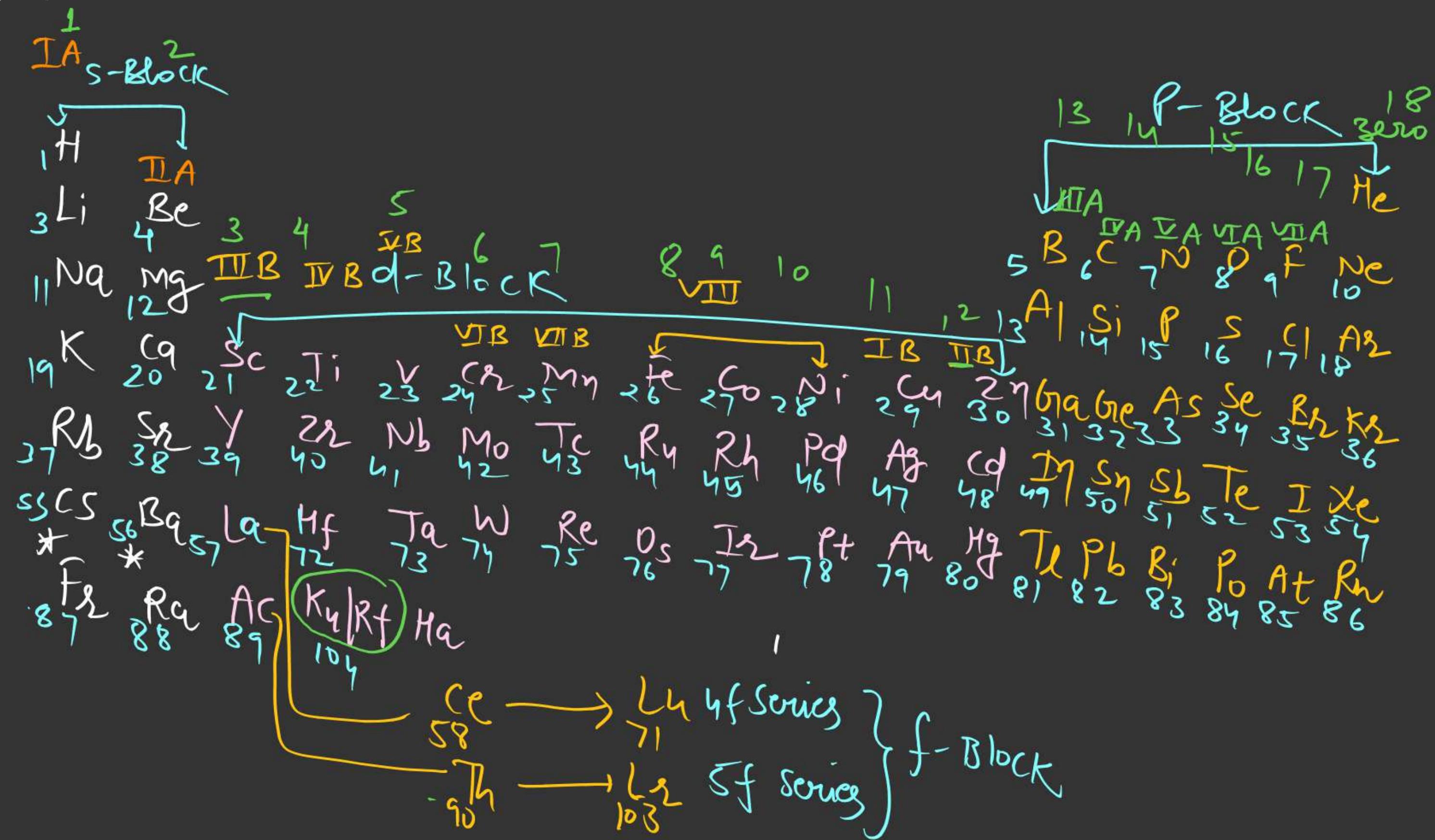


Note \Rightarrow Physical and chemical prop. of an elements are the periodic function of their atomic number



