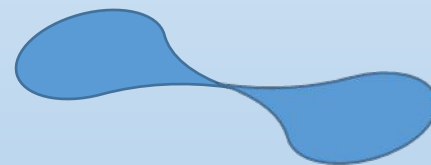
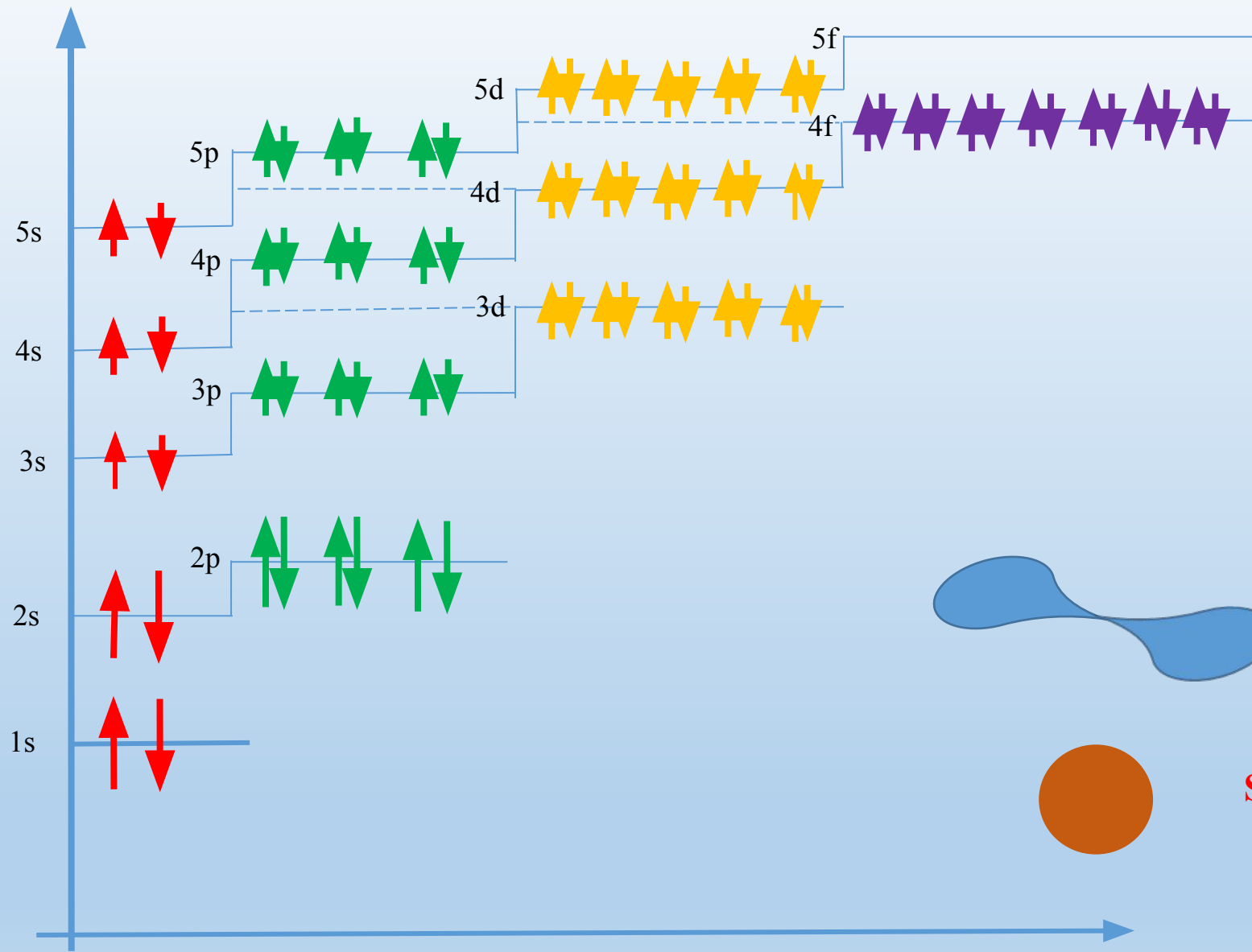
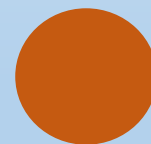


Строение электронных оболочек атомов первого, второго и третьего периодов в Периодической системе химических элементов Д.И.Менделеева

**Приложение к учебнику
О.С. Габриелян ХИМИЯ 8 класс
МБОУ Дивненская СОШ
2015 год**

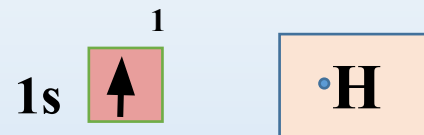
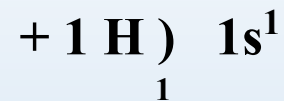


