LA TAVOLA DELLE STELLE

MADE BY S. CRISTALLO

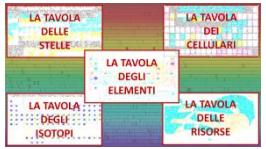
LA TAVOLA DEI CELLULARI

LA TAVOLA DEGLI ELEMENTI

LA TAVOLA DEGLI ISOTOPI

LA TAVOLA DELLE RISORSE

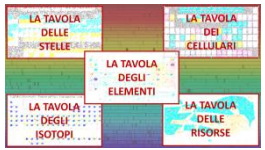
La Tavola Periodica degli Elementi a fumetti



IUPAC KCVS.ca

IUPAC Periodic Table of the Elements and Isotopes

hydrogen H 1 1.008 [1.007 84, 1.008 11]																	helium He 2 4.002 602(2)
lithium Li 3 6.94 [6.938, 6.997]	beryllium Be 4 9.012 1831(5)											boron B 5 10.81 [10.806, 10.821]	carbon C 6 12.011 [12.0096, 12.0116]	nitrogen N 7 14.007 [14.00643, 14.00728]	oxygen O 8 15.999 [15.99903, 15.99977]	fluorine F 9 18.998403163(6)	neon Ne 10 20.1797(6)
sodium Na 11 22.98976928(2)	magnesium Mg 12 24.305 [24.304, 24.307]											aluminium Al 13 26.981 5385(7)	silicon Si 14 28.085 [28.084, 28.086]	phosphorus P 15 30.973 761 998(5)	sulfur S 16 32.06 [32.059, 32.076]	chlorine Cl 17 35.45 [35.446, 35.457]	argon Ar 18 39.95 [39.792, 39.963]
potassium K 19 39.0983(1)	calcium Ca 20 40.078(4)	scandium Sc 21 44.955 908(5)	titanium Ti 22 47.867(1)	vanadium V 23 50.9415(1)	chromium Cr 24 51.9961(6)	manganese Mn 25 54.938 043(2)	iron Fe 26 55.845(2)	cobalt Co 27 58.933 194(4)	nickel Ni 28 58.6934(4)	copper Cu 29 63.546(3)	zinc Zn 30 65.38(2)	gallium Ga 31 69.723(1)	germanium Ge 32 72.630(8)	arsenic As 33 74.921 595(6)	selenium Se 34 78.971(8)	bromine Br 35 79.904 [79.901, 79.907]	krypton Kr 36 83.798(2)
rubidium Rb 37 85.4678(3)	strontium Sr 38 87.62(1)	yttrium Y 39 88.905 84(2)	zirconium Zr 40 91.224(2)	niobium Nb 41 92.906 37(2)	molybdenum Mo 42 95.95(1)	technetium Tc 43	ruthenium Ru 44 101.07(2)	rhodium Rh 45 102.905 49(2)	palladium Pd 46 106.42(1)	silver Ag 47 107.8682(2)	cadmium Cd 48 112.414(4)	indium In 49 114.818(1)	tin Sn 50 118.710(7)	antimony Sb 51 121.760(1)	tellurium Te 52 127.60(3)	iodine I 53 126.904 47(3)	xenon Xe 54 131.293(6)
caesium Cs 55 132.905 451 96(6)	barium Ba 56 137.327(7)		hafnium Hf 72 178.49(2)	tantalum Ta 73 180.947 88(2)	tungsten W 74 183.84(1)	rhenium Re 75 186.207(1)	osmium Os 76 190.23(3)	iridium Ir 77 192.217(2)	platinum Pt 78 195.084(9)	gold Au 79 196.966 570(4)	mercury Hg 80 200.592(3)	thallium Tl 81 [204.382, 204.385]	lead Pb 82 207.2(1)	bismuth Bi 83 208.980 40(1)	polonium Po 84	astatine At 85	radon Rn 86
francium Fr 87	radium Ra 88		rutherfordium Rf 104	dubnium Db 105	seaborgium Sg 106	bohrium Bh 107	hassium Hs 108	meitnerium Mt 109	darmstadtium Ds 110	roentgenium Rg 111	copernicium Cn 112	nihonium Nh 113	flerovium Fl 114	moscovium Mc 115	livermorium Lv 116	tennessine Ts 117	oganesson Og 118

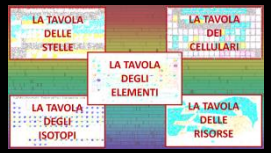


lanthanum La 57 138.905 47(7)	cerium Ce 58 140.116(1)	praseodymium Pr 59 140.907 66(1)	neodymium Nd 60 144.242(3)	promethium Pm 61	samarium Sm 62 150.36(2)	europium Eu 63 151.964(1)	gadolinium Gd 64 157.25(3)	terbium Tb 65 158.925 354(8)	dysprosium Dy 66 162.500(1)	holmium Ho 67 164.930 328(7)	erbium Er 68 167.259(3)	thulium Tm 69 168.934 218(6)	ytterbium Yb 70 173.045(10)	lutetium Lu 71 174.9668(1)
actinium Ac 89	thorium Th 90 232.0377(4)	protactinium Pa 91 231.035 88(1)	uranium U 92 238.028 91(3)	neptunium Np 93	plutonium Pu 94	americium Am 95	curium Cm 96	berkelium Bk 97	californium Cf 98	einsteinium Es 99	fermium Fm 100	mendelevium Md 101	nobelium No 102	lawrencium Lr 103

Standard atomic weights are the best estimates by IUPAC of atomic weights that are found in normal materials, which are terrestrial materials that are reasonably possible sources for elements and their compounds in commerce, industry, or science. They are determined using all stable isotopes and selected radioactive isotopes (having relatively long half-lives and characteristic terrestrial isotopic compositions). Isotopes are considered stable (non-radioactive) if evidence for radioactive decay has not been detected experimentally.

The Origin of the Solar System Elements

1 H		big bang fusion 					cosmic ray fission 										2 He
3 Li	4 Be	merging neutron stars? 					exploding massive stars 					5 B	6 C	7 N	8 O	9 F	10 Ne
11 Na	12 Mg	dying low mass stars 					exploding white dwarfs 					13 Al	14 Si	15 P	16 S	17 Cl	18 Ar
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
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
55 Cs	56 Ba		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
87 Fr	88 Ra																



57 La	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
89 Ac	90 Th	91 Pa	92 U	93 Np	94 Pu	Very radioactive isotopes; nothing left from stars								

Graphic created by Jennifer Johnson
http://www.astronomy.ohio-state.edu/~jaj/nucleo/

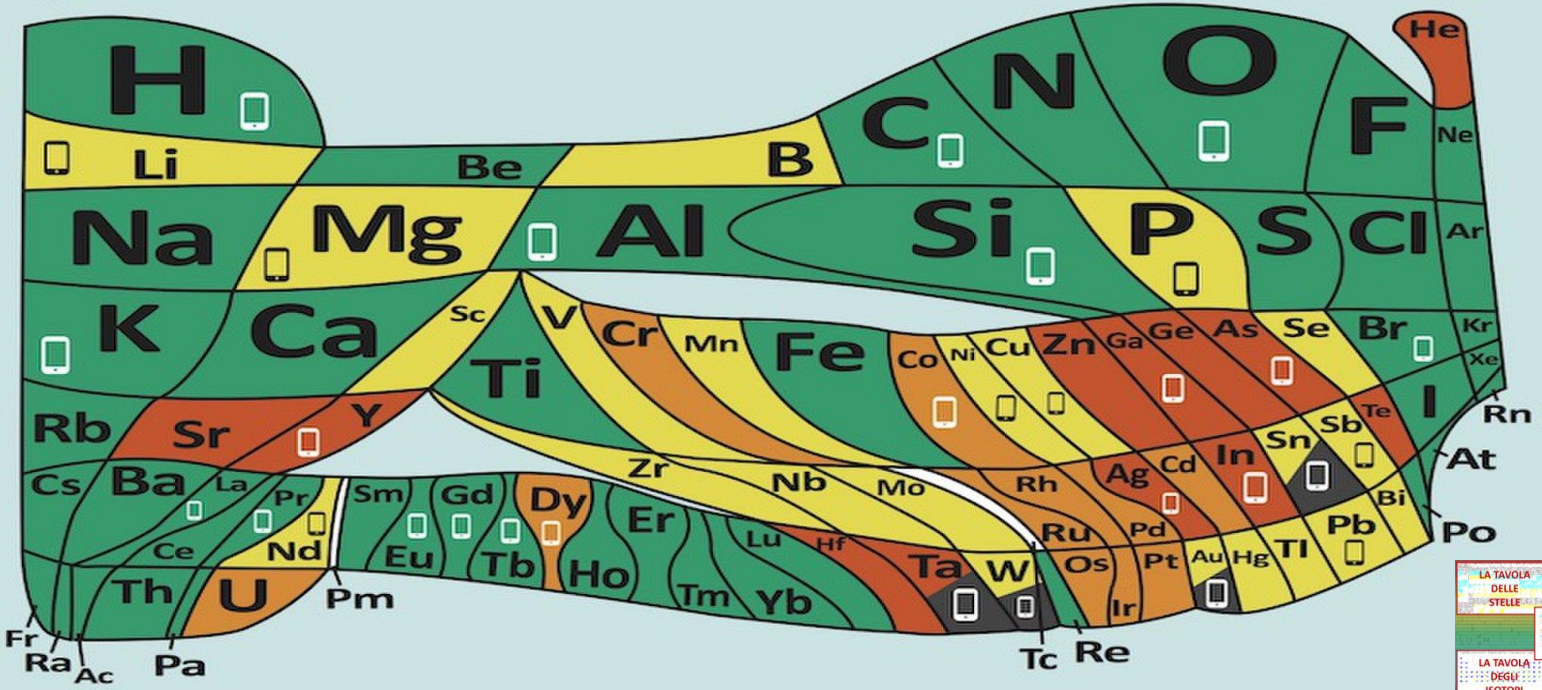
Astronomical Image Credits:
ESA/NASA/AASNova

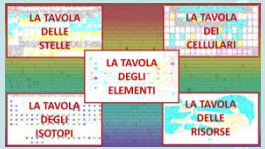
United Nations Educational, Scientific and Cultural Organization

2019 IYPT International Year of the Periodic Table of Chemical Elements

The 90 natural elements that make up everything

How much is there? Is that enough?





