セシウムを含むアルカリ金属の性質 Characteristics of Alkali Metals including Cesium



価電子の数が1

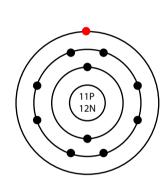
=最外殻の電子殻を回っている電子(遷移元素以外)、他の元素との化学結合に関わる。

簡単にプラスのイオンになって、化学反応を起こし易い (水の場合、水溶性が高い)

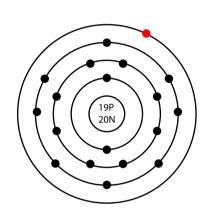
one valence electron

= # of electrons in outher shell (except transition metals) which participate in chemical bonds with other atoms

one or two valance electrons = easy to form positive ion, thus highly reactive



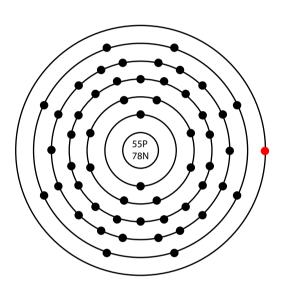
ナトリウム Sodium Na23 1s² 2s²p⁶ 3s¹



Potassium K39 S² 2s²p⁶ 3s²p⁶ 4

カリウム

 $1s^2 2s^2p^6 3s^2p^6 4s^1$

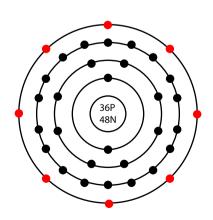


セシウム Cesium Cs133

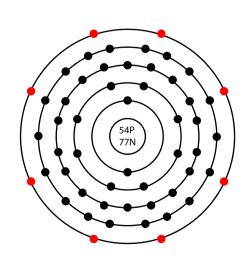
 $1s^2 2s^2p^6 3s^2p^6d^{10} 4s^2p^6d^{10} 5s^2p^6 6s^1$

価電子が8つの希ガスは、化学的に反応しない

eight valence electrons (noble gases, except for Helium with two) = chemically inert



クリプトン Krypton Kr84 $1s^2 \ 2s^2p^6 \ 3s^2p^6d^{10} \ 4s^2p^6$



キセノン Xenon Xe131 $1s^2 \ 2s^2p^6 \ 3s^2p^6d^{10} \ 4s^2p^6d^{10} \ 5s^2p^6$