р электроны



S электроны

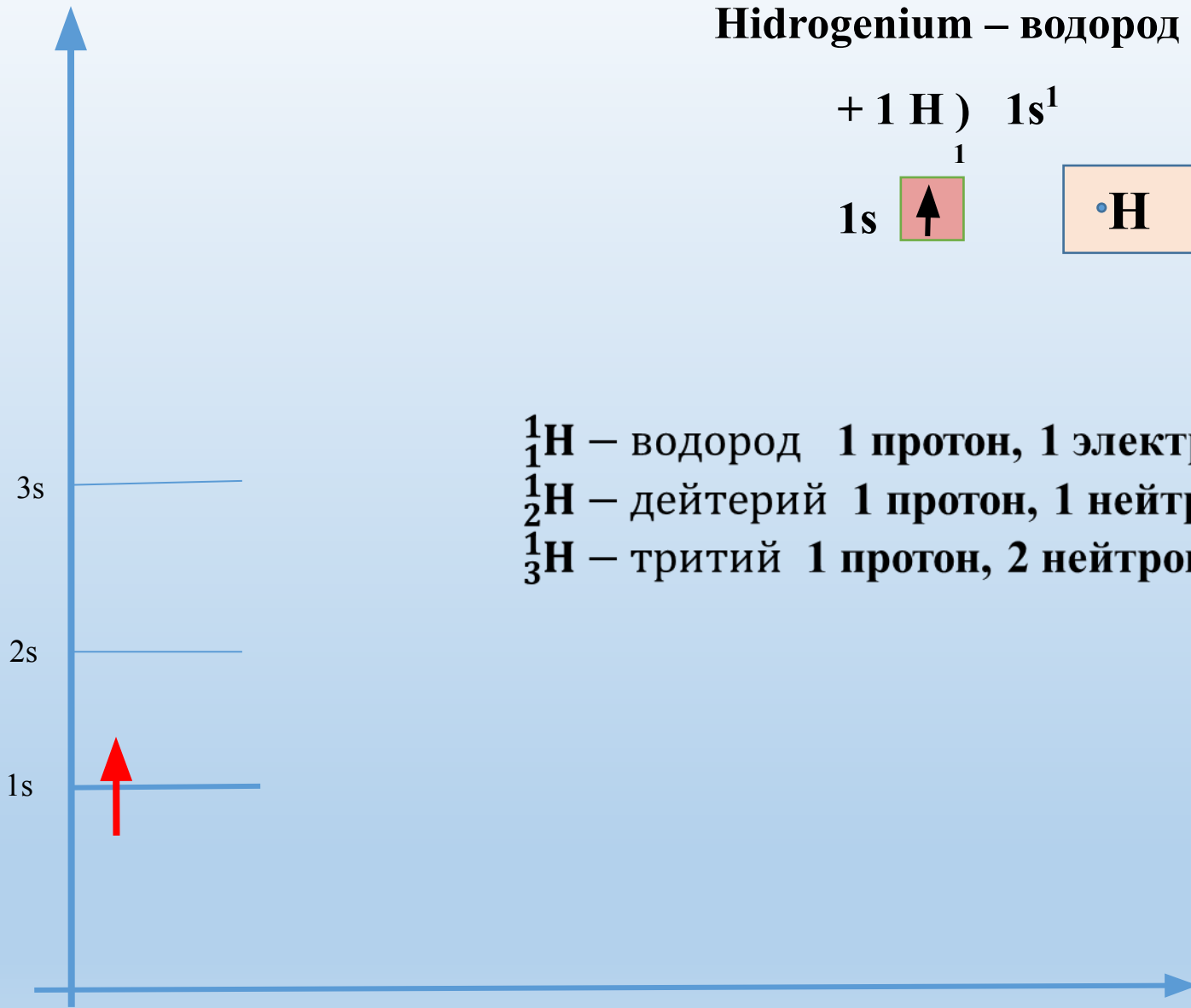
Hydrogenium – водород



${}^1_1\text{H}$ – водород 1 протон, 1 электрон $A = 1$

${}^2_2\text{H}$ – дейтерий 1 протон, 1 нейтрон, 1 электрон $A = 2$

${}^3_3\text{H}$ – тритий 1 протон, 2 нейтрона, 1 электрон $A = 3$

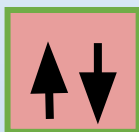


Гелий **$A = 4$**

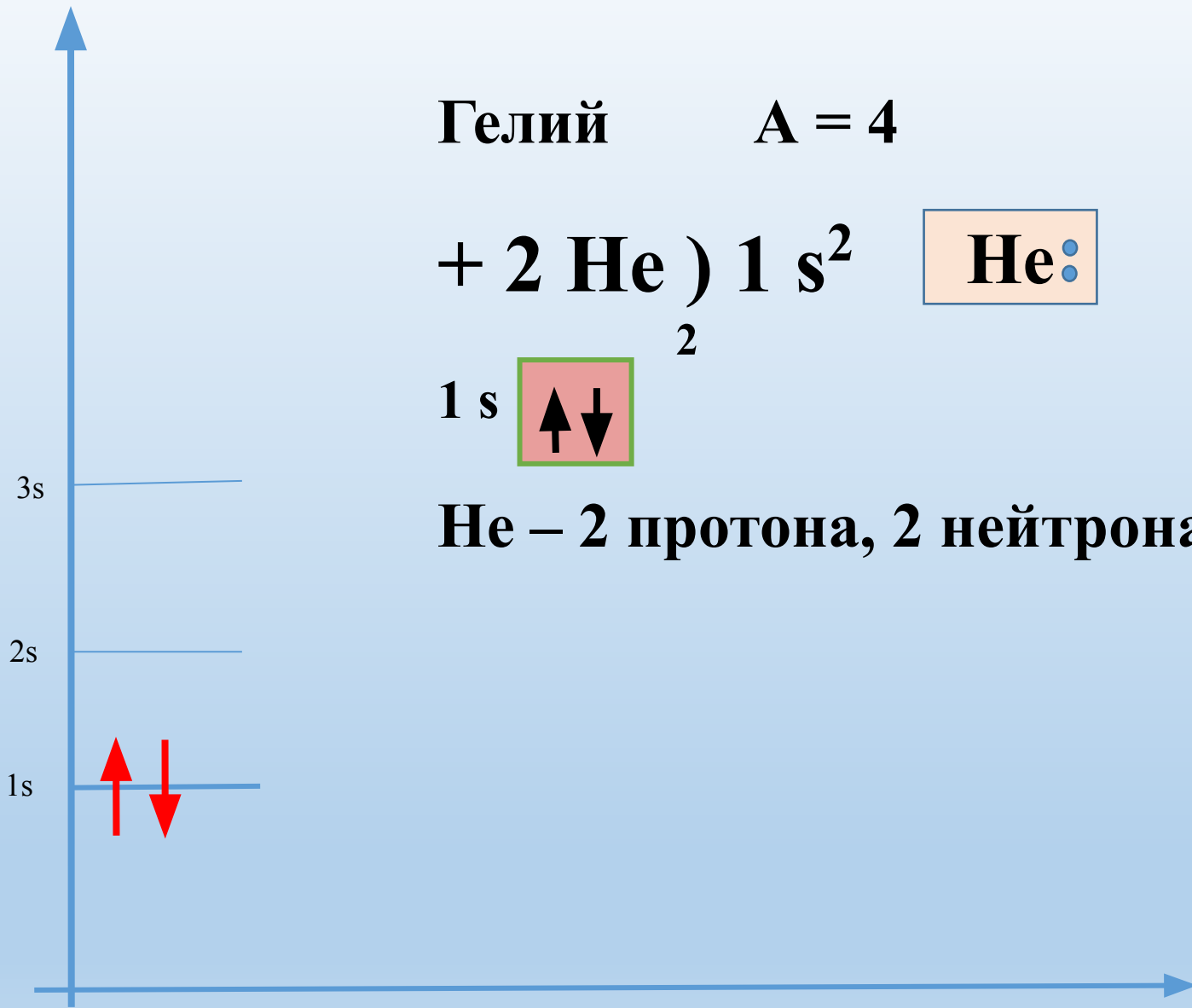
$+ 2 \text{ He }) 1 s^2$



1 s

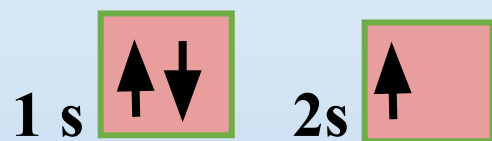
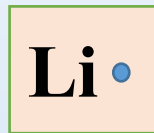