Serious threat in the next 100 years

Rising threat from increased use

Limited availability, future risk to supply

Plentiful Supply

Synthetic

From conflict minerals

Elements used in a smart phone

Read more and play the video game **http://bit.ly/euchems-pt**

EuChemS European Chemical Society

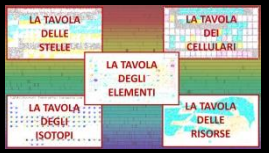
Inspired by 'A Periodic Table with Emphasis' published in Chemistry, 1976, 49, 17-18

Un telefono cellulare nella Tavola Periodica

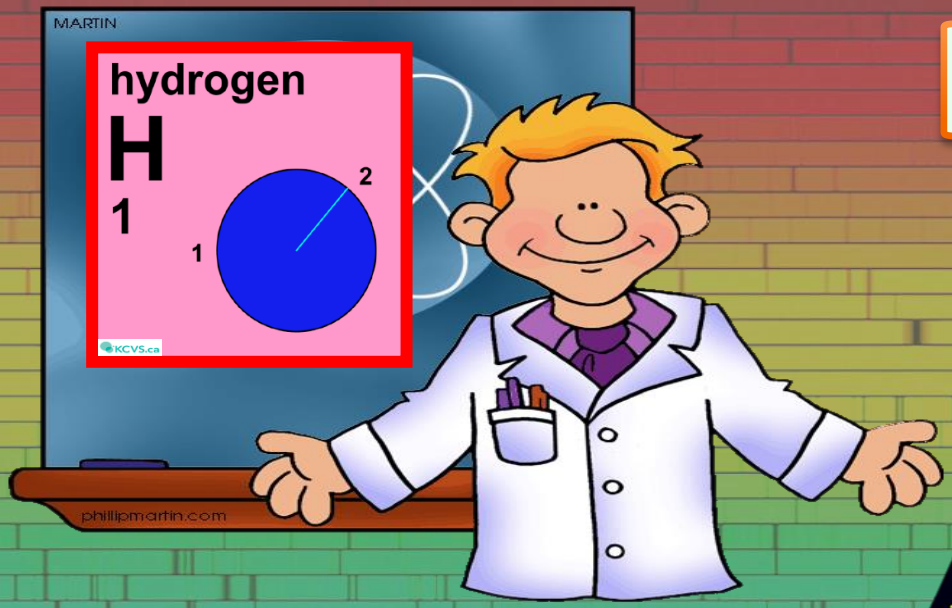
H																	He
Li	Be											B	C	N	O	F	Ne
Na	Mg											Al	Si	P	S	Cl	Ar
K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr
Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe
Cs	Ba	La-Lu	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn
		La	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	

Vetro touchscreen | Involucro | Microprocessore & chips | Unità vibrazione | Batteria

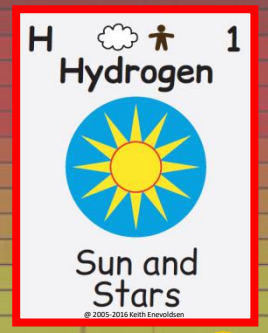
Scheda elettronica | Connettori & cavi | Altoparlanti & microfono | Colori del display



Per costruire un singolo cellulare ci vogliono ben 54 diversi elementi chimici!!!



Idrogeno

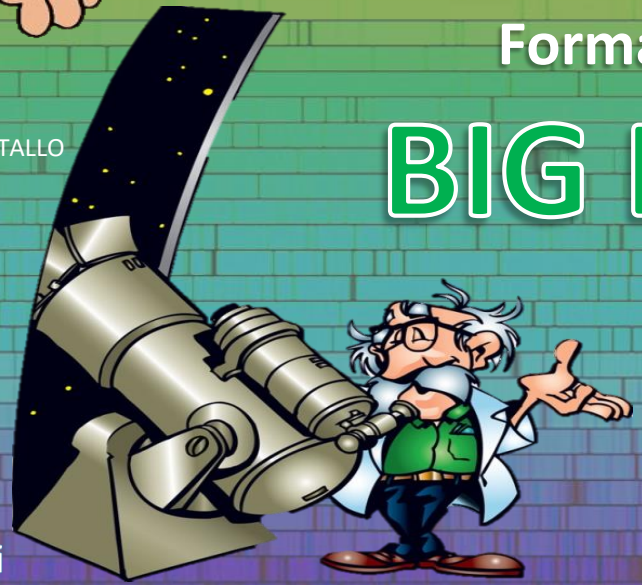


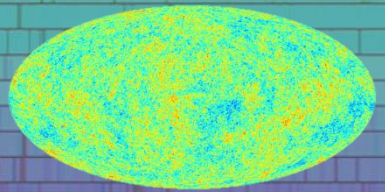
ISOLATO nel 1766 da Henry Cavendish

MADE BY S. CRISTALLO

Formatosi nel

BIG BANG





Si utilizza in...

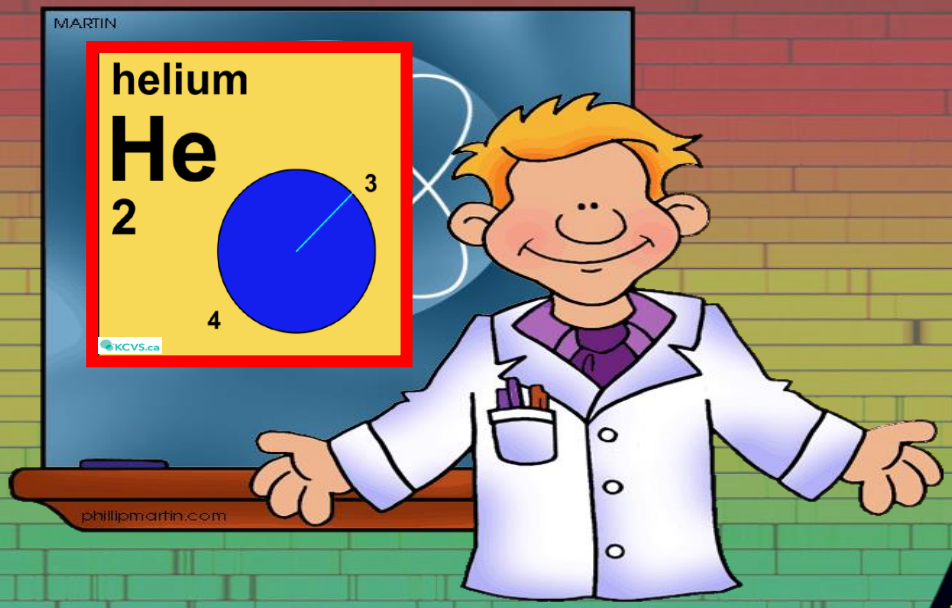
INDUSTRIA:

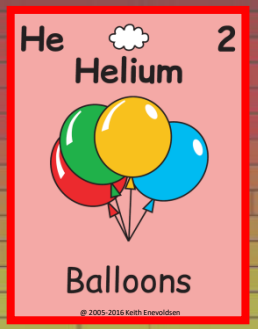
Insegne luminose; reattori nucleari

MEDICINA:

Studi sul metabolismo; hydreliox per immersioni

Elio



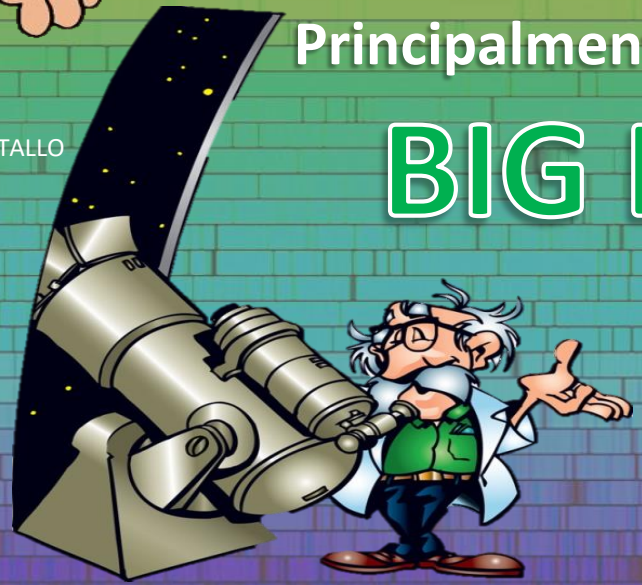


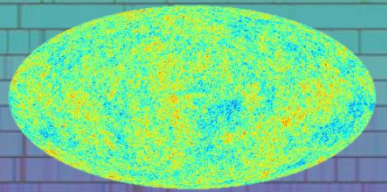
ISOLATO nel 1868 da
P. Janssen e N. Lockyer

MADE BY S. CRISTALLO

Principalmente formatosi nel

BIG BANG





Si utilizza in...

