



OEFENING 22

MATERIE EN MATERIALE

BLADSY 230



1 Voltooi die volgende tabel:



Element	Simbool	Massagetal	Nukleone	Protone	Neutrone	Elektrone
Natrium	1.1 Na	1.2 23	23	11	1.3 11	1.4 11
1.5 Aluminium	Al	27	g. 12	1.7 13	1.8 14	1.9 13
Swawel	1.10 S	1.11 32	32	1.12 16	16	1.13 16
1.14 Kalsium	Ca	40	1.15 40	20	2.16 20	20
Argon	1.17 Ar	40	40	1.18 18	18	1.19 18



2 Gee die name van die volgende:

2.1 Horisontale rye op die Periodieke Tabel
Periodes

2.2 Elemente links van die sigsaglyn
Metale

2.3 Vertikale rye op die Periodieke Tabel
Groepe

2.4 Groep 3 – 12
Oorgangselemente





2.5 Groep 18
Edelgasse

2.6 Groep 1
Alkalimetale

2.7 Groep 7
Alkalimetale

2.8 Elemente verder regs van die sigsaglyn
Niemetale





3. Skryf die name van die sewe diatomiese elemente neer en gee elkeen se formule.

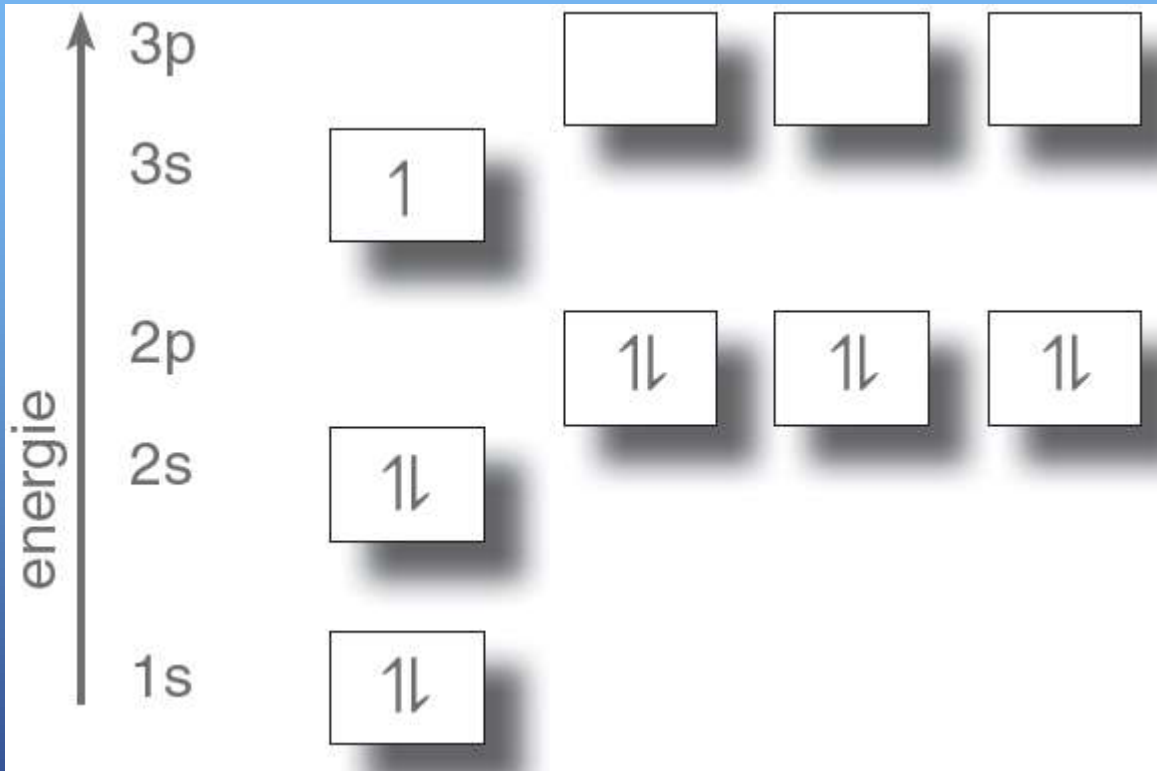
**Waterstof (H_2); stikstof (N_2); suurstof (O_2);
fluor (F_2); chloor (Cl_2); broom (Br_2); jodium (I_2)**