He – 2 протона, 2 нейтрона, 2 электрона



Литий $A = 7$

+ 3 Li)) $1s^2 2s^1$
 2 1

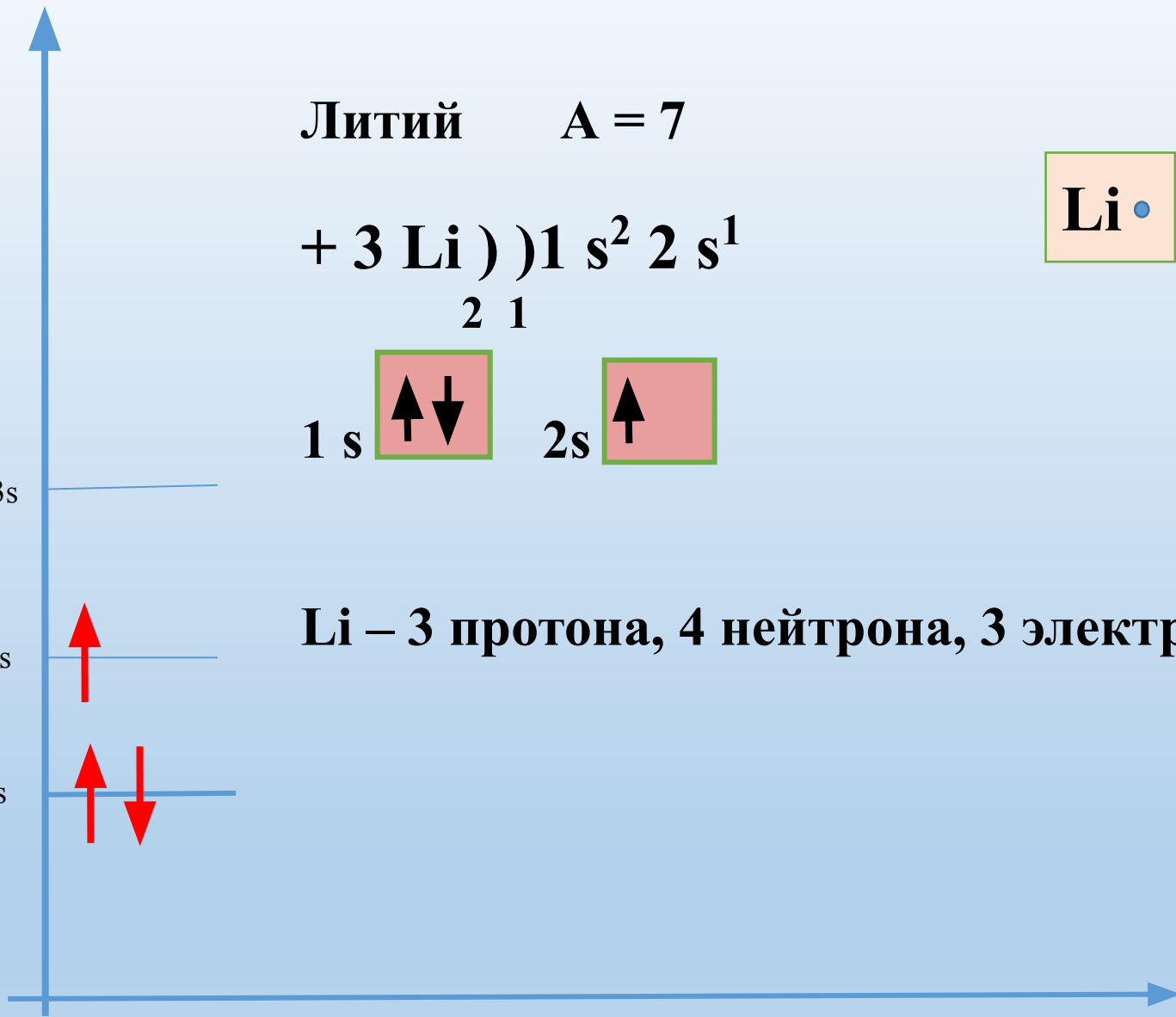


3s

2s

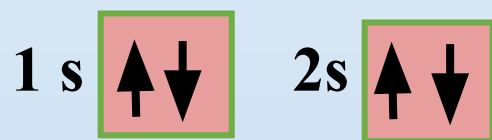
1s

Li – 3 протона, 4 нейтрона, 3 электрона



Бериллий $A = 9$

$+ 4 \text{ Be})) 1 s^2 2 s^2$
2 2



3s

2s

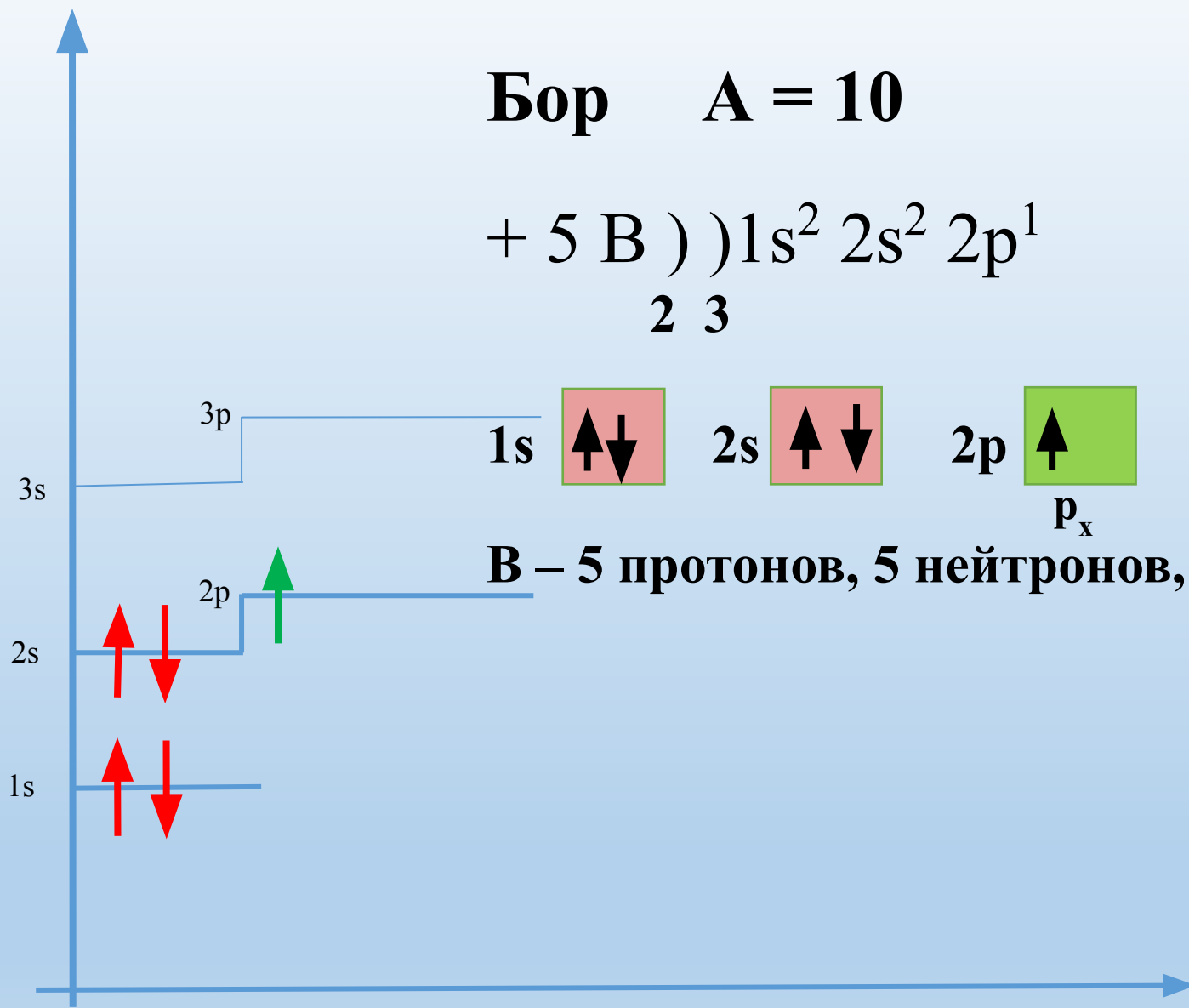
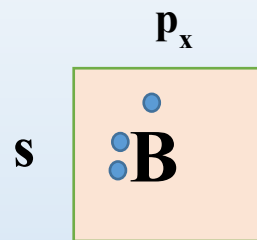
1s

Be – 4 протона, 5 нейтрона, 4 электрона



Бор $A = 10$

+ 5 В)) $1s^2 2s^2 2p^1$
 2 3

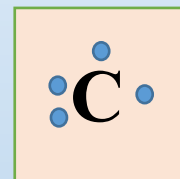
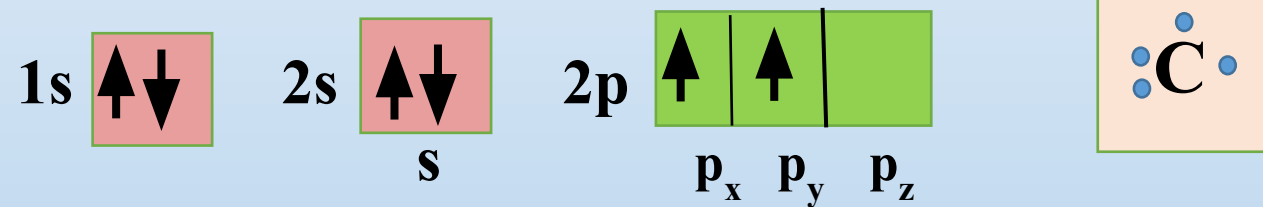
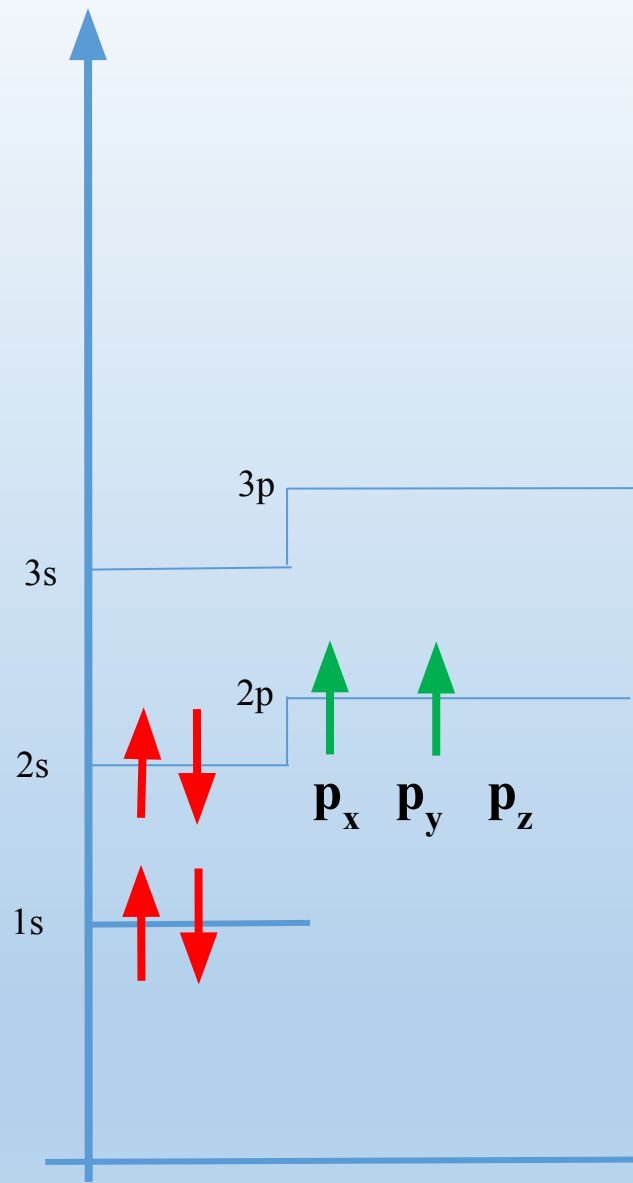


