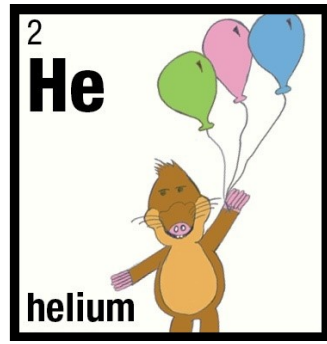
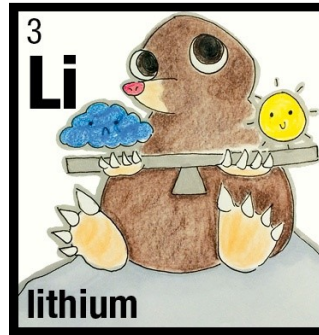


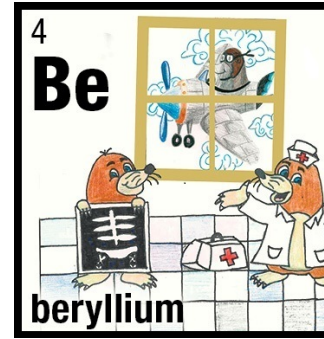
hidrógeno



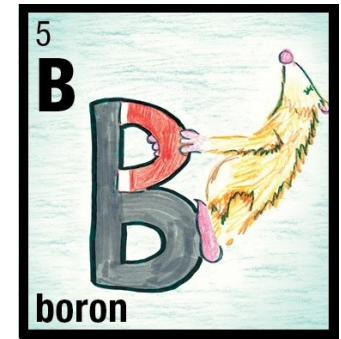
helio



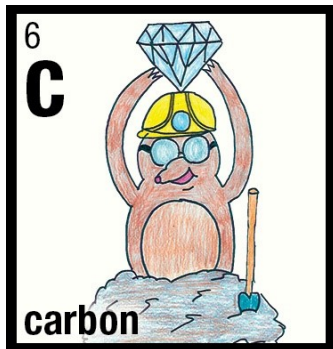
litio



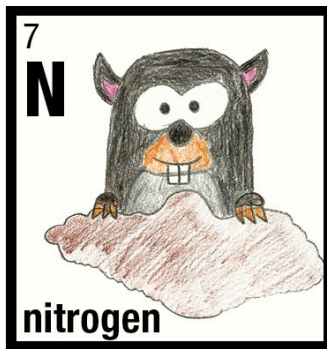
berilio



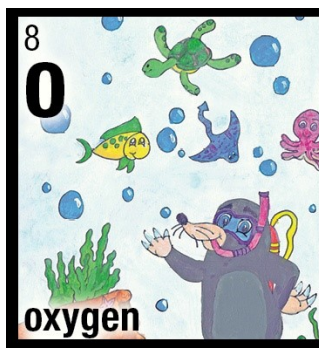
boro



carbón



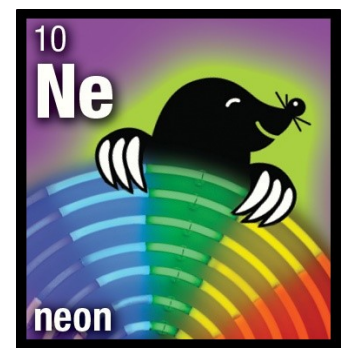
nitrógeno



oxígeno



flúor

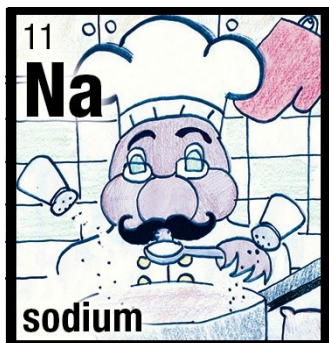


neón

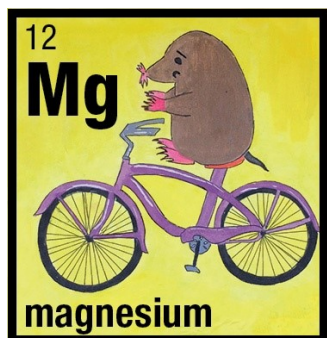
neon - fluorine - oxygen - nitrogen - carbon - boron - beryllium - lithium - helium - hydrogen

Atomic Mass Density 10.81 2.46 Atomic Radius 87 Melting Point Electro-negativity 2076 04	Atomic Mass Density 9.01 1.848 Atomic Radius 112 Melting Point Electro-negativity 1287 1.57	Atomic Mass Density 6.94 0.535 Atomic Radius 167 Melting Point Electro-negativity 181 0.98	Atomic Mass Density 4.00 0.00018 Atomic Radius 31 Melting Point Electro-negativity -272 N/A	Atomic Mass Density 1.01 0.00009 Atomic Radius 53 Melting Point Electro-negativity -259
Atomic Mass Density 20.18 0.0009 Atomic Radius 38 Melting Point Electro-negativity -259 N/A	Atomic Mass Density 19 0.00170 Atomic Radius 42 Melting Point Electro-negativity -220 3.98	Atomic Mass Density 16 0.00143 Atomic Radius 48 Melting Point Electro-negativity -219 3.44	Atomic Mass Density 14.01 0.00125 Atomic Radius 56 Melting Point Electro-negativity -210 3.04	Atomic Mass Density 12.01 2.26 Atomic Radius 67 Melting Point Electro-negativity 3550 55

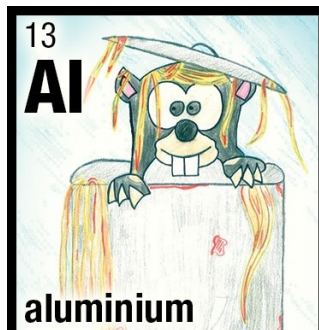
Print in landscape orientation and flip on short end to print double-sided cards correctly.



