



# DIGITAL TEACHING

in natural scientific subjects



# Our Team



**Diana Necker 11ºD | Sciences**



**Mariana Faísca 11ºD | Sciences**



**Carolina Descultu 12ºD | Humanities**

# Portugal seen from Space



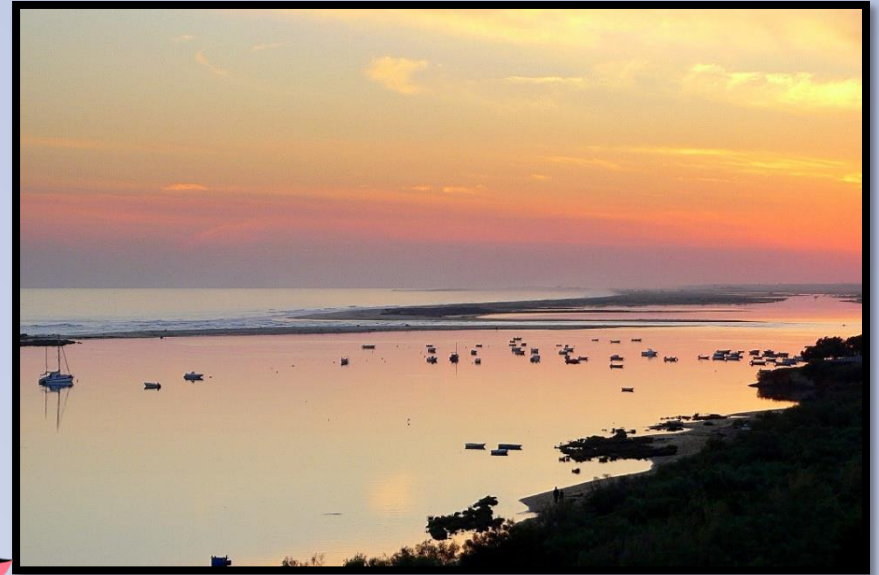




# Our Flag



# Algarve's Landscapes and Nature Overview





# Loule's Landscapes and Nature Overview



# Loule's Landscapes and Nature Overview



Quinta de Lago



Marina de Vilamoura





# Loule's Landscapes and Nature Overview





WOW

# Our School



# Our School





# Our food



# Our Food







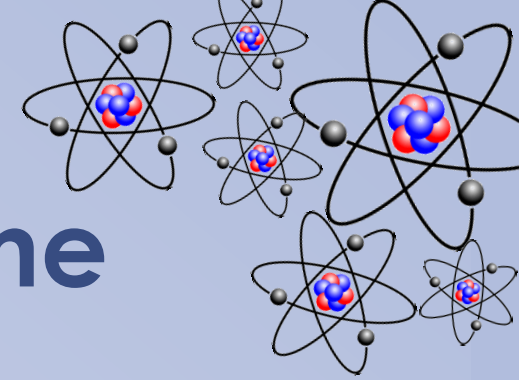
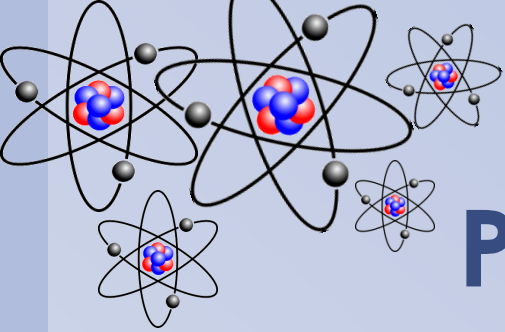
# Typical Things



Do you know any portuguese  
celebrity?







