## Answers to problems in page 217.

26. a. sulfur tetrafluoride
b. xenon tetrafluoride
c. phosphorus pentabromide
d. dinitrogen pentoxide
e. trisilicon tetranitride
f. phosphorus tribromide
g. trineptunium octoxide

## Mixed Review

37. a.

b.

38. a. $\mathrm{SCl}_{2}$ is bent. Both $\mathrm{PF}_{3}$ and $\mathrm{NCl}_{3}$ are trigonal pyramidal.
b. The bond angles of all three molecules are similar.
However, the electronegativity difference is greatest between P and F , so $\mathrm{PF}_{3}$ is the most polar.
39. 


40.
a.

b.

c. $\left[\begin{array}{c}: \ddot{\mathrm{O}}: \\ : \ddot{\mathrm{O}}-\mathrm{P}-\ddot{\mathrm{O}}: \\ \mathrm{O}:\end{array}\right]^{3-}$