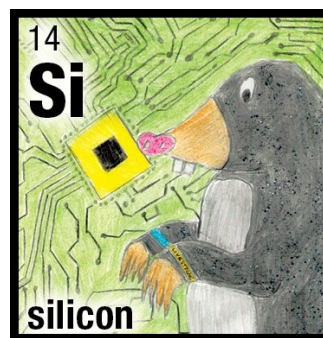
sodio



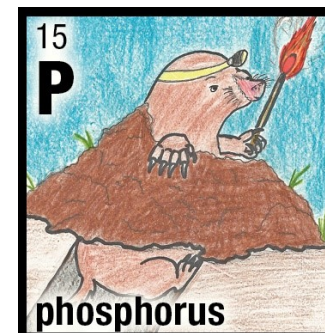
magnesio



aluminio



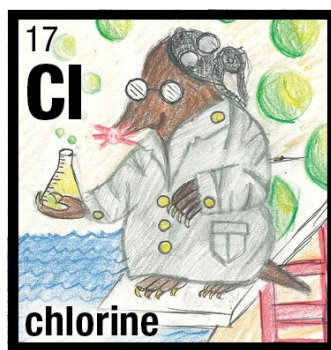
silicio



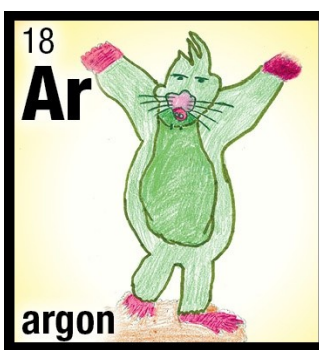
fósforo



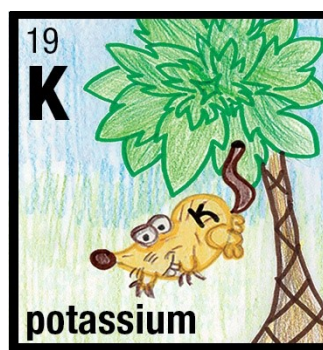
azufre



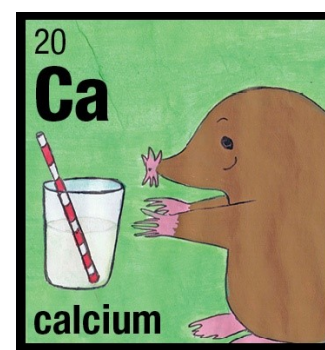
cloro



argón



potasio

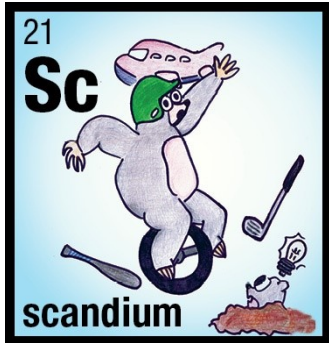


calcio

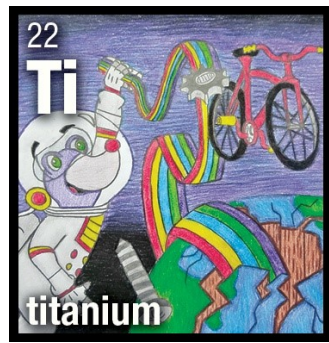
calcium - potassium - argon - chlorine - sulfur - phosphorus - silicon - aluminum - magnesium - sodium

Atomic Mass 30.97	Density 1.823	Atomic Mass 28.09	Density 2.33	Atomic Mass 26.98	Density 2.7	Atomic Mass 24.31	Density 1.738	Atomic Mass 22.99	Density 0.968
Atomic Radius 98		Atomic Radius 111		Atomic Radius 118		Atomic Radius 145		Atomic Radius 190	
Melting Point 44	Electro-negativity 2.19	Melting Point 1414	Electro-negativity 1.9	Melting Point 660	Electro-negativity 1.61	Melting Point 650	Electro-negativity 1.31	Melting Point 98	Electro-negativity 0.93
Atomic Mass 40.08	Density 1.55	Atomic Mass 39.10	Density 0.856	Atomic Mass 39.95	Density 0.00188	Atomic Mass 35.45	Density 0.00321	Atomic Mass 32.06	Density 1.96
Atomic Radius 194		Atomic Radius 243		Atomic Radius 71		Atomic Radius 79		Atomic Radius 87	
Melting Point 842	Electro-negativity 1	Melting Point 66	Electro-negativity 0.82	Melting Point -189	Electro-negativity N/A	Melting Point -102	Electro-negativity 3.16	Melting Point 115	Electro-negativity 58

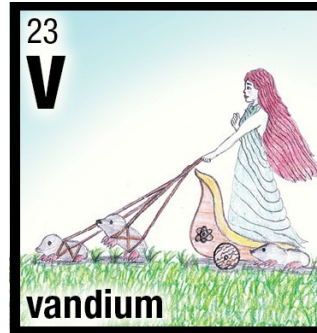
Print in landscape orientation and flip on short end to print double-sided cards correctly.



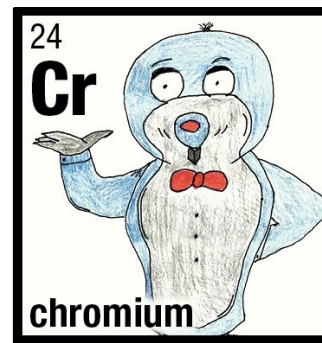
escandio



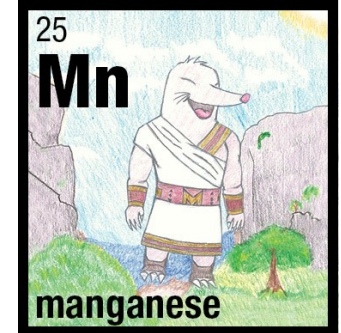
titanio



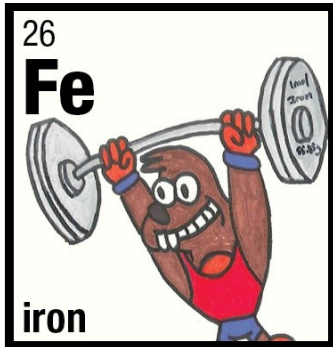
vanadio



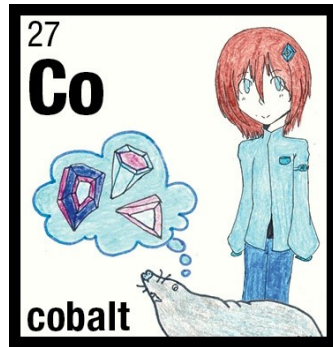
cromo



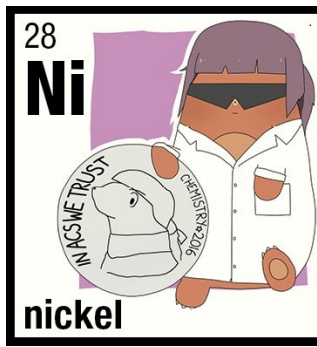
manganeso



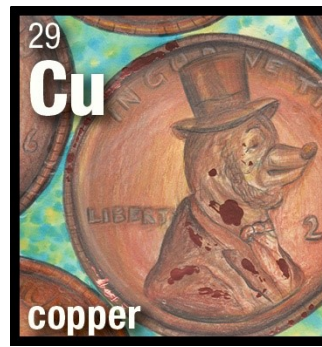
hierro



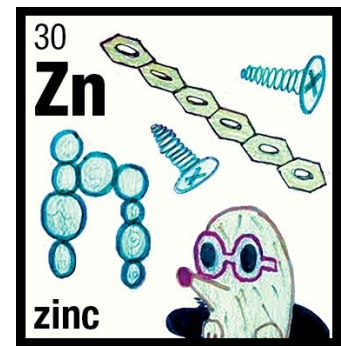
cobalto



níquel



cobre

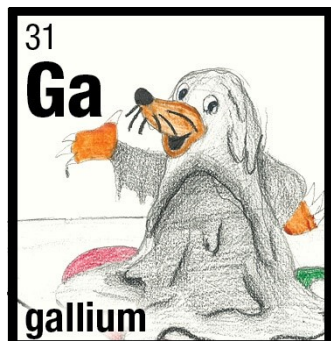


zinc

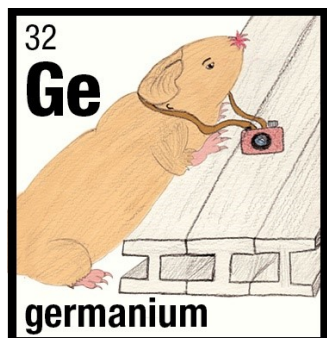
zinc - copper - nickel - cobalt - iron - manganese - chromium - vanadium - titanium - scandium