# Periodic Table of the Elements



Group	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Period 1	1 H																	2 He
Period 2	3 Li	4 Be											5 B	6 C	7 N	8 O	9 F	10 Ne
Period 3	11 Na	12 Mg											13 Al	14 Si	15 P	16 S	17 Cl	18 Ar
Period 4	19 K	20 Ca	21 Sc	22 Ti	23 V	24 Cr	25 Mn	26 Fe	27 Co	28 Ni	29 Cu	30 Zn	31 Ga	32 Ge	33 As	34 Se	35 Br	36 Kr
Period 5	37 Rb	38 Sr	39 Y	40 Zr	41 Nb	42 Mo	43 Tc	44 Ru	45 Rh	46 Pd	47 Ag	48 Cd	49 In	50 Sn	51 Sb	52 Te	53 I	54 Xe
Period 6	55 Cs	56 Ba	57 La	* 72 Hf	73 Ta	74 W	75 Re	76 Os	77 Ir	78 Pt	79 Au	80 Hg	81 Tl	82 Pb	83 Bi	84 Po	85 At	86 Rn
Period 7	87 Fr	88 Ra	89 Ac	* 104 Rf	105 Db	106 Sg	107 Bh	108 Hs	109 Mt	110 Ds	111 Rg	112 Cn	113 Nh	114 Fl	115 Mc	116 Lv	117 Ts	118 Og
				* 58 Ce	59 Pr	60 Nd	61 Pm	62 Sm	63 Eu	64 Gd	65 Tb	66 Dy	67 Ho	68 Er	69 Tm	70 Yb	71 Lu	
				* 90 Th	91 Pa	92 U	93 Np	94 Pu	95 Am	96 Cm	97 Bk	98 Cf	99 Es	100 Fm	101 Md	102 No	103 Lr	

# Elements

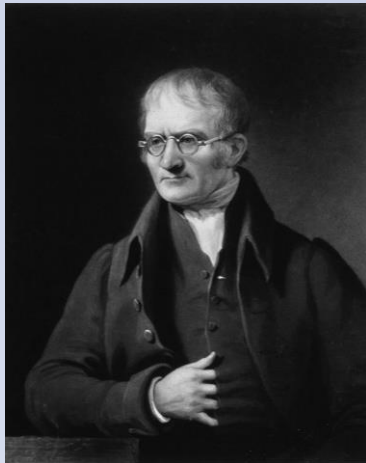
- Science has come a long way since Aristotle's theory of Air, Water, Fire, and Earth.
- Scientists have identified 90 naturally occurring elements, and created about 28 others.
- The elements, alone or in combinations, make up our bodies, our world, our sun, and in fact, the entire universe.



# History of the Periodic Table

1669

John Dalton



Physicist and English chemist who proposed the organization of the chemical elements in ascending order of atomic mass

1817

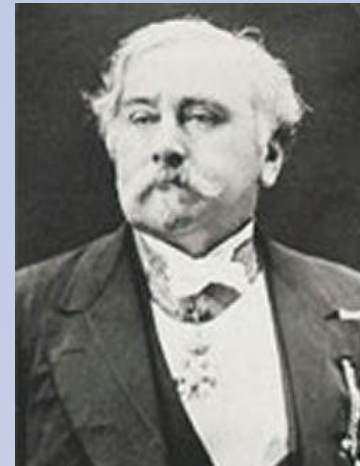
Johann Döbereiner



German chemist who organized the elements in triads, according to their properties

1862

Alexandre de Chancourtois



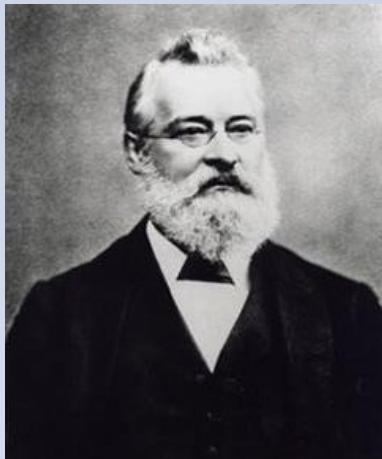
French geologist who organized the elements by increasing order of atomic mass



# History of the Periodic Table

1863

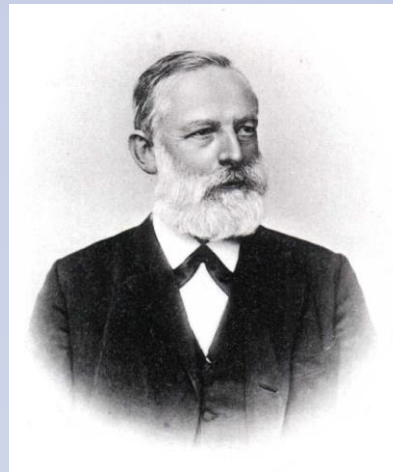
John Newlands



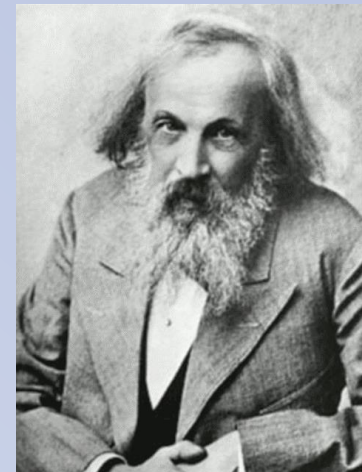
English chemist who proposed the organization of the elements according to the Law of Octaves

