atoms of \_\_\_\_\_.
  - In a compound, atoms are held together by \_\_\_\_\_.
  - A compound's properties are often very \_\_\_\_\_ from those of the elements that make it up.
  - A compound's properties depend on the \_\_\_\_\_ it contains and how they are \_\_\_\_\_.

#### II. Atoms combine in predictable numbers. (p. 42)

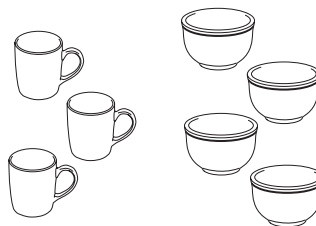
- Below each pair of objects, write the ratio of the objects on the left to the objects on the right.



\_\_\_\_\_



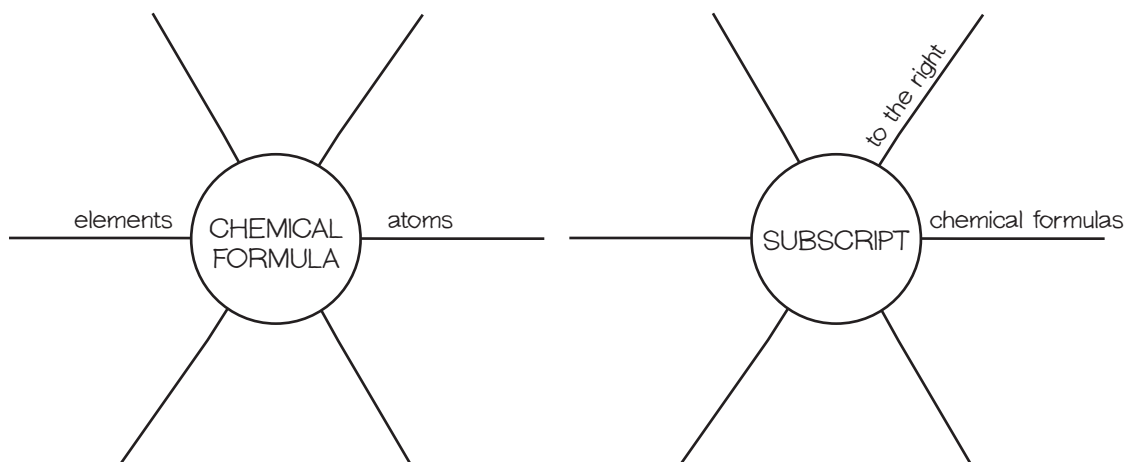
\_\_\_\_\_



\_\_\_\_\_

**A. Chemical Formulas (p. 43)**

3. Fill in the description wheels for *chemical formula* and *subscript*.



4. Ammonia is a compound formed from three hydrogen atoms and one nitrogen atom. Follow the steps for writing its chemical formula.

1. Find the symbols \_\_\_\_\_.
2. Use a subscript \_\_\_\_\_.
3. Use no subscript \_\_\_\_\_.
4. The formula is \_\_\_\_\_.

**B. Same Elements, Different Compounds (p. 44)**

5. Write the chemical formulas for two compounds that have the same elements in different ratios.

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