INDUSTRIA:

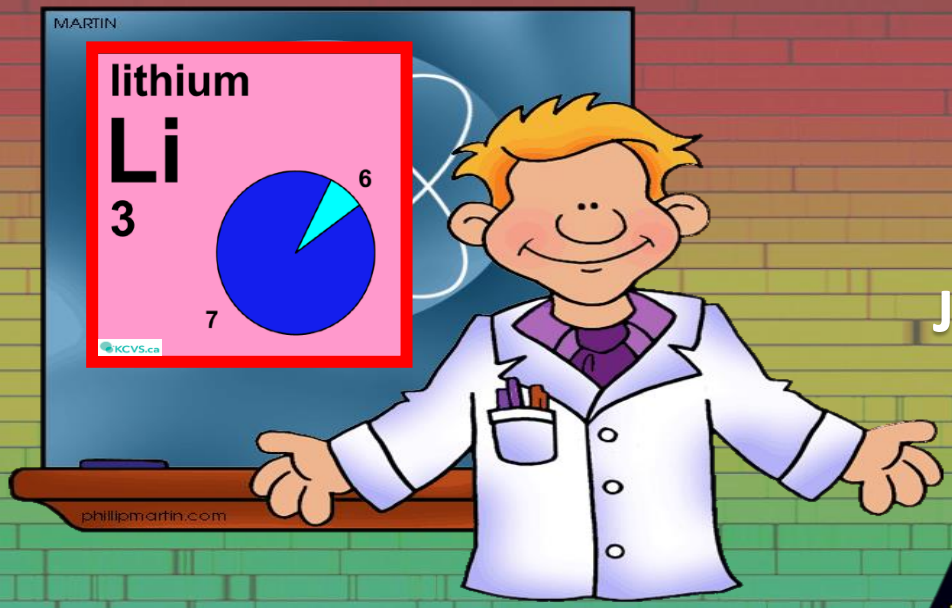
Dirigibili e palloni scientifici; saldature ad arco

MEDICINA:

Raffreddamento magneti per risonanze

INAF - Osservatorio Astronomico d'Abruzzo

Litio



ISOLATO nel 1817 da Johan August Arfwedson

MADE BY S. CRISTALLO

Principalmente formatosi in STELLE DI PICCOLA MASSA ($M<10\ M_{SOLE}$)

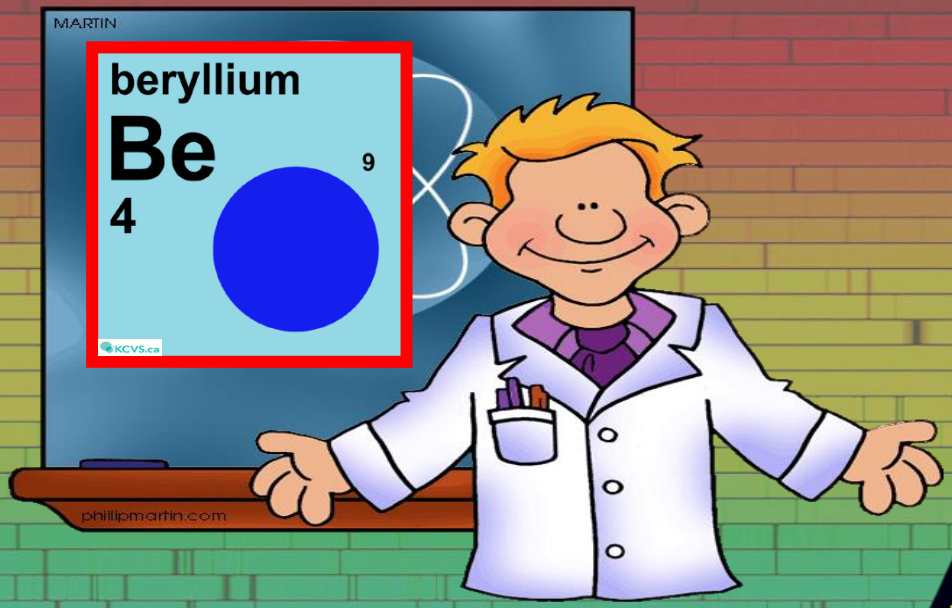
Si utilizza in…

INDUSTRIA:

Lubrificanti alta T; assorbitore CO_2

MEDICINA:

Radioterapia; cure antidepressive



Berillio

ISOLATO nel 1798 da
Louis Nicolas Vauquelin

MADE BY S. CRISTALLO

Principalmente creato da

RAGGI COSMICI

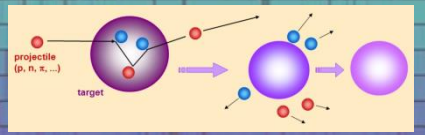
Si utilizza in...

INDUSTRIA:

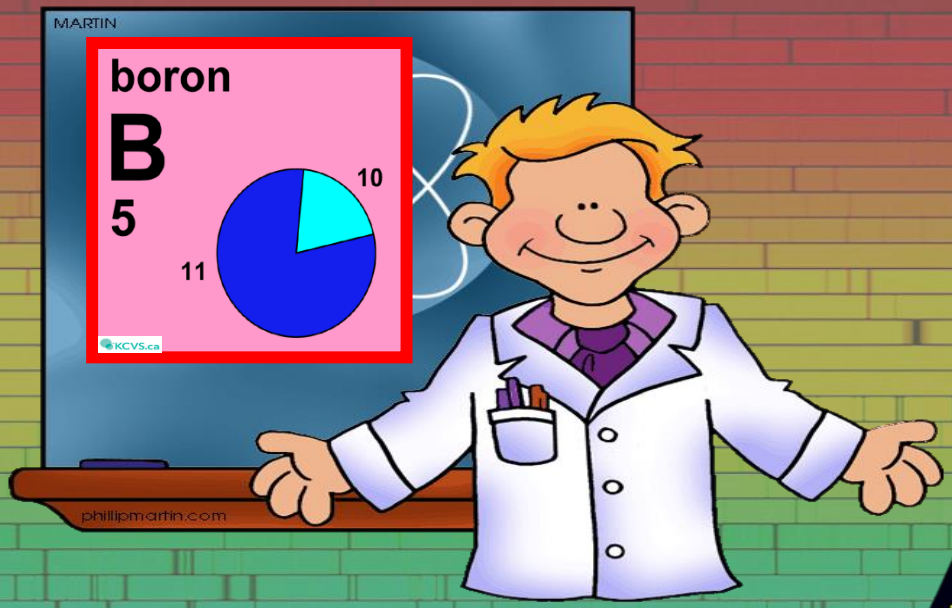
Ingranaggi ed attrezzi per aerei

MEDICINA:

Connettori per strumenti chirurgici



INAF - Osservatorio Astronomico d'Abruzzo



Boro

ISOLATO nel 1807 da Humphry Davy

MADE BY S. CRISTALLO

Principalmente creato da

RAGGI COSMICI

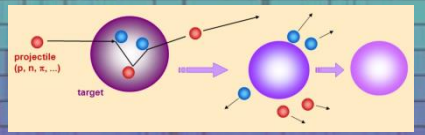
Si utilizza in…

INDUSTRIA:

Combustibile per razzi; detersivi

MEDICINA:

BNCT; gocce per gli occhi



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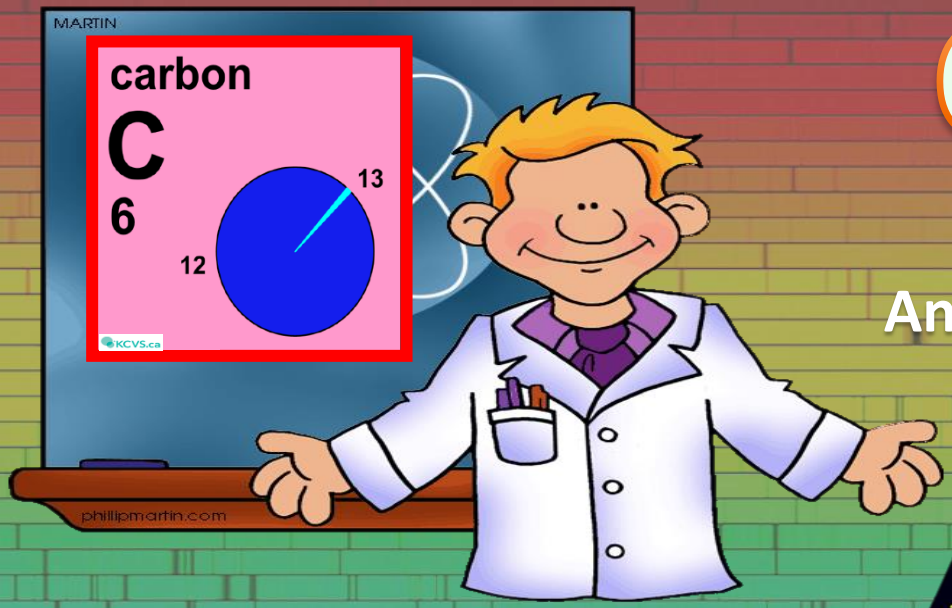
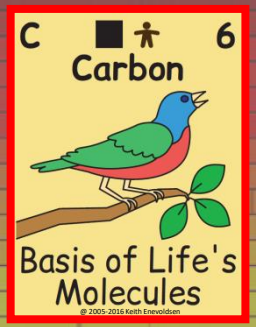
Carbonio





ISOLATO nel 1789 da Antoine-Laurent de Lavoisier

MADE BY S. CRISTALLO

Principalmente formatosi in STELLE DI PICCOLA MASSA ($M<10\ M_{SOLE}$)

Si utilizza in...