1869

Julius Meyer e Dimitri Mendeleev



German chemist who created one of the first versions of the Periodic Table

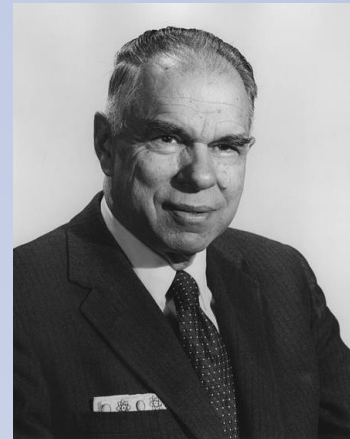


Russian chemist who created one of the first versions of the Periodic Table

# History of the Periodic Table



British physicist who ordered the chemical elements in ascending order of atomic number

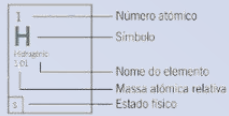


American chemist awarded with Nobel Prize Chemistry in 1951 for the discovery and study of various chemical elements

# Glenn Seaborg

1																	18																					
1	2											13	14	15	16	17	18																					
1	2											5	6	7	8	9	10																					
2	3	4											11	12	13	14	15	16	17	18																		
3	11	12											19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36								
4	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54		
5	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57-71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86		
6	55	56	57-71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89-103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118		
7	87	88	89-103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138

- Metals alcalinos
- Metals alcalino-terrosos
- Metals de transição
- Lantanídeos
- Actínídeos
- Metals representativos
- Semi metais
- Não metais
- Halogénios
- Gases nobres



- S Sólido
- L Líquido
- G Gasoso
- D Desconhecido

57	58	59	60	61	62	63	64	65	66	67	68	69	70	71
La	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu
Lantânio	Célio	Praseodímio	Néodímio	Promécio	Samaritânia	Europio	Gadolínio	Térbio	Díscio	Hólio	Erbólio	Timóteo	Ítrio	Lúteo
138,91	140,12	140,90	144,24	144,91	150,36	151,97	157,25	158,93	162,5	164,93	167,26	168,93	173,05	174,97
S	S	S	S	D	S	S	S	S	S	S	S	S	S	S
89	90	91	92	93	94	95	96	97	98	99	100	101	102	103
Ac	Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No	Lr
Actínio	Tório	Protactínio	Urânio	Neptúlio	Plutónio	Amérvico	Cúrio	Bérvico	Califórnia	Einsteinio	Fermio	Mendelevio	Nélio	Lorenzio
227	232,04	231,04	238,03	237	244	243	247	247	251	252	257	258	259	260
S	S	S	S	S	D	D	D	D	D	D	D	D	D	D