4 Teken energievlakdiagramme en die gee spektroskopiese elektronkonfigurasies vir die volgende elemente:



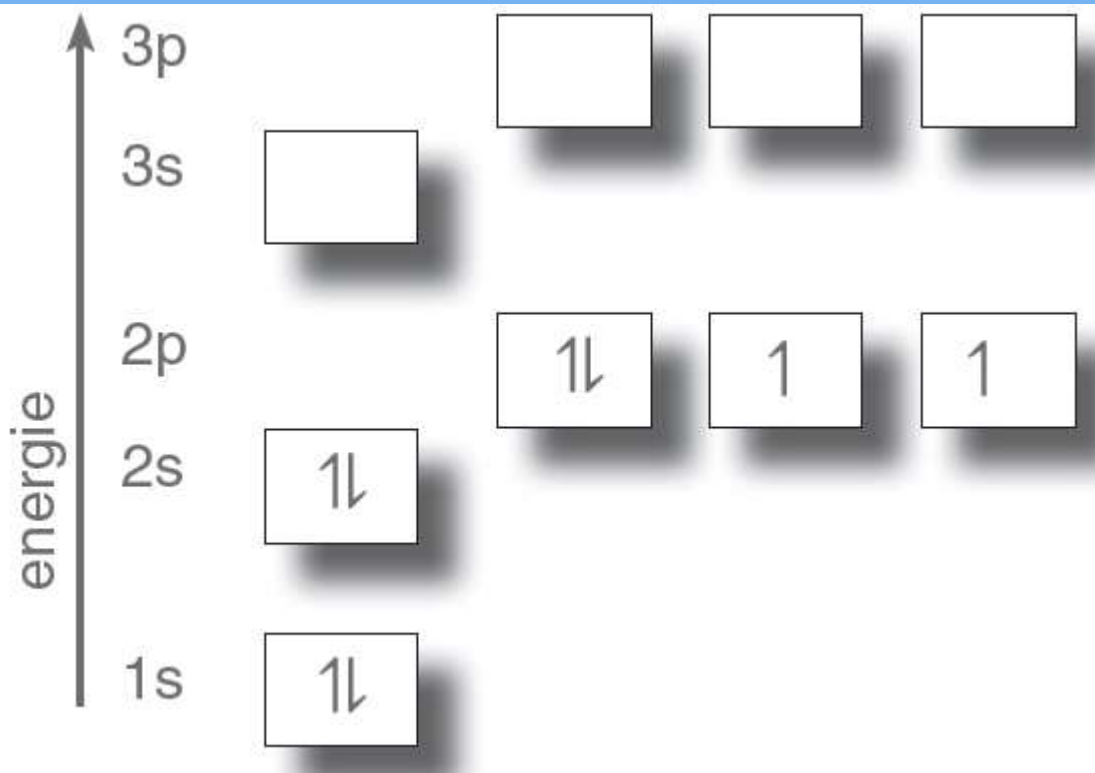
4.1 Natrium



Spektroskopiese elektronkonfigurasi
 $1s^2 2s^2 2p^6 3s^1$



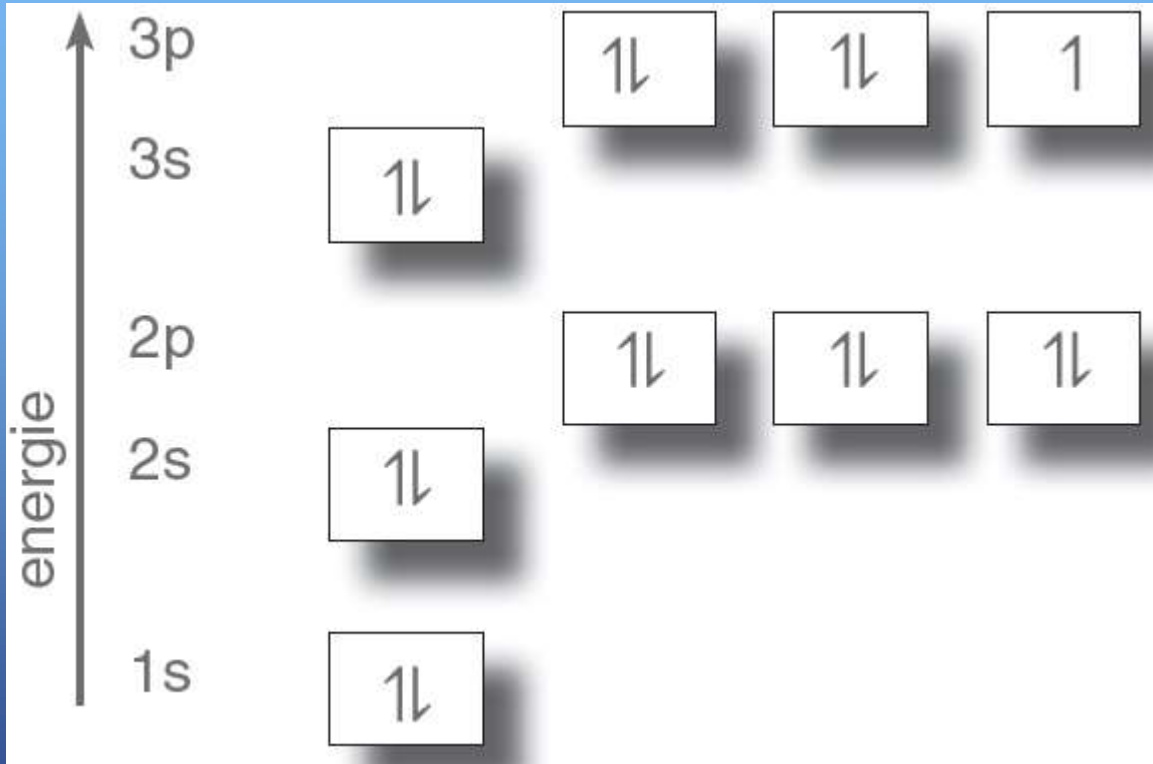
4.2 Suurstof



Spektroskopiese elektronkonfigurasie
 $1s^2 2s^2 2p^4$