В – 5 протонов, 5 нейтронов, 5 электронов

Углерод (Carbonium) $A = 12$

$+ 6 \text{ C })) 1s^2 2s^2 2p^2$

2 4

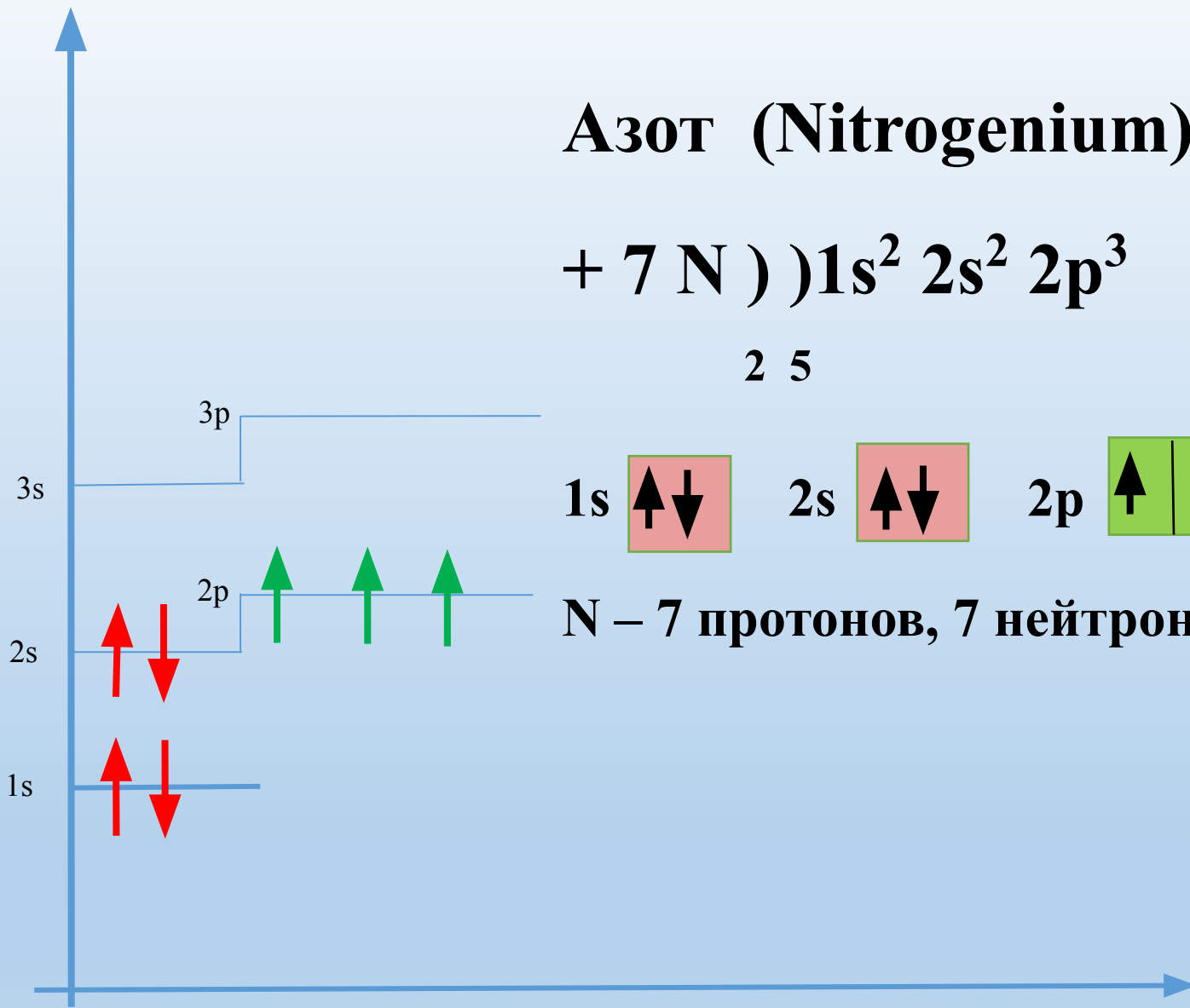


В – 6 протонов, 6 нейтронов, 6 электронов

A30T (Nitrogenium) A = 14

+ 7 N)) $1s^2 2s^2 2p^3$

2 5



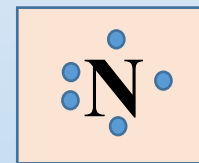
1s



2s



2p

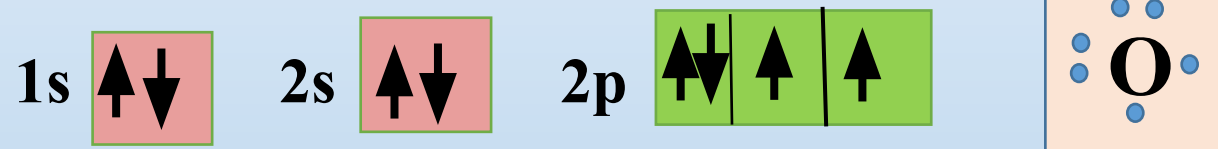
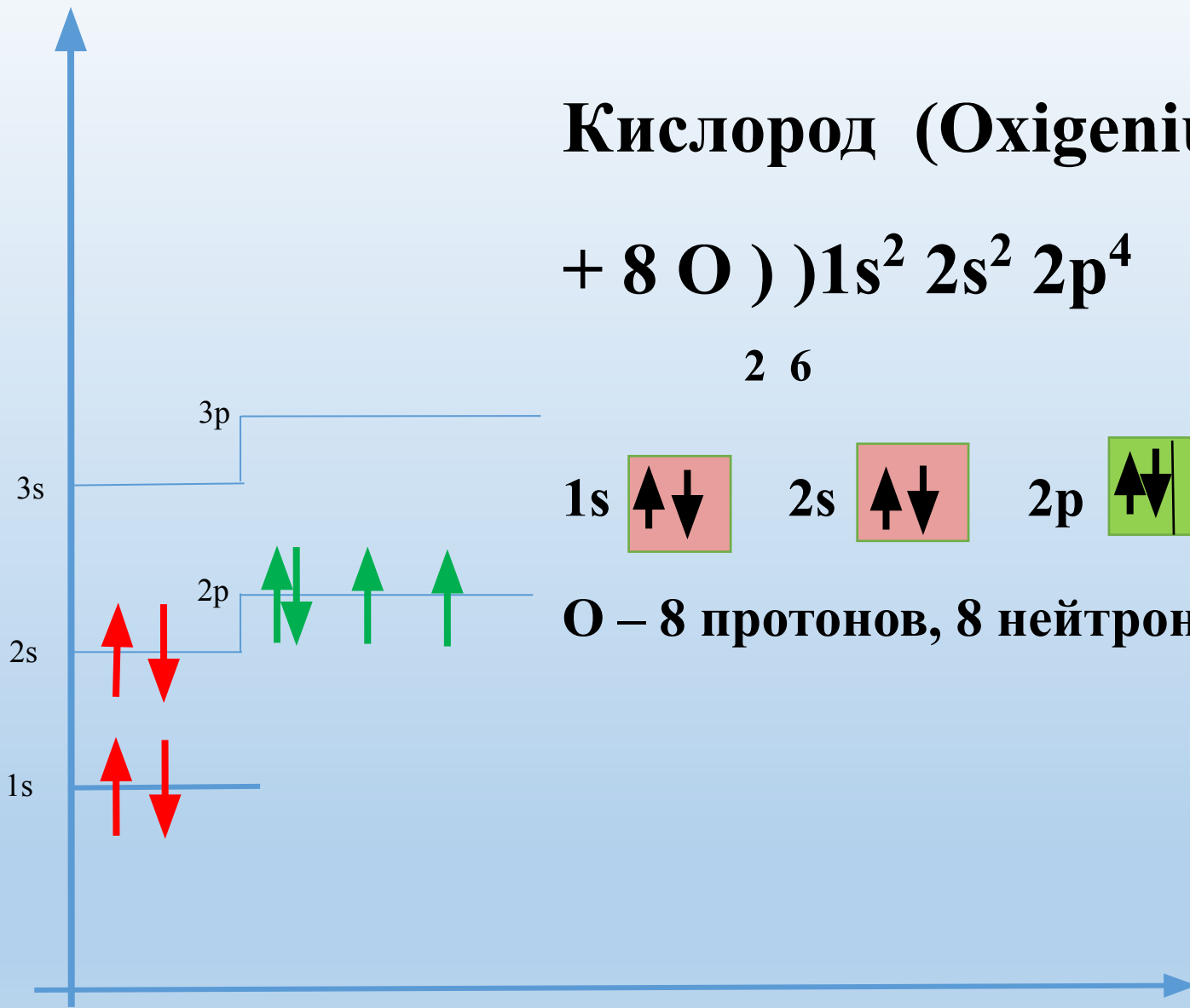


N – 7 протонов, 7 нейтронов, 7 электронов

Кислород (Oxygenium) $A = 16$

$+ 8 \text{ O })) 1s^2 2s^2 2p^4$

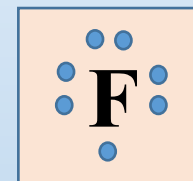
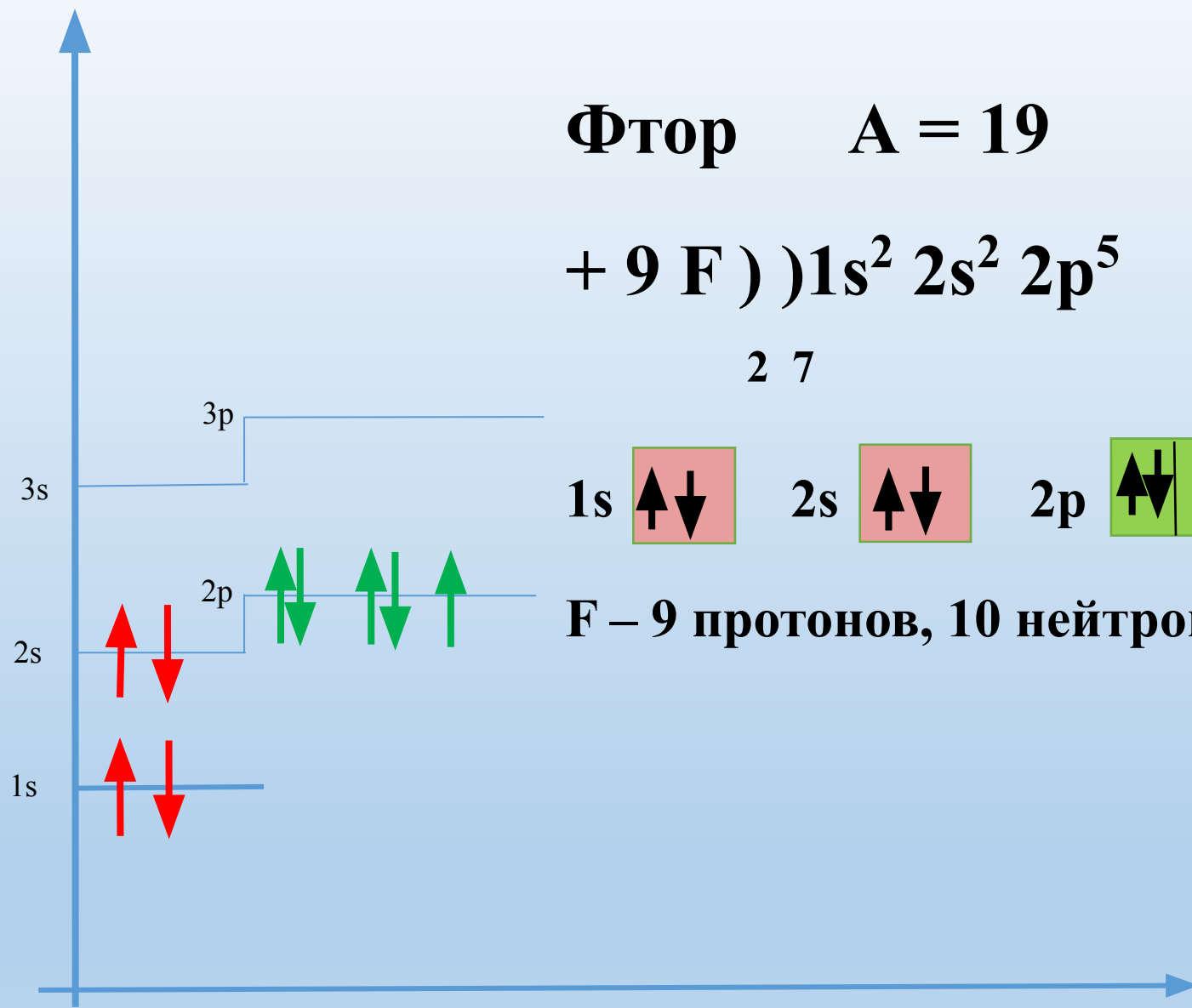
2 6



