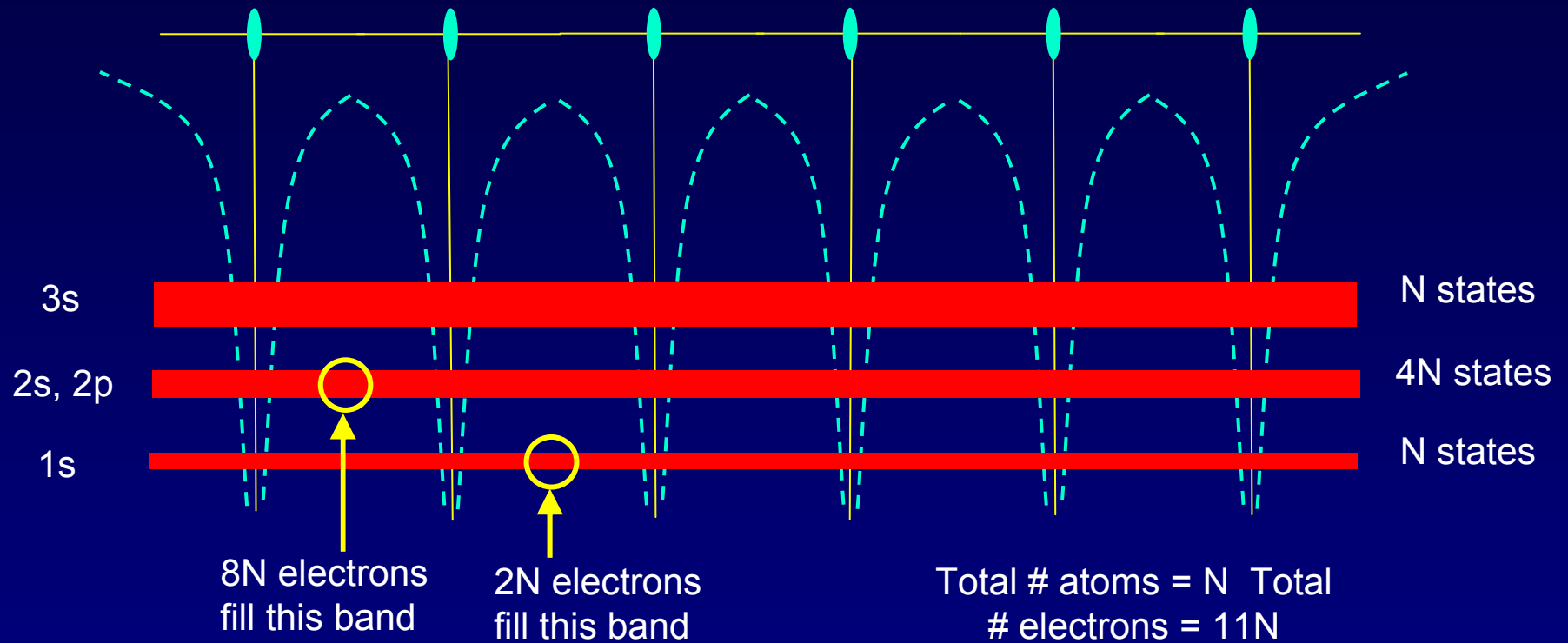
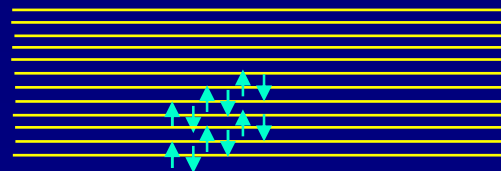


Conductivity of Metals

Sodium: $Z = 11$ ($1s^2 2s^2 2p^6 3s^1$)



The 3s band is only half filled (N states and N electrons)



These electrons are easily promoted to higher states. Na is a good conductor.

Partially filled band → good conductor