Name _____

SIMPLE IONS

Complete the following table. Note that the name of a nonmetallic ion ends with ***–ide***, while the name for a metallic ion uses the full name of the metal.

Ion Name	Ion Symbol	Number of Protons	Number of Valence Electrons	Number of Electrons Lost or Gained	Same Number of Electrons as an Ion as What Noble Gas?
e.g. fluoride	**F^-**	**9**	7	**gained one**	**neon**
1. Iodine	I^-	53	7	gained one	Xenon
2. Sulfur	S^{2-}	16	6	gained two	Argon
3. potassium	K^+	19	1	lost one	argon
4. Calcium	Ca^{2+}	20	2	lost two	argon
5. Bromine	Br^-	35	7	gained one	krypton
6. Strontium	Sr^{2+}	38	2	lost two	krypton
7. hydrogen	H^+	1	1	lost one	(none)
8. oxygen	O^{2-}	8	6	gained two	neon
9. magnesium	Mg^{2+}	12	2	lost two	neon
10. aluminum	Al^{3+}	13	3	lost three	neon
11. selenium	Se^{2-}	34	6	gained two	krypton
12. hydrogen	H^-	1	1	gained one	helium
13. lithium	Li^+	3	1	lost one	helium
14. rubidium	Rb^+	37	1	lost one	krypton
15. chlorine	Cl^-	17	7	gained one	argon

Note that the symbols for ions are written, for example, as Ca^{2+}. This $^{2+}$ symbol is recommended by IUPAC (The international Union of Pure and Applied Chemistry). The incorrect designation $^{+2}$ is sometimes confused as indicating a positive number or an oxidation number, rather than indicating a positive charge.