— Lanthanide's  
 — Actinide's



# What is the periodic table...

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18																		
1 <b>H</b> Hydrogen 1.00794	Atomic # Symbol Name Alkali Group 1																2 <b>He</b> Helium 4.002602																		
3 <b>Li</b> Lithium 6.941	4 <b>Be</b> Beryllium 9.012182	<b>C</b> Solid <b>Hg</b> Liquid <b>H</b> Gas <b>Rf</b> Unknown										<b>Metals</b> Alkali metals Alkaline earth metals Lanthanoids Actinoids Transition metals Poor metals <b>Nonmetals</b> Other nonmetals Noble gases					5 <b>B</b> Boron 10.811	6 <b>C</b> Carbon 12.011	7 <b>N</b> Nitrogen 14.00642	8 <b>O</b> Oxygen 15.9994	9 <b>F</b> Fluorine 18.9984032	10 <b>Ne</b> Neon 20.1797													
11 <b>Na</b> Sodium 22.98976928	12 <b>Mg</b> Magnesium 24.304	13 <b>Al</b> Aluminum 26.9815386	14 <b>Si</b> Silicon 28.0855	15 <b>P</b> Phosphorus 30.973762	16 <b>S</b> Sulfur 32.06	17 <b>Cl</b> Chlorine 35.45	18 <b>Ar</b> Argon 39.948	19 <b>K</b> Potassium 39.0983	20 <b>Ca</b> Calcium 40.078	21 <b>Sc</b> Scandium 44.955912	22 <b>Ti</b> Titanium 47.88	23 <b>V</b> Vanadium 50.9415	24 <b>Cr</b> Chromium 51.9961	25 <b>Mn</b> Manganese 54.938045	26 <b>Fe</b> Iron 55.845	27 <b>Co</b> Cobalt 58.933195	28 <b>Ni</b> Nickel 58.6934	29 <b>Cu</b> Copper 63.546	30 <b>Zn</b> Zinc 65.38	31 <b>Ga</b> Gallium 69.723	32 <b>Ge</b> Germanium 72.63	33 <b>As</b> Arsenic 74.9216	34 <b>Se</b> Selenium 78.96	35 <b>Br</b> Bromine 79.904	36 <b>Kr</b> Krypton 83.798										
37 <b>Rb</b> Rubidium 85.4678	38 <b>Sr</b> Strontium 87.62	39 <b>Y</b> Yttrium 88.90584	40 <b>Zr</b> Zirconium 91.224	41 <b>Nb</b> Niobium 92.90638	42 <b>Mo</b> Molybdenum 95.94	43 <b>Tc</b> Technetium (98.9062)	44 <b>Ru</b> Ruthenium 101.07	45 <b>Rh</b> Rhodium 102.9055	46 <b>Pd</b> Palladium 106.36	47 <b>Ag</b> Silver 107.8682	48 <b>Cd</b> Cadmium 112.411	49 <b>In</b> Indium 114.818	50 <b>Sn</b> Tin 118.710	51 <b>Sb</b> Antimony 121.757	52 <b>Te</b> Tellurium 127.60	53 <b>I</b> Iodine 126.90447	54 <b>Xe</b> Xenon 131.29	55 <b>Cs</b> Cesium 132.90545196	56 <b>Ba</b> Barium 137.327	57-71 Lanthanoids	72 <b>Hf</b> Hafnium 178.49	73 <b>Ta</b> Tantalum 180.94788	74 <b>W</b> Tungsten 183.84	75 <b>Re</b> Rhenium 186.207	76 <b>Os</b> Osmium 190.23	77 <b>Ir</b> Iridium 192.222	78 <b>Pt</b> Platinum 195.084	79 <b>Au</b> Gold 196.966569	80 <b>Hg</b> Mercury 200.59	81 <b>Tl</b> Thallium 204.3832	82 <b>Pb</b> Lead 207.2	83 <b>Bi</b> Bismuth 208.9804	84 <b>Po</b> Polonium (209)	85 <b>At</b> Astatine (209)	86 <b>Rn</b> Radon (222)
87 <b>Fr</b> Francium (223)	88 <b>Ra</b> Radium (226)	89-103 Actinoids	104 <b>Rf</b> Rutherfordium (261)	105 <b>Db</b> Dubnium (262)	106 <b>Sg</b> Seaborgium (263)	107 <b>Bh</b> Bohrium (264)	108 <b>Hs</b> Hassium (265)	109 <b>Mt</b> Meitnerium (266)	110 <b>Ds</b> Darmstadtium (271)	111 <b>Rg</b> Roentgenium (272)	112 <b>Cn</b> Copernicium (285)	113 <b>Uut</b> Ununtrium (284)	114 <b>Fl</b> Flerovium (289)	115 <b>Uup</b> Ununpentium (288)	116 <b>Lv</b> Livermorium (293)	117 <b>Uus</b> Ununseptium (294)	118 <b>Uuo</b> Ununoctium (294)																		

For elements with no stable isotopes, the mass number of the isotope with the longest half-life is in parentheses.

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57 <b>La</b> Lanthanum 138.90547	58 <b>Ce</b> Cerium 140.116	59 <b>Pr</b> Praseodymium 140.90766	60 <b>Nd</b> Neodymium 144.242	61 <b>Pm</b> Promethium (145)	62 <b>Sm</b> Samarium 150.36	63 <b>Eu</b> Europium 151.964	64 <b>Gd</b> Gadolinium 157.25	65 <b>Tb</b> Terbium 158.92535	66 <b>Dy</b> Dysprosium 162.500	67 <b>Ho</b> Holmium 164.93032	68 <b>Er</b> Erbium 167.259	69 <b>Tm</b> Thulium 168.93032	70 <b>Yb</b> Ytterbium 173.054	71 <b>Lu</b> Lutetium 174.967
89 <b>Ac</b> Actinium (227)	90 <b>Th</b> Thorium 232.0377	91 <b>Pa</b> Protactinium 231.03688	92 <b>U</b> Uranium 238.02891	93 <b>Np</b> Neptunium (237)	94 <b>Pu</b> Plutonium (244)	95 <b>Am</b> Americium (243)	96 <b>Cm</b> Curium (247)	97 <b>Bk</b> Berkelium (247)	98 <b>Cf</b> Californium (251)	99 <b>Es</b> Einsteinium (252)	100 <b>Fm</b> Fermium (257)	101 <b>Md</b> Mendelevium (258)	102 <b>No</b> Nobelium (259)	103 <b>Lr</b> Lawrencium (260)

