



2) How many covalent bonds does the Se atom form with the F atoms?

3) Therefore, the selenium atom should provide _____ half-filled orbitals.
how many ?

4) This is accomplished by creating _____ hybrids, placing _____ electron(s) in four of them, and leaving _____ lone pair(s) of electrons. Show this in the following diagram, using arrows to represent selenium's electrons. Label the orbitals:



5) Show the orbital diagram for the selenium atom in the SeF₄ molecule, using darker arrows (or arrows in another colour) to represent electrons from fluorine:



6) What electron domain (ED) geometry does this molecule have?

7) What is molecular geometry of this molecule?

SOLUTIONS

