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元 素 周 期 表 Periodic Table of the Elements

镧系

锕系

	1 $\mathbf{I} \mathbf{A}$				Peri	lodic	Tab.	le of	the I	出em	ents							18 0
1	1 1.008 H qung Hydrogen 1s1	2 II A											13 III A	14 IV A	15 V A	16 VI A	17 VII A	2 4.003 He hài Helium 1s²
2	Lithium [He]2s ¹	4 9.012 Be ty Beryllium [He]2s²											5 10.81 B péng Boron [He]2s ² 2p ¹	6 12.01 C tàn Carbon [He]2s ² 2p ²	dàn (X) Nitrogen [He]2s²2p³	yǎng Oxygen [He]2s²2p⁴	9 19.00 F fú Fluorine [He]2s ² 2p ⁵	10 20.18 Ne năi Neon [He] 2s ² 2p ⁶
3	11 22.99 Na nà Sodium [Ne]3s ¹	$\overset{ ext{m} ext{\'e} ext{i}}{m{\xi}}$ $\overset{ ext{Magnesium}}{ ext{[Ne]}3s^2}$	3 III A	4 IV B							11 I B	12 II B	13 26.98 Al lǚ Aluminium [Ne]3s²3p¹	Silicon [Ne]3s ² 3p ²	15 30.97 P In Phosphorus [Ne]3s ² 3p ³	liú Fin Sulfur [Ne]3s ² 3p ⁴	17 35.45 Cl lù Chlorine [Ne]3s ² 3p ⁵	18 39.95 Ar yà Argon [Ne]3s ² 3p ⁶
4	jiă Potassium [Ar]4s ¹	Calcium [Ar]4s²	kàng FI Scandium [Ar]3d ¹ 4s ²	22 47.87 Ti tài £ Titanium [Ar]3d ² 4s ²	fán FI Vanadium [Ar]3d ³ 4s ²	gè Chromium [Ar]3d ⁵ 4s ¹	měng Manganese [Ar]3d ⁵ 4s ²	$\operatorname*{ti\check{e}}_{\mathbf{ff}}$ $\operatorname*{Iron}_{[\mathrm{Ar}]\mathrm{3d}^{6}\mathrm{4s}^{2}}$	Gu Cobalt [Ar]3d ⁷ 4s ²	niè 集 Nickel [Ar]3d ⁸ 4s ²	tóng Fi Copper [Ar]3d ¹⁰ 4s ¹	Xin	jiā Gallium [Ar]3d ¹⁰ 4s ² 4p ¹	zhě A Germanium [Ar]3d ¹⁰ 4s²4p²	shēn Arsenic [Ar]3d ¹⁰ 4s ² 4p ³	Selenium [Ar]3d ¹⁰ 4s ² 4p ⁴	35 79.90 Br xiù Bromine [Ar]3d ¹⁰ 4s ² 4p ⁵	kè Æ Krypton [Ar]3d ¹⁰ 4s ² 4p ⁶
5	37 85.47 Rb rú Rubidium [Kr]5s ¹	Strontium [Kr]5s ²	Yttrium [Kr]4d ¹ 5s ²	7 40 91.22 Zr gào Zirconium [Kr]4d²5s²	ní FE Niobium [Kr]4d ⁴ 5s ¹	Molybdenum [Kr]4d ⁵ 5s ¹	Technetium [Kr]4d ⁵ 5s ²	Ruthenium $[Kr]4d^75s^1$	lǎo Æ Rhodium [Kr]4d ⁸ 5s ¹	Palladium [Kr]4d ¹⁰	yín Q Silver [Kr]4d ¹⁰ 5s ¹	Cadmium [Kr]4d ¹⁰ 5s ²	yīn † Indium [Kr]4d ¹⁰ 5s ² 5p ¹	xī Tin [Kr]4d ¹⁰ 5s ² 5p ²	tī † Antimony [Kr]4d ¹⁰ 5s ² 5p ³	dì Tir Tellurium [Kr]4d ¹⁰ 5s ² 5p ⁴	diǎn Iodine [Kr]4d ¹⁰ 5s ² 5p ⁵	54 131.3 Xe xiān Xenon [Kr]4d ¹⁰ 5s ² 5p ⁶
6	sè Caesium [Xe]6s¹	bèi FU Barium [Xe]6s²	镧系 Lanthanoids	172 178.5 Hf hā Hafnium [Xe]4f ¹⁴ 5d ² 6s ²	$ \begin{array}{c} {\rm t\check{a}n} \\ \overline{\bf H} \\ {\rm Tantalum} \\ {\rm [Xe]4f^{14}5d^36s^2} \end{array}$	wū Tungsten [Xe]4f ¹⁴ 5d ⁴ 6s ²	lái ‡‡ Rhenium [Xe]4f ¹⁴ 5d ⁵ 6s ²	é FR Osmium [Xe]4f ¹⁴ 5d ⁶ 6s ²	yī f Iridium [Xe]4f ¹⁴ 5d ⁷ 6s ²	bó H Platinum [Xe]4f ¹⁴ 5d ⁹ 6s ¹	jīn Gold [Xe]4f ¹⁴ 5d ¹⁰ 6s ¹	gŏng Mercury [Xe]4f ¹⁴ 5d ¹⁰ 6s ²	tā †È Thallium [Xe]4f ¹⁴ 5d ¹⁰ 6s ² 6p ¹	$^{ m qi\bar{a}n}$ $^{ m Lead}$ $^{ m [Xe]4f^{14}5d^{10}6s^26p^2}$	bì Eismuth [Xe]4f ¹⁴ 5d ¹⁰ 6s ² 6p ³	Polonium [Xe]4f ¹⁴ 5d ¹⁰ 6s ² 6p ⁴	$\begin{array}{c} \text{ài} \\ \text{\textbf{L}} \\ \text{Astatine} \\ \text{[Xe]} 4 \text{f}^{14} 5 \text{d}^{10} 6 \text{s}^2 6 \text{p}^5 \end{array}$	86 [222] Rn dong Radon [Xe] 4f ¹⁴ 5d ¹⁰ 6s ² 6p ⁶
7	87 [223] Fr fang Francium [Rn]7s ¹	88 [226] Ra léi Radium [Rn]7s²	89-103 Ac-Li 锕系 Actinoids	104 [267] Rf lú FF Rutherfordium [Rn]5f ²⁴ 6d ² 7s ²	105 [268] Db dù Dubnium [Rn]5f ¹⁴ 6d ³ 7s ²	106 [269] Sg xǐ Seaborgium [Rn]5f ¹⁴ 6d ⁴ 7s ²	107 [270] Bh bō Bohrium [Rn]5f ¹⁴ 6d ⁵ 7s ²	108 [269] Hs hēi Hassium [Rn]5f ¹⁴ 6d ⁶ 7s ²	镀	110 [281] Ds dá Darmstadtium [Rn]5f ¹⁴ 6d ⁸ 7s ²	轮轮	寄	鉨	114 [289] F] t Flerovium [Rn]5f ¹⁴ 6d ¹⁰ 7s ² 7p ²	模 Moscovium	F <u>V</u> Livermorium	Tián TiH	ào (Sanesson)