Atomic Mass Density 54.94 7.47	Atomic Mass Density 52.00 7.14	Atomic Mass Density 50.94 6.11	Atomic Mass Density 47.87 4.507	Atomic Mass Density 44.96 2.985
Atomic Radius 161	Atomic Radius 166	Atomic Radius 171	Atomic Radius 176	Atomic Radius 184
Melting Point Electro-negativity 1246 1.55	Melting Point Electro-negativity 1907 1.66	Melting Point Electro-negativity 1910 1.63	Melting Point Electro-negativity 1668 1.54	Melting Point Electro-negativity 1541 1.36
Atomic Mass Density 65.38 7.14	Atomic Mass Density 63.55 8.92	Atomic Mass Density 58.69 8.91	Atomic Mass Density 58.93 8.90	Atomic Mass Density 55.85 7.87
Atomic Radius 142	Atomic Radius 145	Atomic Radius 149	Atomic Radius 152	Atomic Radius 156
Melting Point Electro-negativity 420 1.65	Melting Point Electro-negativity 1085 1.90	Melting Point Electro-negativity 1455 1.91	Melting Point Electro-negativity 1495 1.88	Melting Point Electro-negativity 1538 1.83

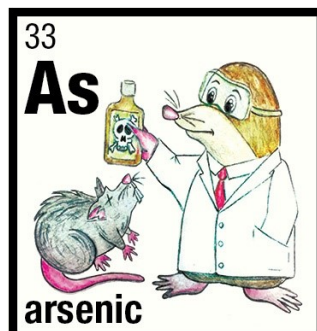
Print in landscape orientation and flip on short end to print double-sided cards correctly.



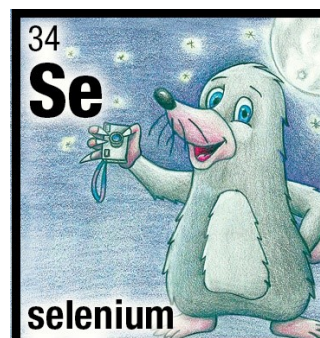
galio



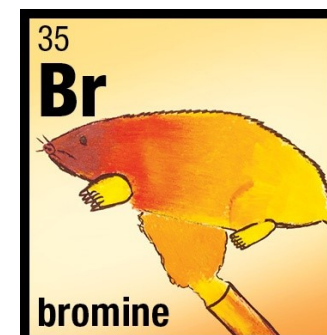
germanio



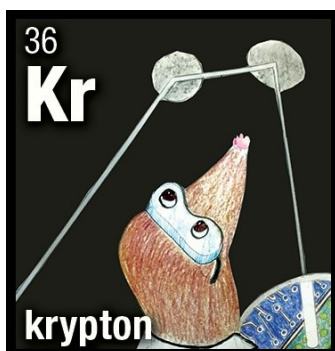
arsénico



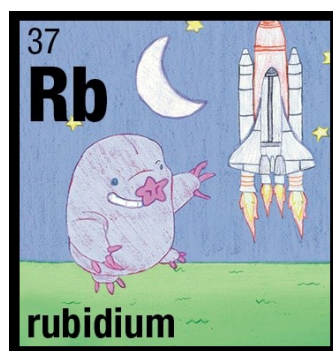
selenio



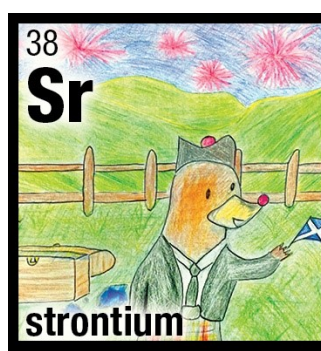
bromo



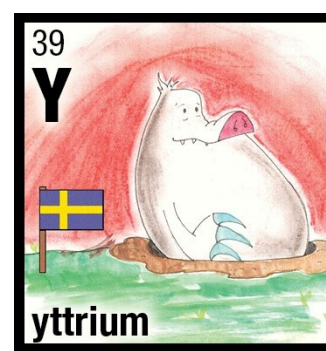
criptón



rubidio



estroncio



itrio

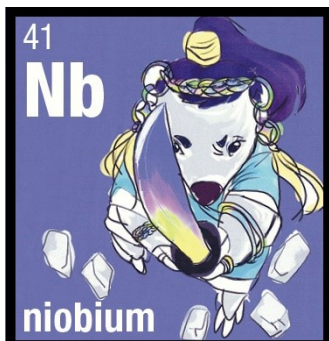


circonio

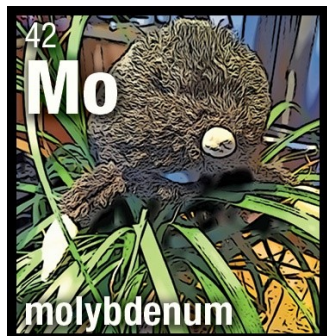
zirconium - yttrium - strontium - rubidium - krypton - bromine - selenium - arsenic - germanium - gallium

Atomic Mass 79.90	Density 3.11	Atomic Mass 78.96	Density 4.82	Atomic Mass 74.92	Density 5.73	Atomic Mass 72.63	Density 5.32	Atomic Mass 69.72	Density 5.90
Atomic Radius 94		Atomic Radius 103		Atomic Radius 114		Atomic Radius 125		Atomic Radius 136	
Melting Point -7	Electro-negativity 2.96	Melting Point 221	Electro-negativity 2.55	Melting Point 817	Electro-negativity 2.18	Melting Point 938	Electro-negativity 2.01	Melting Point 30	Electro-negativity 1.81
Atomic Mass 91.22	Density 6.51	Atomic Mass 88.91	Density 4.47	Atomic Mass 87.62	Density 2.63	Atomic Mass 85.47	Density 1.53	Atomic Mass 83.80	Density 0.00375
Atomic Radius 206		Atomic Radius 212		Atomic Radius 219		Atomic Radius 265		Atomic Radius 87	
Melting Point 1855	Electro-negativity 1.33	Melting Point 1526	Electro-negativity 1.22	Melting Point 777	Electro-negativity 0.95	Melting Point 39	Electro-negativity 0.82	Melting Point -157	Electro-negativity 3

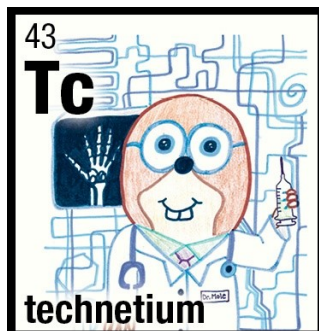
Print in landscape orientation and flip on short end to print double-sided cards correctly.