Atomic number

45

Rh

Chemical symbol

Element name

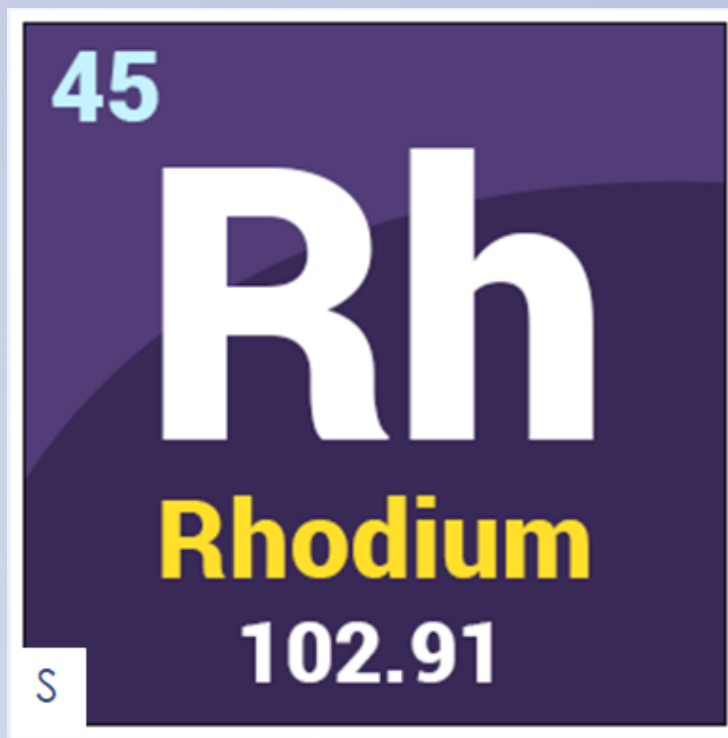
Rhodium

Relative atomic mass

102.91

S

Physical state at room temperature



# Periodic Table

Groups

Periods

		Groups																	
		1											17	18					
		1A											7A	8A					
Periods	1	<b>H</b> 1.00784, 1.00811 HYDROGEN											<b>He</b> 4.0026 HELIUM						
	2	<b>Li</b> 6.941 LITHIUM	<b>Be</b> 9.0122 BERYLLIUM											<b>B</b> 10.811 BORON	<b>C</b> 12.011 CARBON	<b>N</b> 14.007 NITROGEN	<b>O</b> 15.999 OXYGEN	<b>F</b> 18.998 FLUORINE	<b>Ne</b> 20.180 NEON
	3	<b>Na</b> 22.990 SODIUM	<b>Mg</b> 24.305 MAGNESIUM	3	4	5	6	7	8	9	10	11	12	<b>Al</b> 26.982 ALUMINUM	<b>Si</b> 28.086 SILICON	<b>P</b> 30.974 PHOSPHORUS	<b>S</b> 32.065 SULFUR	<b>Cl</b> 35.453 CHLORINE	<b>Ar</b> 39.948 ARGON
	4	<b>K</b> 39.098 POTASSIUM	<b>Ca</b> 40.078 CALCIUM	<b>Sc</b> 44.956 SCANDIUM	<b>Ti</b> 47.867 TITANIUM	<b>V</b> 50.942 VANADIUM	<b>Cr</b> 51.996 CHROMIUM	<b>Mn</b> 54.938 MANGANESE	<b>Fe</b> 55.845 IRON	<b>Co</b> 58.933 COBALT	<b>Ni</b> 58.693 NICKEL	<b>Cu</b> 63.546 COPPER	<b>Zn</b> 65.38 ZINC	<b>Ga</b> 69.723 GALLIUM	<b>Ge</b> 72.63 GERMANIUM	<b>As</b> 74.922 ARSENIC	<b>Se</b> 78.96 SELENIUM	<b>Br</b> 79.904 BROMINE	<b>Kr</b> 83.80 KRYPTON
	5	<b>Rb</b> 85.468 RUBIDIUM	<b>Sr</b> 87.62 STRONTIUM	<b>Y</b> 88.906 YTRIUM	<b>Zr</b> 91.224 ZIRCONIUM	<b>Nb</b> 92.906 NIOBIUM	<b>Mo</b> 95.94 MOLYBDENUM	<b>Tc</b> 97.907 TECHNETIUM	<b>Ru</b> 101.07 RUTHENIUM	<b>Rh</b> 102.906 RHODIUM	<b>Pd</b> 106.42 PALLADIUM	<b>Ag</b> 107.868 SILVER	<b>Cd</b> 112.411 CADMIUM	<b>In</b> 114.818 INDIUM	<b>Sn</b> 118.710 TIN	<b>Sb</b> 121.757 ANTIMONY	<b>Te</b> 127.603 TELLURIUM	<b>I</b> 126.905 IODINE	<b>Xe</b> 131.29 XENON