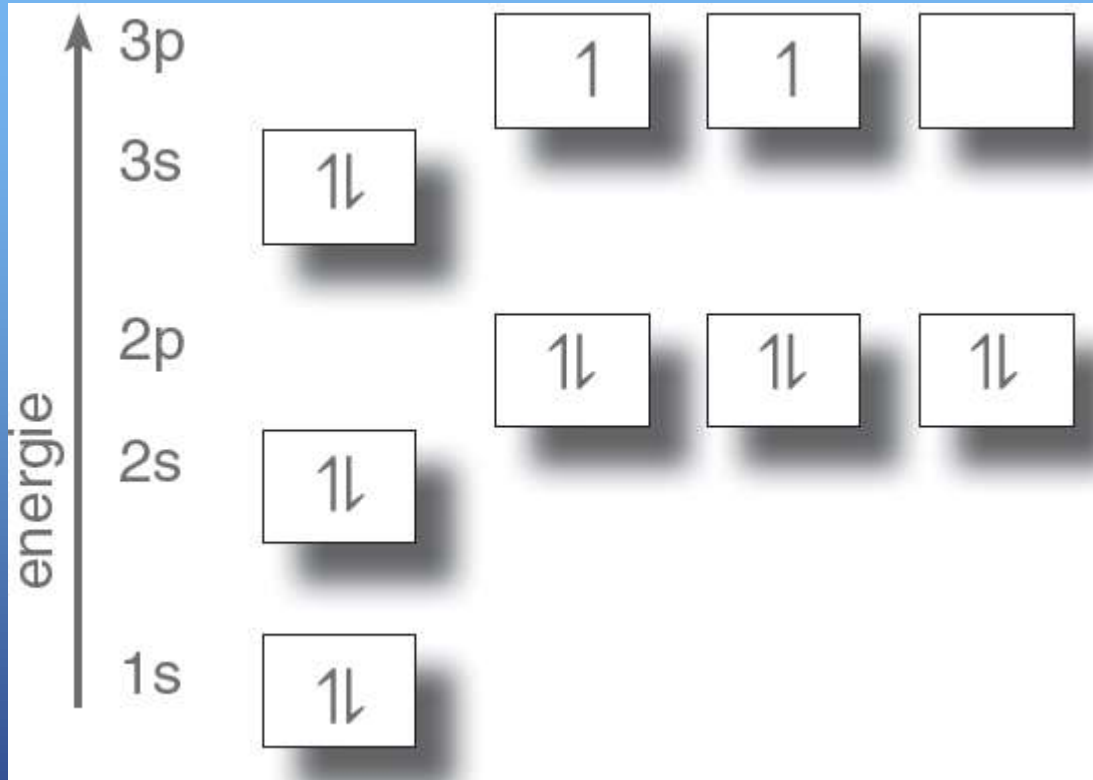
4.3 Chloor



Spektroskopiese elektronkonfigurasi
 $1s^2 2s^2 2p^6 3s^2 3p^5$



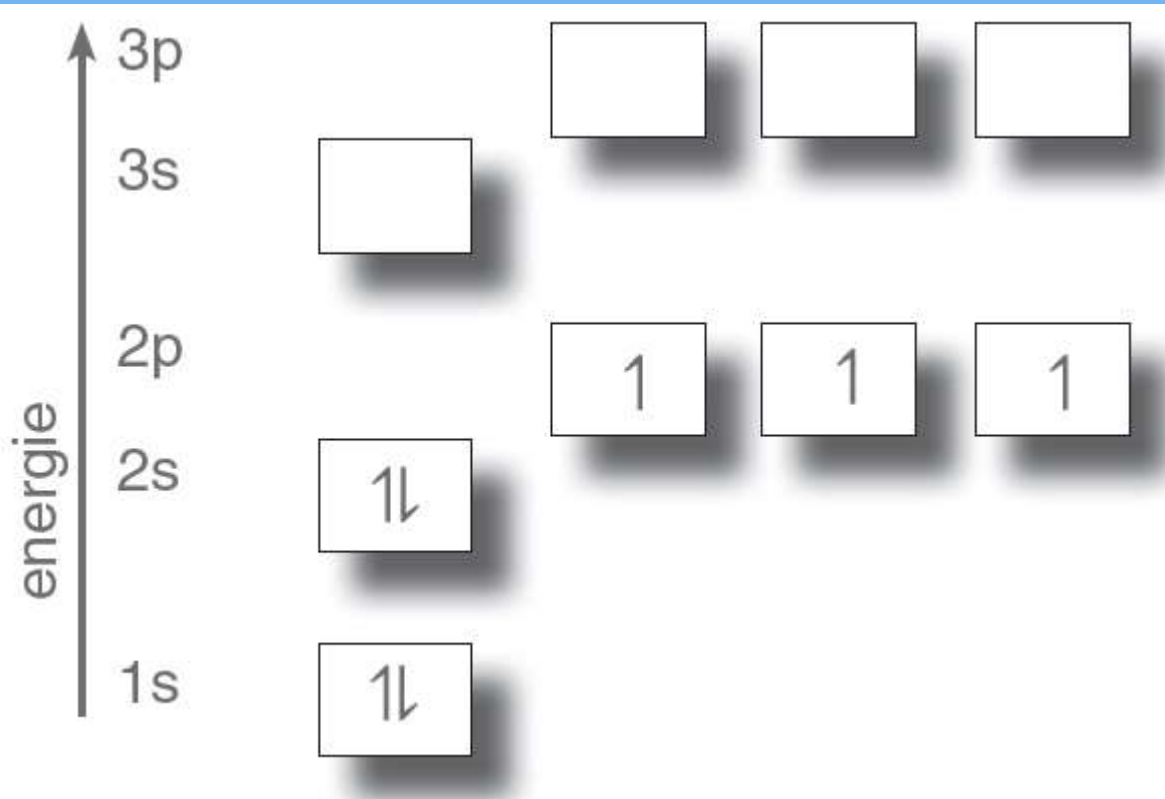
4.4 Silikon



Spektroskopiese elektronkonfigurasie
 $1s^2 2s^2 2p^6 3s^2 3p^2$



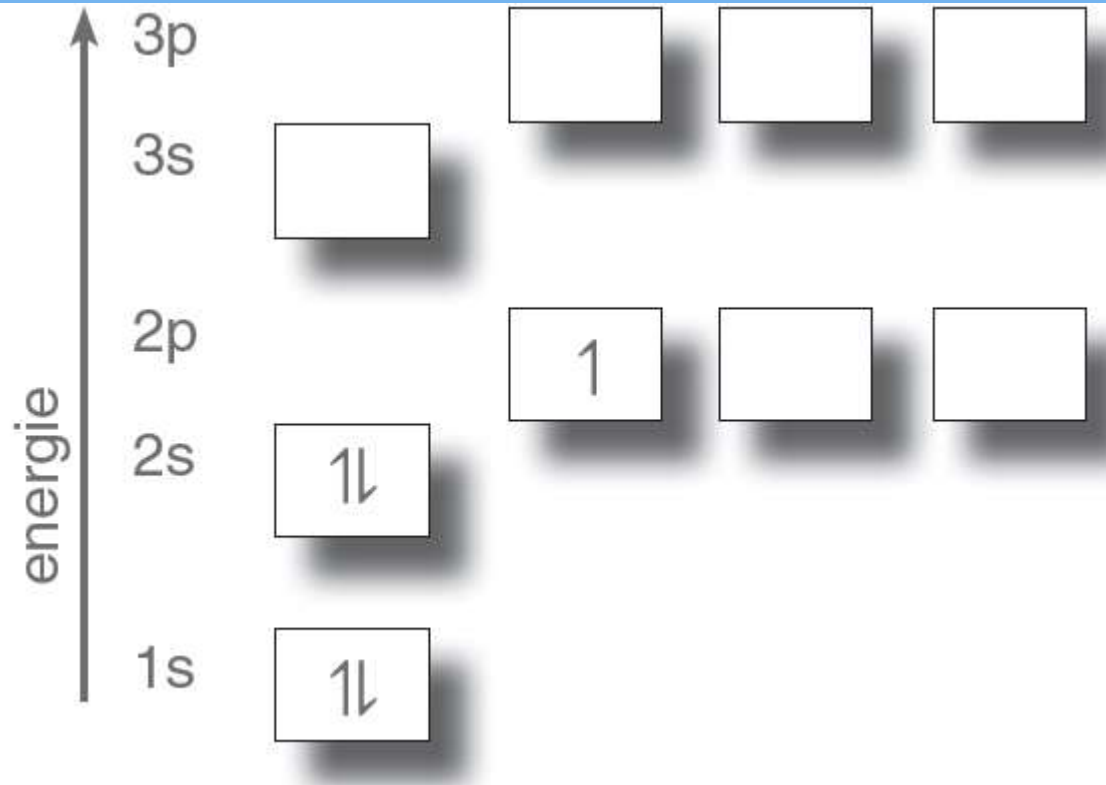
4.5 Stikstof



Spektroskopiese elektronkonfigurasi