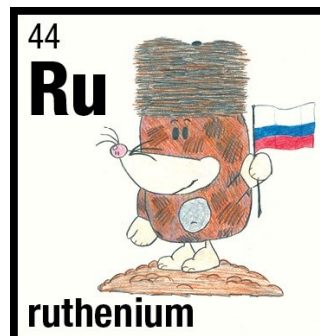
niobio



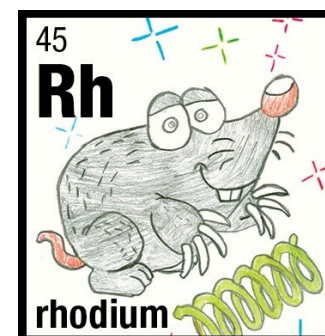
molibdeno



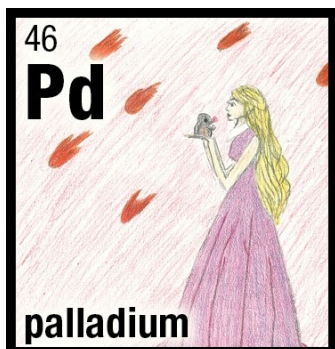
tecnecio



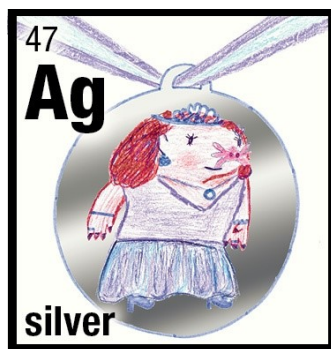
rutenio



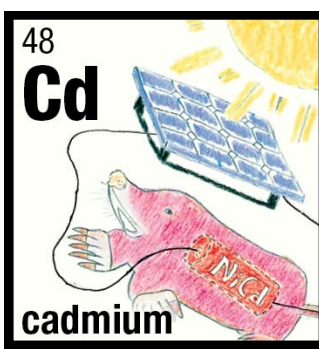
renio



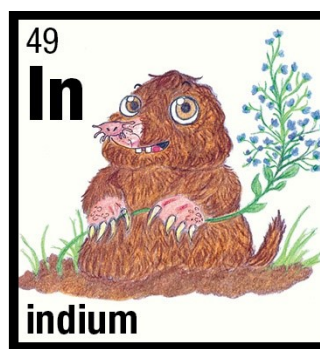
paladio



plata



cadmio



indio

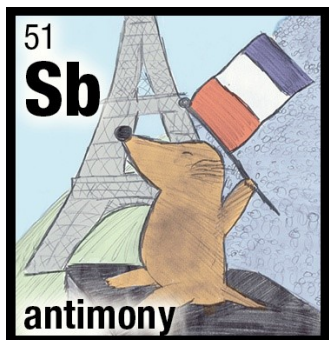


estaño

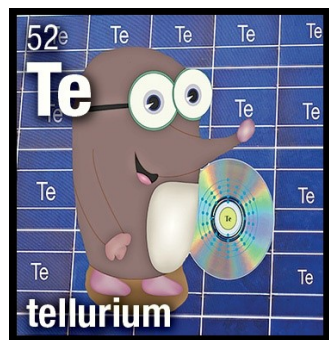
tin - indium - cadmium - silver - palladium - rhodium - ruthenium - technetium - molybdenum - niobium

Atomic Mass 102.91	Density 12.45	Atomic Mass 101.07	Density 12.37	Atomic Mass 98.00	Density 11.5	Atomic Mass 95.96	Density 10.28	Atomic Mass 92.91	Density 8.57
Atomic Radius 173		Atomic Radius 178		Atomic Radius 183		Atomic Radius 190		Atomic Radius 198	
Melting Point 1964	Electro- negativity 2.28	Melting Point 2334	Electro- negativity 2.2	Melting Point 2157	Electro- negativity 1.9	Melting Point 2623	Electro- negativity 2.16	Melting Point 2477	Electro- negativity 1.6
Atomic Mass 118.71	Density 7.31	Atomic Mass 114.82	Density 7.31	Atomic Mass 112.41	Density 8.65	Atomic Mass 107.87	Density 10.49	Atomic Mass 106.42	Density 12.02
Atomic Radius 145		Atomic Radius 156		Atomic Radius 161		Atomic Radius 165		Atomic Radius 169	
Melting Point 232	Electro- negativity 1.96	Melting Point 157	Electro- negativity 1.78	Melting Point 321	Electro- negativity 1.69	Melting Point 962	Electro- negativity 1.93	Melting Point 1555	Electro- negativity 2.2

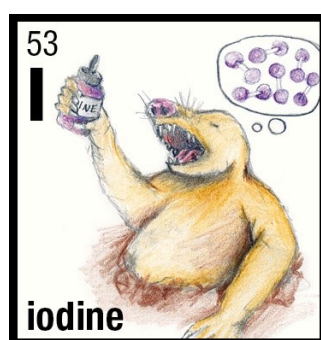
Print in landscape orientation and flip on short end to print double-sided cards correctly.



antimonio



telurio



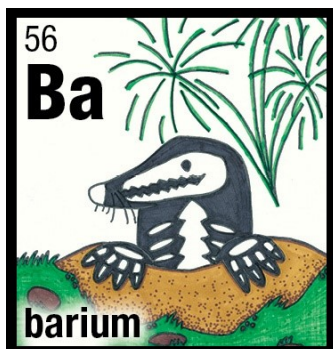
yodo



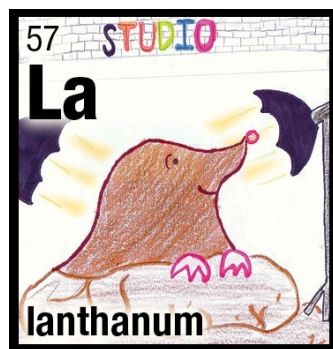
xenón



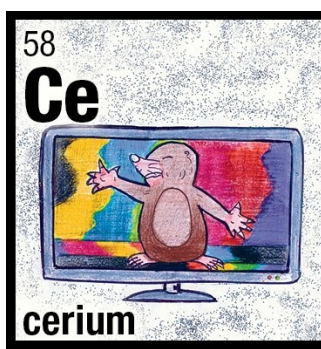
cesio



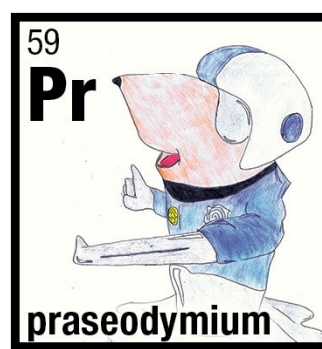
bario



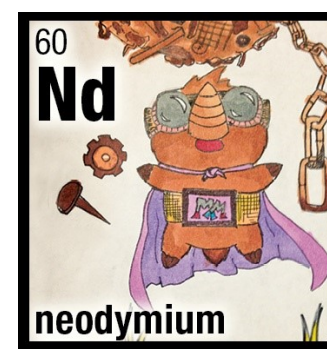
lantano



cerio



praseodimio



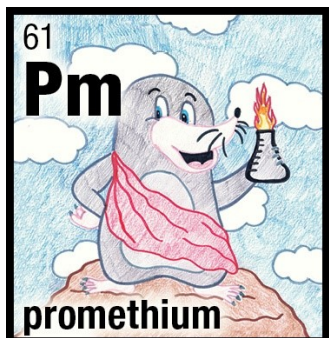
neodimio

neodymium - praseodymium - cerium - lanthanum - barium - cesium - xenon - iodine - tellurium - antimony

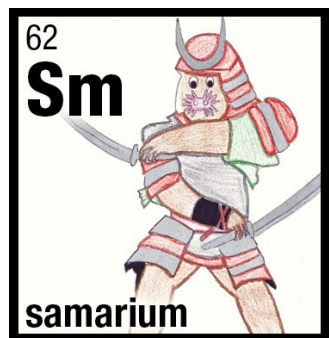
Atomic Mass Density 132.91 1.88	Atomic Mass Density 131.29 0.0059	Atomic Mass Density 126.90 4.94	Atomic Mass Density 127.60 6.24	Atomic Mass Density 121.76 6.70
Atomic Radius 298	Atomic Radius 108	Atomic Radius 115	Atomic Radius 123	Atomic Radius 133
Melting Point Electro-negativity 28 0.79	Melting Point Electro-negativity -112 2.6	Melting Point Electro-negativity 114 2.66	Melting Point Electro-negativity 450 2.1	Melting Point Electro-negativity 631 2.05
Atomic Mass Density 144.24 7.01	Atomic Mass Density 140.91 6.64	Atomic Mass Density 140.12 6.69	Atomic Mass Density 138.91 6.15	Atomic Mass Density 137.33 3.51
Atomic Radius 206	Atomic Radius 247	Atomic Radius 235	Atomic Radius 240	Atomic Radius 253
Melting Point Electro-negativity 1024 1.14	Melting Point Electro-negativity 935 1.13	Melting Point Electro-negativity 795 1.12	Melting Point Electro-negativity 920 1.1	Melting Point Electro-negativity 727 0.89

Print in landscape orientation and flip on short end to print double-sided cards correctly.

