

AP WORKSHEET 01E: ANSWERS

ELEMENT	INCORRECT CONFIGURATION	VIOLATION	CORRECT CONFIGURATION
N	$1s^2 2s^2 2px^2 2py^1$	C	$1s^2 2s^2 2px^1 2py^1 2pz^1$
Al	$1s^2 2s^2 2p^6 3p^3$	A	$1s^2 2s^2 2p^6 3s^2 3p^1$
B	$1s^2 2s^3$	B	$1s^2 2s^2 2p^1$
P	$1s^2 2s^2 2p^6 3p^5$	A	$1s^2 2s^2 2p^6 3s^2 3p^3$
Mg	[Ne] $\uparrow\uparrow$	B	[Ne] $\uparrow\downarrow$
C	$1s^2 2s^1 2px^1 2py^1 2pz^1$	A	$1s^2 2s^2 2px^1 2py^1$
C	$1s^2 2s^2 2px^2$	C	$1s^2 2s^2 2px^1 2py^1$
Mn	[Ar] $4s^1 3d^6$	A	[Ar] $4s^2 3d^5$
Ni	[Ar] $4s^2 3d_{xy}^2 3d_{xz}^2 3d_{yz}^2 3d_{z^2}^2 3d_{x^2-y^2}^0$	C	[Ar] $4s^2 3d_{xy}^2 3d_{xz}^2 3d_{yz}^2 3d_{z^2}^1 3d_{x^2-y^2}^1$
Cl	[Ne] $\downarrow\downarrow \uparrow\uparrow \downarrow\downarrow \uparrow$	B	[Ne] $\uparrow\downarrow \uparrow\downarrow \uparrow\downarrow \uparrow$
Sc	[Ar] $3d^3$	A	[Ar] $4s^2 3d^1$
B	$1s^2 2s^1 2px^1 2py^1$	A	$1s^2 2s^2 2px^1$
Na	$1s^1 2s^2 2p^6 3s^2$	A	$1s^2 2s^2 2p^6 3s^1$
S	[Ne] $3s^2 3px^2 3py^2$	C	[Ne] $3s^2 3px^2 3py^1 3pz^1$
V	[Ar] $3d^5$	A	[Ar] $4s^2 3d^3$
P	[Ne] $3s^2 3px^2 3py^1$	C	[Ne] $3s^2 3px^1 3py^1 3pz^1$
Kr	[Ar] $4s^2 3d^{16}$	B	[Ar] $4s^2 3d^{10} 4p^6$