 $1s^2 2s^2 2p^3$



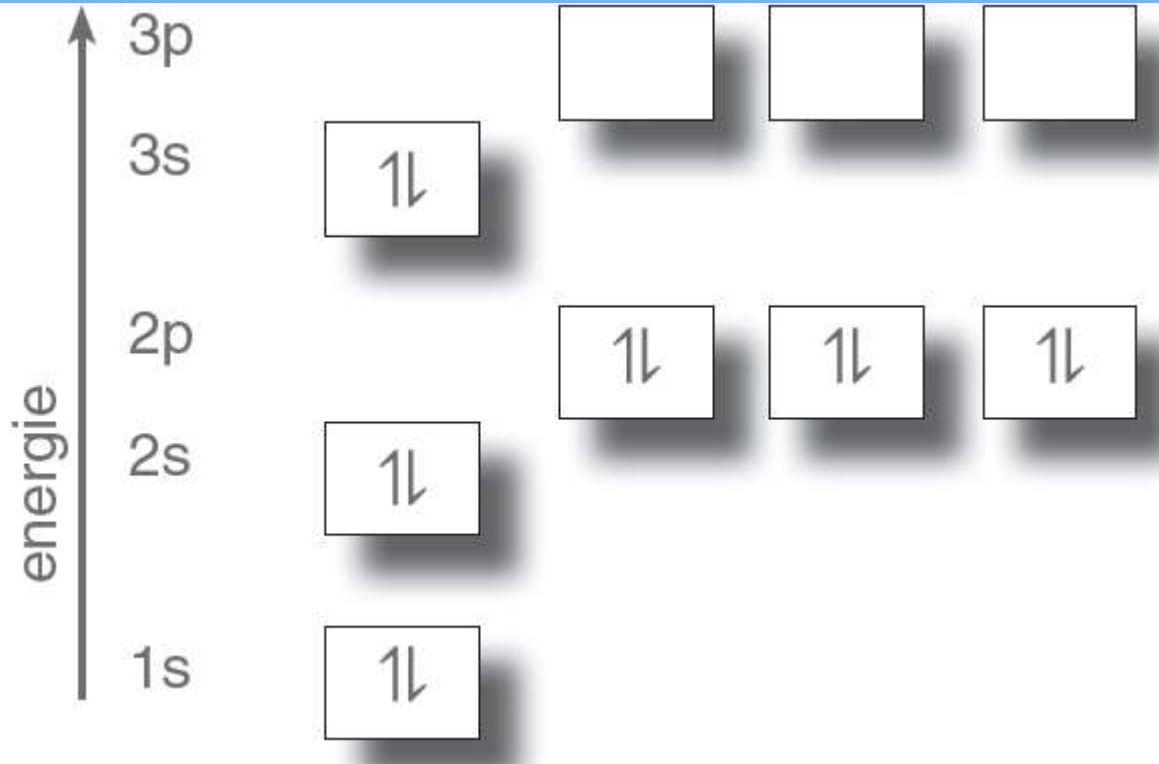
4.6 Boor



Spektroskopiese elektronkonfigurasi
 $1s^2 2s^2 2p^1$



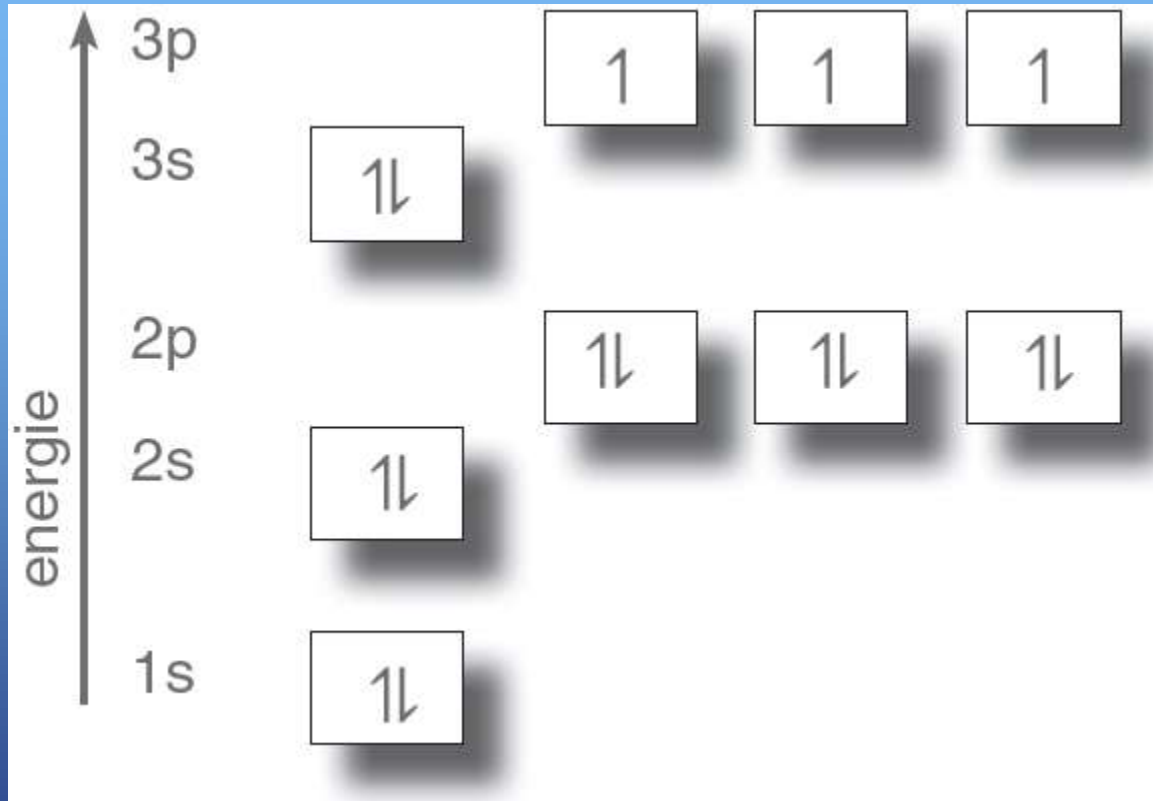
4.7 Mg



Spektroskopie elektronkonfiguratie
 $1s^2 2s^2 2p^6 3s^2$



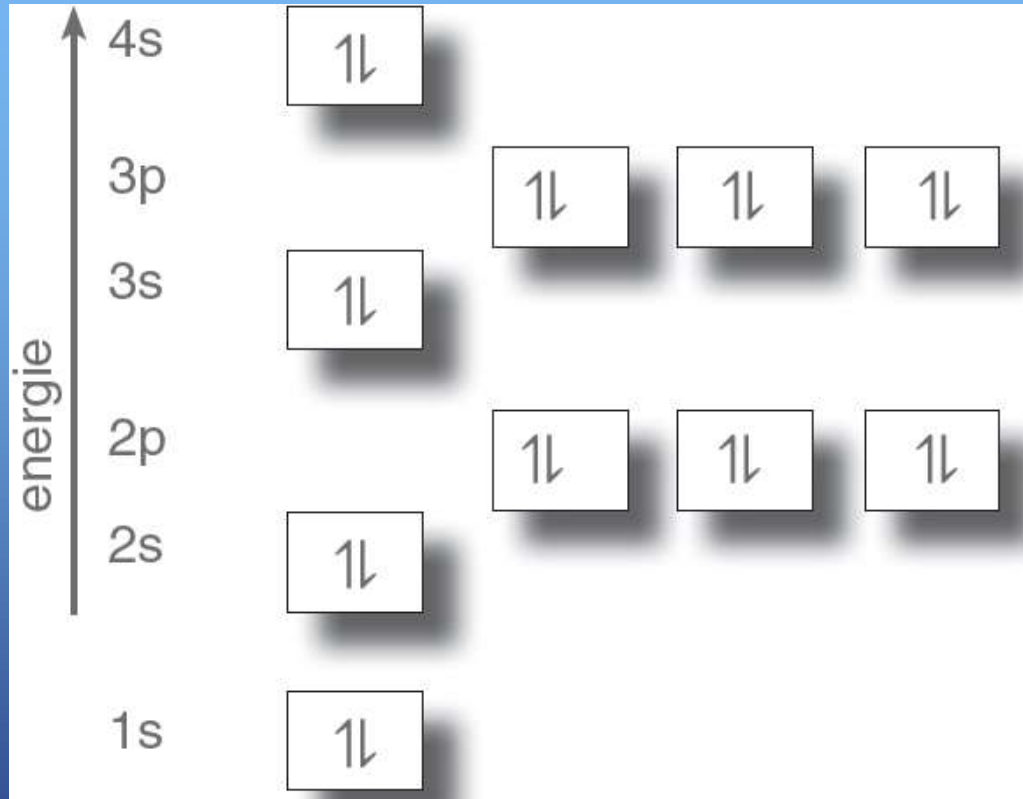
4.8 Fosfor



