Name	Name (sign name)	
(print nam	e) (sign name)	blue
Please sho	w all work for full credit and for partial credit.	
	If you have principal quantum number $n = 5$, what are numbers (ℓ) ? (6 pts) $P = 0$ $P = 4$	the possible angular momentum quantum
J	Q=0, 1,2,3,4	
2. For	r the symbol to represent an electron configuration, (circ	cle one under each letter) (6 pts)
3 p ⁴ a)	3 represents (period number) (angular momentum of	quantum number)
b)	the p represents (angular momentum quantum nur	mber) (shell number)
c)	the 4 represents (period number) (number of electrons)	ons within 3 p)
3. Fc	or the element F give the electron configuration in the	e format $(1s^2, 2s^2, 2p^6,)$
1	5 ² , 25 ² , 2p ⁵	

Extra Credit: For the same element (2 pts, 1 pt per letter)

a) Give the valence electron configuration for the element in #3 above, in the same format.

b) Give the <u>valence orbital diagram</u> for the same element (in the format $\frac{1}{1}$ $\frac{1}{2}$ using up and down arrows to represent electrons) $\frac{1}{1} = \frac{1}{1} = \frac{1}$

Name	Key	Name	
(print name	e)	Name (sign name)	Salma
Please sho	w all work for full credit a	and for partial credit.	- wimm
1		entum quantum number (ℓ) = 2,	what are the possible magnetic $M_{\ell} = - \ell_{\ell}, \ldots, \ell_{\ell}, \ldots$
	2 = -2, -1,	' /	
2. For	the symbol to represent a	n electron configuration, (circle o	one under each letter) (6 pts)
$4 s^2$ a)	the 2 represents (perio	od number) (number of electrons	within 4s))
b)	4 represents (period n	umber) angular momentum quar	ntum number)
c)	the s represents Kang	ular momentum quantum number	f) (shell number)
Ź			
	4p7, 55	7 4d	6 45 ² , 3d ¹⁰
Extra Cred	it: For the same element	(2 pts, 1 pt per letter)	
a) Giv	ve the <u>valence</u> electron con	nfiguration for the elemenet in #3	3 above, in the same format.
	552	4 d ²	
b) Giv dov	ve the valence orbital diagonal with a represent electric diagonal control of the	gram for the same element (in the ctrons) 1 1	e format 11 12 using up and 1s 2s

Mame	Key		Name		t 11
(print name)) Pory		(sign name)		y ellou
Please show	all work for full credi			• .	Ü
1 That	e is one error in the qu	antum numher i	to describe a single	electron? Expl	ain. (6 pts)
1. 11161	e is one error in the qu		2 A	(), n	-1 = 01 = 0
$n=2, (\ell=2)$	$m_t = -2, m_s = + \frac{1}{2}$	11 - 2	一人人	<i>-</i> /	9107
	- not allowed	l			ain. (6 pts) -1 = 0, 1 = L
2. a.	Each orbital can ho				
b.	Principal quantum to one) number (3 pts)		on the periodic ta	ble as the [(group	o) or (period)) (circle
3. For	the element Te	give the electron	n configuration in t	he format (1s². 2s	$p^2, 2p^6,)$
J. 101	10 c 57 +	chento	162 702	7 6 2	2 2 6
1. 8	1143 / 2	a such		C/ 13	1 81
		_			
40	2 300 10, 4	e 55	2 4d(0)	5p4	
49	the element $\frac{1e}{1}$, $\frac{has}{52} + \frac{52}{4}$	p ⁶ , 55	2 , $^{4}d^{(0)}$,	5pt	
49	3 ² , 3d ¹⁰ , 4	p, 55	2 4d ⁽⁰ ,	5p4	
49	3 ² , 3 ¹⁰ , 4	p ⁶ , 55	2 4d ⁽⁰ ,	5p4	
49	3 ² , 3d ¹⁰ , 4	p 55	2 4d ⁽⁰ ,	5p4	
49	3 ² , 3d ¹⁰ , 4	P, 55	² , 4d ⁽⁰ ,	5p4	
	·			5p4	
Extra Credit	: For the same eleme	nt (2 pts, 1 pt pe	er letter)		
Extra Credit a) Give	t: For the same element the <u>valence</u> electron o	nt (2 pts, 1 pt pe	er letter)		
Extra Credit a) Give	: For the same eleme	nt (2 pts, 1 pt pe	er letter)		
Extra Credit a) Give	t: For the same element the <u>valence</u> electron o	nt (2 pts, 1 pt pe	er letter)		
Extra Credit a) Give	t: For the same element the <u>valence</u> electron o	nt (2 pts, 1 pt pe	er letter)		
Extra Credit a) Give	t: For the same element the <u>valence</u> electron o	nt (2 pts, 1 pt pe	er letter)		
Extra Credit a) Give	t: For the same element the <u>valence</u> electron o	nt (2 pts, 1 pt pe	er letter)		
Extra Credit a) Give	t: For the same element the <u>valence</u> electron o	nt (2 pts, 1 pt pe configuration fo	er letter) r the elemenet in #	3 above, in the s	ame format.
Extra Credit a) Give	t: For the same elements the <u>valence</u> electron of S^2 , S^2	nt (2 pts, 1 pt perconfiguration for	er letter) r the elemenet in #	3 above, in the s	ame format.
Extra Credit a) Give	t: For the same elements the <u>valence</u> electron of $S = S = S = S = S = S = S = S = S = S $	nt (2 pts, 1 pt perconfiguration for	er letter) r the elemenet in #	3 above, in the s	ame format. ∠ using up and
Extra Credit a) Give	t: For the same elements the <u>valence</u> electron of $S = S = S = S = S = S = S = S = S = S $	nt (2 pts, 1 pt perconfiguration for	er letter) r the elemenet in #	3 above, in the s	ame format. ∠ using up and
Extra Credit a) Give	t: For the same elements the <u>valence</u> electron of $S = S = S = S = S = S = S = S = S = S $	nt (2 pts, 1 pt perconfiguration for	er letter) r the elemenet in #	3 above, in the s	ame format. ∠ using up and

