



元素周期表

Periodic Table of the Elements

自然も暮らしもすべて元素記号で書かれている



メンデレーエフ (Dmitriy Ivanovich Mendeleev, 1834~1907)
1869年、ロシアのペテルスブルグ大学の化学者メンデレーエフは、当時知られていた63種類の元素を(1)原子量の順に並べ、(2)酸素や塩素と結合してできる物質の組成(たとえば、ナトリウムはNaClを、マグネシウムはMgCl₂をつくる)などの性質が周期的に変化する法則「周期律」を見出し、性質が似た元素が同じ列にできるように配列した周期表をつくった。その表のなかには空欄があり、当時知られていなかった元素の性質を予言した。初めはメンデレーエフの周期表は注目されなかったが、1875年にガリウムが、1886年にゲルマニウムが発見され、それらの性質が彼の予言のとおりであったため、世界的に信頼された。現在では周期表は、すべての人が用いる化学や物理学の基本となっている。

18

He

4.003

2 Helium

空気より軽いガスで飛行艇に利用
びんバロウや気球の充填で重要
気体は純粋に、最も高純度の元素
吸入すると高い音がでる

1 1 Hydrogen	2 3 Lithium	3 11 Sodium	4 19 Potassium	5 37 Rubidium	6 55 Cesium	7 87 Francium	8 104 Rutherfordium	9 105 Dubnium	10 106 Seaborgium	11 107 Bohrium	12 108 Hassium	13 109 Meitnerium	14 110 Darmstadtium	15 111 Roentgenium	16 112 Copernicium	17 113 Nihonium	18 114 Flerovium	19 115 Ununpentium	20 116 Livermorium	21 117 Ununseptium	22 118 Ununoctium	23 119 Ununtrium	24 120 Ununquadium	25 121 Unbibium	26 122 Unbibium	27 123 Unbibium	28 124 Unbibium	29 125 Unbibium	30 126 Unbibium	31 127 Tennessine	32 128 Oganesson	33 129 Ununseptium	34 130 Ununoctium	35 131 Ununtrium	36 132 Ununquadium	37 133 Unbibium	38 134 Unbibium	39 135 Unbibium	40 136 Unbibium	41 137 Unbibium	42 138 Unbibium	43 139 Unbibium	44 140 Unbibium	45 141 Unbibium	46 142 Unbibium	47 143 Unbibium	48 144 Unbibium	49 145 Unbibium	50 146 Unbibium	51 147 Unbibium	52 148 Unbibium	53 149 Unbibium	54 150 Unbibium	55 151 Unbibium	56 152 Unbibium	57 153 Unbibium	58 154 Unbibium	59 155 Unbibium	60 156 Unbibium	61 157 Unbibium	62 158 Unbibium	63 159 Unbibium	64 160 Unbibium	65 161 Unbibium	66 162 Unbibium	67 163 Unbibium	68 164 Unbibium	69 165 Unbibium	70 166 Unbibium	71 167 Unbibium	72 168 Unbibium	73 169 Unbibium	74 170 Unbibium	75 171 Unbibium	76 172 Unbibium	77 173 Unbibium	78 174 Unbibium	79 175 Unbibium	80 176 Unbibium	81 177 Unbibium	82 178 Unbibium	83 179 Unbibium	84 180 Unbibium	85 181 Unbibium	86 182 Unbibium	87 183 Unbibium	88 184 Unbibium	89 185 Unbibium	90 186 Unbibium	91 187 Unbibium	92 188 Unbibium	93 189 Unbibium	94 190 Unbibium	95 191 Unbibium	96 192 Unbibium	97 193 Unbibium	98 194 Unbibium	99 195 Unbibium	100 196 Unbibium	101 197 Unbibium	102 198 Unbibium	103 199 Unbibium	104 200 Unbibium	105 201 Unbibium	106 202 Unbibium	107 203 Unbibium	108 204 Unbibium	109 205 Unbibium	110 206 Unbibium	111 207 Unbibium	112 208 Unbibium	113 209 Unbibium	114 210 Unbibium	115 211 Unbibium	116 212 Unbibium	117 213 Unbibium	118 214 Unbibium	119 215 Unbibium	120 216 Unbibium	121 217 Unbibium	122 218 Unbibium	123 219 Unbibium	124 220 Unbibium	125 221 Unbibium	126 222 Unbibium	127 223 Unbibium	128 224 Unbibium	129 225 Unbibium	130 226 Unbibium	131 227 Unbibium	132 228 Unbibium	133 229 Unbibium	134 230 Unbibium	135 231 Unbibium	136 232 Unbibium	137 233 Unbibium	138 234 Unbibium	139 235 Unbibium	140 236 Unbibium	141 237 Unbibium	142 238 Unbibium	143 239 Unbibium	144 240 Unbibium	145 241 Unbibium	146 242 Unbibium	147 243 Unbibium	148 244 Unbibium	149 245 Unbibium	150 246 Unbibium	151 247 Unbibium	152 248 Unbibium	153 249 Unbibium	154 250 Unbibium	155 251 Unbibium	156 252 Unbibium	157 253 Unbibium	158 254 Unbibium	159 255 Unbibium	160 256 Unbibium	161 257 Unbibium	162 258 Unbibium	163 259 Unbibium	164 260 Unbibium	165 261 Unbibium	166 262 Unbibium	167 263 Unbibium	168 264 Unbibium	169 265 Unbibium	170 266 Unbibium	171 267 Unbibium	172 268 Unbibium	173 269 Unbibium	174 270 Unbibium	175 271 Unbibium	176 272 Unbibium	177 273 