	6	<b>Cs</b> 132.905 CESIUM	<b>Ba</b> 137.327 BARIUM	<b>La-Lu</b> LANTHANIDES	<b>Hf</b> 178.49 HAFNIUM	<b>Ta</b> 180.95 TANTALUM	<b>W</b> 183.84 TUNGSTEN	<b>Re</b> 186.207 RHENIUM	<b>Os</b> 190.23 OSMIUM	<b>Ir</b> 192.222 IRIDIUM	<b>Pt</b> 195.084 PLATINUM	<b>Au</b> 196.967 GOLD	<b>Hg</b> 200.59 MERCURY	<b>Tl</b> 204.387 THALLIUM	<b>Pb</b> 207.2 LEAD	<b>Bi</b> 208.980 BISMUTH	<b>Po</b> 209 POLONIUM	<b>At</b> 210 ASTATINE	<b>Rn</b> 222 RADON
	7	<b>Fr</b> 223 FRANCIUM	<b>Ra</b> 226 RADIUM	<b>Ac-Lr</b> ACTINIDES	<b>Rf</b> 261 RUTHERFORDIUM	<b>Db</b> 262 DUBNIUM	<b>Sg</b> 266 SEABORGIUM	<b>Bh</b> 264 BOHRIUM	<b>Hs</b> 269 HASSIUM	<b>Mt</b> 268 MEITNERIUM	<b>Ds</b> 271 DARMSTADTIUM	<b>Rg</b> 272 ROSGENIUM	<b>Cn</b> 277 COPECNICIUM	<b>Uut</b> 284 UNUNTRIUM	<b>Uuq</b> 284 UNUNQUADIUM	<b>Uup</b> 288 UNUNPENTIUM	<b>Uuh</b> 292 UNUNHEXIUM	<b>Uus</b> 294 UNUNSEPTIUM	<b>Uuo</b> 294 UNUNOCTIUM
LANTHANIDES		<b>La</b> 138.905 LANTHANUM	<b>Ce</b> 140.12 CERIUM	<b>Pr</b> 140.908 PRASEODYMIUM	<b>Nd</b> 144.242 NEODYMIUM	<b>Pm</b> 144.913 PROMETHIUM	<b>Sm</b> 150.362 SAMARIUM	<b>Eu</b> 151.964 EUROPIUM	<b>Gd</b> 157.253 GADOLINIUM	<b>Tb</b> 158.925 TERBIUM	<b>Dy</b> 162.500 DYSPROSIUM	<b>Ho</b> 164.930 HOLMIUM	<b>Er</b> 167.259 ERBIUM	<b>Tm</b> 168.934 THULIUM	<b>Yb</b> 173.043 YTTERIUM	<b>Lu</b> 174.967 LUTETIUM			
ACTINIDES		<b>Ac</b> 227.027 ACTINIUM	<b>Th</b> 232.038 THORIUM	<b>Pa</b> 231.036 PROTACTINIUM	<b>U</b> 238.029 URANIUM	<b>Np</b> 237.048 NEPTUNIUM	<b>Pu</b> 244.064 PLUTONIUM	<b>Am</b> 243.061 AMERICIUM	<b>Cm</b> 247.070 CURIUM	<b>Bk</b> 247.070 BERKELIUM	<b>Cf</b> 251.080 CALIFORNIUM	<b>Es</b> 252.083 EINSTEINIUM	<b>Fm</b> 257.095 FERMIUM	<b>Md</b> 258.108 MENDELEVIUM	<b>No</b> 259.101 NOBELIUM	<b>Lr</b> 262.101 LAWRENCIUM			