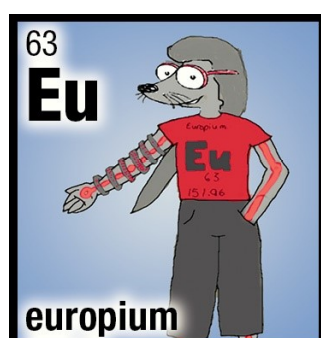
promethium - samarium - europium - gadolinium - terbium - dysprosium - holmium - erbium - thulium - ytterbium



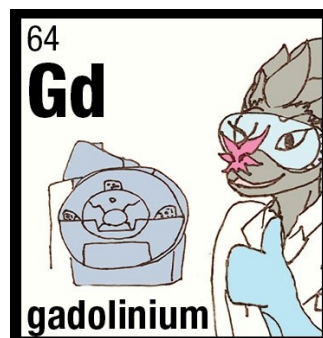
prometeo



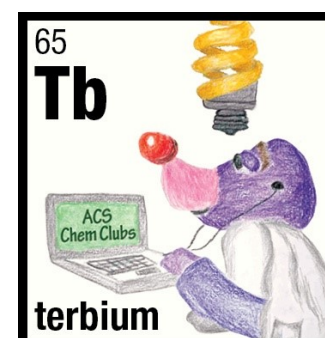
samario



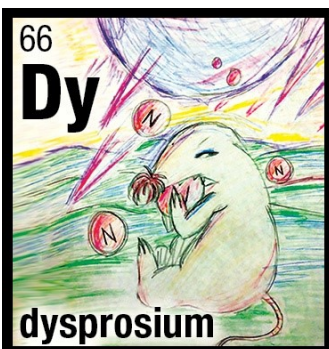
europio



gadolinio



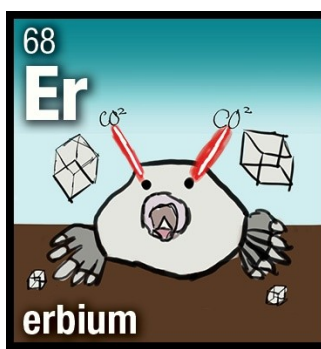
terbio



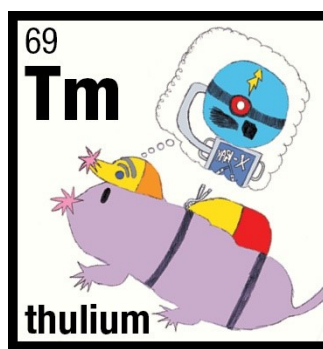
disprosio



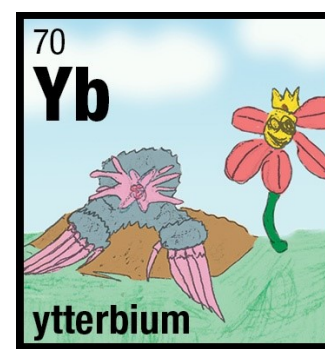
holmio



erbio



tulio



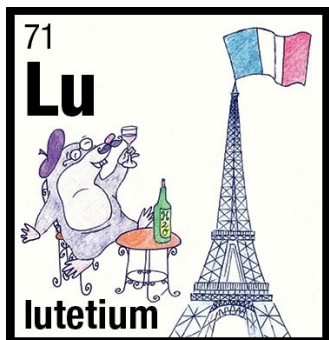
iterbio

Print double-sided and cut along lines to make 10 cards with element names on one side and properties on the other.

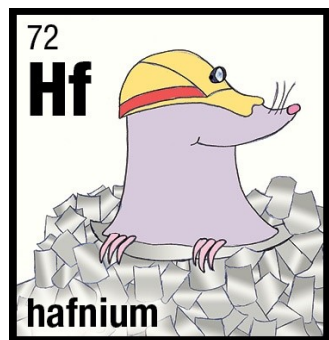
ytterbium - thulium - erbium - holmium - dysprosium - terbium - gadolinium - europium - samarium - promethium

Atomic Mass Density 158.93 8.22	Atomic Mass Density 157.25 7.90	Atomic Mass Density 151.96 5.24	Atomic Mass Density 150.36 7.4	Atomic Mass Density 145.00 7.3
Atomic Radius 225	Atomic Radius 233	Atomic Radius 231	Atomic Radius 238	Atomic Radius 205
Melting Point Electro-negativity 1356 1.1	Melting Point Electro-negativity 1312 1.2	Melting Point Electro-negativity 826 1.2	Melting Point Electro-negativity 1072 1.17	Melting Point Electro-negativity 1042 1.13
Atomic Mass Density 173.05 6.57	Atomic Mass Density 168.93 9.321	Atomic Mass Density 167.26 9.066	Atomic Mass Density 164.93 8.80	Atomic Mass Density 162.50 8.55
Atomic Radius 222	Atomic Radius 222	Atomic Radius 226	Atomic Radius 226	Atomic Radius 228
Melting Point Electro-negativity 819 1.1	Melting Point Electro-negativity 1545 1.25	Melting Point Electro-negativity 1529 1.24	Melting Point Electro-negativity 1461 1.23	Melting Point Electro-negativity 1407 1.22

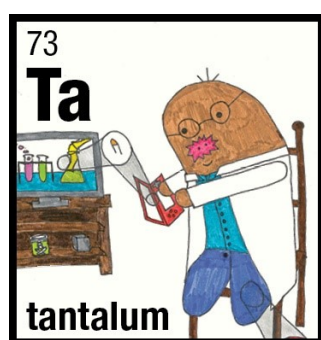
Print in landscape orientation and flip on short end to print double-sided cards correctly.