Spektroskopiese elektronkonfigurasi
 $1s^2 2s^2 2p^5$



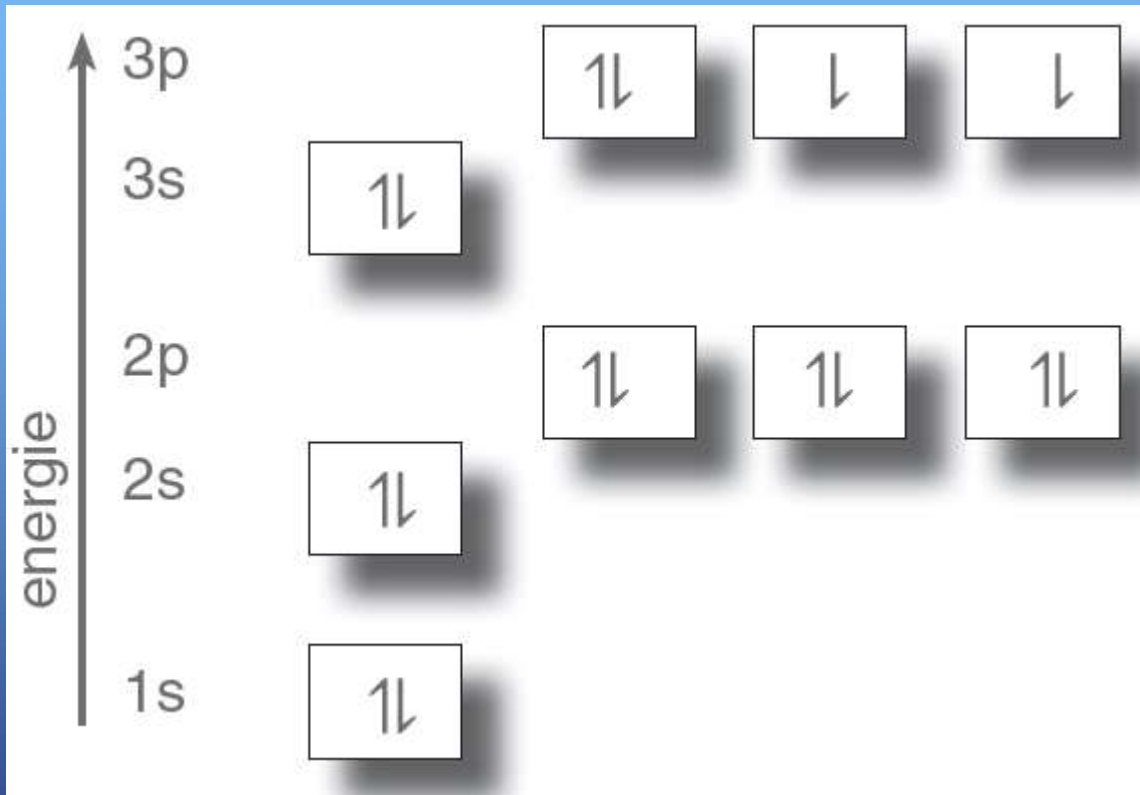
4.9 Ca



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



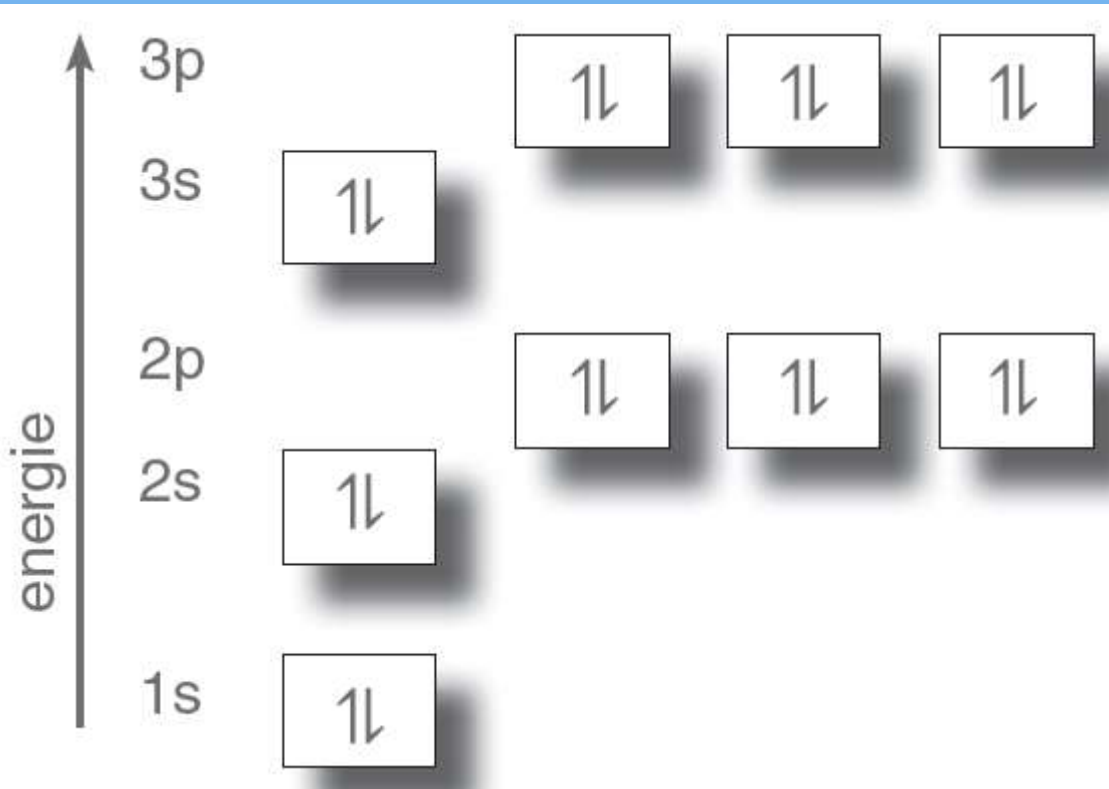
4.10 S



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



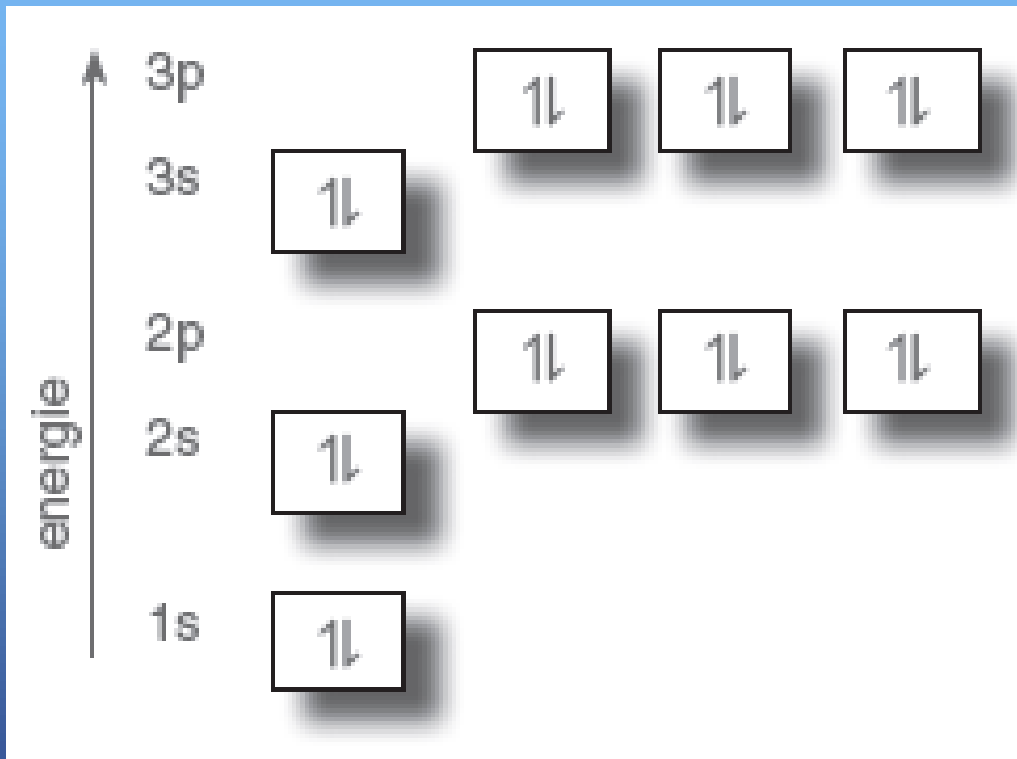
4.11 Kalium



