Electron configurations of the elements

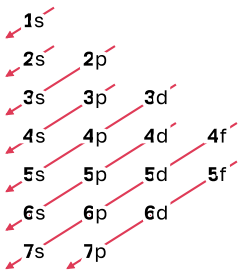
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1 H Hydrogen $1s^1$																	**2** He Helium $1s^2$
3 Li Lithium [He] $2s^1$	**4** Be Beryllium [He] $2s^2$											**5** B Boron [He] $2s^2\ 2p^1$	**6** C Carbon [He] $2s^2\ 2p^2$	**7** N Nitrogen [He] $2s^2\ 2p^3$	**8** O Oxygen [He] $2s^2\ 2p^4$	**9** F Fluorine [He] $2s^2\ 2p^5$	**10** Ne Neon [He] $2s^2\ 2p^6$
11 Na Sodium [Ne] $3s^1$	**12** Mg Magnesium [Ne] $3s^2$											**13** Al Aluminium [Ne] $3s^2\ 3p^1$	**14** Si Silicon [Ne] $3s^2\ 3p^2$	**15** P Phosphorus [Ne] $3s^2\ 3p^3$	**16** S Sulfur [Ne] $3s^2\ 3p^4$	**17** Cl Chlorine [Ne] $3s^2\ 3p^5$	**18** Ar Argon [Ne] $3s^2\ 3p^6$
19 K Potassium [Ar] $4s^1$	**20** Ca Calcium [Ar] $4s^2$	**21** Sc Scandium [Ar] $3d^1\ 4s^2$	**22** Ti Titanium [Ar] $3d^2\ 4s^2$	**23** V Vanadium [Ar] $3d^3\ 4s^2$	**24** Cr Chromium [Ar] $3d^5\ 4s^1$	**25** Mn Manganese [Ar] $3d^5\ 4s^2$	**26** Fe Iron [Ar] $3d^6\ 4s^2$	**27** Co Cobalt [Ar] $3d^7\ 4s^2$	**28** Ni Nickel [Ar] $3d^8\ 4s^2$	**29** Cu Copper [Ar] $3d^{10}\ 4s^1$	**30** Zn Zinc [Ar] $3d^{10}\ 4s^2$	**31** Ga Gallium [Ar] $3d^{10}\ 4s^2\ 4p^1$	**32** Ge Germanium [Ar] $3d^{10}\ 4s^2\ 4p^2$	**33** As Arsenic [Ar] $3d^{10}\ 4s^2\ 4p^3$	**34** Se Selenium [Ar] $3d^{10}\ 4s^2\ 4p^4$	**35** Br Bromine [Ar] $3d^{10}\ 4s^2\ 4p^5$	**36** Kr Krypton [Ar] $3d^{10}\ 4s^2\ 4p^6$
37 Rb Rubidium [Kr] $5s^1$	**38** Sr Strontium [Kr] $5s^2$	**39** Y Yttrium [Kr] $4d^1\ 5s^2$	**40** Zr Zirconium [Kr] $4d^2\ 5s^2$	**41** Nb Niobium [Kr] $4d^4\ 5s^1$	**42** Mo Molybdenum [Kr] $4d^5\ 5s^1$	**43** Tc Technetium [Kr] $4d^5\ 5s^2$	**44** Ru Ruthenium [Kr] $4d^7\ 5s^1$	**45** Rh Rhodium [Kr] $4d^8\ 5s^1$	**46** Pd Palladium [Kr] $4d^{10}$	**47** Ag Silver [Kr] $4d^{10}\ 5s^1$	**48** Cd Cadmium [Kr] $4d^{10}\ 5s^2$	**49** In Indium [Kr] $4d^{10}\ 5s^2\ 5p^1$	**50** Sn Tin [Kr] $4d^{10}\ 5s^2\ 5p^2$	**51** Sb Antimony [Kr] $4d^{10}\ 5s^2\ 5p^3$	**52** Te Tellurium [Kr] $4d^{10}\ 5s^2\ 5p^4$	**53** I Iodine [Kr] $4d^{10}\ 5s^2\ 5p^5$	**54** Xe Xenon [Kr] $4d^{10}\ 5s^2\ 5p^6$
55 Cs Caesium [Xe] $6s^1$	**56** Ba Barium [Xe] $6s^2$	57–71	**72** Hf Hafnium [Xe] $4f^{14}\ 5d^2\ 6s^2$	**73** Ta Tantalum [Xe] $4f^{14}\ 5d^3\ 6s^2$	**74** W Tungsten [Xe] $4f^{14}\ 5d^4\ 6s^2$	**75** Re Rhenium [Xe] $4f^{14}\ 5d^5\ 6s^2$	**76** Os Osmium [Xe] $4f^{14}\ 5d^6\ 6s^2$	**77** Ir Iridium [Xe] $4f^{14}\ 5d^7\ 6s^2$	**78** Pt Platinum [Xe] $4f^{14}\ 5d^9\ 6s^1$	**79** Au Gold [Xe] $4f^{14}\ 5d^{10}\ 6s^1$	**80** Hg Mercury [Xe] $4f^{14}\ 5d^{10}\ 6s^2$	**81** Tl Thallium [Xe] $4f^{14}\ 5d^{10}\ 6s^2\ 6p^1$	**82** Pb Lead [Xe] $4f^{14}\ 5d^{10}\ 6s^2\ 6p^2$	**83** Bi Bismuth [Xe] $4f^{14}\ 5d^{10}\ 6s^2\ 6p^3$	**84** Po Polonium [Xe] $4f^{14}\ 5d^{10}\ 6s^2\ 6p^4$	**85** At Astatine [Xe] $4f^{14}\ 5d^{10}\ 6s^2\ 6p^5$	**86** Rn Radon [Xe] $4f^{14}\ 5d^{10}\ 6s^2\ 6p^6$
87 Fr Francium [Rn] $7s^1$	**88** Ra Radium [Rn] $7s^2$	89–103	**104** Rf Rutherfordium [Rn] $5f^{14}\ 6d^2\ 7s^2$	**105** Db Dubnium [Rn] $5f^{14}\ 6d^3\ 7s^2$	**106** Sg Seaborgium [Rn] $5f^{14}\ 6d^4\ 7s^2$	**107** Bh Bohrium [Rn] $5f^{14}\ 6d^5\ 7s^2$	**108** Hs Hassium [Rn] $5f^{14}\ 6d^6\ 7s^2$	**109** Mt Meitnerium [Rn] $5f^{14}\ 6d^7\ 7s^2$	**110** Ds Darmstadtium [Rn] $5f^{14}\ 6d^8\ 7s^2$	**111** Rg Roentgenium [Rn] $5f^{14}\ 6d^9\ 7s^2$	**112** Cn Copernicium [Rn] $5f^{14}\ 6d^{10}\ 7s^2$	**113** Nh Nihonium [Rn] $5f^{14}_*\ 6d^{10}\ 7s^2\ 7p^1$	**114** Fl Flerovium [Rn] $5f^{14}_*\ 6d^{10}\ 7s^2\ 7p^2$	**115** Mc Moscovium [Rn] $5f^{14}_*\ 6d^{10}\ 7s^2\ 7p^3$	**116** Lv Livermorium [Rn] $5f^{14}_*\ 6d^{10}\ 7s^2\ 7p^4$	**117** Ts Tennessine [Rn] $5f^{14}_*\ 6d^{10}\ 7s^2\ 7p^5$	**118** Og Oganesson [Rn] $5f^{14}_*\ 6d^{10}\ 7s^2\ 7p^6$