O – 8 протонов, 8 нейтронов, 8 электронов

$\Phi_{\text{top}} \quad A = 19$

$+ 9 \text{ F })) 1s^2 2s^2 2p^5$
2 7

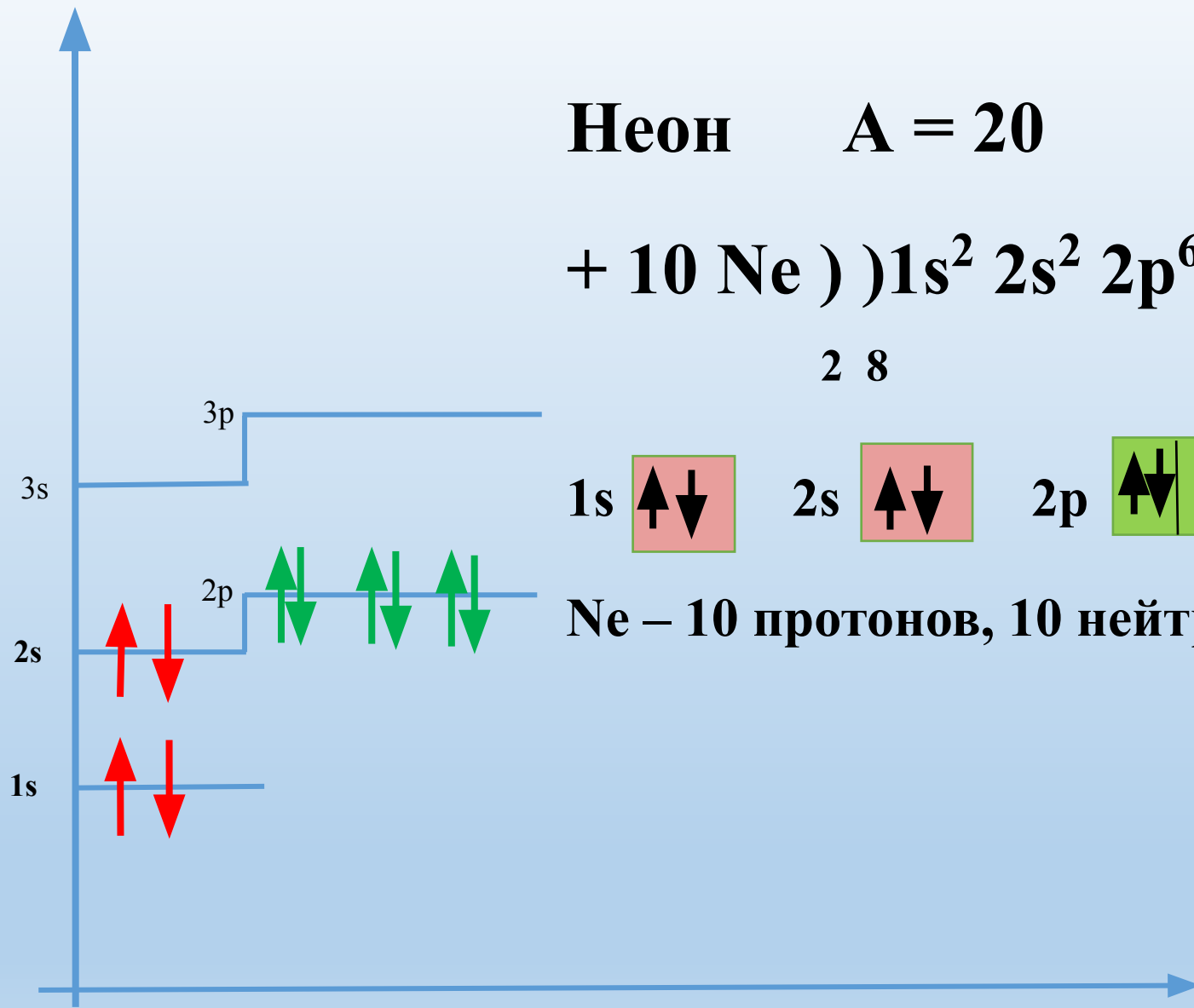


F – 9 протонов, 10 нейтронов, 9 электронов

Неон $A = 20$

+ 10 Ne)) $1s^2 2s^2 2p^6$

2 8



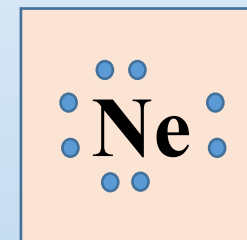
1s



2s

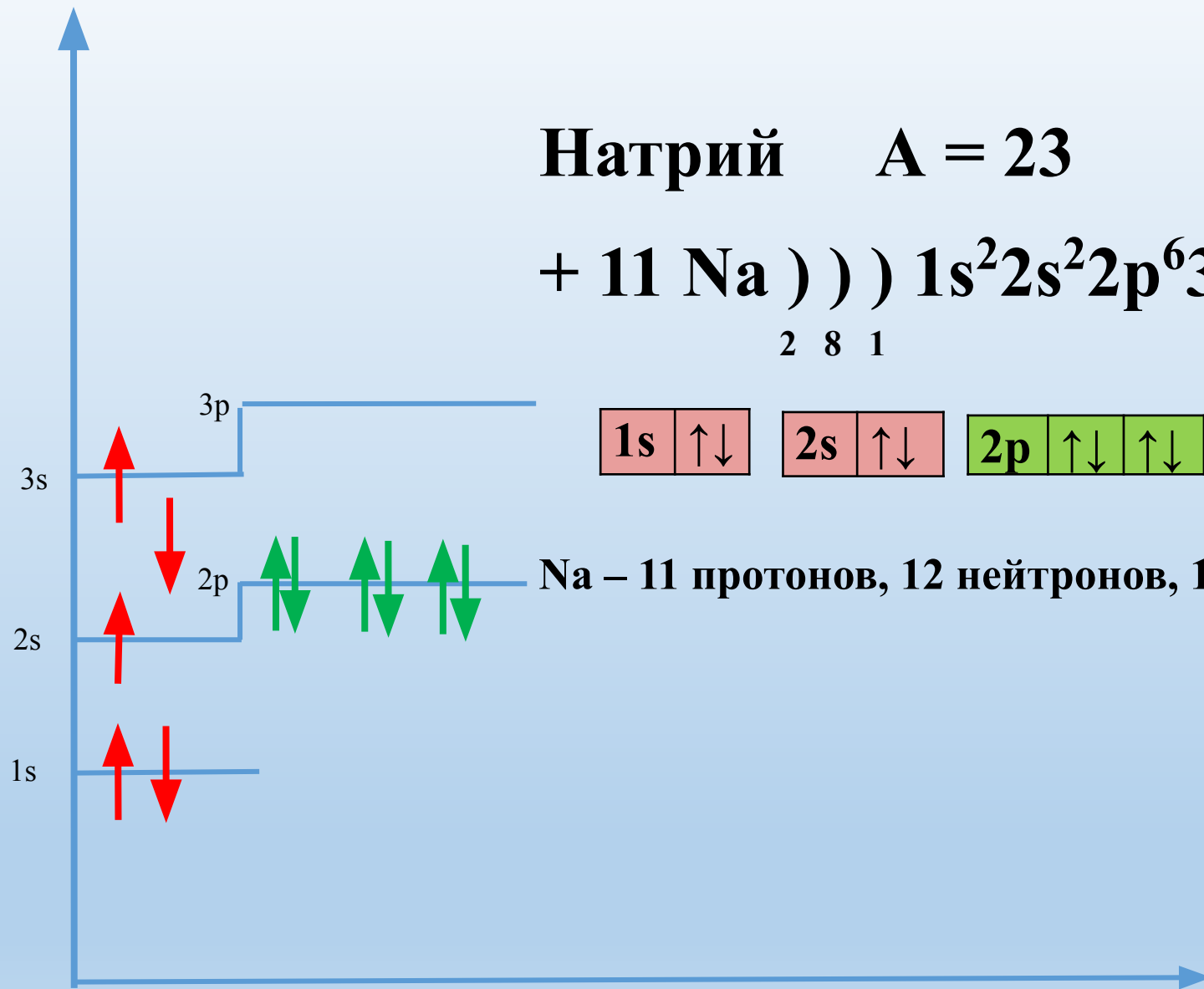
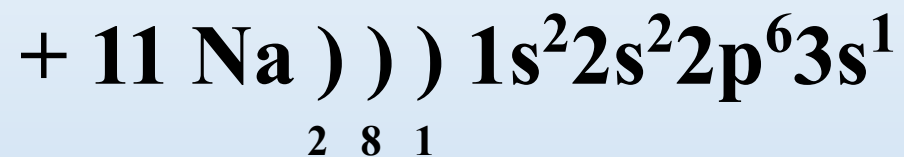