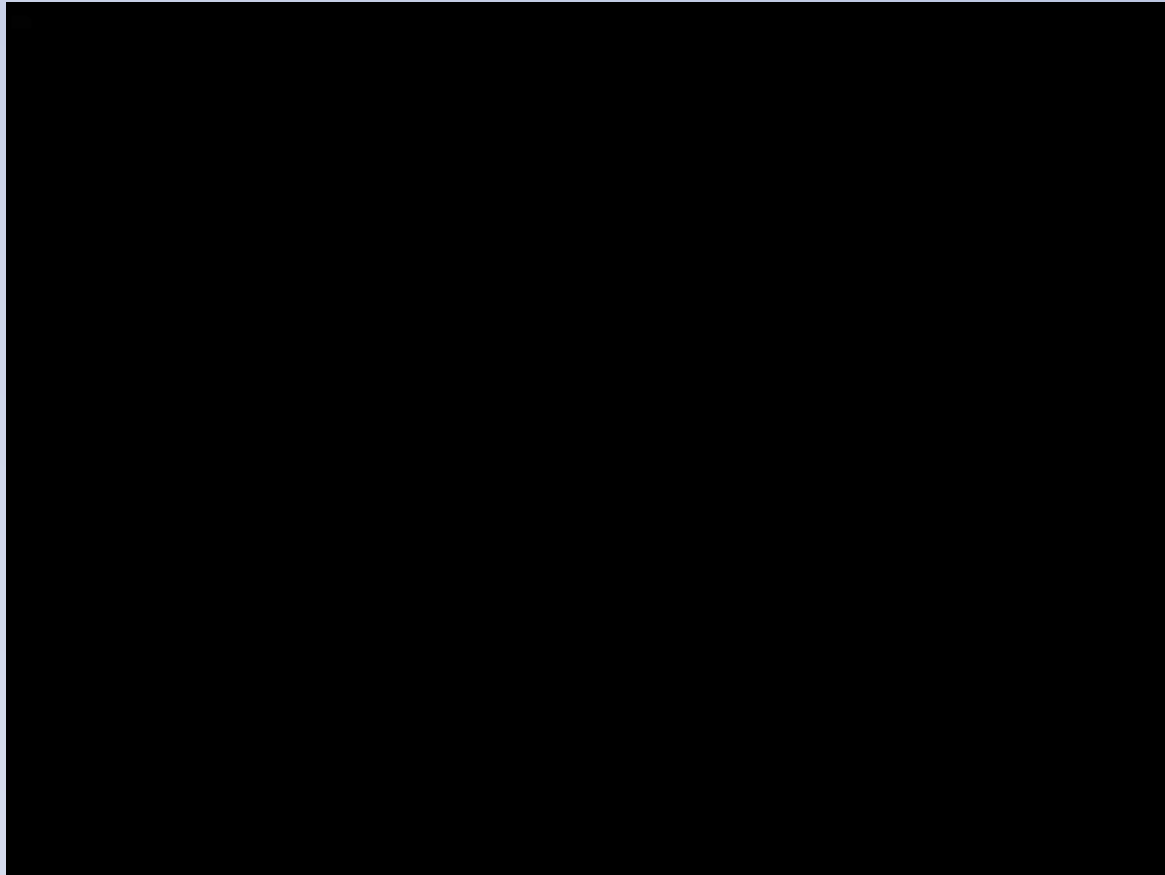
METALS

METALLOIDS

NONMETALS

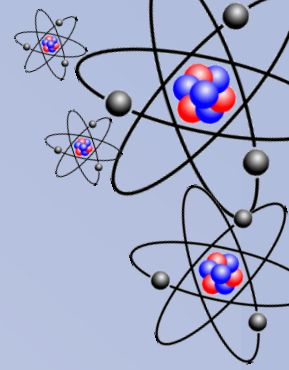
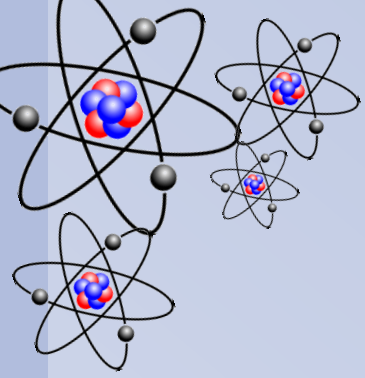


