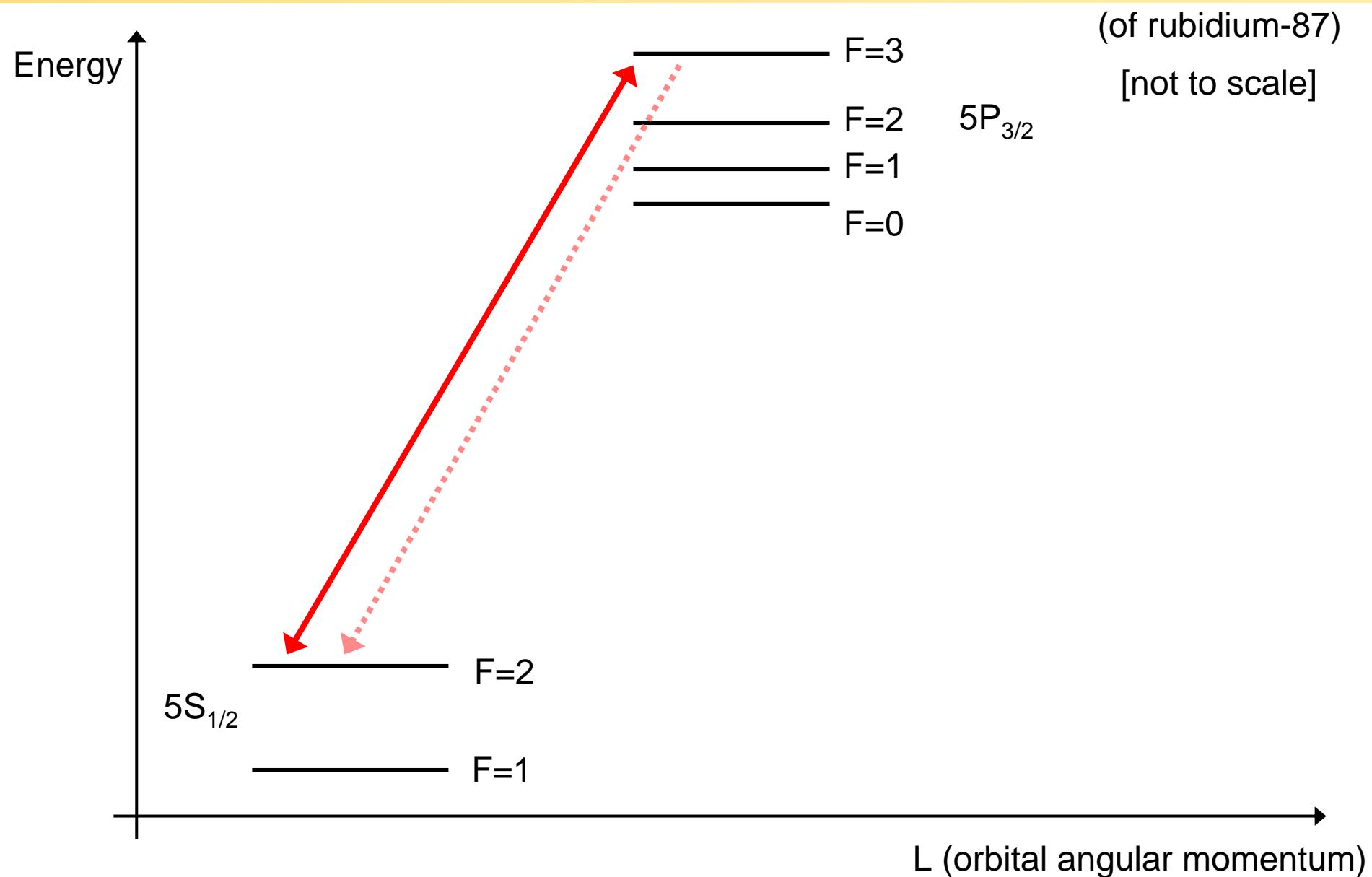