I.U.P.A.C

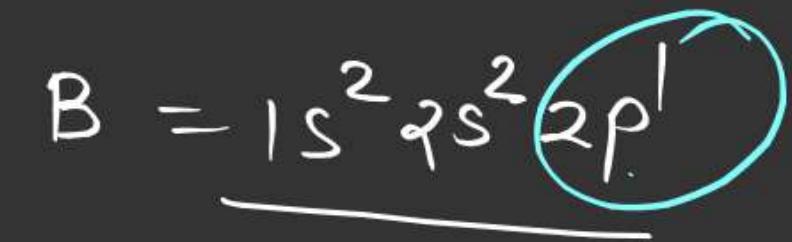
- 0 nil
- 1 Un
- 2 Bi
- 3 Tri
- 4 quad
- 5 Pent
- 6 Hex
- 7 Sept
- 8 Oct
- 9 Enn

$101 = \text{Unniluonium} [U_{nu}]$

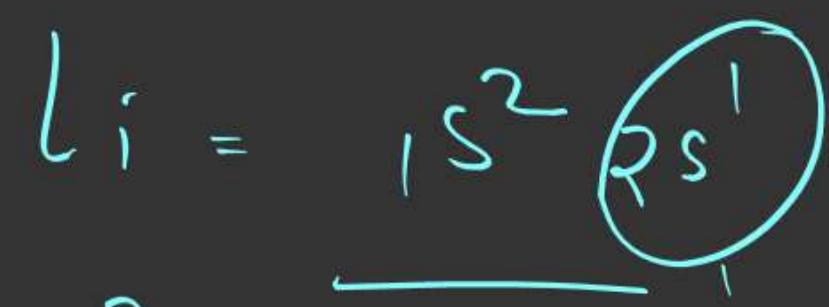
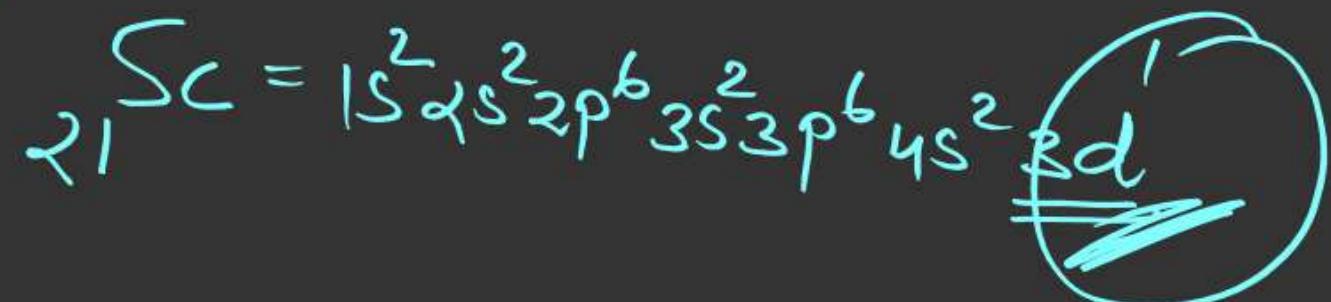
$104 = \text{Unnilquadium} [U_{nq}]$