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lán	shì	pů	nů	pŏ	shān	yŏu	gá	tè	dī	huŏ	ěr	diū	yì	lŭ
镧	铈	镨	钕	钷	钐	铕	牟	铽	镝	钬	铒	铥	镱	镥
			· · ·		. •-		, , , L				127			
Lanthanum	Cerium	Praseodymium	Neodymium	Promethium	Samarium	Europium	Gadolinium	Terbium	Dysprosium	Holmium	Erbium	Thulium	Ytterbium	Lutetium
$[Xe]5d^16s^2$	$[Xe]4f^{1}5d^{1}6s^{2}$	$[Xe]4f^{3}6s^{2}$	$[\mathrm{Xe}]4\mathrm{f}^46\mathrm{s}^2$	$[{\rm Xe}]4{\rm f}^{5}6{\rm s}^{2}$	$[\mathrm{Xe}]4\mathrm{f}^66\mathrm{s}^2$	$[{\rm Xe}]4{\rm f}^76{\rm s}^2$	$[{ m Xe}]4{ m f}^75{ m d}^16{ m s}^2$	$[Xe]4f^{9}6s^{2}$	$[{ m Xe}]4{ m f}^{10}6{ m s}^2$	$[Xe]4f^{11}6s^{2}$	$[{ m Xe}]4{ m f}^{12}6{ m s}^2$	$[{ m Xe}]4{ m f}^{13}6{ m s}^2$	$[{ m Xe}]4{ m f}^{14}6{ m s}^2$	$[Xe]4f^{14}5d^{1}6s^{2}$
89 [227] Ac	90 232.0 Th	91 231.0 Pa	92 238.0 U	93 [237] Np	94 [244] Pu	95 [243] Am	96 [247] Cm	97 [247] Bk	98 [251] Cf	99 [252] Es	100 [257] Fm	101[258]Md	102 [259] No	103 [262] Lr
ā	tů	pú	yóu	ná	bù	méi	jú	péi	kāi	āi	fèi	mén	nuò	láo
锕	钍	镤	铀	镎	钚	镅	锔	锫	锎	锿	镄	钔	锘	铹
					D1 / 1							114		
Actinium	Thorium	Protactinium	Uranium	Neptunium	Plutonium	Americium	Curium	Berkelium	Californium	Einsteinium	Fermium	Mendelevium	Nobelium	Lawrencium
$[Rn]6d^{1}7s^{2}$	$[Rn]6d^{2}7s^{2}$	$[Rn]5f^{2}6d^{1}7s^{2}$	$[Rn]5f^{3}6d^{1}7s^{2}$	$[Rn]5f^46d^17s^2$	$[Rn]5f^67s^2$	$[Rn]5f^77s^2$	$[Rn]5f^{7}6d^{1}7s^{2}$	$[Rn]5f^{9}7s^{2}$	[Rn]5f ¹⁰ 7s ²	$[Rn]5f^{11}7s^{2}$	[Rn]5f ¹² 7s ²	$[Rn]5f^{13}7s^{2}$	$[Rn]5f^{14}7s^{2}$	$[Rn]5f^{14}7s^{2}7p^{1}$