INDUSTRIA:

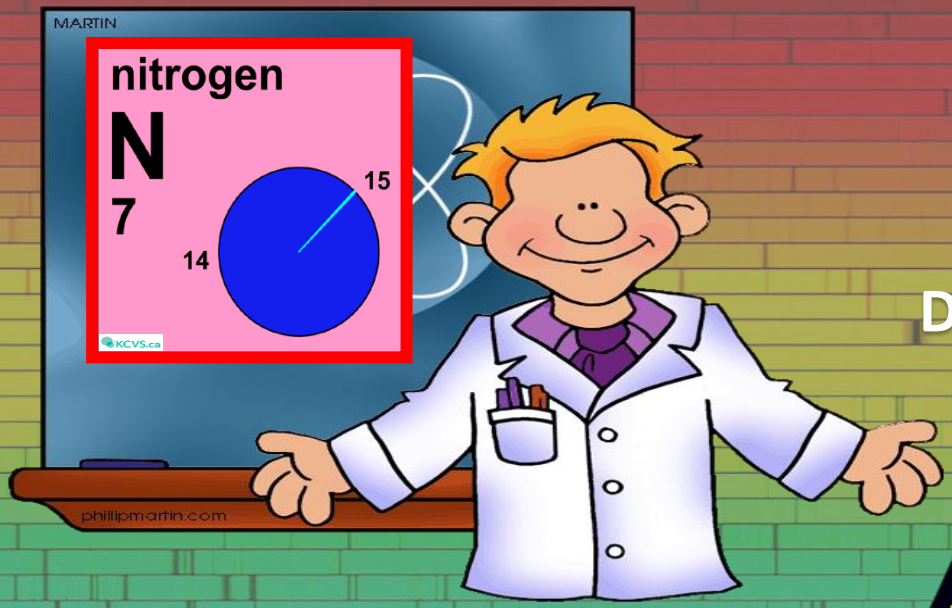
Combustibili; lubrificanti; acciaio

MEDICINA:

Operazioni chirurgiche; crioterapia

INAF - Osservatorio Astronomico d'Abruzzo

Azoto



ISOLATO nel 1772 da
D. Rutherford e C. Scheele

MADE BY S. CRISTALLO

Principalmente formatosi in
STELLE DI PICCOLA MASSA ($M<10\ M_{SOLE}$)

Si utilizza in...

INDUSTRIA:

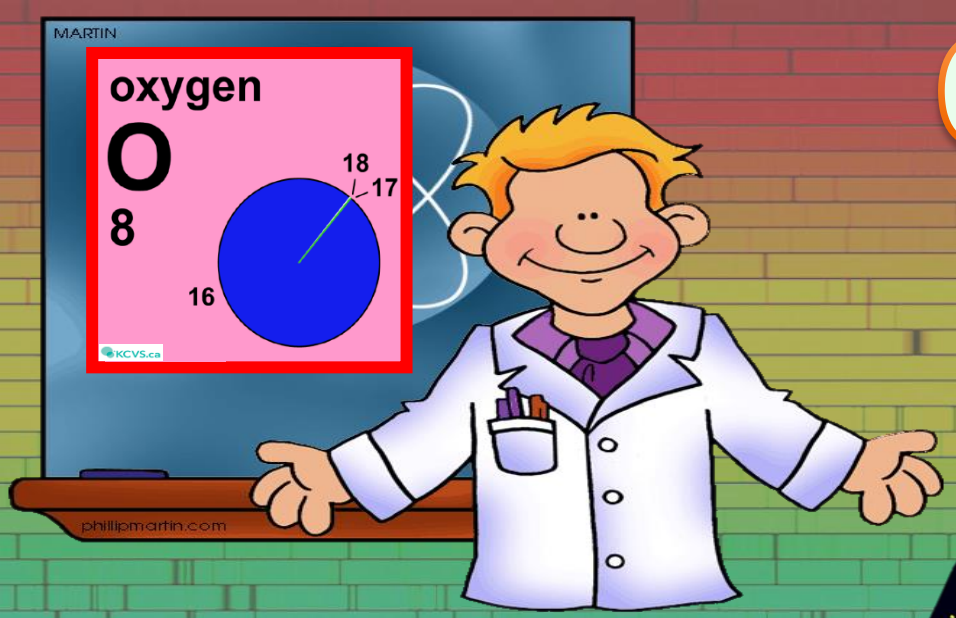
Fertilizzanti; coloranti; nylon; esplosivi

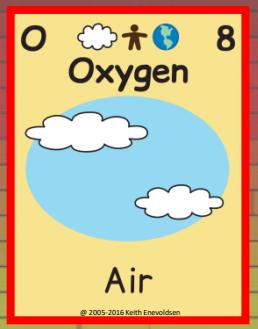
MEDICINA:

Chirurgia criogenica; crioterapia

INAF - Osservatorio Astronomico d'Abruzzo

Ossigeno

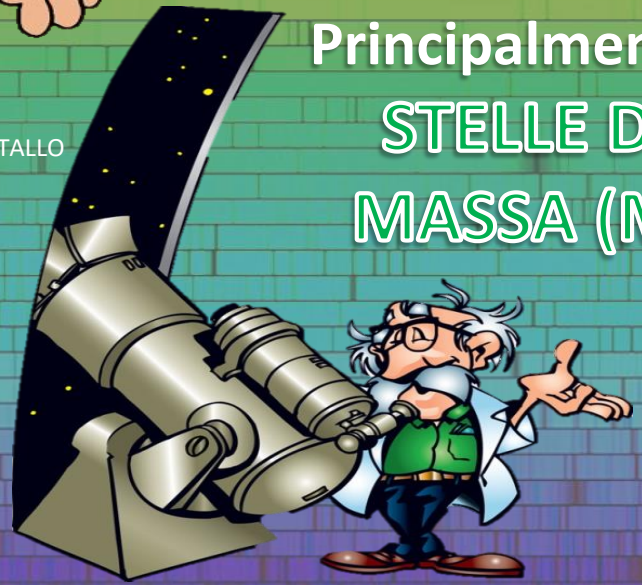




ISOLATO nel 1774 da Joseph Priestley

MADE BY S. CRISTALLO

Principalmente formatosi in STELLE DI GRANDE MASSA ($M>10\ M_{SOLE}$)



Si utilizza in...

INDUSTRIA:

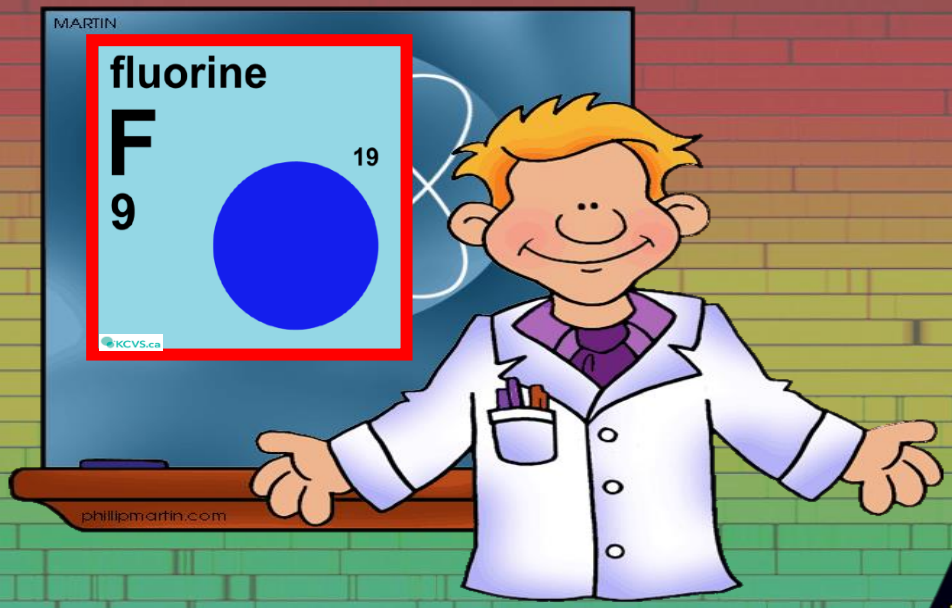
Siderurgia; combustibili; ceramiche; vetro

MEDICINA:

PET; risanamento tessuti; respirazione assistita

INAF - Osservatorio Astronomico d'Abruzzo

Fluoro



MADE BY S. CRISTALLO

ISOLATO nel 1886 da Henri Moissan

Principalmente formatosi in STELLE DI PICCOLA MASSA ($M<10\ M_{SOLE}$)

Si utilizza in...

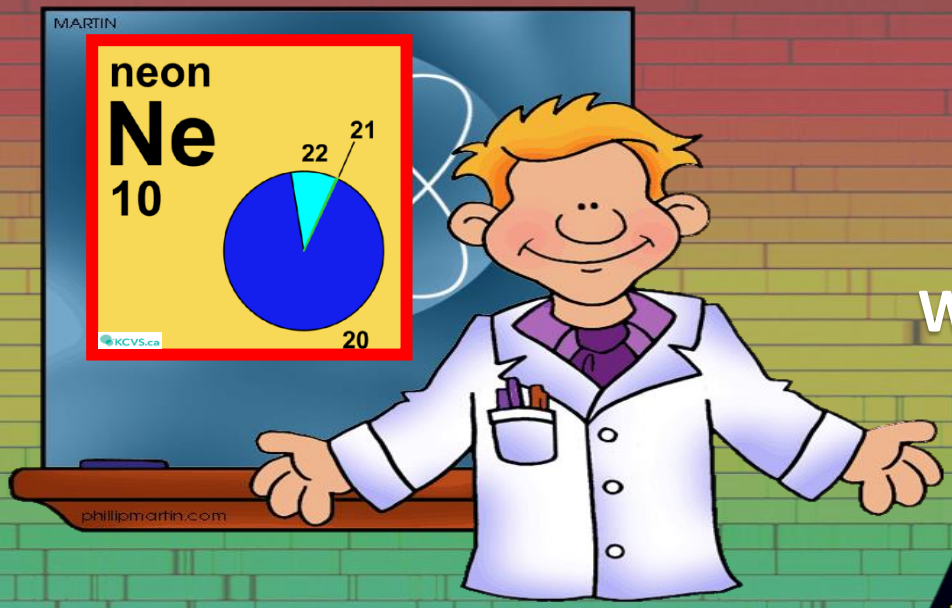
INDUSTRIA:

Fluorescenza; TEFLON; reattori nucleari

MEDICINA:

