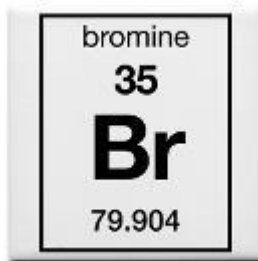
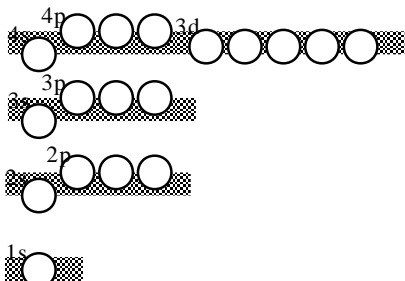


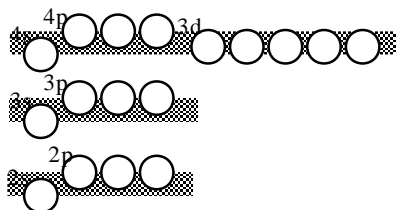
Name: _____ Date: _____ Period: _____ Seat #: _____

Fill in the orbital diagram for bromine.



Write the *short form electron configuration* for Bromine: [Ar] _____

Bromine can make five bonds in molecules such as BrF_5 . Draw the Lewis dot structure for BrF_5 .



SKIP! We no longer think d hybridization happens, and even if it does, we would not use a normal orbital diagram to show it, we would need an MO diagram.



Draw the orbital diagram for bromine when it uses the “expanded octet”. (Use diagram above.)

Determine the *formal charge* for each atom in BrF_5 molecule. Br = _____ F = _____

Consider the central bromine atom in BrF_5 :

of bonded atoms = _____ # of lone pairs = _____ Steric Number = _____

What is the *Electron-Pair Geometry* of BrF_5 ? _____

What is the *Molecular Geometry* of BrF_5 ? _____