2p

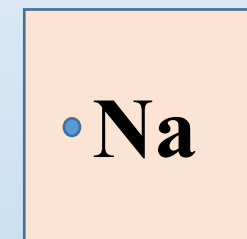


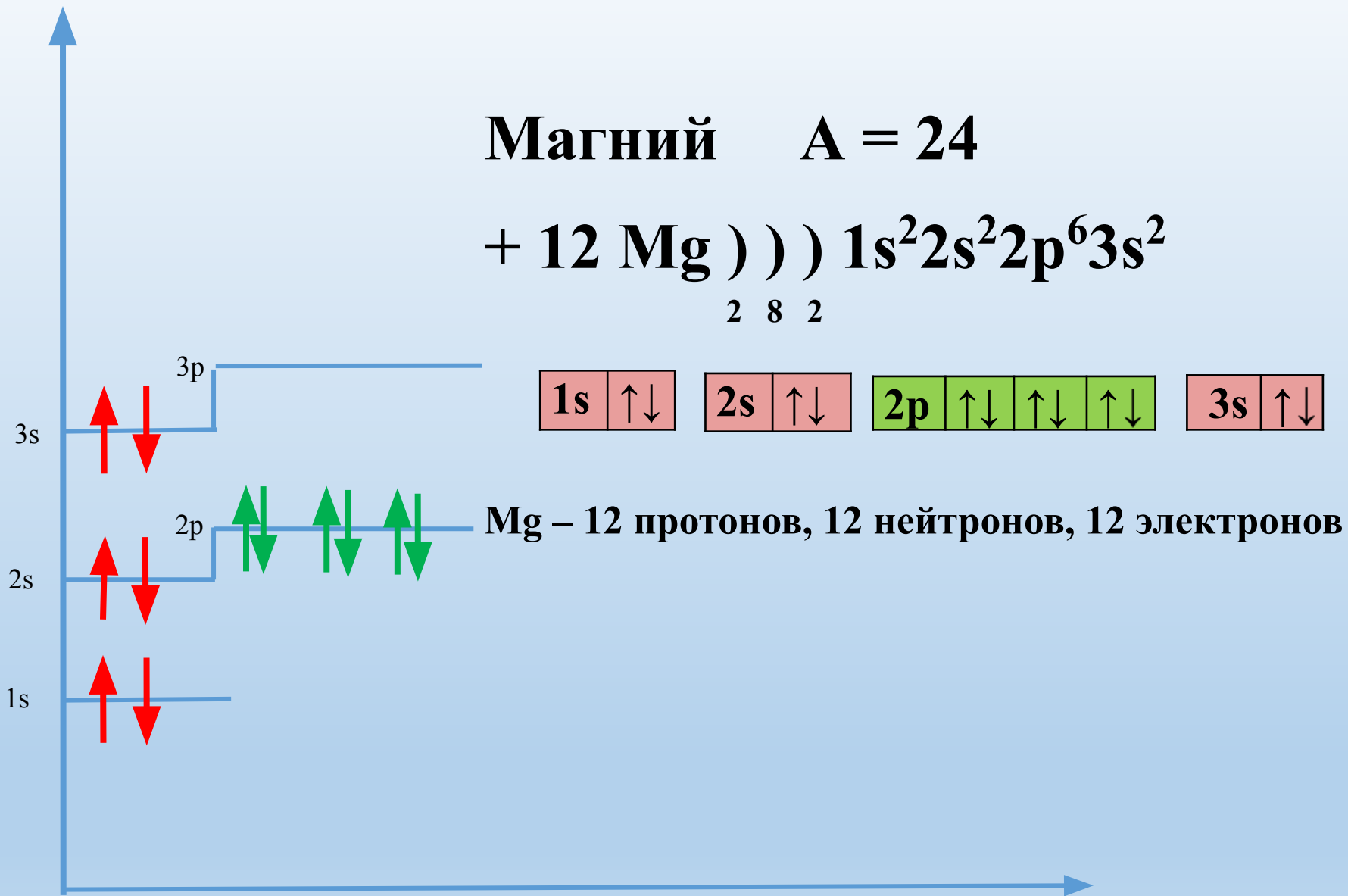
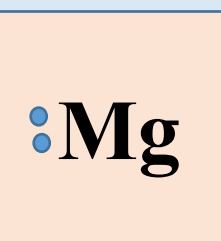
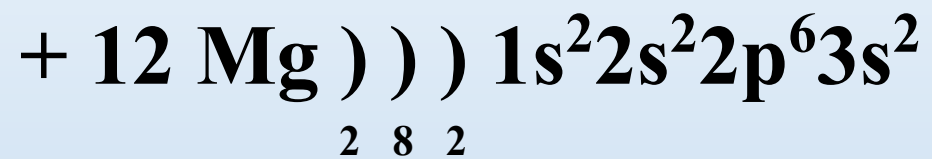
Ne – 10 протонов, 10 нейтронов, 10 электронов

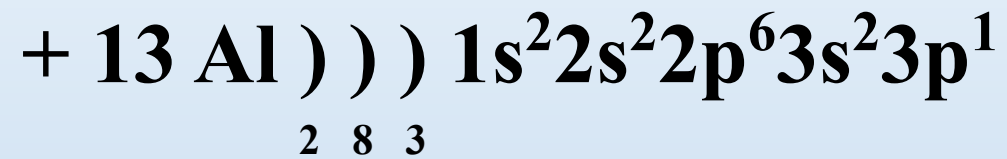
Натрий $A = 23$



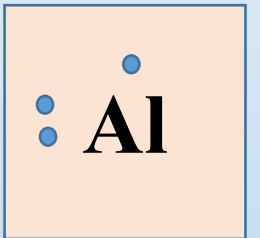
Na – 11 протонов, 12 нейтронов, 11 электронов



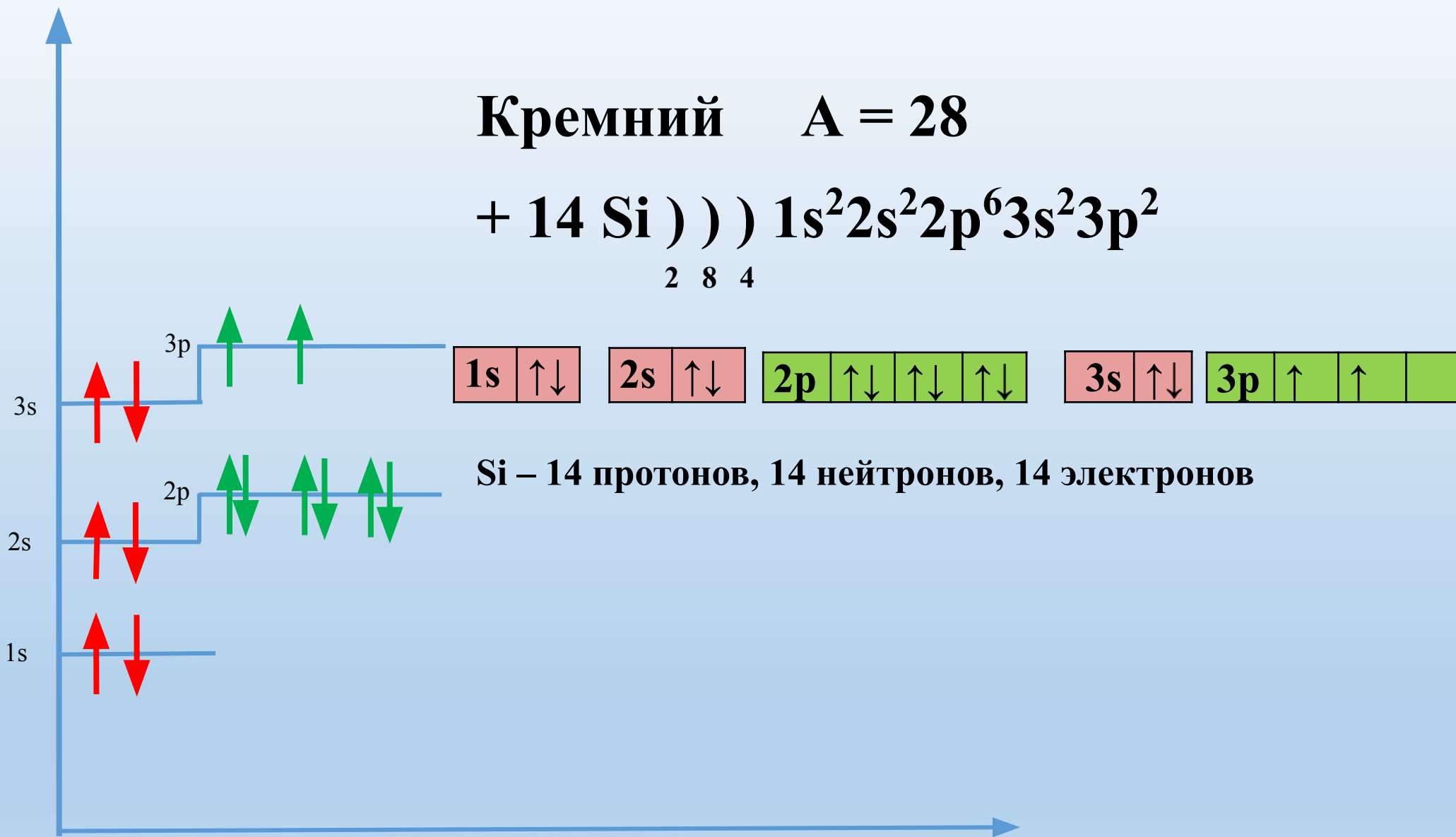
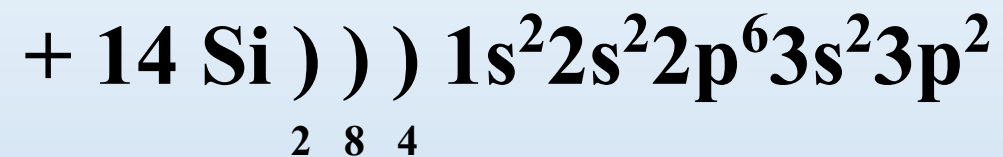
$$+ 12 \text{ Mg }))) 1s^2 2s^2 2p^6 3s^2$$


$$+ 13 \text{ Al }))) 1s^2 2s^2 2p^6 3s^2 3p^1$$


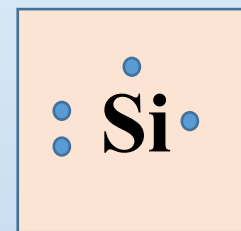
Al – 13 протонов, 14 нейтронов, 13 электронов



