

## Orbitals

1. How many orbitals are in a  $d$  subshell? \_\_\_\_\_
2. Sketch the three  $p$  orbitals.
3. Sketch the  $1s$ ,  $2s$ , and  $3s$  orbitals.
4. A  $g$  subshell has how many orbitals?
5. What is the maximum number of electrons that can occupy a  $4f$  orbital?
6. What is the maximum number of electrons that can occupy a  $5d$  subshell?
7. What is the total number of orbitals in an atom of Hg?