Werner, Rang, and bohr berry

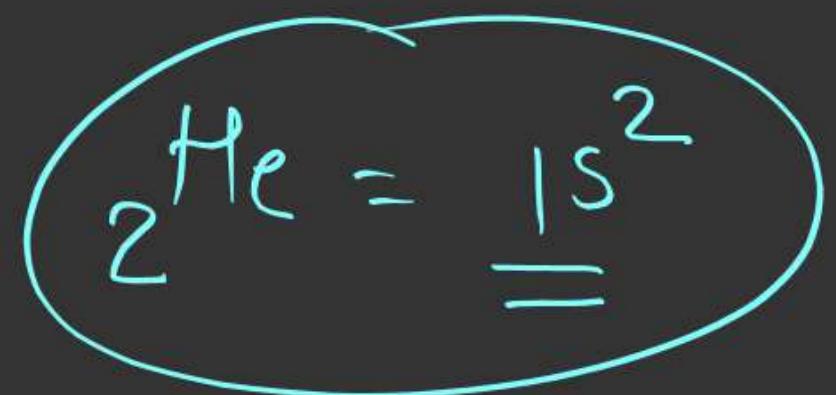
Block identification



B is P-block element

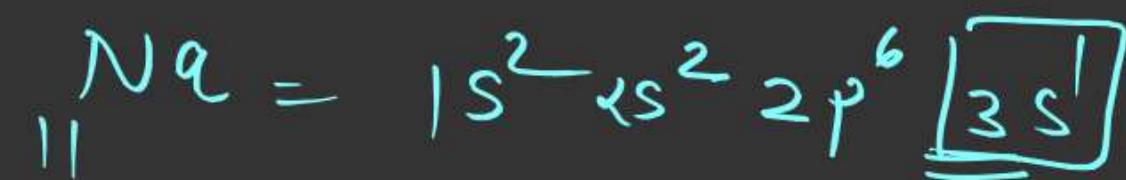


S-block



Period = highest Principle & N

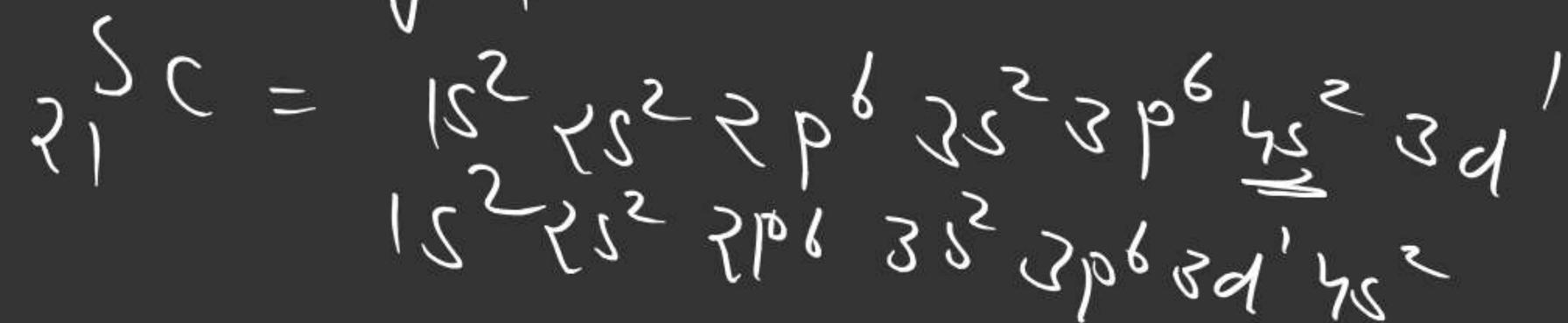
identify period of $_{11}^{Na}$

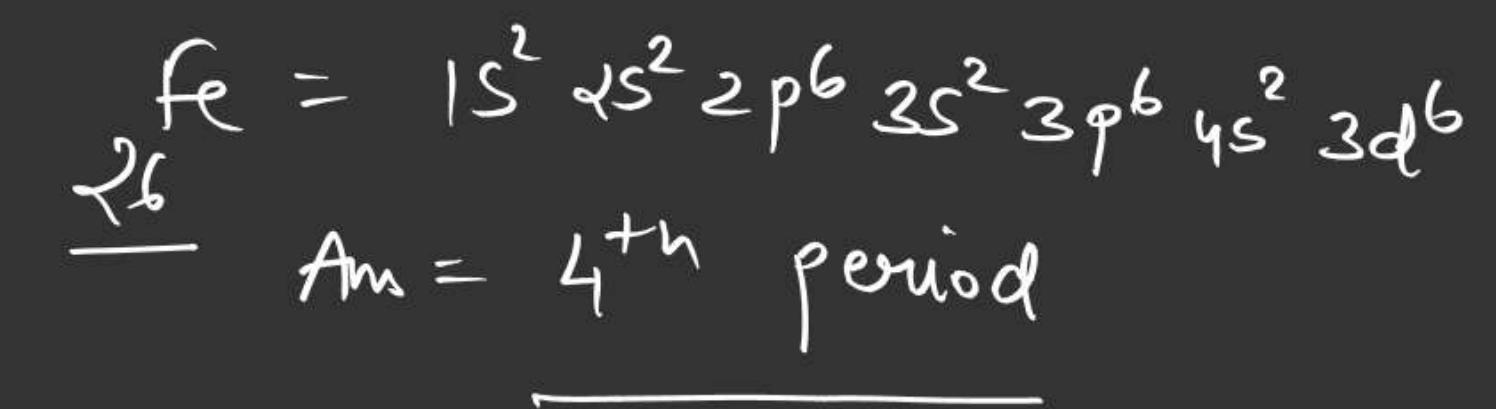


Ans = 3rd period