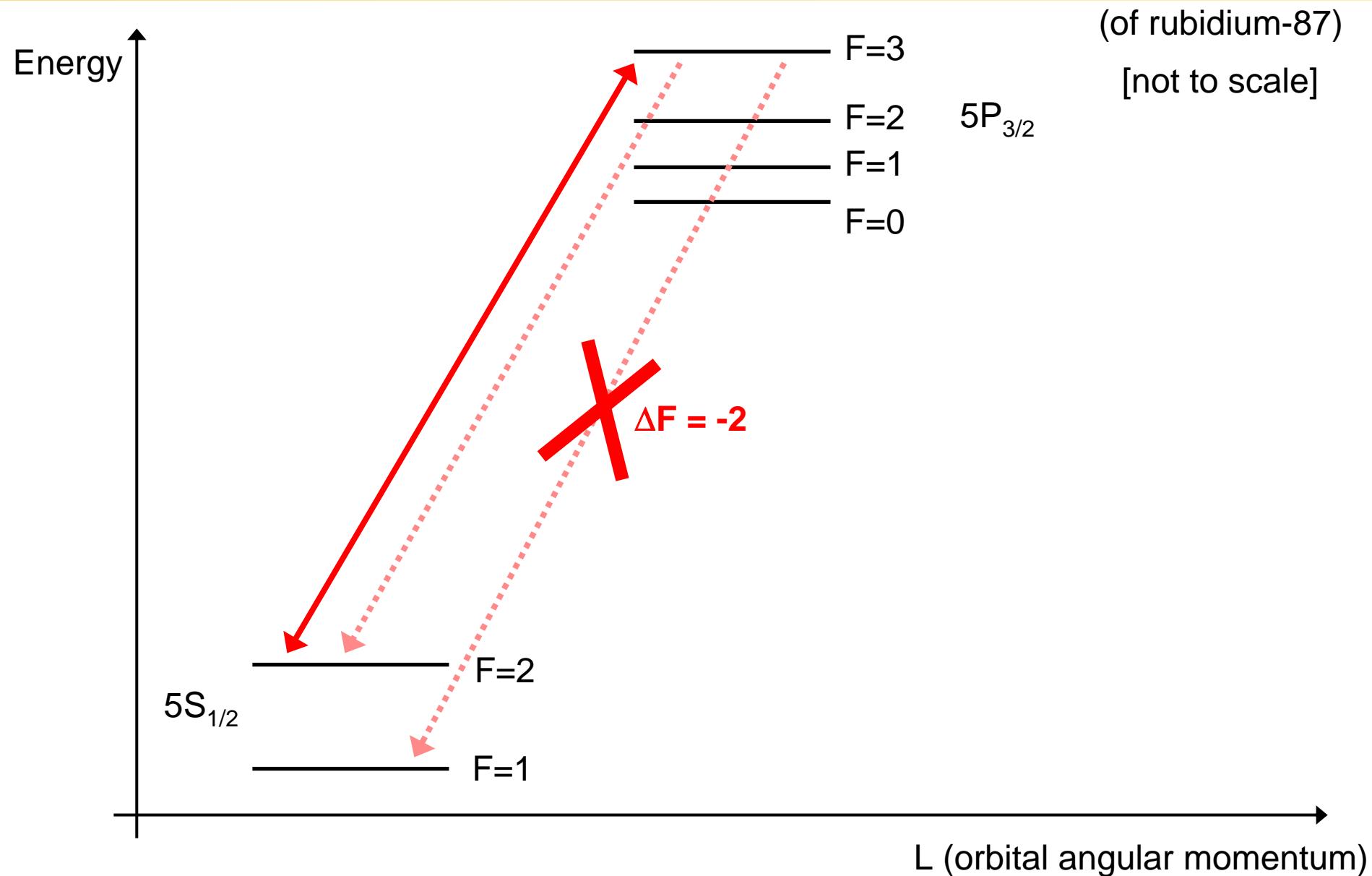




