Electronic Structure Worksheet III Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Chem 140 (11/8/2017)

*n* = principle quantum number

*l* = angular momentum quantum number

 *l* = \_\_\_ *l* = \_\_\_\_ *l* = \_\_\_

*n*=\_\_\_ **\_\_\_\_\_\_ \_\_\_\_\_\_ \_\_\_\_\_\_ \_\_\_\_\_\_ \_\_\_\_\_\_ \_\_\_\_\_\_ \_\_\_\_\_\_ \_\_\_\_\_\_ \_\_\_\_\_\_**

*n*=\_\_\_ **\_\_\_\_\_\_ \_\_\_\_\_\_ \_\_\_\_\_\_ \_\_\_\_\_\_**

*n*=\_\_\_ **\_\_\_\_\_\_**

**RULES:**

***n* = 1, 2, 3, … *l* = 0, 1, 2, 3, … *n-1***

 ***l* = 0 (*s*-orbital), *l* = 1 (*p*-orbital), *l* = 2 (*d*-orbital), *l* = 3 (*f*-orbital),**

…now add in…

*ml* = magnetic quantum number

 *l* = \_\_\_ *l* = \_\_\_\_ *l* = \_\_\_

*n*=\_\_\_ **\_\_\_\_\_\_ \_\_\_\_\_\_ \_\_\_\_\_\_ \_\_\_\_\_\_ \_\_\_\_\_\_ \_\_\_\_\_\_ \_\_\_\_\_\_ \_\_\_\_\_\_ \_\_\_\_\_\_**

 *ml* = \_\_\_ *ml* = \_\_\_ \_\_\_ \_\_\_ *ml* = \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_

*n*=\_\_\_ **\_\_\_\_\_\_ \_\_\_\_\_\_ \_\_\_\_\_\_ \_\_\_\_\_\_**

 *ml* = \_\_\_ *ml* = \_\_\_ \_\_\_ \_\_\_

*n*=\_\_\_ **\_\_\_\_\_\_**

 *ml* = \_\_\_

**RULES:**

***ml* = -*l … 0 … +l***