			00 4 40 B 055	Comp. D
	neral Chemistry I Lecture			
Name(print name)	(Cely	Name (sign_na	me)	- green
Please show a	Il work for full credit and	for partial credit.		
1. There n = 3, \(\ell = 2 \) M \(\text{g} = 2 \) 2. a. The b. Gi 3. For th	is one error in the quantum $n_t = 3$, $m_s = +\frac{1}{2}$ p subshell can hold a marking the symbol of one election $n_t = 1$ e element $n_t = 1$ $n_t = 3$ $n_t = $	im number to describe $1 = 3 - 1 = 2$ $1 = -2$ eximum of 6 element in the f block electron configuration $1 = 3 - 1 = 2$	O, 1, 2 -1 , O, $+1$, $+2$ lectrons (3 pts) (3 pts) Gd, Centin the format (1s ² , 2s ² ,	notallower 2, Lu, 2p6,)
Extra Credit:	For the same element (2	pts, 1 pt per letter)		
	ne <u>valence</u> electron confi	집에 내가 되었다.		same format.
	453, 3d9	or 451	3d10	
	ne valence orbital diagra		ent (in the format 4k	11/ using up and
down a	rrows to represent electro	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	12 12	2s

Quiz VI General Chemistry I Lecture Spring	g 15 Dr. Hahn 20 pts 4/2 R 8:30am form A quiz #
Name(print name)	Name (sign name)
Please show all work for full credit and for par	rtial credit.
If you have principal quantum num numbers (t)? (6 pts)	ther $n = 5$, what are the possible angular momentum quantum
2. For the symbol to represent an electron	n configuration, (circle one under each letter) (6 pts)
3 p ⁴ a) 3 represents (period number) (a	angular momentum quantum number)
b) the p represents (angular mom	nentum quantum number) (shell number)
c) the 4 represents (period number	r) (number of electrons within 3 p)
3. For the element F give the electron	configuration in the format (1s², 2s², 2p ⁶ ,)
Extra Credit: For the same element (2 pts, 1 pts) a) Give the <u>valence</u> electron configuration	pt per letter) In for the element in #3 above, in the same format.
b) Give the <u>valence orbital diagram</u> for down arrows to represent electrons)	the same element (in the format 1 viv using up and 1s 2s

Name	Name (sign name)		
(print name)	(sign name)		
Please show all work for full credit and for partial credit.			
If you have angular momentum quantum numbers (m ₂)? (6 pt	a quantum number (ℓ) = 2, what are the possible magnetic ts)		
2. For the symbol to represent an elec	etron configuration, (circle one under each letter) (6 pts)		
$4 s^2$ a) the 2 represents (period num	mber) (number of electrons within 4s)		
b) 4 represents (period number	r) (angular momentum quantum number)		
c) the s represents (angular n	nomentum quantum number) (shell number)		
3. For the element Zr give the ele	ectron configuration in the format (1s ² , 2s ² , 2p ⁶ ,)		
Extra Credit: For the same element (2 pts	s, 1 pt per letter)		
a) Give the <u>valence</u> electron configur	ration for the elemenet in # 3 above, in the same format.		
b) Give the <u>valence orbital diagram</u> down arrows to represent electrons	for the same element (in the format 1 2 2s using up and		

Name	Name
(print name)	(sign name)
Please show all work for full credit and for	or partial credit.
1. There is one error in the quantum	number to describe a single electron? Explain. (6 pts)
$n = 2$, $\ell = 2$, $m_{\ell} = -2$, $m_s = + \frac{1}{2}$	
2. a. Each orbital can hold a ma	aximum of electrons (3 pts)
b. Principal quantum number one) number (3 pts)	r is found on the periodic table as the [(group) or (period)] (circl
3. For the element Te give the	e electron configuration in the format (1s², 2s², 2p ⁶ ,)
•	
Extra Credit: For the same element (2 pt	ts, 1 pt per letter)
a) Give the <u>valence</u> electron configu	ration for the elemenet in # 3 above, in the same format.
	n for the same element (in the format 1/2 1/2 using up and
down arrows to represent electron	1s 2s

Name	Name (sign_name)
(print name)	(sign name)
Please show all work for full credit and	for partial credit.
1. There is one error in the quantum	n number to describe a single electron? Explain (6 pts)
$n = 3$, $\ell = 2$, $m_{\ell} = 3$, $m_{s} = +\frac{1}{2}$	•
2. a. The p subshell can hold a max	ximum of electrons (3 pts)
b. Give the symbol of one elem	ment in the f block (3 pts)
	electron configuration in the format (1s ² , 2s ² , 2p ⁶ ,)

Extra Credit: For the same element (2 pts, 1 pt per letter)

a) Give the valence electron configuration for the element in #3 above, in the same format.