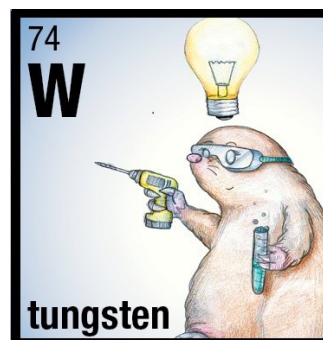
lutecio



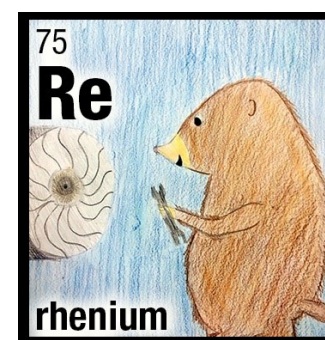
hafnio



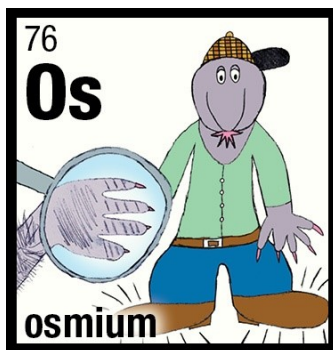
tantalo



tungsteno



renio



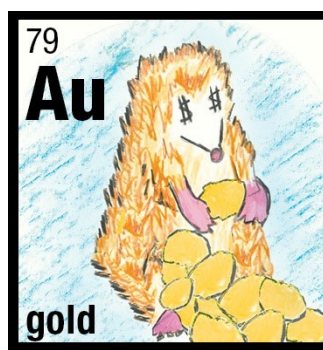
osmio



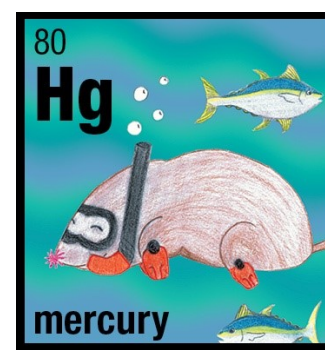
iridio



platino



oro



mercurio

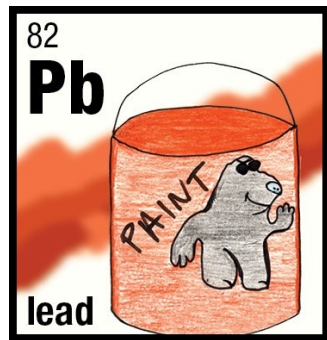
mercury - gold- platinum - iridium - osmium - rhenium - tungsten - tantalum - hafnium - lutetium

Atomic Mass Density 186.21 21.02	Atomic Mass Density 183.84 19.25	Atomic Mass Density 180.95 16.65	Atomic Mass Density 178.49 13.31	Atomic Mass Density 174.97 9.84
Atomic Radius 188	Atomic Radius 193	Atomic Radius 200	Atomic Radius 208	Atomic Radius 217
Melting Point Electro-negativity 3186 1.9	Melting Point Electro-negativity 3422 2.36	Melting Point Electro-negativity 3017 1.5	Melting Point Electro-negativity 2233 1.3	Melting Point Electro-negativity 1652 1.27
Atomic Mass Density 200.59 13.53	Atomic Mass Density 197.00 19.30	Atomic Mass Density 195.08 22.09	Atomic Mass Density 192.22 22.65	Atomic Mass Density 190.23 22.61
Atomic Radius 171	Atomic Radius 174	Atomic Radius 177	Atomic Radius 180	Atomic Radius 185
Melting Point Electro-negativity -39 2	Melting Point Electro-negativity 1064 2.54	Melting Point Electro-negativity 1768 2.28	Melting Point Electro-negativity 2466 2.2	Melting Point Electro-negativity 3033 2

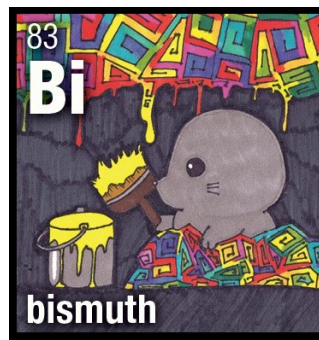
Print in landscape orientation and flip on short end to print double-sided cards correctly.



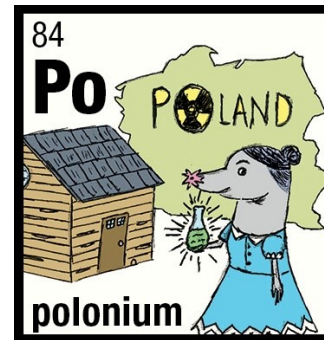
talio



plomo



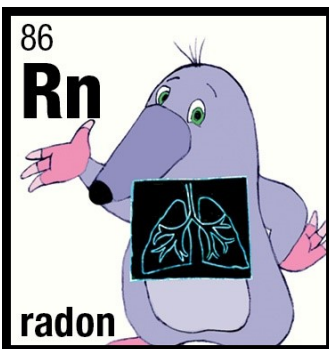
bismuto



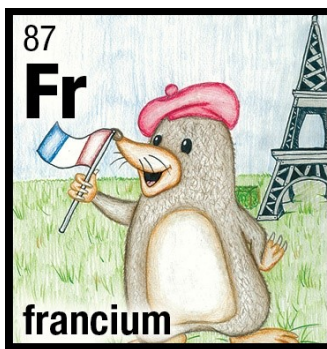
polonio



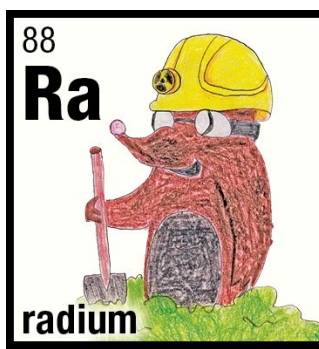
astatino



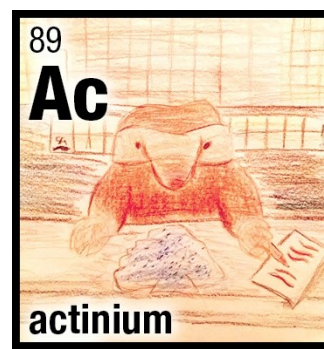
radón



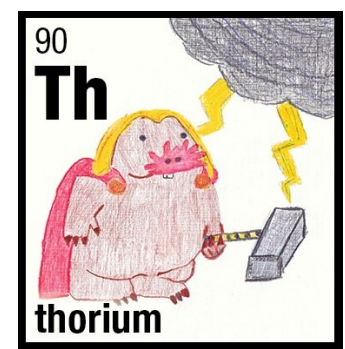
francio



radio



actinio



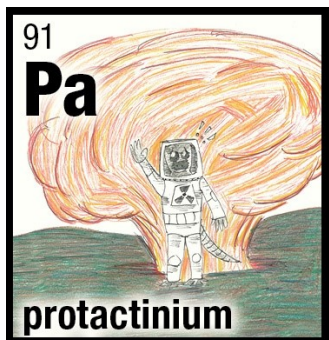
torio

thorium - actinium - radium - francium - radon - astatine - polonium - bismuth - lead - thallium

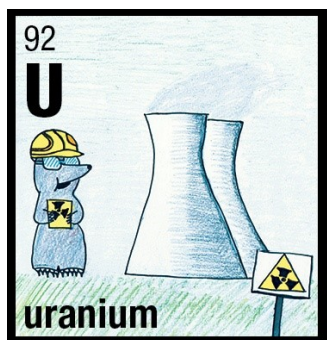
Atomic Mass Density 210 6.35 Atomic Radius 127 Melting Point Electro-negativity 302 2.2	Atomic Mass Density 209.00 9.20 Atomic Radius 135 Melting Point Electro-negativity 254 2	Atomic Mass Density 208.98 9.78 Atomic Radius 143 Melting Point Electro-negativity 271 2.02	Atomic Mass Density 207.20 11.34 Atomic Radius 154 Melting Point Electro-negativity 327 1.87	Atomic Mass Density 204.38 11.85 Atomic Radius 156 Melting Point Electro-negativity 304 1.62
Atomic Mass Density 232.04 11.72 Atomic Radius 237 Melting Point Electro-negativity 1750 1.3	Atomic Mass Density 227 10.07 Atomic Radius 260 Melting Point Electro-negativity 1227 1.1	Atomic Mass Density 226 5.5 Atomic Radius 283 Melting Point Electro-negativity 700 0.9	Atomic Mass Density 223 unknown Atomic Radius 348 Melting Point Electro-negativity 30 0.79	Atomic Mass Density 222 0.01 Atomic Radius 120 Melting Point Electro-negativity -71 2.2

Print in landscape orientation and flip on short end to print double-sided cards correctly.