Unbibium	178 274 Unbibium	179 275 Unbibium	180 276 Unbibium	181 277 Unbibium	182 278 Unbibium	183 279 Unbibium	184 280 Unbibium	185 281 Unbibium	186 282 Unbibium	187 283 Unbibium	188 284 Unbibium	189 285 Unbibium	190 286 Unbibium	191 287 Unbibium	192 288 Unbibium	193 289 Unbibium	194 290 Unbibium	195 291 Unbibium	196 292 Unbibium	197 293 Unbibium	198 294 Unbibium	199 295 Unbibium	200 296 Unbibium	201 297 Unbibium	202 298 Unbibium	203 299 Unbibium	204 300 Unbibium	205 301 Unbibium	206 302 Unbibium	207 303 Unbibium	208 304 Unbibium	209 305 Unbibium	210 306 Unbibium	211 307 Unbibium	212 308 Unbibium	213 309 Unbibium	214 310 Unbibium	215 311 Unbibium	216 312 Unbibium	217 313 Unbibium	218 314 Unbibium	219 315 Unbibium	220 316 Unbibium	221 317 Unbibium	222 318 Unbibium	223 319 Unbibium	224 320 Unbibium	225 321 Unbibium	226 322 Unbibium	227 323 Unbibium	228 324 Unbibium	229 325 Unbibium	230 326 Unbibium	231 327 Unbibium	232 328 Unbibium	233 329 Unbibium	234 330 Unbibium	235 331 Unbibium	236 332 Unbibium	237 333 Unbibium	238 334 Unbibium	239 335 Unbibium	240 336 Unbibium	241 337 Unbibium	242 338 Unbibium	243 339 Unbibium	244 340 Unbibium	245 341 Unbibium	246 342 Unbibium	247 343 Unbibium	248 344 Unbibium	249 345 Unbibium	250 346 Unbibium	251 347 Unbibium	252 348 Unbibium	253 349 Unbibium	254 350 Unbibium	255 351 Unbibium	256 352 Unbibium	257 353 Unbibium	258 354 Unbibium	259 355 Unbibium	260 356 Unbibium	261 357 Unbibium	262 358 Unbibium	263 359 Unbibium	264 360 Unbibium	265 361 Unbibium	266 362 Unbibium	267 363 Unbibium	268 364 Unbibium	269 365 Unbibium	270 366 Unbibium	271 367 Unbibium	272 368 Unbibium	273 369 Unbibium	274 370 Unbibium	275 371 Unbibium	276 372 Unbibium	277 373 Unbibium	278 374 Unbibium	279 375 Unbibium	280 376 Unbibium	281 377 Unbibium	282 378 Unbibium	283 379 Unbibium	284 380 Unbibium	285 381 Unbibium	286 382 Unbibium	287 383 Unbibium	288 384 Unbibium	289 385 Unbibium	290 386 Unbibium	291 387 Unbibium	292 388 Unbibium	293 389 Unbibium	294 390 Unbibium	295 391 Unbibium	296 392 Unbibium	297 393 Unbibium	298 394 Unbibium	299 395 Unbibium	300 396 Unbibium	301 397 Unbibium	302 398 Unbibium	303 399 Unbibium	304 400 Unbibium	305 401 Unbibium	306 402 Unbibium	307 403 Unbibium	308 404 Unbibium	309 405 Unbibium	310 406 Unbibium	311 407 Unbibium	312 408 Unbibium	313 409 Unbibium	314 410 Unbibium	315 411 Unbibium	316 412 Unbibium	317 413 Unbibium	318 414 Unbibium	319 415 Unbibium	320 416 Unbibium	321 417 Unbibium	322 418 Unbibium	323 419 Unbibium	324 420 Unbibium	325 421 Unbibium	326 422 Unbibium	327 423 Unbibium	328 424 Unbibium	329 425 Unbibium	330 426 Unbibium	331 427 Unbibium	332 428 Unbibium	333 429 Unbibium	334 430 Unbibium	335 431 Unbibium	336 432 Unbibium	337 433 Unbibium	338 434 Unbibium	339 435 Unbibium	340 436 Unbibium	341 437 Unbibium	342 438 Unbibium	343 439 Unbibium	344 440 Unbibium	345 441 Unbibium	346 442 Unbibium	347 443 Unbibium	348 444 Unbibium	349 445 Unbibium	350 446 Unbibium	351 447 Unbibium	352 448 Unbibium	353 449 Unbibium	354 450 Unbibium	355 451 Unbibium	356 452 Unbibium	357 453 Unbibium	358 454 Unbibium	359 455 Unbibium	360 456 Unbibium	361 457 Unbibium	362 458 Unbibium	363 459 Unbibium	364 460 Unbibium	365 461 Unbibium	366 462 Unbibium	367 463 Unbibium	368 464 Unbibium	369 465 Unbibium	370 466 Unbibium	371 467 Unbibium	372 468 Unbibium	373 469 Unbibium	374 470 Unbibium	375 471 Unbibium	376 472 Unbibium	377 473 Unbibium	378 474 Unbibium	379 475 Unbibium	380 476 Unbibium	