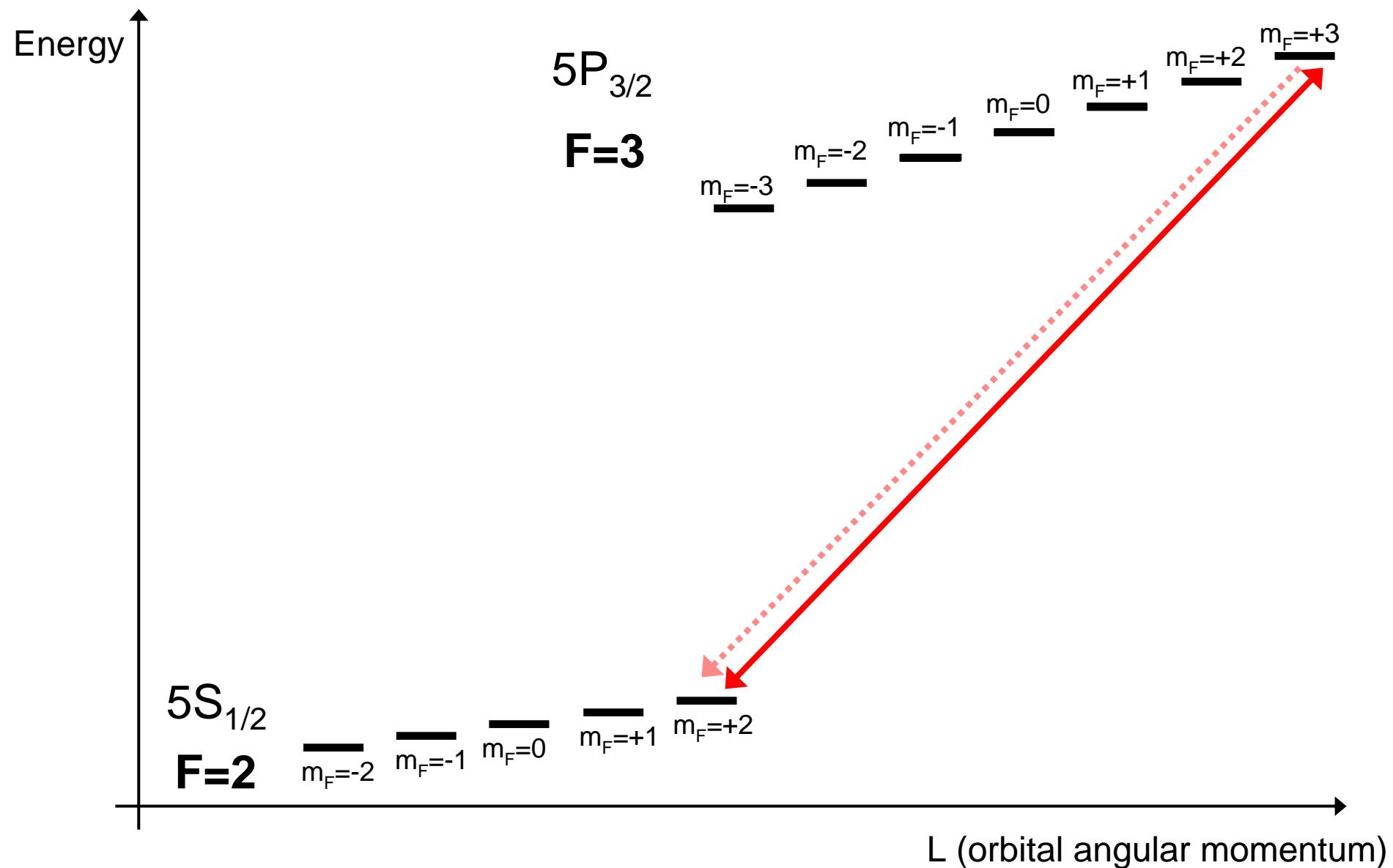
# Why are Alkalies “2-level atoms” ?