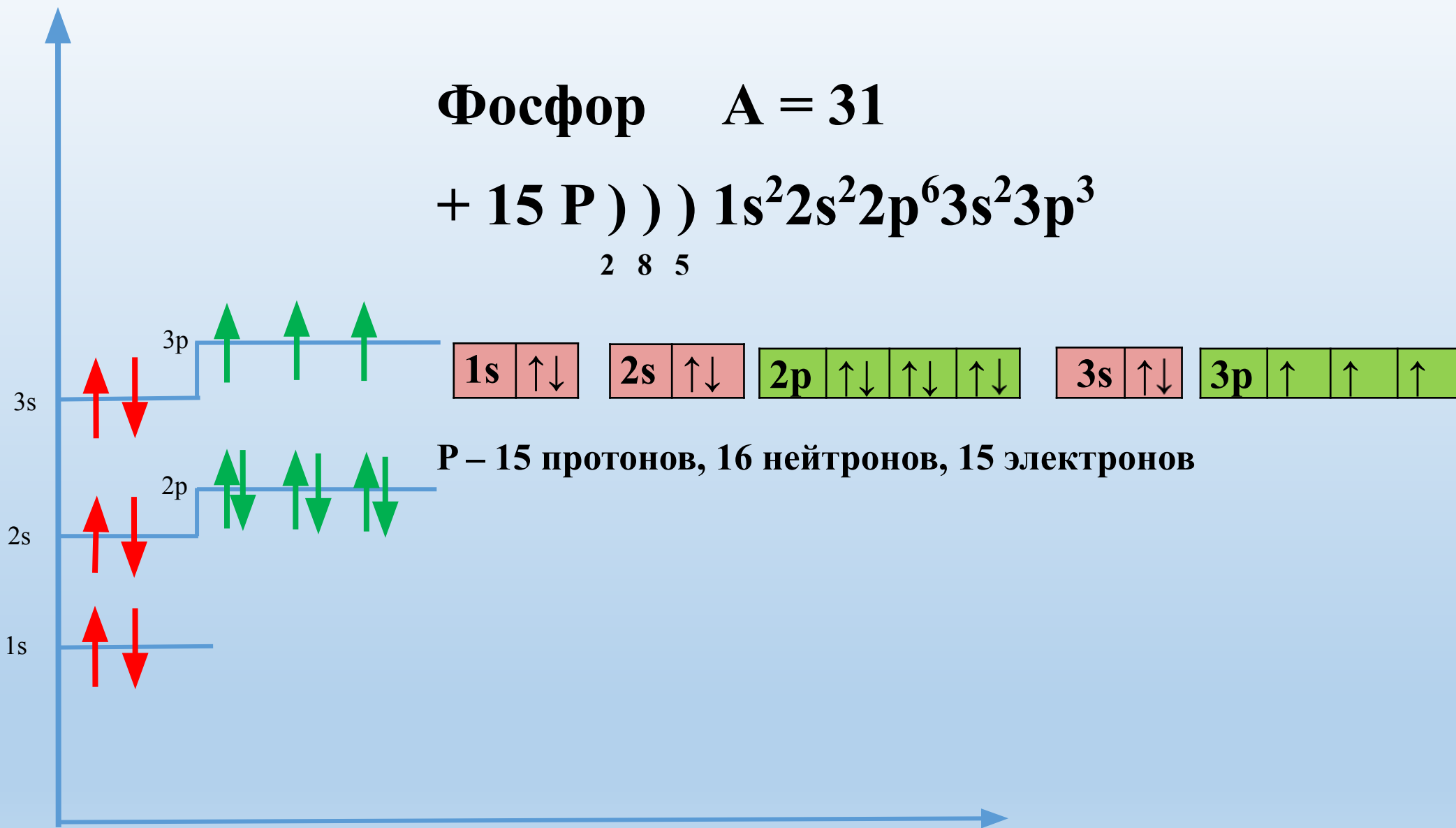
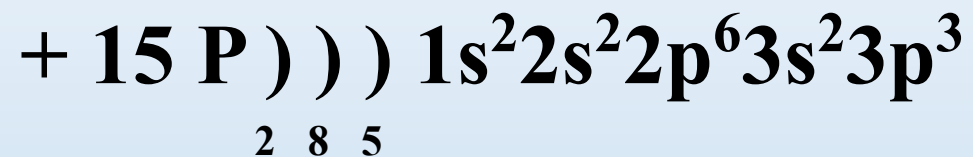
Кремний $A = 28$



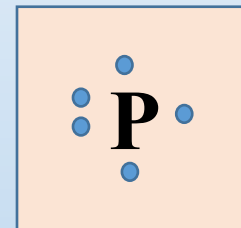
Si – 14 протонов, 14 нейтронов, 14 электронов



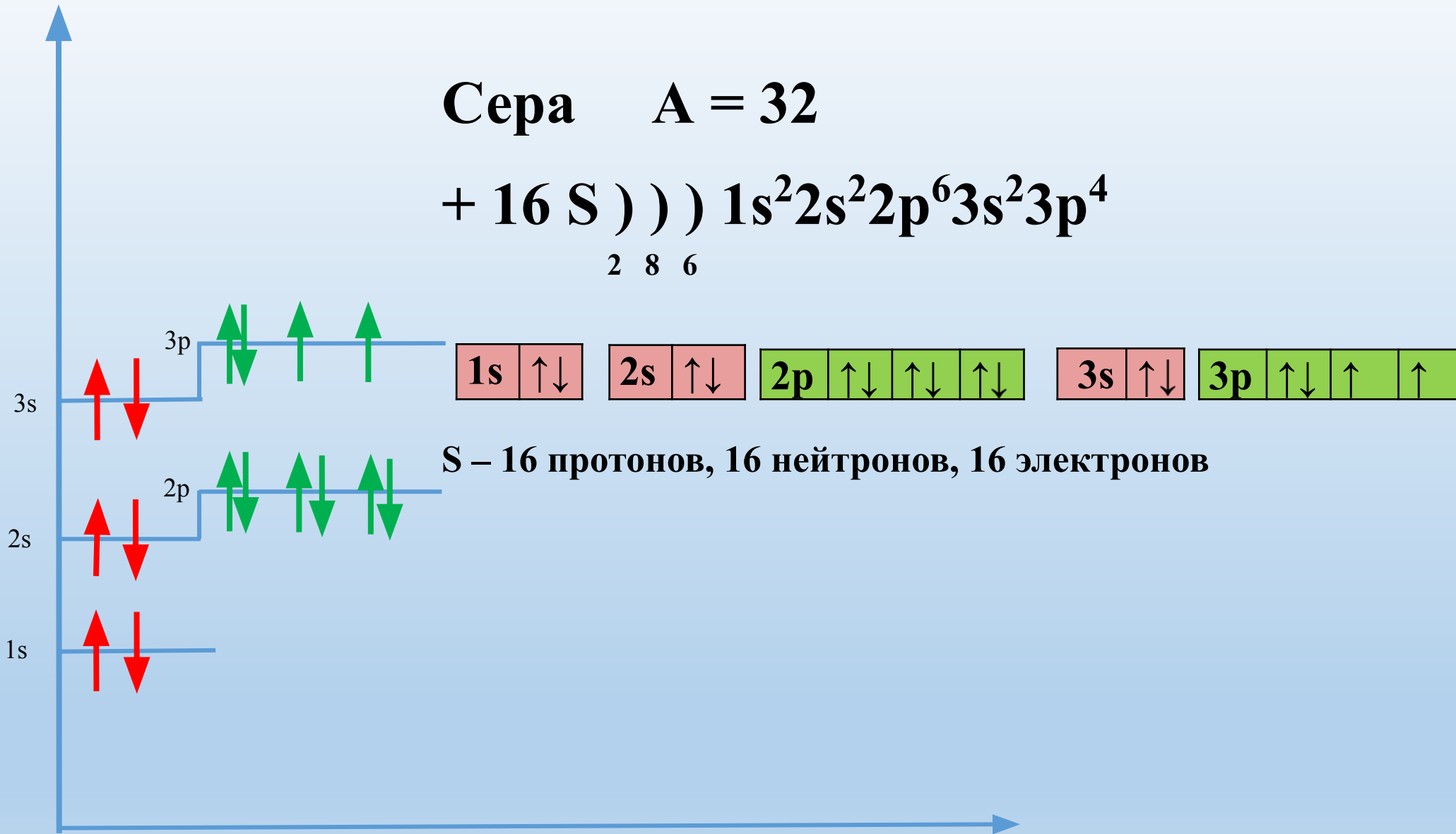
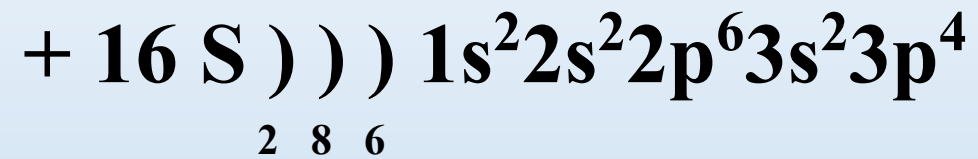
Фосфор $A = 31$