PET; dentifrici

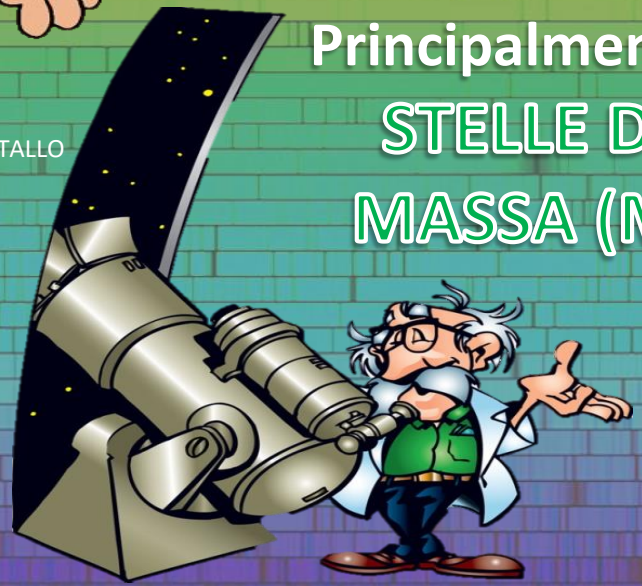
Neon



ISOLATO nel 1898 da
W. Ramsay e M.W. Travers

MADE BY S. CRISTALLO

Principalmente formatosi in
STELLE DI GRANDE MASSA ($M>10\ M_{SOLE}$)



Si utilizza in…

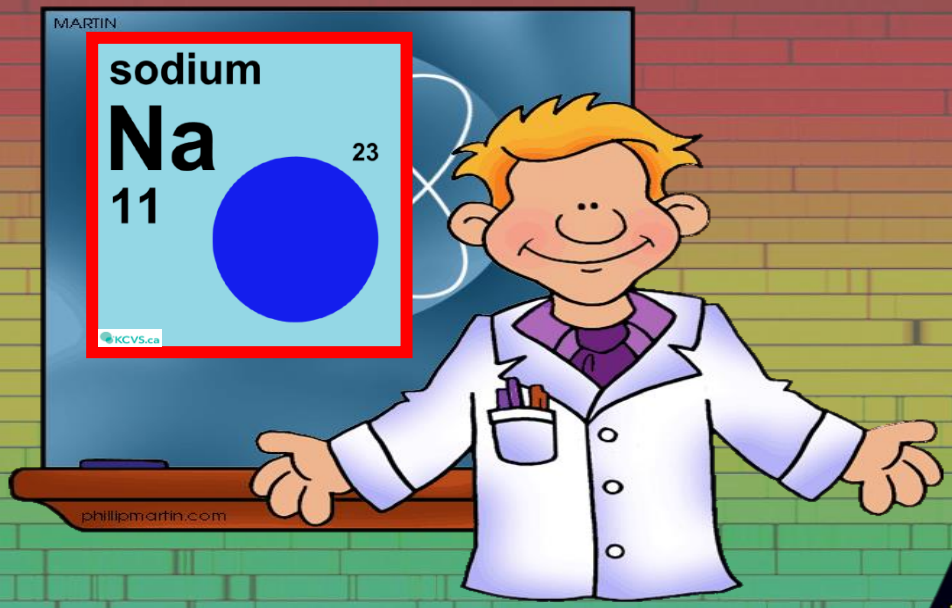
INDUSTRIA:

Insegne luminose; refrigeranti criogenici; laser

MEDICINA:

Laser

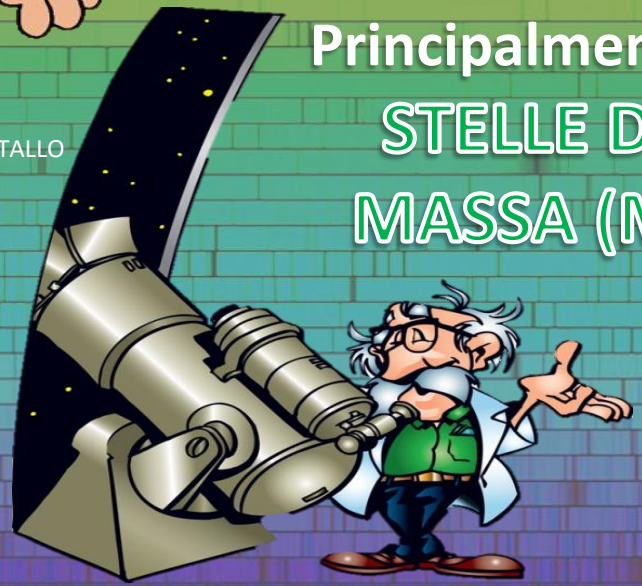
Sodio



MADE BY S. CRISTALLO

ISOLATO nel 1807 da Humphry Davy

Principalmente formatosi in STELLE DI GRANDE MASSA ($M>10\ M_{SOLE}$)



Si utilizza in…

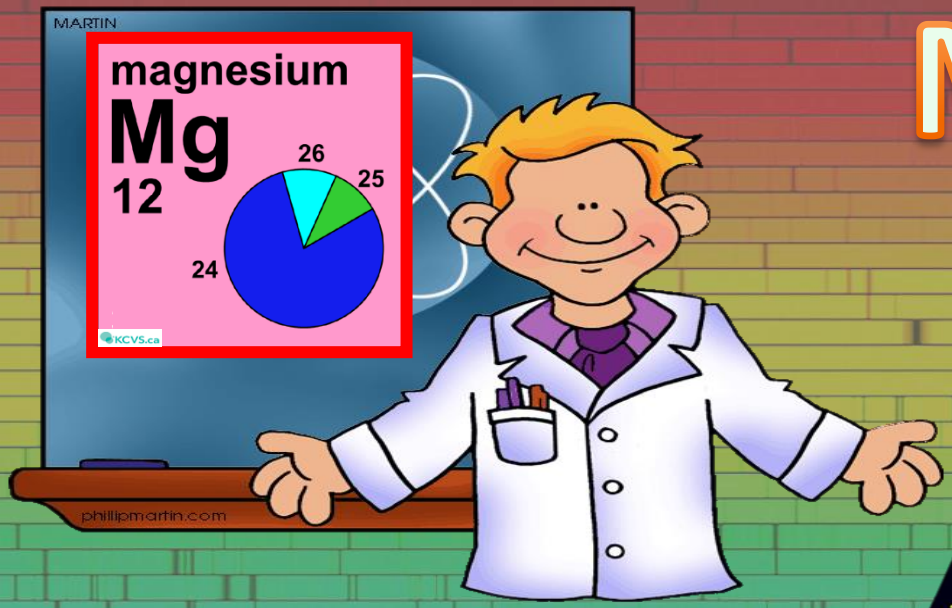
INDUSTRIA:

Reattori nucleari; lampioni; reagente chimico

MEDICINA:

Soluzioni saline; calibrazione PET

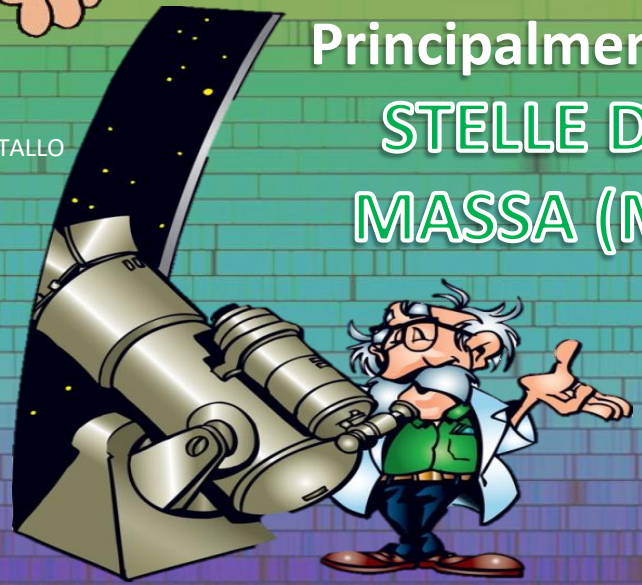
Magnesio



ISOLATO nel 1755 da Joseph Black

MADE BY S. CRISTALLO

Principalmente formatosi in STELLE DI GRANDE MASSA ($M>10\ M_{SOLE}$)



Si utilizza in...

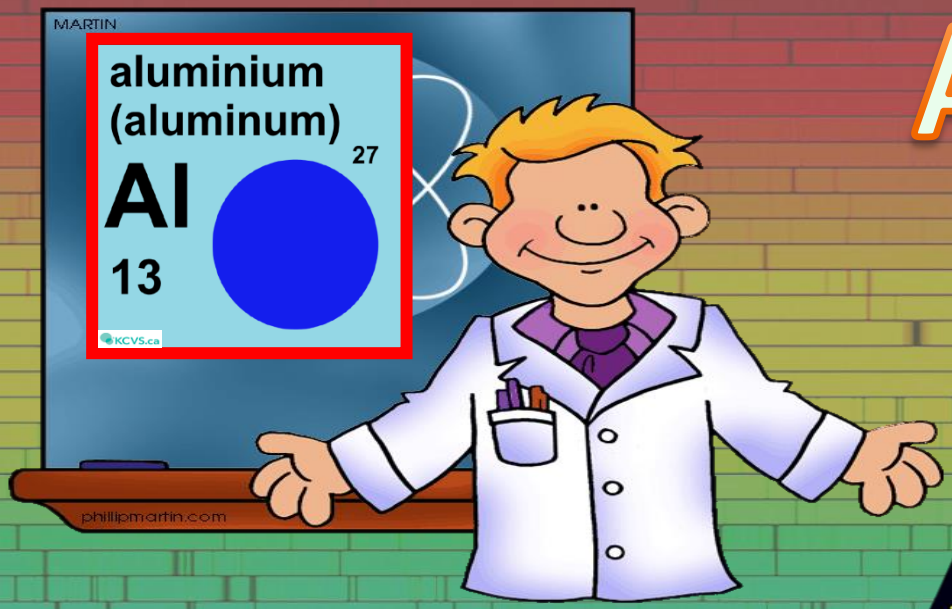
INDUSTRIA:

Lattine e contenitori; leghe per auto; isolanti

MEDICINA:

Trattamento gestosi, convulsioni e nefrosi

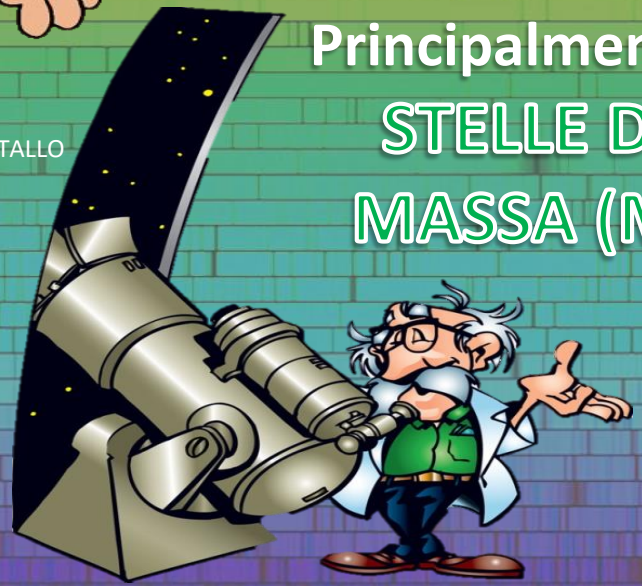
Alluminio



ISOLATO nel 1812 da Humphry Davy

MADE BY S. CRISTALLO

Principalmente formatosi in STELLE DI GRANDE MASSA ($M>10\ M_{SOLE}$)



Si utilizza in…

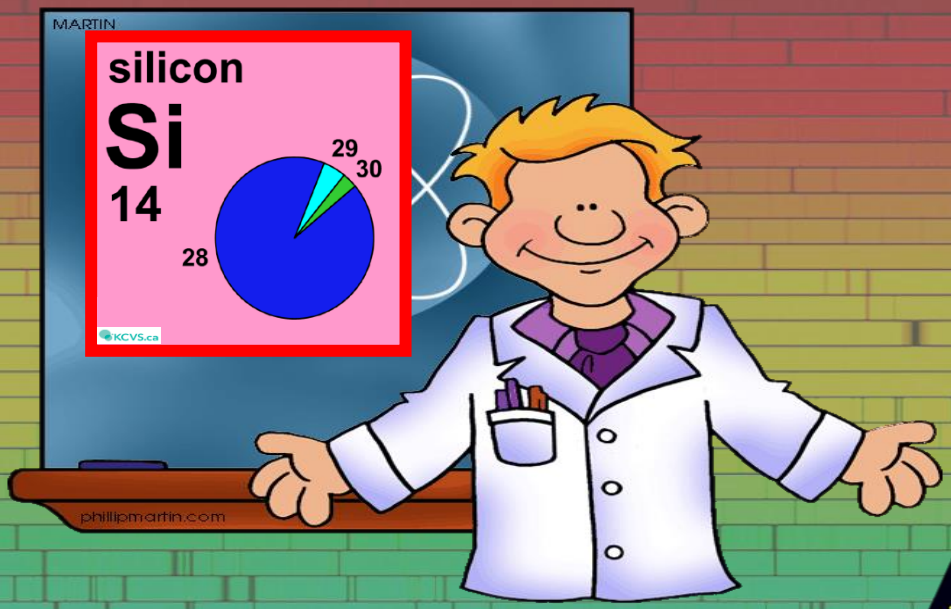
INDUSTRIA:

Macchine; treni; aerei; infissi

MEDICINA:

Antiacido; purificazione acqua

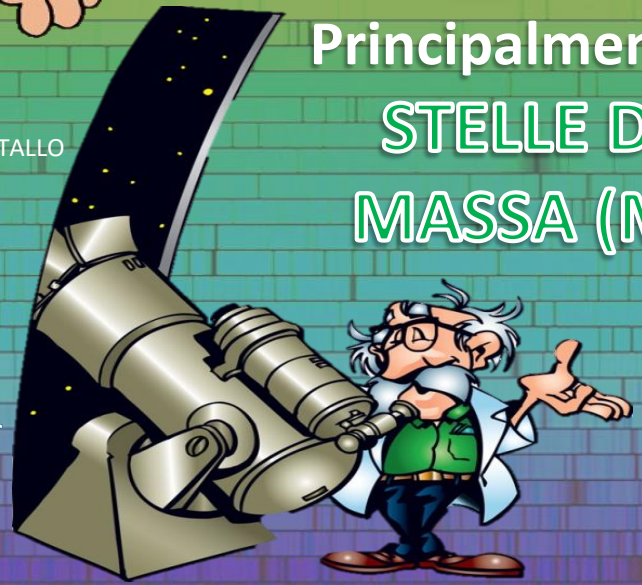
Silicio



ISOLATO nel 1810 da Jons Jacob Berzelius

MADE BY S. CRISTALLO

Principalmente formatosi in STELLE DI GRANDE MASSA ($M>10\ M_{SOLE}$)



Si utilizza in...

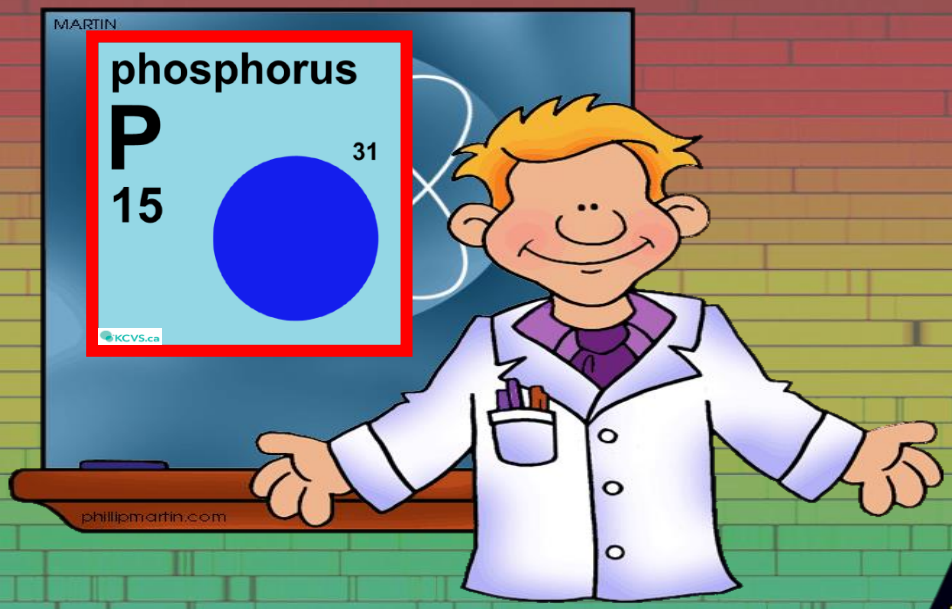
INDUSTRIA:

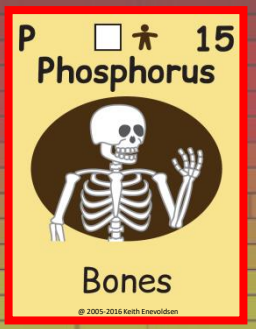
Semiconduttori; dischi e memorie per computer

MEDICINA:

Protesi; tubazioni mediche

Fosforo

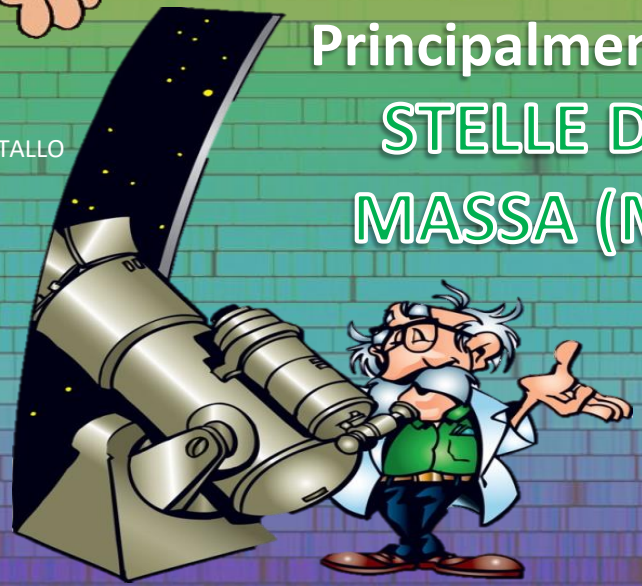




ISOLATO nel 1669 da Hennig Brand

MADE BY S. CRISTALLO

Principalmente formatosi in STELLE DI GRANDE MASSA ($M>10\ M_{SOLE}$)



Si utilizza in...