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



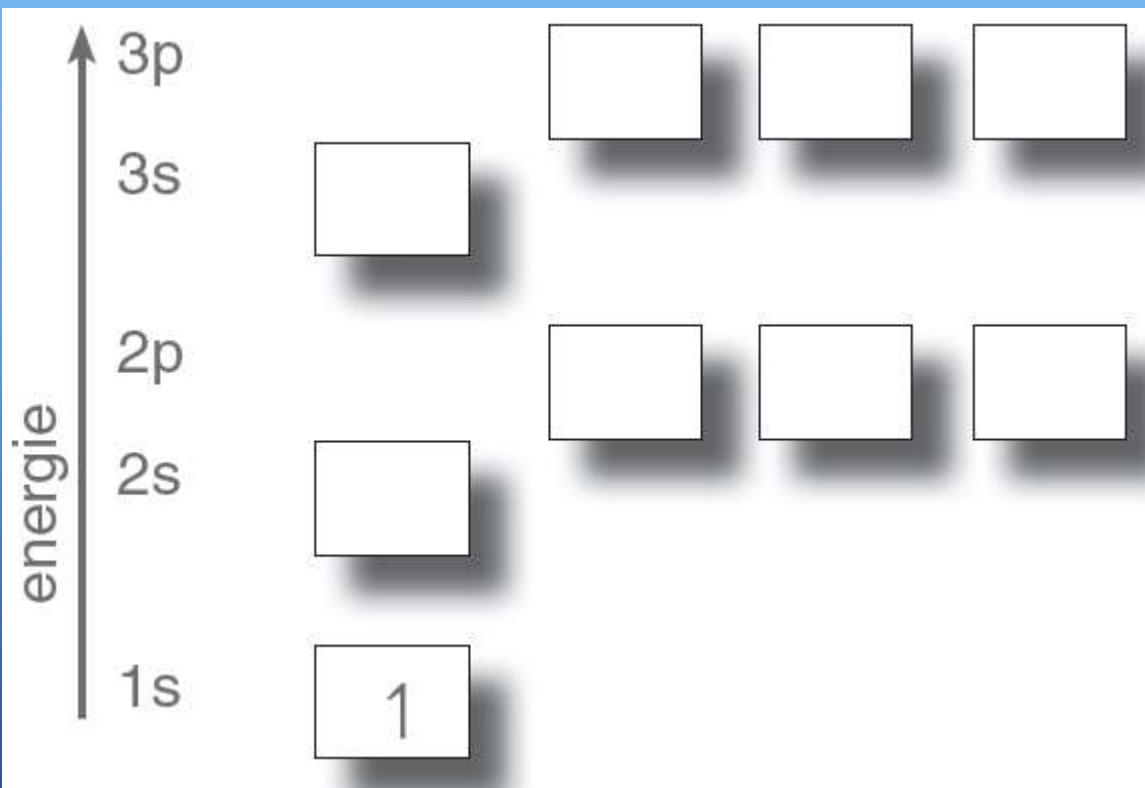
4.12 Argon



Spektroskopiese elektronkonfigurasi
 $1s^2 2s^2 2p^6 3s^2 3p^6$



4.13 Waterstof

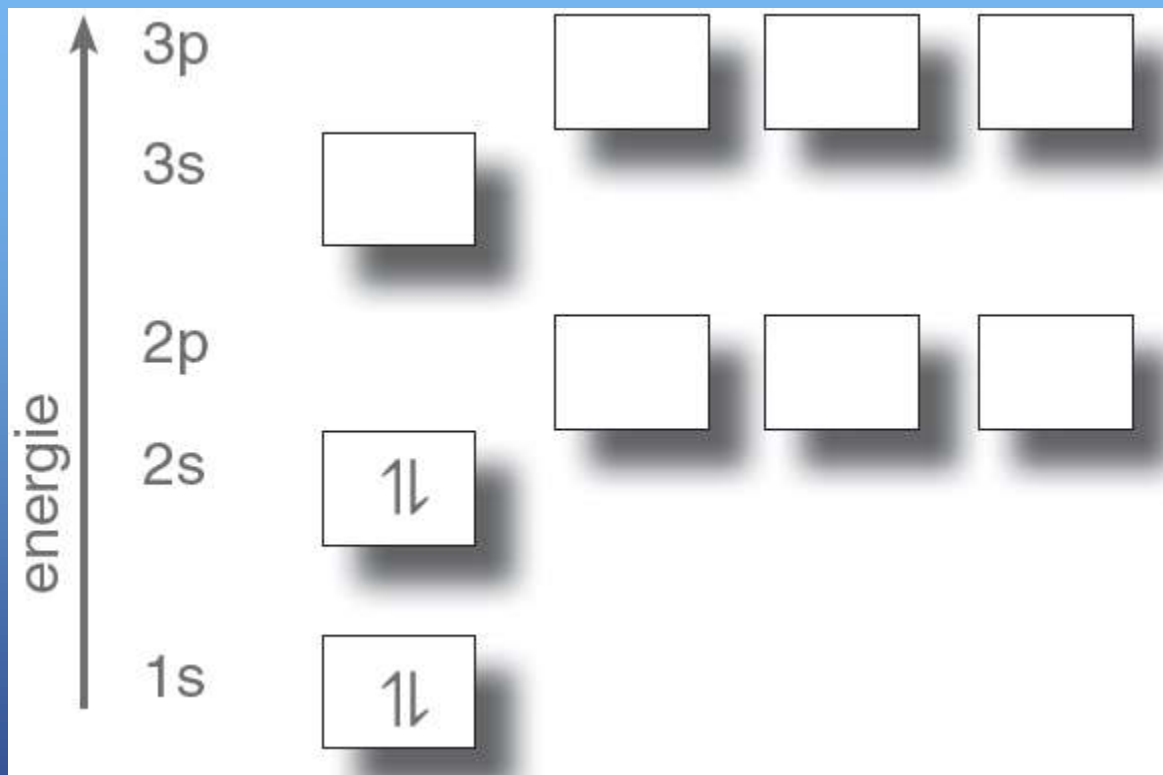


Spektroskopiese elektronkonfigurasie

$1s^1$



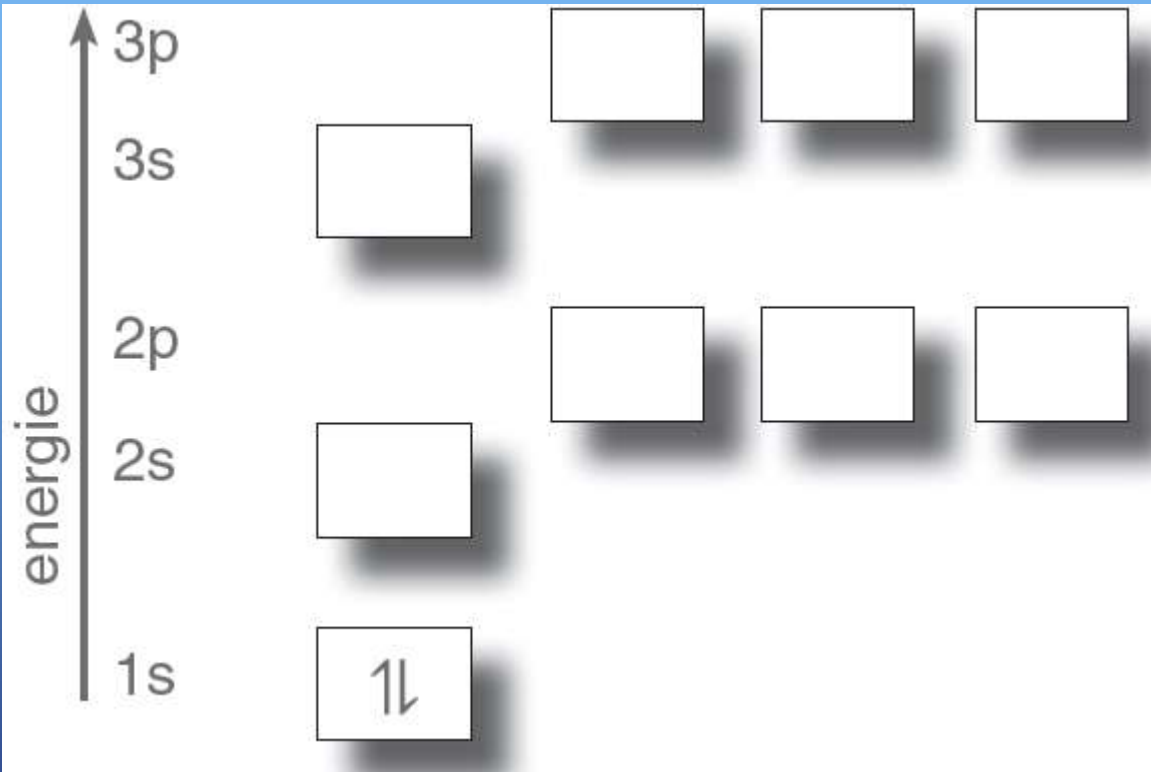
4.14 Be