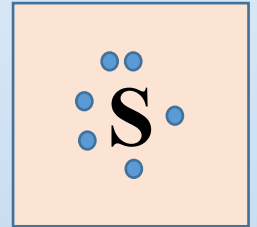
P – 15 протонов, 16 нейтронов, 15 электронов



Сера A = 32

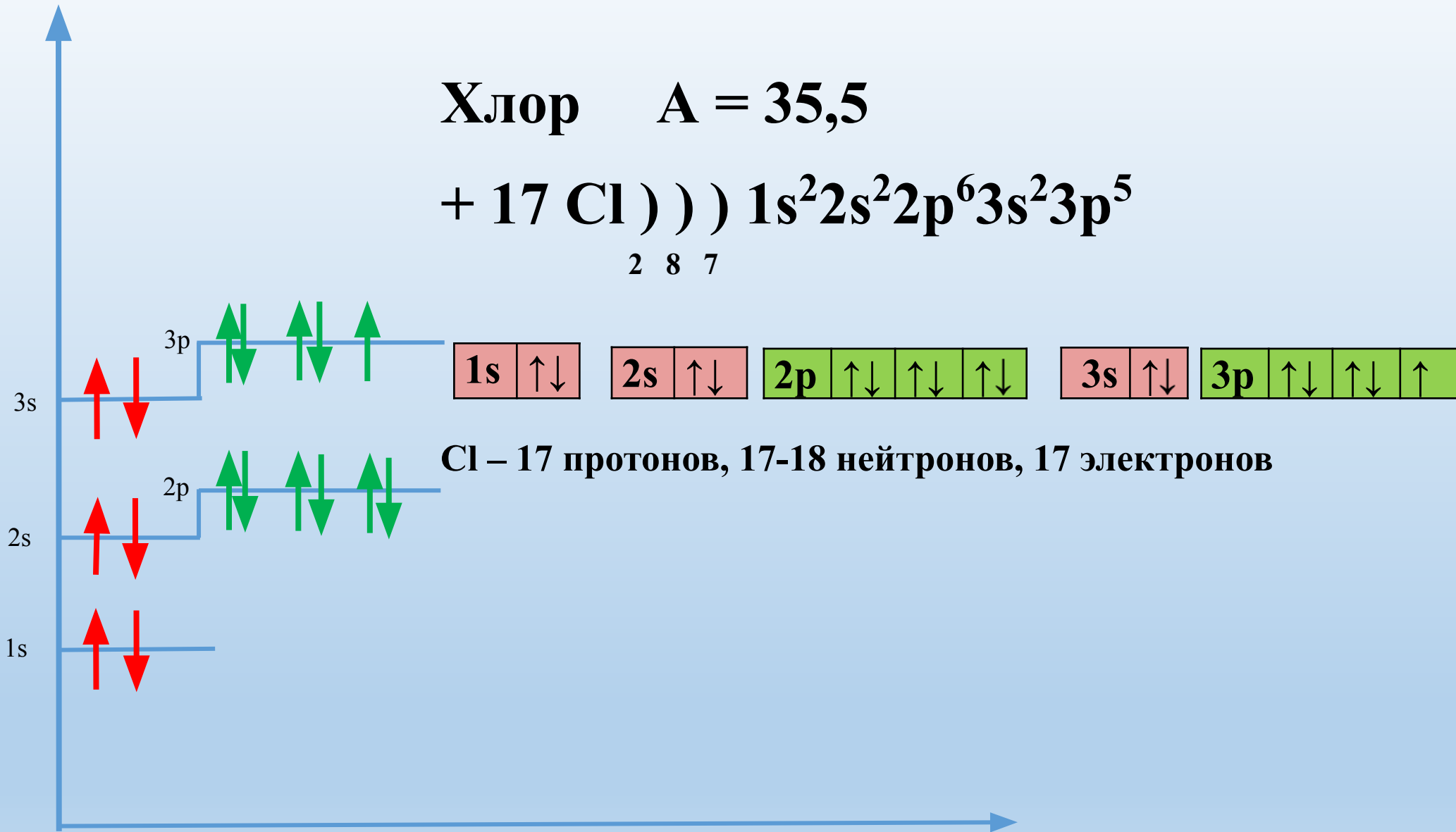


S – 16 протонов, 16 нейтронов, 16 электронов

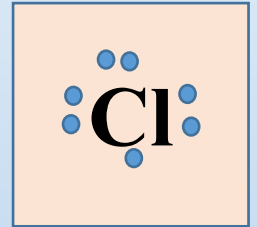


Хлор **A = 35,5**

+ 17 Cl))) $1s^2 2s^2 2p^6 3s^2 3p^5$
2 8 7

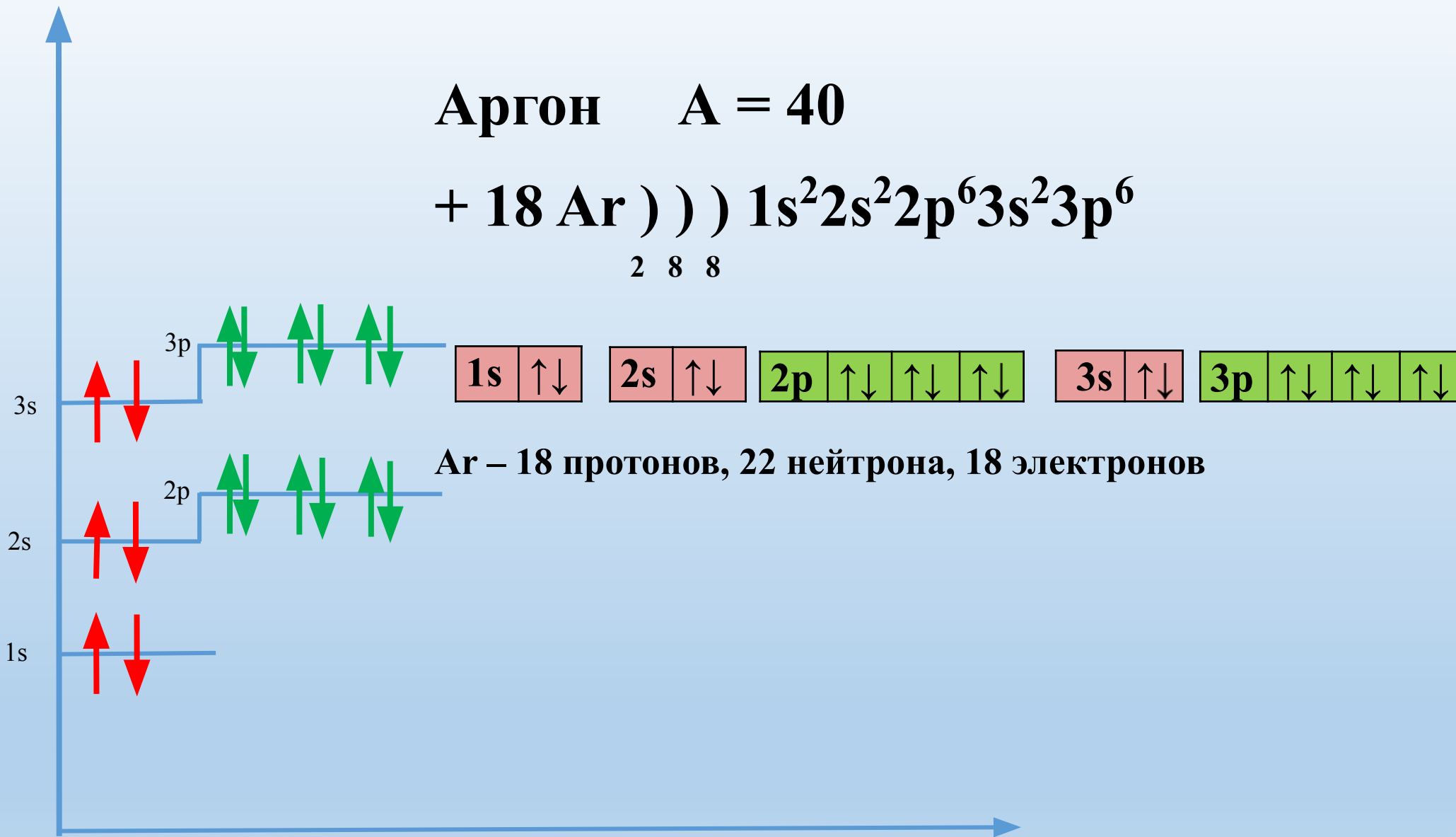


Cl – 17 протонов, 17-18 нейтронов, 17 электронов



Аргон A = 40

+ 18 Ar))) 1s²2s²2p⁶3s²3p⁶
2 8 8



Ar – 18 протонов, 22 нейтрона, 18 электронов