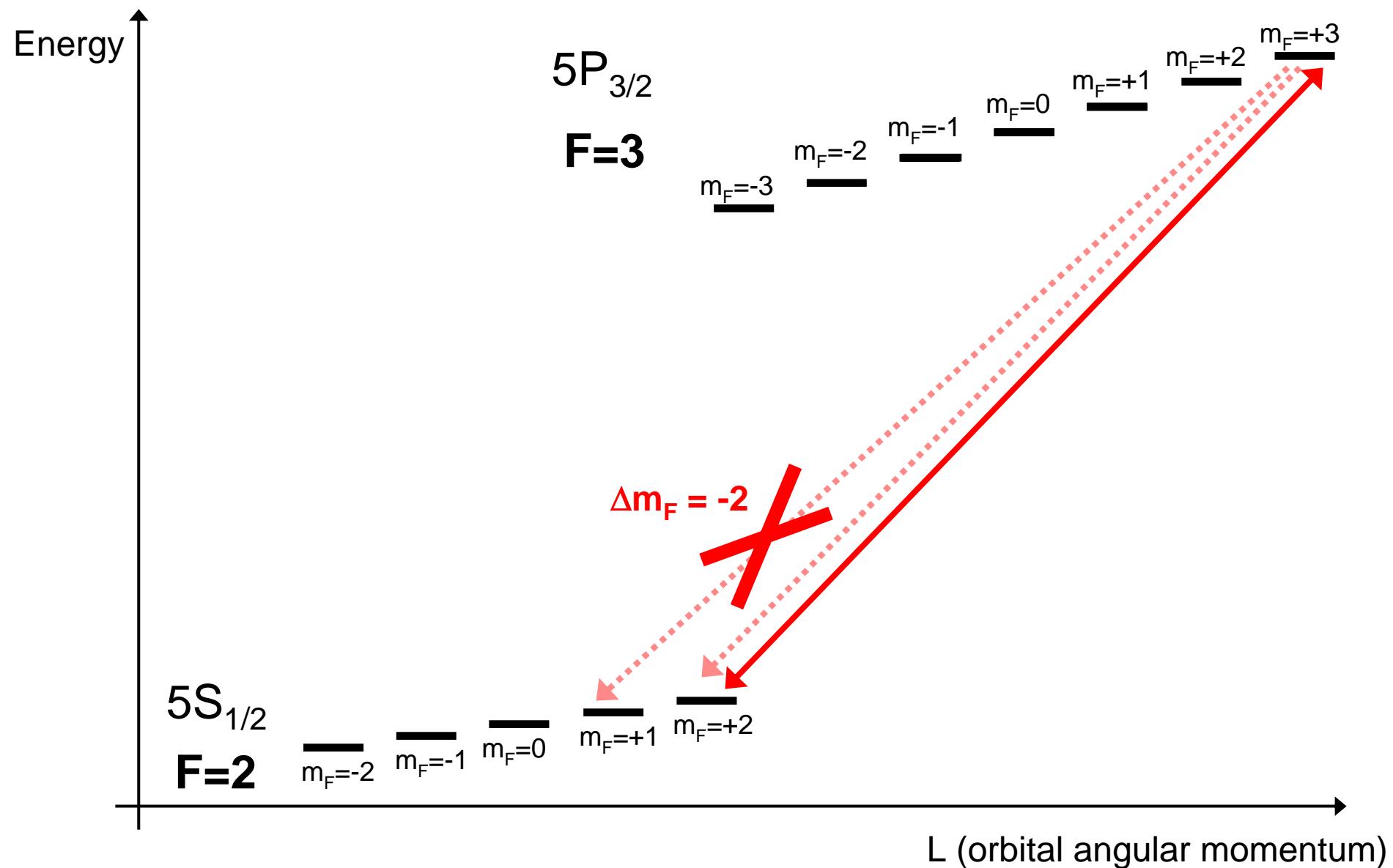
# Why are Alkalies “2-level atoms” ?



# The D2 line Cycling Transition



# The D2 line Cycling Transition



### D2-line (780 nm)      87Rb      D1-line (795 