Spektroskopiese elektronkonfigurasi
 $1s^1 1s^2 2s^2$



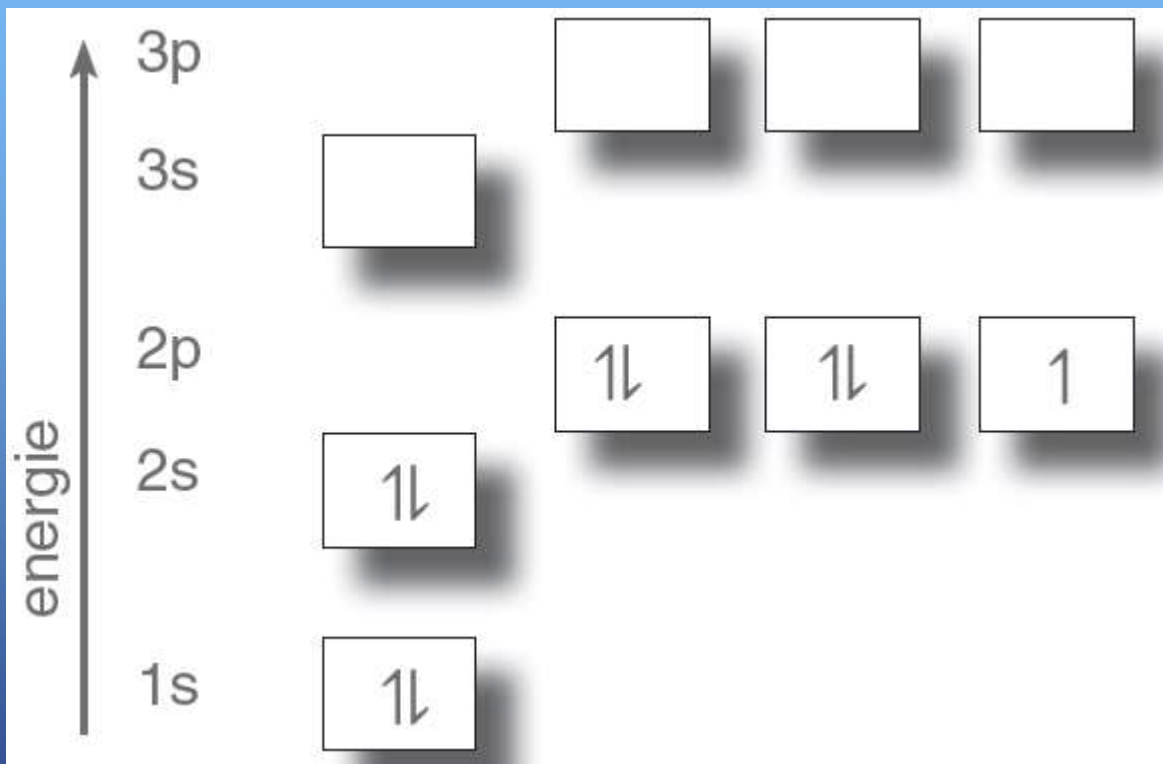
4.15 He



Spektroskopiese elektronkonfigurasi
 $1s^2$



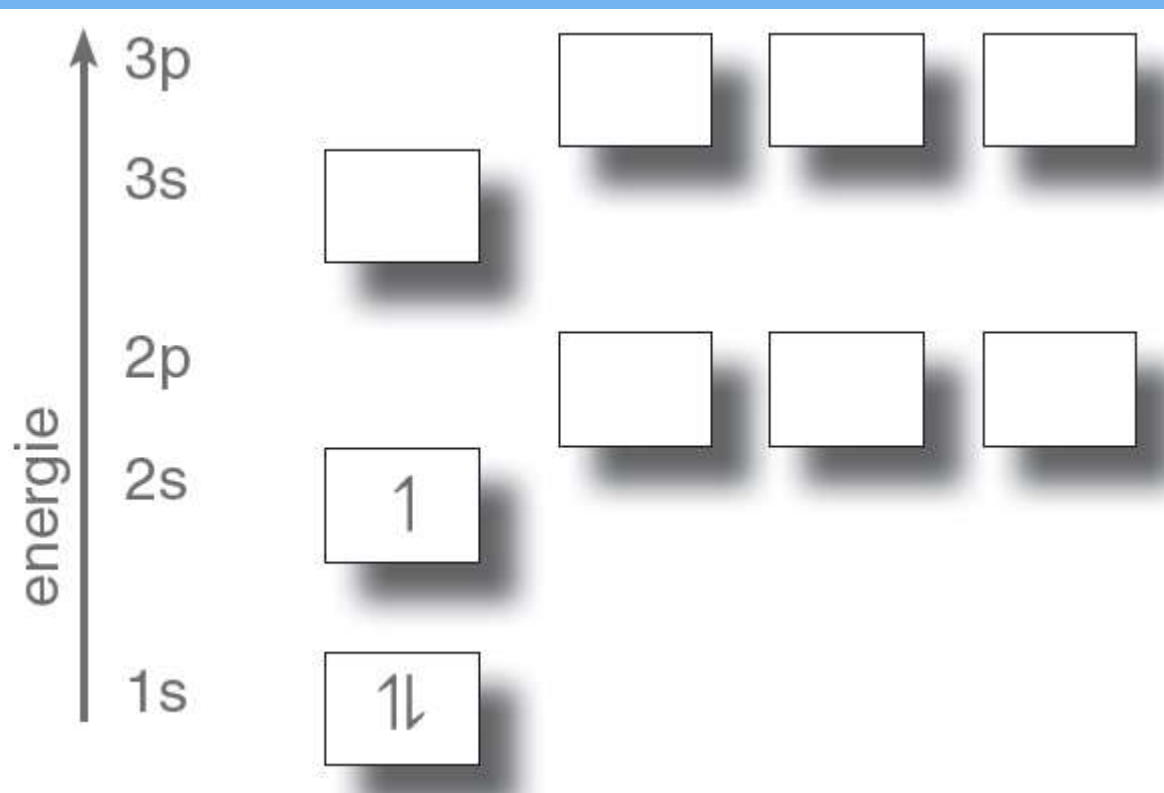
4.16 Fluor



Spektroskopiese elektronkonfigurasi
 $1s^2 2s^2 2p^5$



4.17 Litium

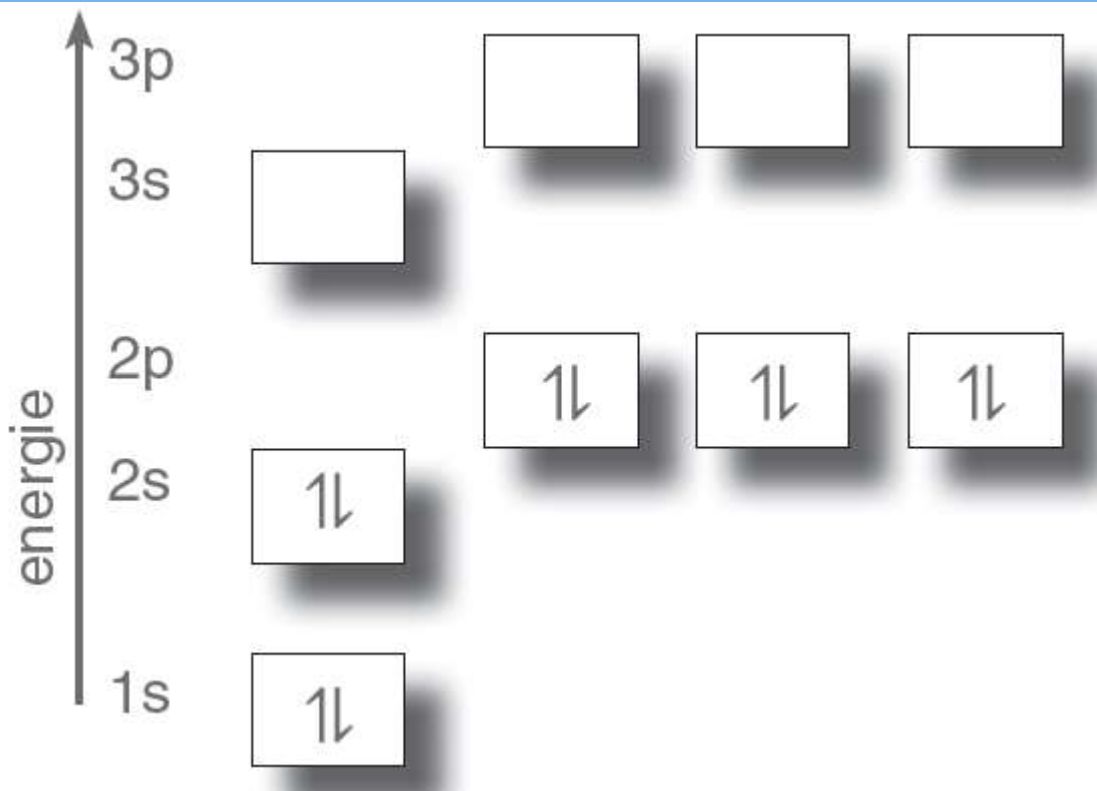


Spektroskopiese elektronkonfigurasi