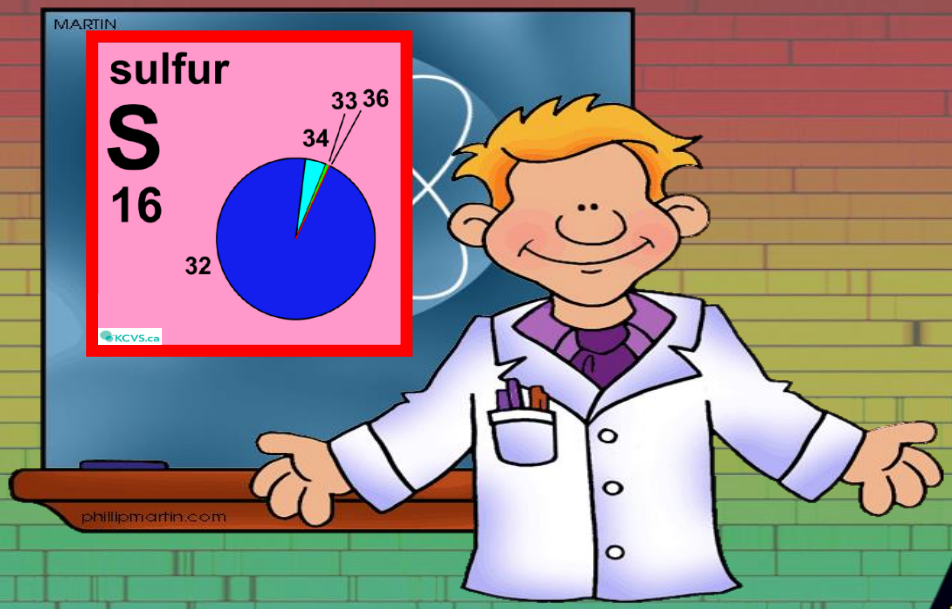
INDUSTRIA:

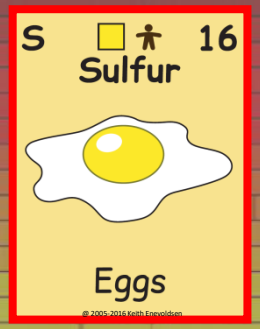
LED; semiconduttori; industria alimentare

MEDICINA:

Trattamento tumori

Zolfo

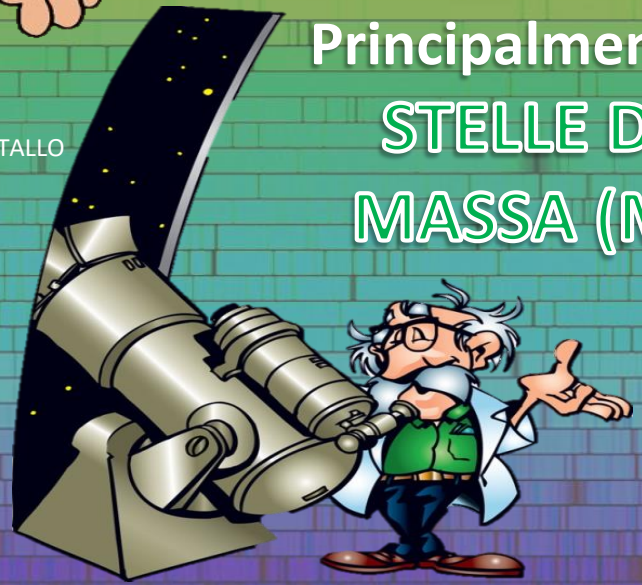




NOTO sin dall'antichità

MADE BY S. CRISTALLO

Principalmente formatosi in STELLE DI GRANDE MASSA ($M>10\ M_{SOLE}$)



Si utilizza in…

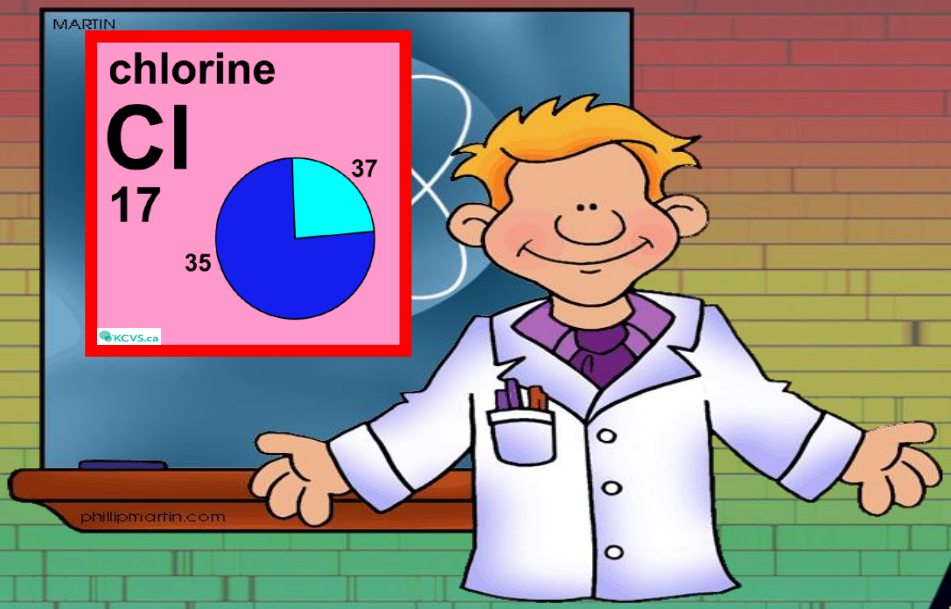
INDUSTRIA:

Acido solforico; fertilizzanti; fiammiferi

MEDICINA:

Trattamento pelle; chirurgia oftalmica

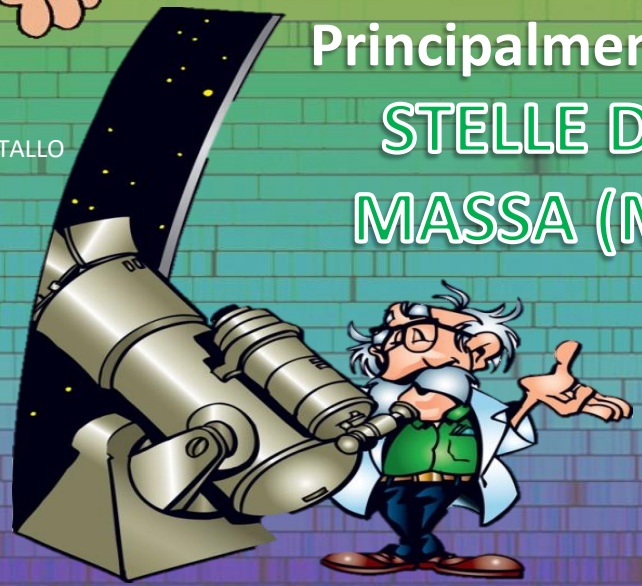
Cloro



ISOLATO nel 1774 da Carl Wilhelm Scheele

MADE BY S. CRISTALLO

Principalmente formatosi in STELLE DI GRANDE MASSA ($M>10\ M_{SOLE}$)



Si utilizza in...

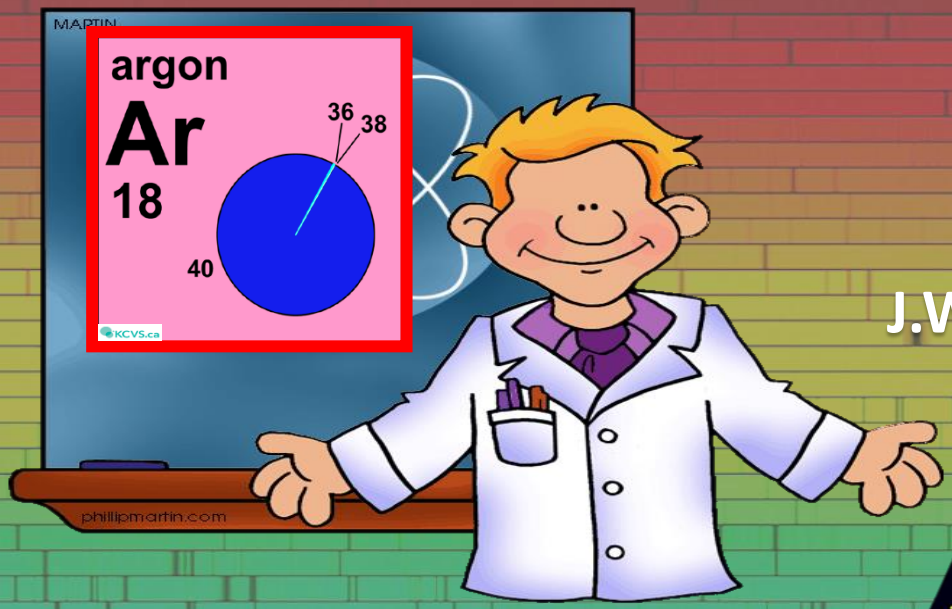
INDUSTRIA:

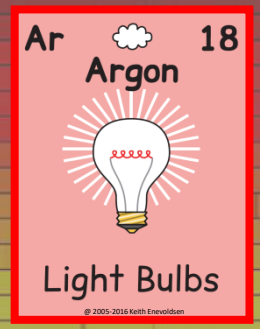
Industria tessile; carta; plastica e PVC; piscine

MEDICINA:

Nylon per sutura; cateteri nel cuore

Argon

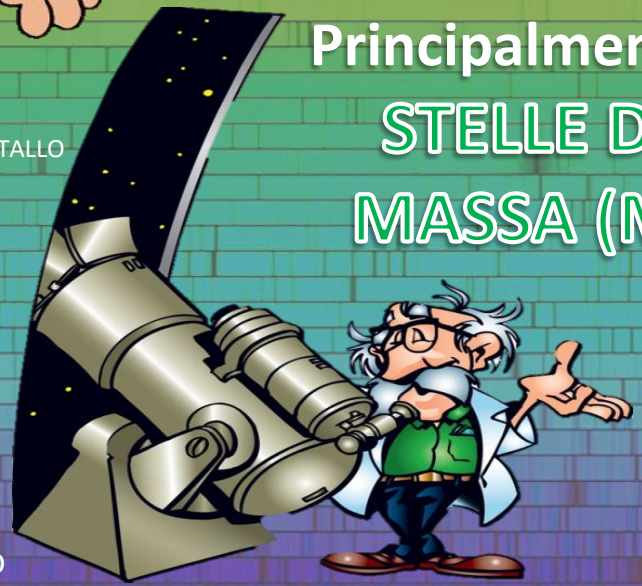




ISOLATO nel 1894 da
J.W.S. Rayleigh e W. Ramsay

MADE BY S. CRISTALLO

Principalmente formatosi in
STELLE DI GRANDE MASSA ($M>10\ M_{SOLE}$)



