- 12. Write the chemical formula for silicon carbide.
- 13. Is this chemical formula written correctly following the rules we learned—KCl? If not, why not?
- 14. Write the chemical formula for the molecule made from 3 atoms of oxygen and two atoms of gallium.
- 15. Is this chemical formula correct following the rules we learned—Ba<sub>2</sub>O? If not, why not?
- 16. What is wrong with this chemical formula—NGa?
- 17. How many cesium (Cs) and how many nitrogen (N) are in the compound cesium nitride?
- 18. Choose the ionic compounds: KCl, SiI<sub>4</sub>, dilithium sulfide, MgO, Sr<sub>3</sub>N<sub>2</sub>, phosphorous pentafluoride.
- 19. Draw the structural diagram for silicon tetrafluoride.
- 20. Draw the electron dot structure for calcium bromide.
- 21. What is another systematic name that you could use for calcium bromide? Why can it have two different names and still be named correctly?
- 22. Cesium forms a compound with oxygen with the formula Cs<sub>2</sub>O. Based upon what you know about the Periodic Table, is the structural diagram below correct or incorrect? If incorrect, why?

23. What is the name of this compound?

- 24. True or False: the reason prefixes must be included when naming molecular compounds ("prefix-first element prefix-second element") is that double and triple covalent bonds affect the overall number of atoms that a molecule can contain.
- 25. Name this compound, and indicate which element is the cation and which is the anion.