nm)

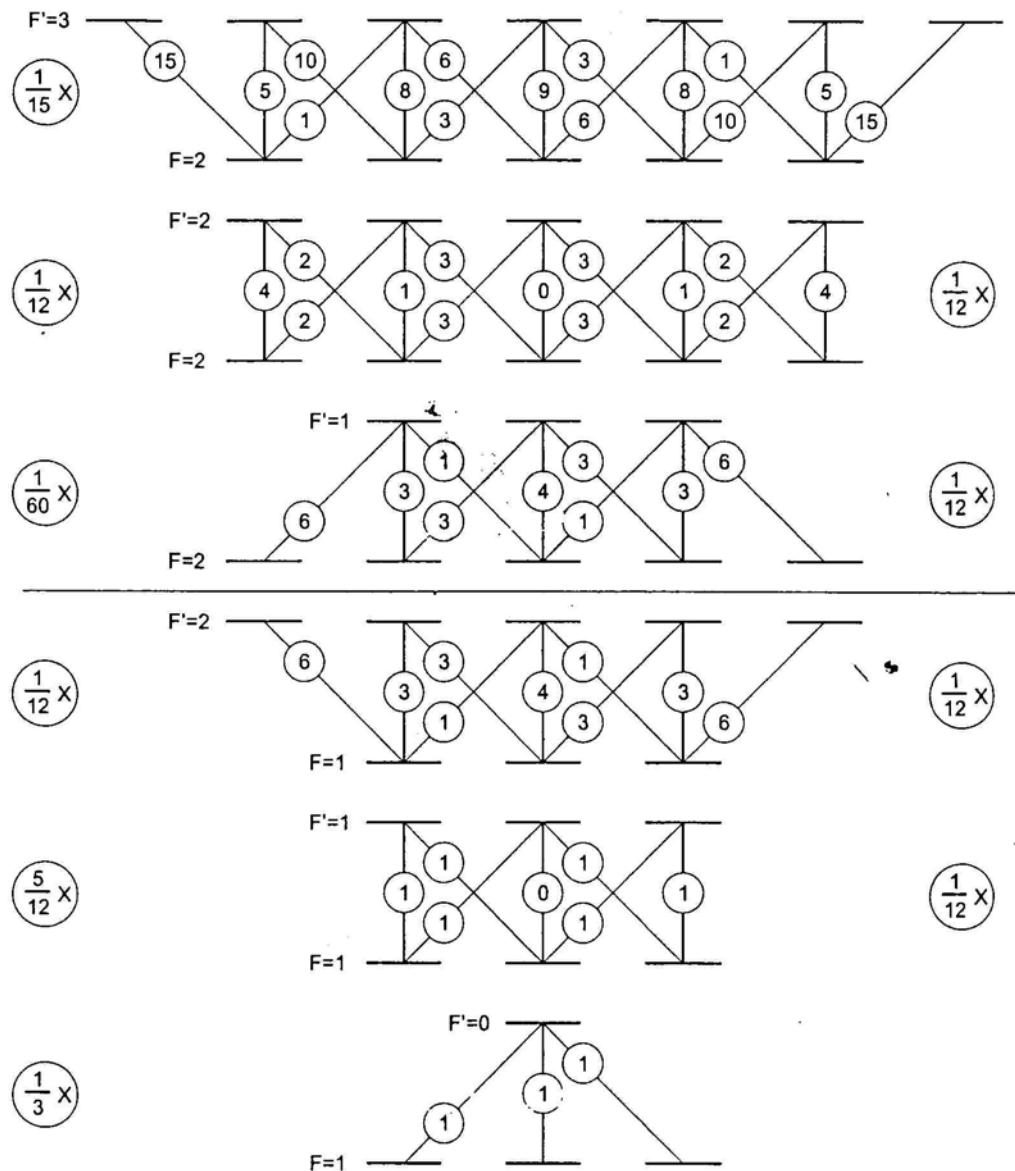


Figure A.2: Branching ratios for  $^{87}\text{Rb}$ . Multiply by the circled number in the left(right) column to get the branching ration for the D2(D1) line.