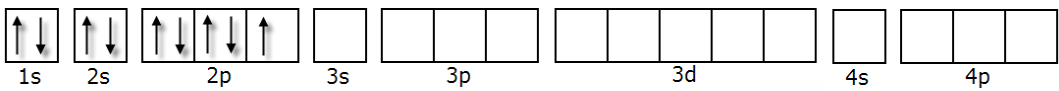
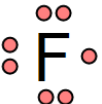
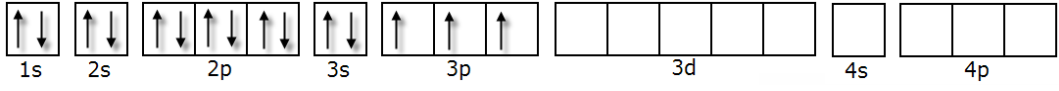
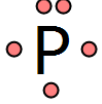

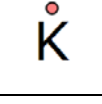

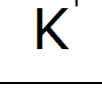

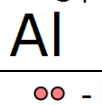


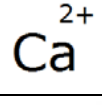


Electron configurations: solutions

Atom Ion	Nucleus			Z	A	Electron configuration			Lewis
	# p+	# n ⁰	# e ⁻			Shorthand notation	Orbital diagram		
¹⁹ ₉ F	9	10	9	9	19	1s ² 2s ² 2p ⁵			
³¹ ₁₅ P	15	16	15	15	31	1s ² 2s ² 2p ⁶ 3s ² 3p ³			
³⁹ ₁₉ K	19	20	19	19	39	1s ² 2s ² 2p ⁶ 3s ² 3p ⁶ 4s ¹			
³⁹ ₁₉ K ⁺	19	20	18	19	39	1s ² 2s ² 2p ⁶ 3s ² 3p ⁶			
²⁷ ₁₃ Al ³⁺	13	14	10	13	27	1s ² 2s ² 2p ⁶			
³⁵ ₁₇ Cl ⁻	17	18	18	17	35	1s ² 2s ² 2p ⁶ 3s ² 3p ⁶			
⁴⁰ ₂₀ Ca ²⁺	20	20	18	20	40				
³⁴ ₁₆ S ²⁻	16	18	18	16	34			