

## Section 9.1

1. What makes up an ionic compound?
2. What is the charge of an ionic compound?
3. What is a monatomic ion?
4. How do cations form?
5. Which groups of cations have charges that are easy to find?
6. How do they name the ions of these groups?
7. What types of elements make anions?
8. How can you find the charges of anions?
9. How do you write the names of anions?
10. What about the elements in groups 4A and 8A?
11. What is true about the charges of transition metals?
12. What is true of the metals in group 4A?
13. How does the Stock system write the names of transition metal ions?
14. What is the name of  $\text{Cr}^{3+}$  using the stock system?
15. How does the classical system name ions?
16. What is the major disadvantage of the classical system?
17. Which transition metal ions don't have a roman numeral in their names?
18. What does color have to do with this?
19. What is a polyatomic ion?
20. What are the four endings that polyatomic ions have?
21. Which of these endings is the same as monatomic ions?
22. How long should you use Table 9.3?
23. What is the pattern to *-ate* and *-ite* ions?
24. How should you think of hydrogen in a polyatomic ion?
25. How can you figure out the charge of a polyatomic ion containing hydrogen?

## Section 9.2

1. How did they originally name compounds?
2. What didn't this tell them about the compounds?
3. Why don't they memorize the compounds?
4. What is a binary compound?
5. What are the two types of binary compounds?
6. How do you name a binary ionic compound?
7. Why is copper oxide incomplete?
8. How do you figure out the cation in  $\text{CuO}$ ?
9. What do the charges have to add up to in an ionic compound?
10. How do you write the formula for binary ionic compounds?
11. What is the net charge on a formula unit?
12. What does a Roman numeral in the name tell you?
13. What is the crisscross method?
14. What happens to the signs when you use the crisscross method?
15. What do you do if they are not the lowest ratio?

16. How does the name tell you that there is a polyatomic ion?
17. How do you write the formula of a compound with a polyatomic ion?
18. When are parenthesis used?
19. How do you name compounds with polyatomic ions?
20. What types of ionic compounds don't have metals?

## Section 9.3

1. What makes up a molecular compound?
2. Why can't their ionic charges be used to write formulas or name them?
3. What ways can carbon and oxygen combine?
4. What do the prefixes in a name tell you?
5. What happens to the name of the second element?
6. What happens to vowels at the end of the prefix if the element begins with a vowel?
7. How do you confirm that it is a molecular compound?
8. When do you omit the prefix *mono-*?
9. How do you know what subscript to use when writing formulas?

## Section 9.4

1. What is an acid?
2. How are acids related to anions?
3. What is the general formula for an acid?
4. What does the naming system for acids depend on?
5. How do you name a acid if the anion ends in *-ide*?
6. How do you name a acid if the anion ends in *-ate*?
7. How do you name a acid if the anion ends in *-ite*?
8. How you write the formula for an acid?
9. What is a base?
10. How are bases named?
11. Why does the formula for aluminum hydroxide have parenthesis?

## Section 9.5

1. What ratios do the subscripts in a formula tell you?
2. What else could you use for ratios?
3. What is the law of definite proportion?
4. Why is the law of definite proportion true?
5. How are water and hydrogen peroxide alike?
6. How are water and hydrogen peroxide different?
7. What is the law of multiple proportions?
8. How do you use the flowchart in Figure 9.20?
9. What does a name ending in *-ide* tell you?
10. What does a name ending in *-ate* or *-ite* tell you?
11. What does a name containing a prefix tell you?
12. What does a name containing a Roman numeral tell you?
13. How do you use the flowchart in Figure 9.22?