Ques

identify period of $_{21}^{Sc}$





group number

S-block

$\gamma s^1 \rightarrow$ group 1 | IA

$\gamma s^2 \rightarrow$ group 2 | IIA

$Li = 1s^2 \gamma s^1$

group - 1 | IA

Period = 2 period

Block = S-block

P-Block

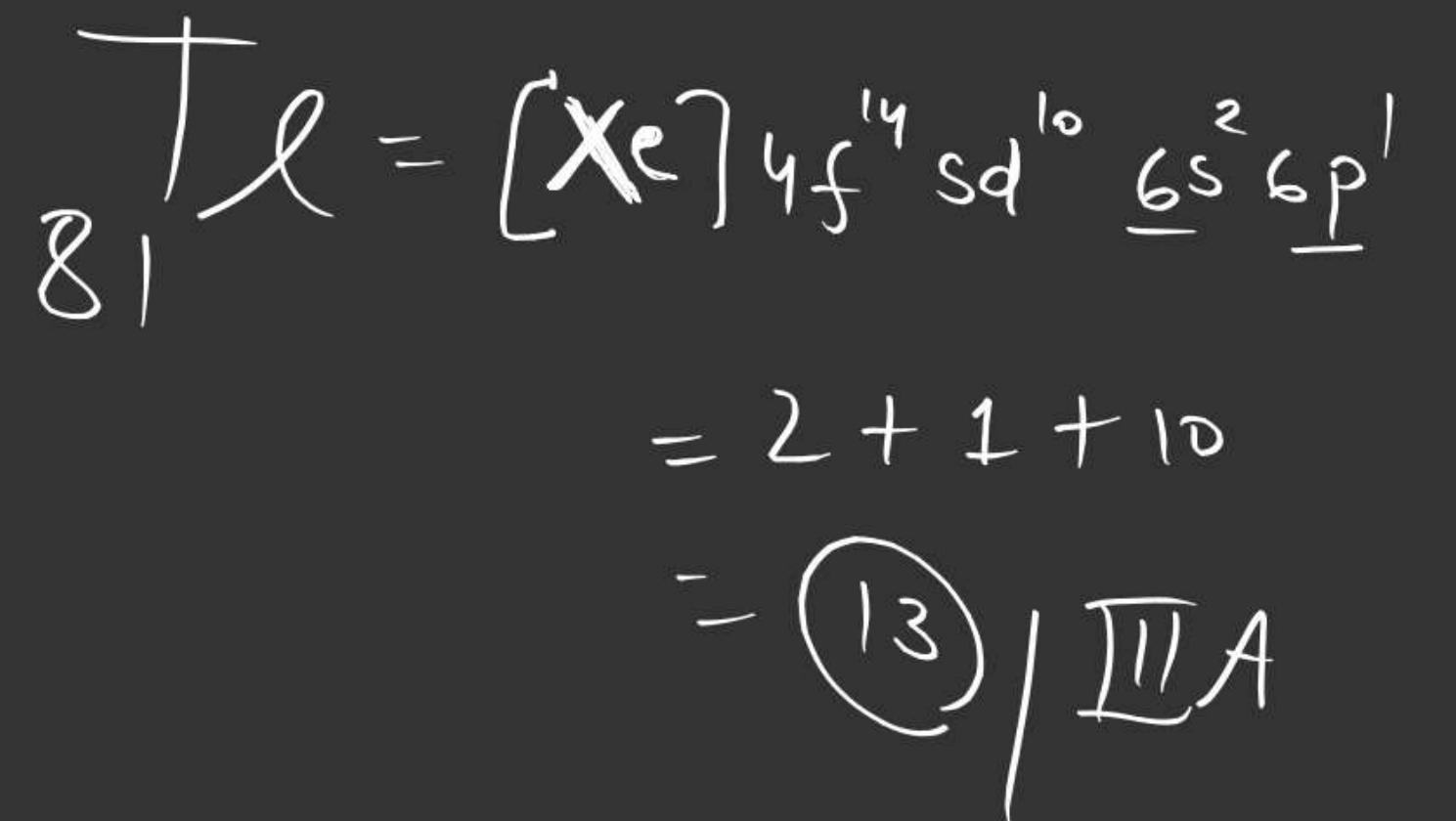
group \Rightarrow number of $n_s e^- +$ number of $n_p e^- + 10$