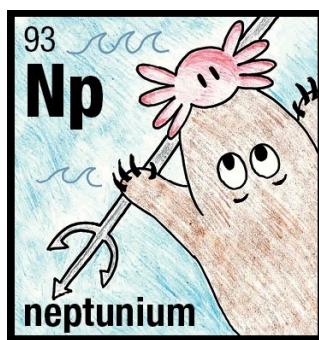
proactinium - uranium - neptunium - plutonium - americium - curium - berkelium - californium - einsteinium - fermium



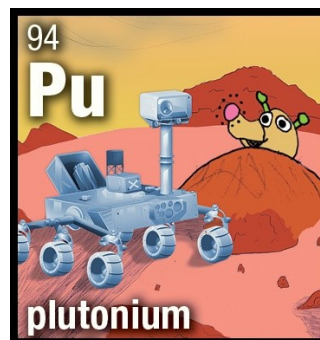
protactinio



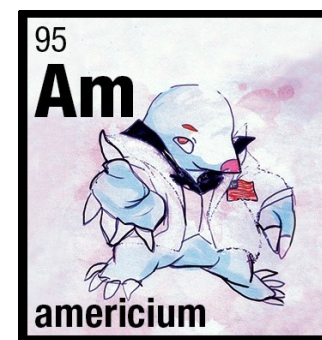
uranio



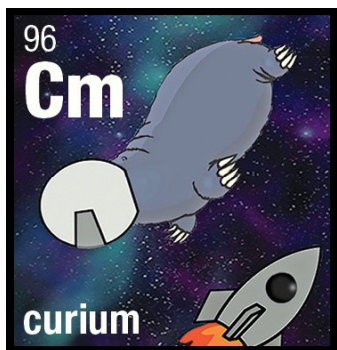
neptunio



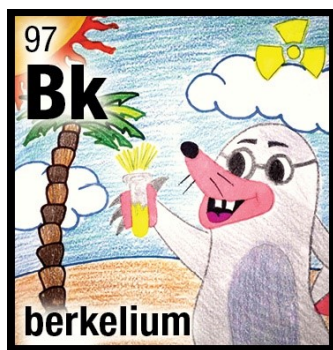
plutonio



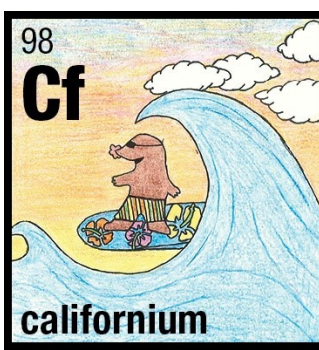
americio



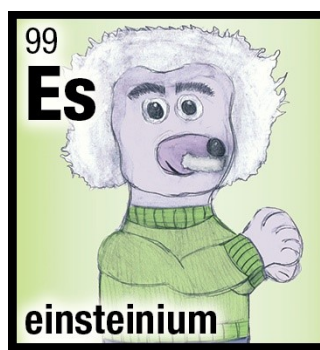
curio



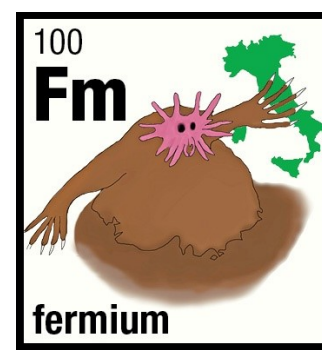
berkelio



californio



einstenio



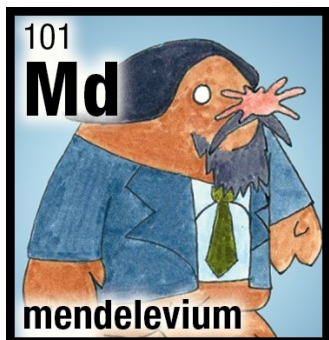
fermio

Print double-sided and cut along lines to make 10 cards with element names on one side and properties on the other.

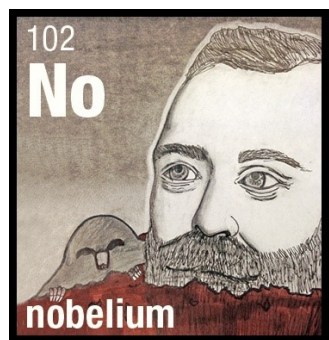
fermium - einsteinium - californium - berkelium - curium - americium - plutonium - neptunium - uranium - protactinium

Atomic Mass Density 243 12	Atomic Mass Density 244 19.82	Atomic Mass Density 237 20.45	Atomic Mass Density 239.03 19.05	Atomic Mass Density 231.04 15.37
Atomic Radius 244	Atomic Radius 243	Atomic Radius 221	Atomic Radius 240	Atomic Radius 243
Melting Point Electro-negativity 1176 1.13	Melting Point Electro-negativity 640 1.28	Melting Point Electro-negativity 644 1.36	Melting Point Electro-negativity 1133 1.38	Melting Point Electro-negativity 1568 1.5
Atomic Mass Density 257 unknown	Atomic Mass Density 252 unknown	Atomic Mass Density 251 15.1	Atomic Mass Density 247 14.78	Atomic Mass Density 247 13.51
Atomic Radius unknown	Atomic Radius 245	Atomic Radius 245	Atomic Radius 244	Atomic Radius 245
Melting Point Electro-negativity 1527 1.3	Melting Point Electro-negativity 860 1.3	Melting Point Electro-negativity 900 1.3	Melting Point Electro-negativity 986 1.3	Melting Point Electro-negativity 1340 1.28

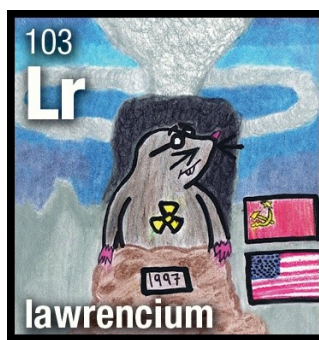
Print in landscape orientation and flip on short end to print double-sided cards correctly.



