

Atoms and Ions Worksheet

Fill in the table below for each of the atoms:

Atom	Symbol	Atomic number	# of protons	# of valence electrons	Metal or non-metal	Electron Dot diagram
carbon	C	6	6	4	non-metal	$\cdot \overset{\cdot}{\underset{\cdot}{\text{C}}}$
iodine	I	53	53	7	non-metal	$\cdot \overset{\cdot\cdot}{\underset{\cdot\cdot}{\text{I}}}$
tin	Sn	50	50	4	metal	$\cdot \overset{\cdot}{\underset{\cdot}{\text{Sn}}}$
rubidium	Rb	37	37	1	metal	$\overset{\cdot}{\text{Rb}}$

Fill in the table below for each of the ions:

Ion	Atomic number	# of protons	Metal or non-metal	Lose or gain electrons	Charge	Electron Dot diagram
strontium ion	38	38	metal	lose	2+	Sr^{2+}
selenide	34	34	non-metal	gain	2-	$:\overset{\cdot\cdot}{\underset{\cdot\cdot}{\text{Se}}}:^{2-}$
rubidium ion	37	37	metal	lose	1+	Rb^+
fluoride	9	9	non-metal	gain	1-	$:\overset{\cdot\cdot}{\underset{\cdot\cdot}{\text{F}}}:^{-}$
iodide	53	53	non-metal	gain	1-	$:\overset{\cdot\cdot}{\underset{\cdot\cdot}{\text{I}}}:^{-}$