$$= 2 + 1 + 10$$

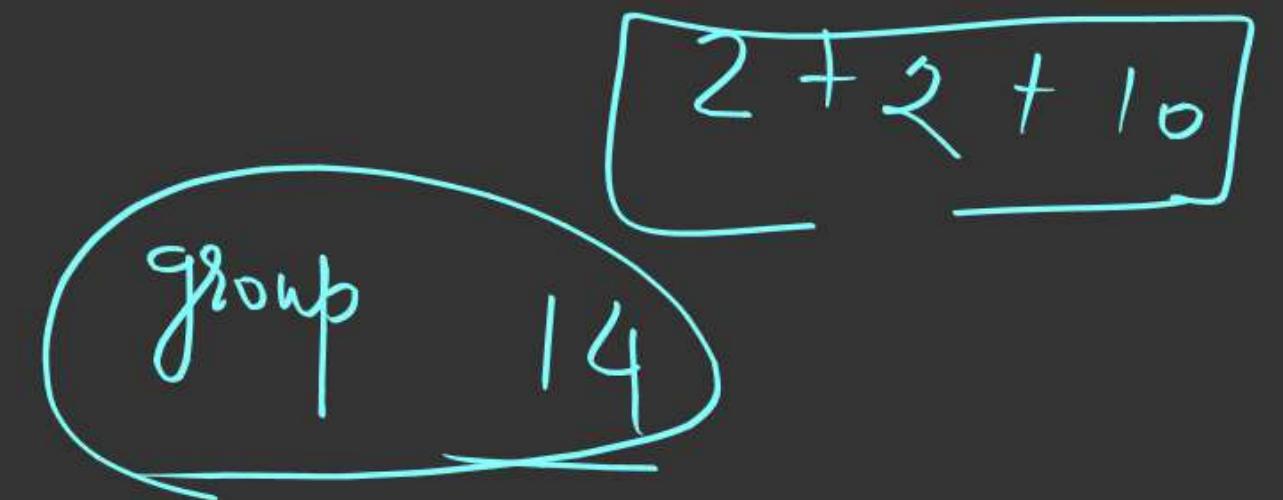
$$= 13 | \text{IIIA}$$

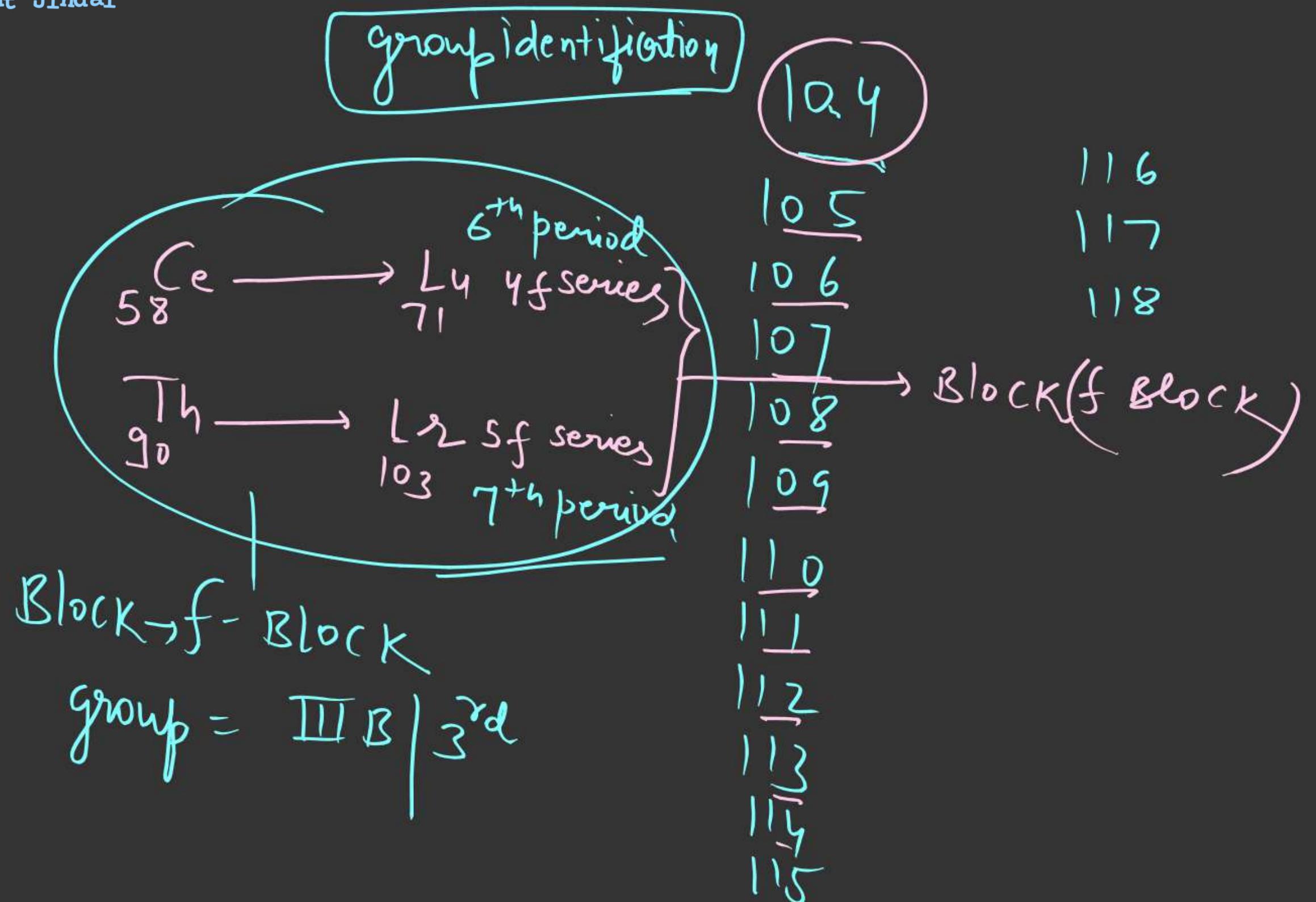
$$\begin{aligned}C &= 1s^2 2s^2 2p^2 \\6 &= 2 + 2 + 10 \\&= \underline{14}\end{aligned}$$



Sn
50

$$\begin{aligned}
 Sn &= 1s^2 \quad 2s^2 2p^6 \quad 3s^2 \quad 3p^6 \quad 4s^2 3d^10 4p^6 \quad 5s^2 4d^10 5p^2 \\
 &= 1s^2 \cancel{2s^2} \cancel{2p^6} \quad 3s^2 \cancel{3p^6} \quad \boxed{\cancel{3d^{10}}} \quad 4s^2 4p^6 \quad 4d^{10} \quad \underline{5s^2 5p^2}
 \end{aligned}$$





no e^-	
S	2
P	6
g	10
f	14
g	18
h	22

Period	Sub Shells	number of e^-	number of element	element
1	S	2	2	$H \rightarrow {}_2^4 He$ Shortest
2	S P	8	8	${}^3 Li \rightarrow {}_{10}^{18} Ne$ Short
3	S P	8	8	${}_{11}^{19} N \rightarrow {}_{18}^{36} Ar$ Short
4	S d p	18	18	${}_{19}^{36} K \rightarrow {}_{36}^{86} Kr$ long
5	S d p	18	18	${}_{37}^{87} Rb \rightarrow {}_{36}^{86} Xe$ long
6	S f d p	32	32	${}_{35}^{87} Cs \rightarrow {}_{86}^{118} Rn$ honest
7	S f d p	32	32	${}_{87}^{118} Fr \rightarrow {}_{118}^{118} Og$ longest
8	S g f d p	50		
9	S g f d p	50		
10	S h g f d p p	72		
11	S h g f d p p	72		