381 477 Unbibium	382 478 Unbibium	383 479 Unbibium	384 480 Unbibium	385 481 Unbibium	386 482 Unbibium	387 483 Unbibium	388 484 Unbibium	389 485 Unbibium	390 486 Unbibium	391 487 Unbibium	392 488 Unbibium	393 489 Unbibium	394 490 Unbibium	395 491 Unbibium	396 492 Unbibium	397 493 Unbibium	398 494 Unbibium	399 495 Unbibium	400 496 Unbibium	401 497 Unbibium	402 498 Unbibium	403 499 Unbibium	404 500 Unbibium	405 501 Unbibium	406 502 Unbibium	407 503 Unbibium	408 504 Unbibium	409 505 Unbibium	410 506 Unbibium	411 507 Unbibium	412 508 Unbibium	413 509 Unbibium	414 510 Unbibium	415 511 Unbibium	416 512 Unbibium	417 513 Unbibium	418 514 Unbibium	419 515 Unbibium	420 516 Unbibium	421 517 Unbibium	422 518 Unbibium	423 519 Unbibium	424 520 Unbibium	425 521 Unbibium	426 522 Unbibium	427 523 Unbibium	428 524 Unbibium	429 525 Unbibium	430 526 Unbibium	431 527 Unbibium	432 528 Unbibium	433 529 Unbibium	434 530 Unbibium	435 531 Unbibium	436 532 Unbibium	437 533 Unbibium	438 534 Unbibium	439 535 Unbibium	440 536 Unbibium	441 537 Unbibium	442 538 Unbibium	443 539 Unbibium	444 540 Unbibium	445 541 Unbibium	446 542 Unbibium	447 543 Unbibium	448 544 Unbibium	449 545 Unbibium	450 546 Unbibium	451 547 Unbibium	452 548 Unbibium	453 549 Unbibium	454 550 Unbibium	455 551 Unbibium	456 552 Unbibium	457 553 Unbibium	458 554 Unbibium	459 555 Unbibium	460 556 Unbibium	461 557 Unbibium	462 558 Unbibium	463 559 Unbibium	464 560 Unbibium	465 561 Unbibium	466 562 Unbibium	467 563 Unbibium	468 564 Unbibium	469 565 Unbibium	470 566 Unbibium	471 567 Unbibium	472 568 Unbibium	473 569 Unbibium	474 570 Unbibium	475 571 Unbibium	476 572 Unbibium	477 573 Unbibium	478 574 Unbibium	479 575 Unbibium	480 576 Unbibium	481 577 Unbibium	482 578 Unbibium	483 579 Unbibium	484 580 Unbibium	485 581 Unbibium	486 582 Unbibium	487 583 Unbibium	488 584 Unbibium	489 585 Unbibium	490 586 Unbibium	491 587 Unbibium	492 588 Unbibium	493 589 Unbibium	494 590 Unbibium	495 591 Unbibium	496 592 Unbibium	497 593 Unbibium	498 594 Unbibium	499 595 Unbibium	500 596 Unbibium	501 597 Unbibium	502 598 Unbibium	503 599 Unbibium	504 600 Unbibium	505 601 Unbibium	506 602 Unbibium	507 603 Unbibium	508 604 Unbibium	509 605 Unbibium	510 606 Unbibium	511 607 Unbibium	512 608 Unbibium	513 609 Unbibium	514 610 Unbibium	515 611 Unbibium	516 612 Unbibium	517 613 Unbibium	518 614 Unbibium	519 615 Unbibium	520 616 Unbibium	521 617 Unbibium	522 618 Unbibium	523 619 Unbibium	524 620 Unbibium	525 621 Unbibium	526 622 Unbibium	527 623 Unbibium	528 624 Unbibium	529 625 Unbibium	530 626 Unbibium	531 627 Unbibium	532 628 Unbibium	533 629 Unbibium	534 630 Unbibium	535 631 Unbibium	536 632 Unbibium	537 633 Unbibium	538 634 Unbibium	539 635 Unbibium	540 636 Unbibium
-----------------	----------------	----------------	-------------------	------------------	----------------	------------------	------------------------	------------------	----------------------	-------------------	-------------------	----------------------	------------------------	-----------------------	-----------------------	--------------------	---------------------	-----------------------	-----------------------	-----------------------	----------------------	---------------------	-----------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	----------------------	---------------------	-----------------------	----------------------	---------------------	-----------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------