		57 La Lanthanum [Xe] $5d^1\ 6s^2$	**58** Ce Cerium [Xe] $4f^1\ 5d^1\ 6s^2$	**59** Pr Praseodymium [Xe] $4f^3\ 6s^2$	**60** Nd Neodymium [Xe] $4f^4\ 6s^2$	**61** Pm Promethium [Xe] $4f^5\ 6s^2$	**62** Sm Samarium [Xe] $4f^6\ 6s^2$	**63** Eu Europium [Xe] $4f^7\ 6s^2$	**64** Gd Gadolinium [Xe] $4f^7\ 5d^1\ 6s^2$	**65** Tb Terbium [Xe] $4f^9\ 6s^2$	**66** Dy Dysprosium [Xe] $4f^{10}\ 6s^2$	**67** Ho Holmium [Xe] $4f^{11}\ 6s^2$	**68** Er Erbium [Xe] $4f^{12}\ 6s^2$	**69** Tm Thulium [Xe] $4f^{13}\ 6s^2$	**70** Yb Ytterbium [Xe] $4f^{14}\ 6s^2$	**71** Lu Lutetium [Xe] $4f^{14}\ 5d^1\ 6s^2$
		89 Ac Actinium [Rn] $6d^1\ 7s^2$	**90** Th Thorium [Rn] $6d^2\ 7s^2$	**91** Pa Protactinium [Rn] $5f^2\ 6d^1\ 7s^2$	**92** U Uranium [Rn] $5f^3\ 6d^1\ 7s^2$	**93** Np Neptunium [Rn] $5f^4\ 6d^1\ 7s^2$	**94** Pu Plutonium [Rn] $5f^6\ 7s^2$	**95** Am Americium [Rn] $5f^7\ 7s^2$	**96** Cm Curium [Rn] $5f^7\ 6d^1\ 7s^2$	**97** Bk Berkelium [Rn] $5f^9\ 7s^2$	**98** Cf Californium [Rn] $5f^{10}\ 7s^2$	**99** Es Einsteinium [Rn] $5f^{11}\ 7s^2$	**100** Fm Fermium [Rn] $5f^{12}\ 7s^2$	**101** Md Mendelevium [Rn] $5f^{13}\ 7s^2$	**102** No Nobelium [Rn] $5f^{14}\ 7s^2$	**103** Lr Lawrencium [Rn] $5f^{14}\ 7s^2\ 7p^1$

26
Fe
Iron
[Ar] $3d^6\ 4s^2$

Atomic number
Symbol
Name
Electron configuration

Order in which subshells fill



s-block
p-block
d-block
f-block

How electrons are arranged in subshells. The bracket stands for the previous noble gas; the superscript is the number of electrons in a subshell.

* predicted

Data sources: IUPAC CIAAW, NIST, PubChem (NIH), Wikidata · CC BY 4.0 · 2026-10-25