# Chemistry and Geography tight hands

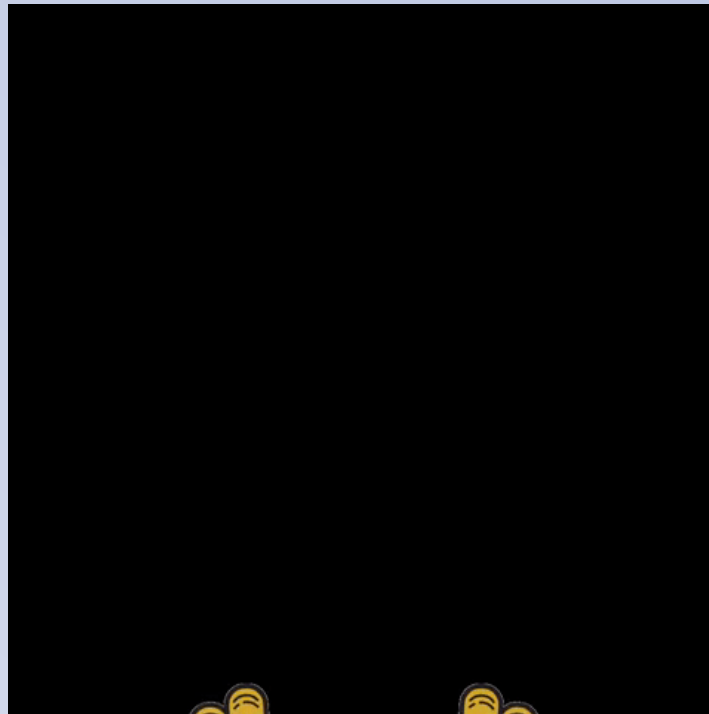


# Conclusion

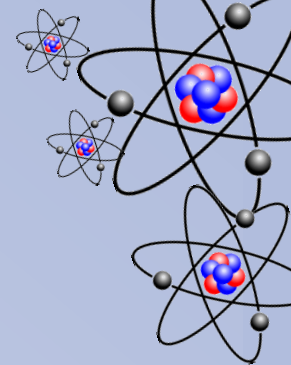
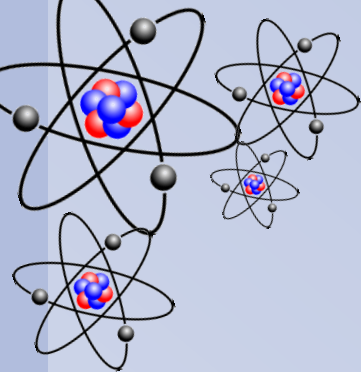
- The current Periodic Table gathers the 118 known chemical elements, ordered by ascending order of atomic number.
- Its structure resulted from the contribution of several scientists, who sought to organize the elements according to their properties.



# GAME Time





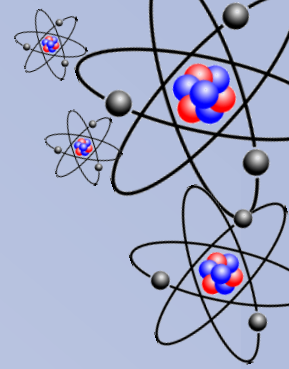
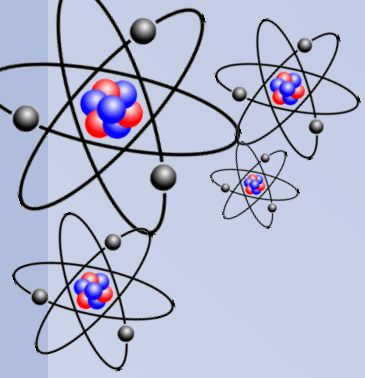


# GAME Time

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TABELA PERIODICA

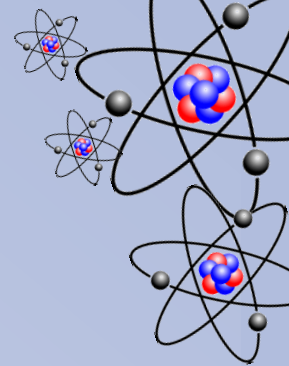
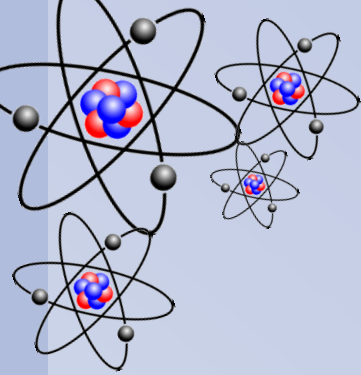




# GAME Time

<https://tinyurl.com/staremesto>





# GAME Time

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**PERIODIC TABLE QUIZ**