$1s^2 2s^1$



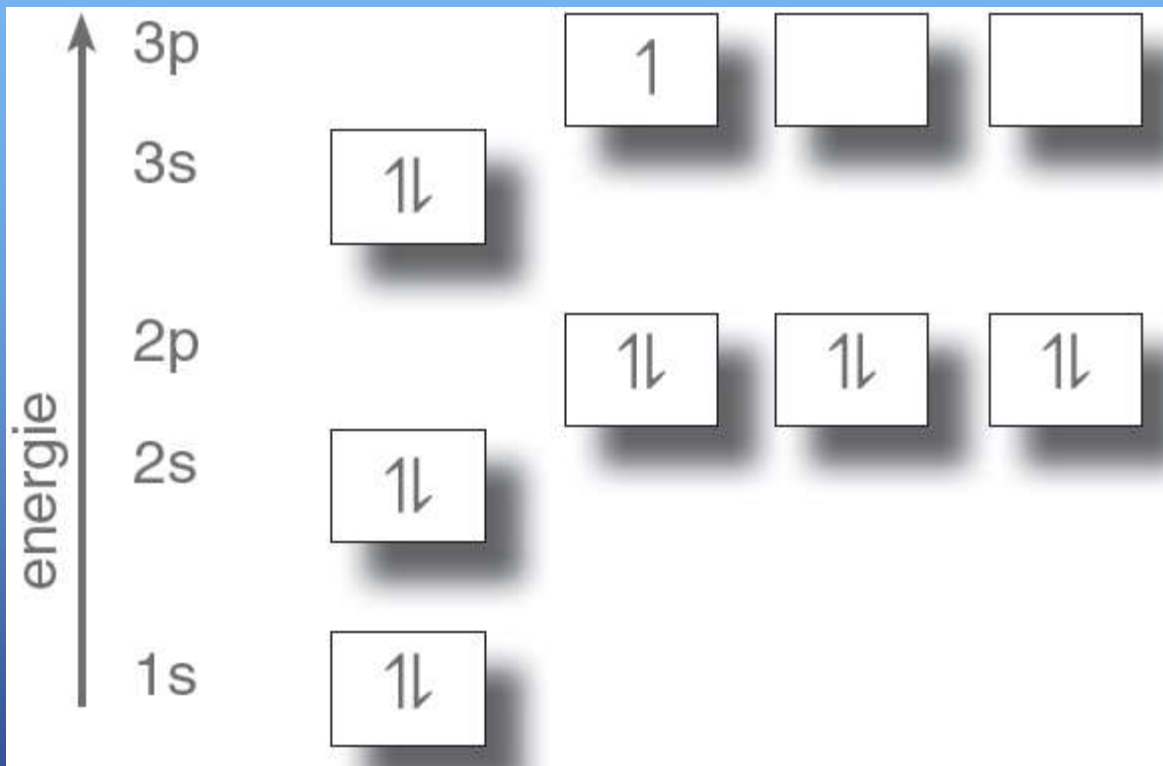
4.18 Neon



Spektroskopiese elektronkonfigurasie
 $1s^2 2s^2 2p^6$



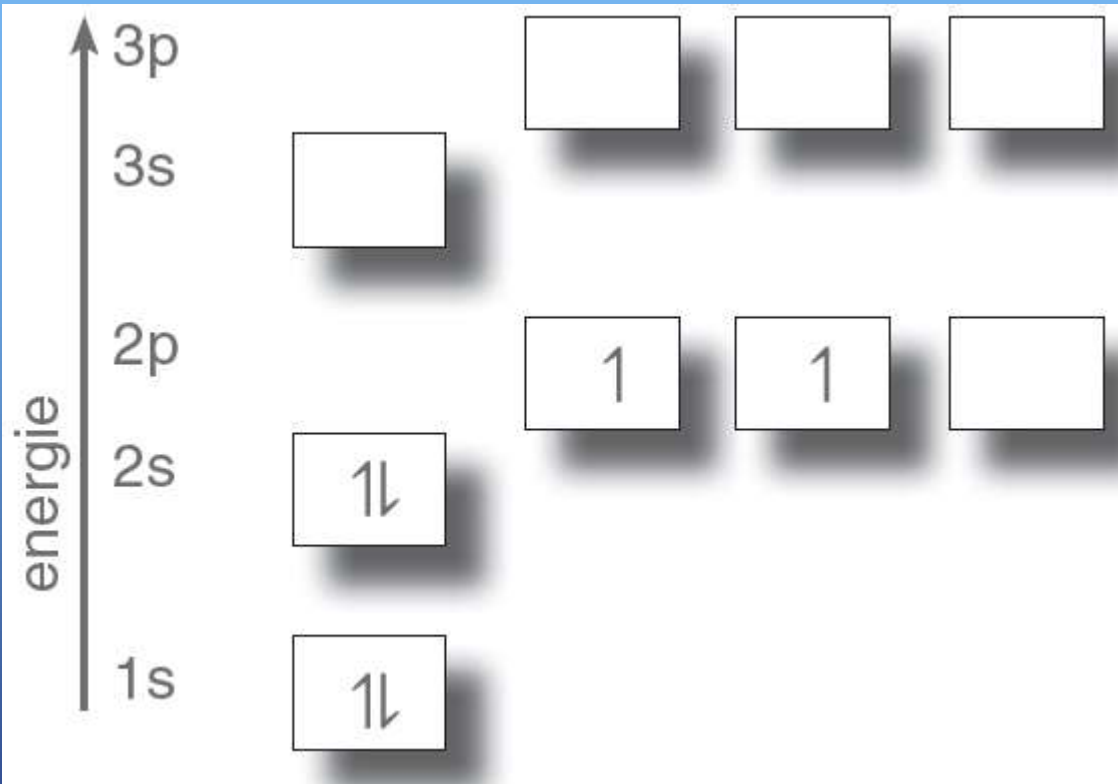
4.19 Al



Spektroskopiese elektronkonfigurasi
 $1s^2 2s^2 2p^6 3s^2 3p^1$



4.20 Koolstof



Spektroskopiese elektronkonfigurasi
 $1s^2 2s^2 2p^2$