

$\underline{l=0}$ ,  $L=0$ ,  $m=0$ ,  $m_s = +1/2, -1/2$

$\underline{l=1}$ ,  $L=1$ ,  $m = -1, 0, +1$ ,  $m_s = +1/2, -1/2$   
 $3\uparrow$   $3\downarrow$

n=1	$\uparrow$	$\downarrow$								$\uparrow$	$\uparrow$	$\uparrow$	$\downarrow$	$\downarrow$	$\downarrow$
2															
3															
4			$\uparrow$	$\uparrow$	$\uparrow$	$\uparrow$	$\uparrow$	$\downarrow$	$\downarrow$	$\downarrow$	$\downarrow$	$\downarrow$			
5															
6															
7															

$\underline{l=2}$ ,  $L=2$ ,  $m = -2, -1, 0, +1, +2$   
 $m_s = +1/2, -1/2$   
 $5\uparrow$ ,  $5\downarrow$

$\uparrow$	$\uparrow$	$\uparrow$	$\uparrow$	$\uparrow$	$\uparrow$	$\uparrow$	$\downarrow$	$\downarrow$	$\downarrow$	$\downarrow$	$\downarrow$	$\downarrow$	$\downarrow$

$\underline{l=3}$ ,  $L=3$ ,  $m = -3, -2, -1, 0, +1, +2, +3$   
 $m_s = +1/2, -1/2$   
 $7\uparrow$ ,  $7\downarrow$