

Name Teacher's Notes Pd \_\_\_\_\_ Date \_\_\_\_\_

**Chemistry: Valence Electrons & Lewis Dot Structures Worksheet**

Apply your knowledge of valence electrons, Lewis dot structures and the octet rule to complete the table below.

Element	Valence Electrons		Lewis Dot Structure	to achieve a full valence shell	
	Main E Level	How Many?		# of e's gained	# of e's lost
Hydrogen	1	1	H•	1	1
Lithium	2	1	Li•	7	1
Cesium	6	1	Cs•	7	1
Magnesium	3	2	Mg•	6	2
Calcium	4	2	Ca•	6	2
Strontium	5	2	Sr•	6	2
Boron	2	3	B•	5	3
Aluminum	3	3	Al•	5	3
Carbon	2	4	•C•	4	4
Silicon	3	4	•Si•	4	4
Lead	6	4	•Pb•	4	4
Nitrogen	2	5	•N:	3	5
Phosphorous	3	5	•P:	3	5

Element	Valence Electrons		Lewis Dot Structure	to achieve a full valence shell	
	Main E Level	How Many?		# of e's gained	# of e's lost
Oxygen	2	6	$\cdot \ddot{O} \cdot$	2	0
Sulfur	3	6	$\cdot \ddot{S} \cdot$	2	0
Fluorine	2	7	$\cdot \ddot{F} \cdot$	1	7
Chlorine	3	7	$\cdot \ddot{Cl} \cdot$	1	7
Bromine	4	7	$\cdot \ddot{Br} \cdot$	1	7
Iodine	5	7	$\cdot \ddot{I} \cdot$	1	7
Helium	1	2	He:	0	0
Neon	2	8	$:\ddot{Ne}:$	0	0
Argon	3	8	$:\ddot{Ar}:$	0	0
Krypton	4	8	$:\ddot{Kr}:$	0	0
Xenon	5	8	$:\ddot{Xe}:$	0	0
Radon	6	8	$:\ddot{Rn}:$	0	0