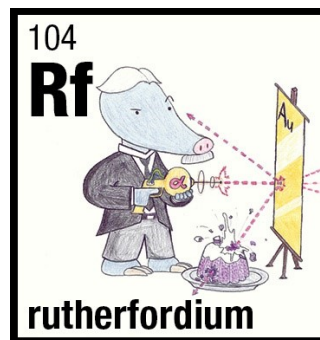
mendelevio



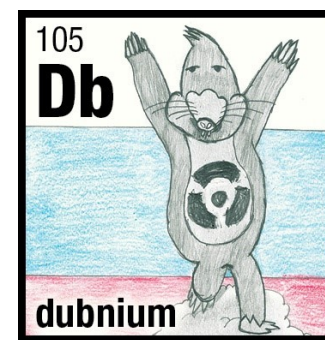
nobelio



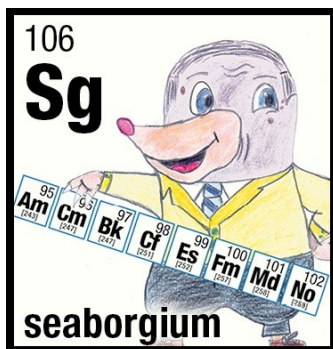
laurencio



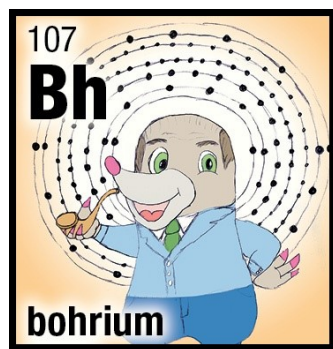
rutherfordio



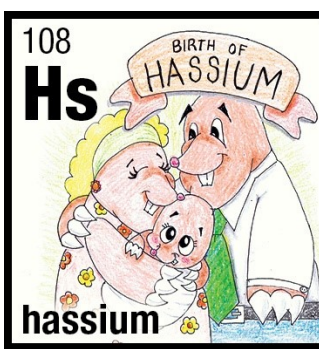
dubnio



seaborgio



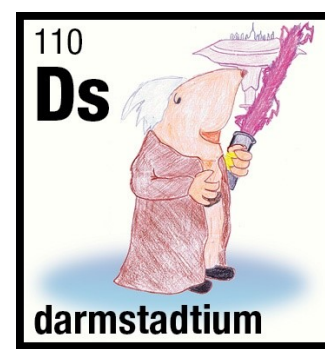
bohrio



hassio



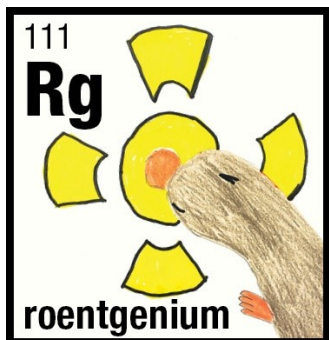
meitnerio



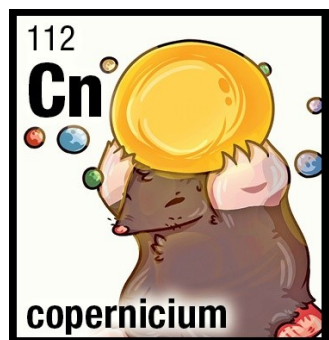
darmstadtio

darmstadtium - meitnerium - hassium - bohrium - seaborgium - dubnium - rutherfordium - lawrencium - nobelium - mendelevium

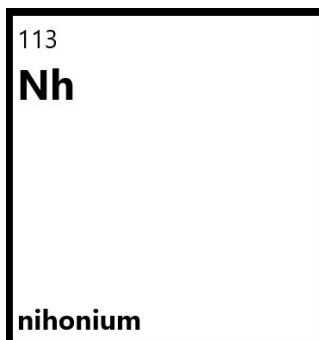
Atomic Mass Density 268 unknown Atomic Radius ≈139 Melting Point Electro-negativity unknown unknown	Atomic Mass Density 267 unknown Atomic Radius ≈150 Melting Point Electro-negativity ≈2100 unknown	Atomic Mass Density 262 unknown Atomic Radius unknown Melting Point Electro-negativity 1627 1.3	Atomic Mass Density 259 unknown Atomic Radius unknown Melting Point Electro-negativity 827 1.3	Atomic Mass Density 258 unknown Atomic Radius unknown Melting Point Electro-negativity 827 1.3
Atomic Mass Density 281 unknown Atomic Radius ≈132 Melting Point Electro-negativity unknown unknown	Atomic Mass Density 278 unknown Atomic Radius ≈128 Melting Point Electro-negativity unknown unknown	Atomic Mass Density 277 unknown Atomic Radius ≈126 Melting Point Electro-negativity unknown unknown	Atomic Mass Density 270 unknown Atomic Radius ≈128 Melting Point Electro-negativity unknown unknown	Atomic Mass Density 269 unknown Atomic Radius ≈132 Melting Point Electro-negativity unknown unknown



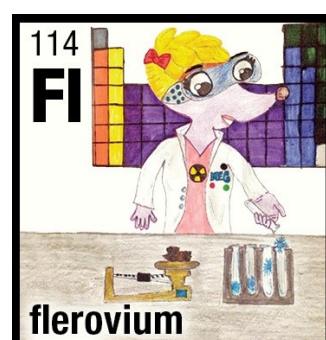
roentgenio



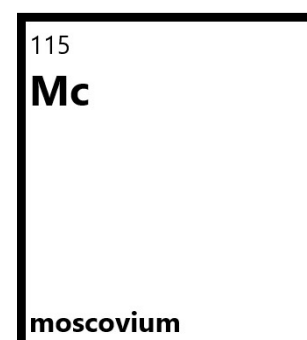
copernicio



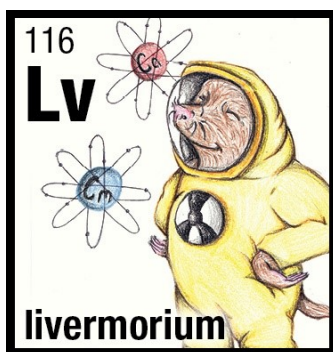
nihonio



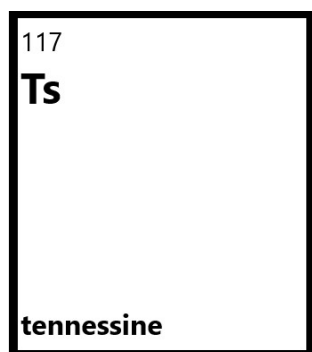
flerovio



moscovio



livermorio



teneso



oganesón

Data from:
periodic.lanl.gov and
periodictable.com

View the activity at
www.acs.org/iypt



oganesson - tennessine - livermorium - moscovium - flerovium - nihonium - copernicium - roentgenium

Atomic Mass Density 289 unknown Atomic Radius ≈187 Melting Point Electro-negativity 400 unknown	Atomic Mass Density 289 unknown Atomic Radius ≈180 Melting Point Electro-negativity unknown unknown	Atomic Mass Density 286 unknown Atomic Radius ≈170 Melting Point Electro-negativity 430 unknown	Atomic Mass Density 285 unknown Atomic Radius ≈147 Melting Point Electro-negativity unknown unknown	Atomic Mass Density 282 unknown Atomic Radius ≈138 Melting Point Electro-negativity unknown unknown
Atomic Mass Density u g/cm ³ Atomic Radius pm Melting Point Electro-negativity ° C kJ/mol	Masa Atomica Densidad u g/cm ³ Radio Atómico pm Punto de Fusión Electro-negatividad ° C kJ/mol	Atomic Mass Density 294 unknown Atomic Radius unknown Melting Point Electro-negativity unknown unknown	Atomic Mass Density 294 unknown Atomic Radius ≈138 Melting Point Electro-negativity 350–550 unknown	Atomic Mass Density 293 unknown Atomic Radius ≈183 Melting Point Electro-negativity 364–507 unknown

Print in landscape orientation and flip on short end to print double-sided cards correctly.