Si utilizza in…

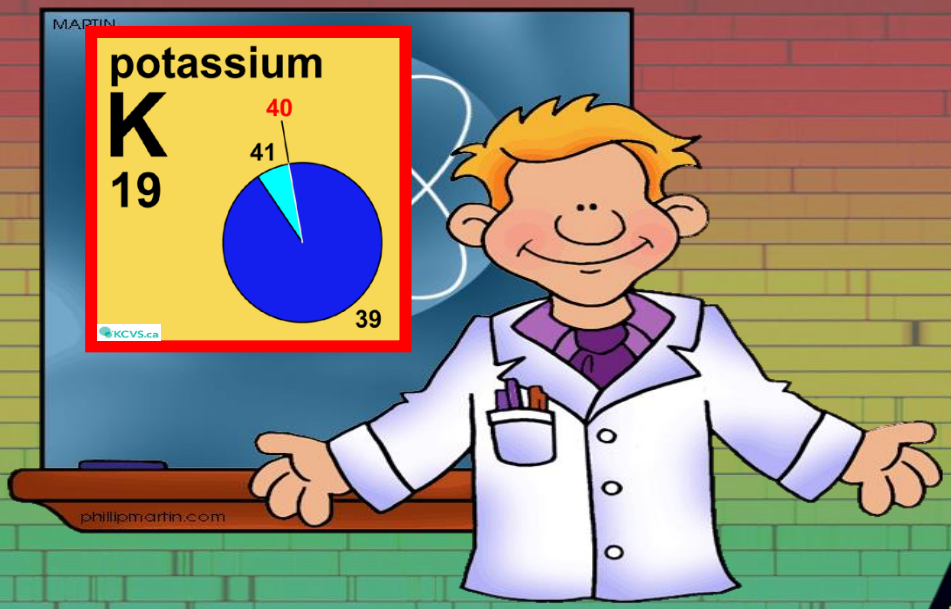
INDUSTRIA:

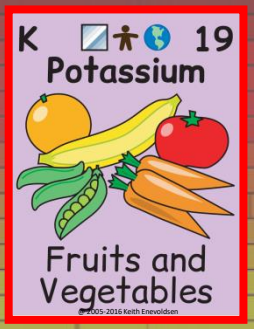
Trattamemento materiali; saldature; lampadine

MEDICINA:

Controllo qualità; tracciamento flusso sanguigno

Potassio

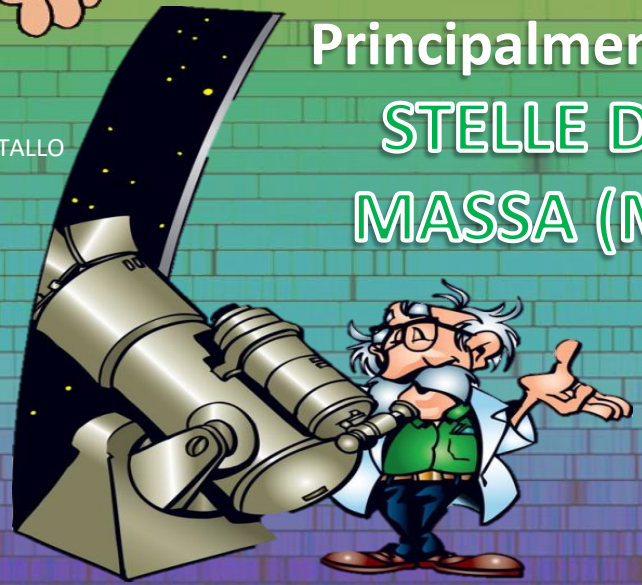


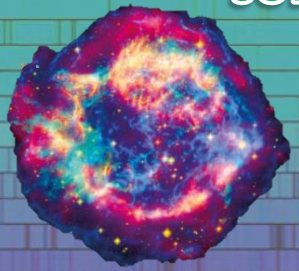


ISOLATO nel 1807
da Humphry Davy

MADE BY S. CRISTALLO

Principalmente formatosi in
STELLE DI GRANDE MASSA ($M>10\ M_{SOLE}$)





Si utilizza in...

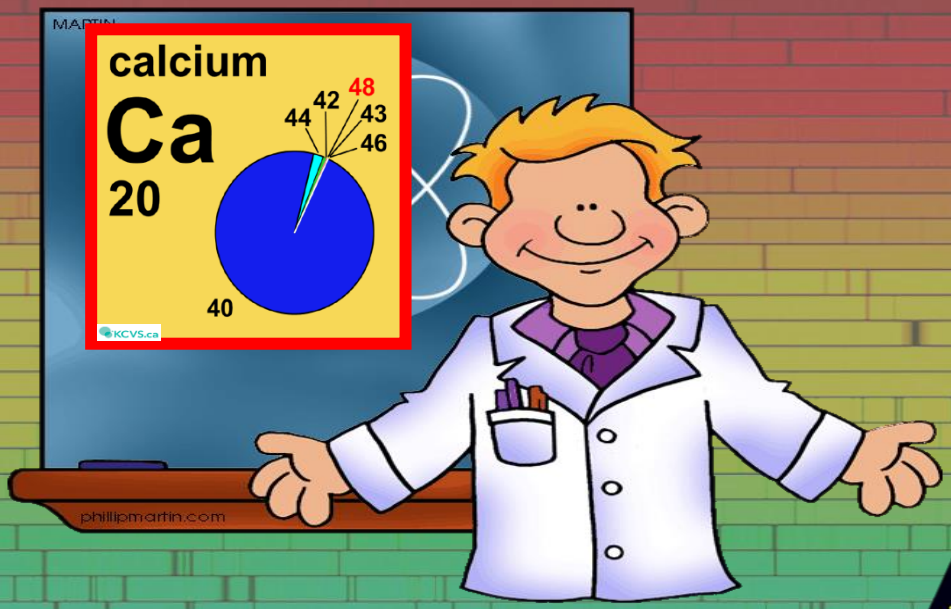
INDUSTRIA:

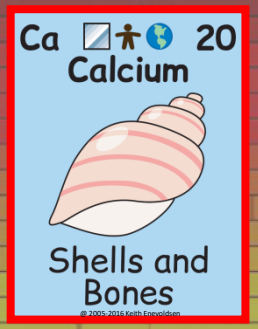
Fertilizzanti; saponi; detergenti

MEDICINA:

Tracciamento flusso sanguigno; anti-ictus

Calcio

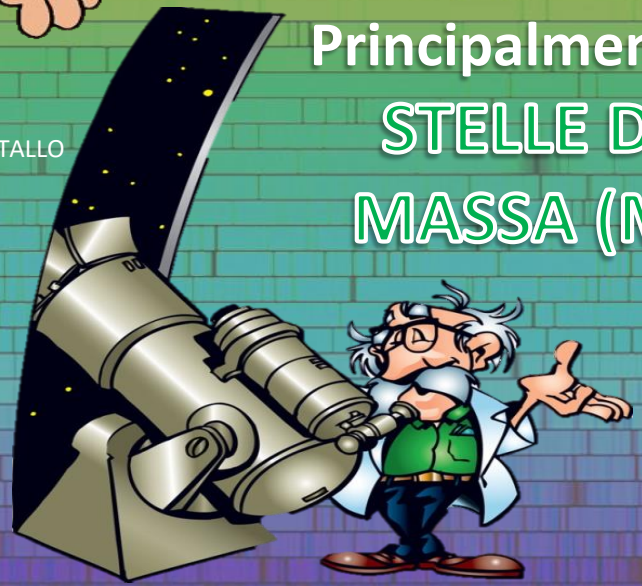




ISOLATO nel 1808
da Humphry Davy

MADE BY S. CRISTALLO

Principalmente formatosi in
STELLE DI GRANDE MASSA ($M>10\ M_{SOLE}$)



Si utilizza in...

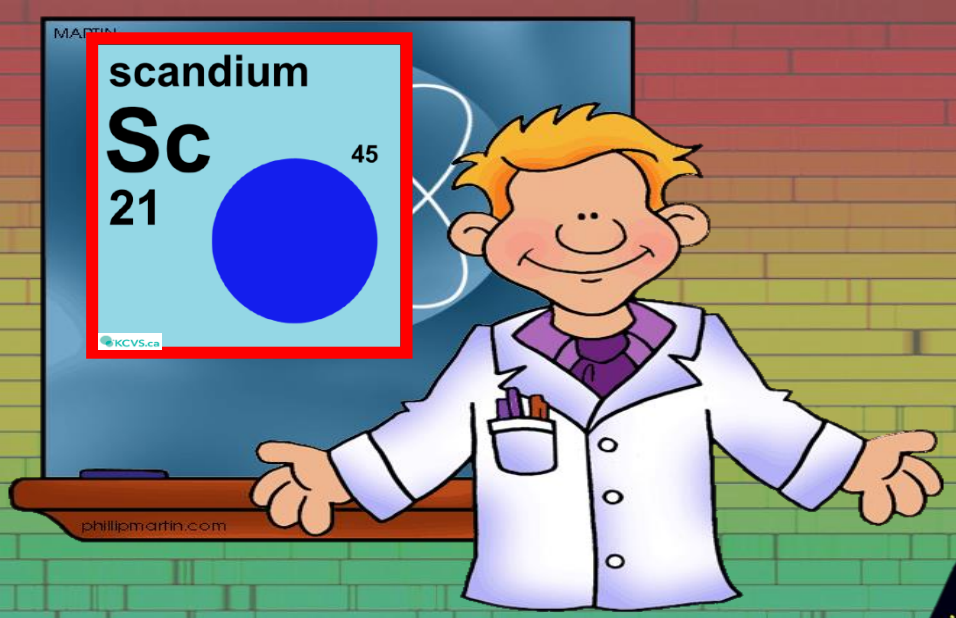
INDUSTRIA:

Riempitivo per carta, plastica, cemento e vetro

MEDICINA:

Trattamento osteoporosi; rianimazione cardiaca

Scandio



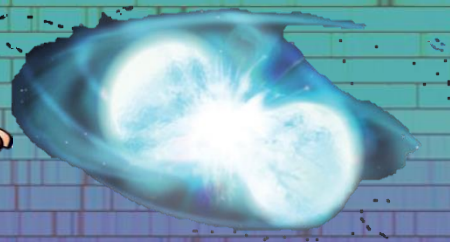
ISOLATO nel 1879

da Lars Fredrick Nilson

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI DUE NANE BIANCHE



Si utilizza in...

INDUSTRIA:

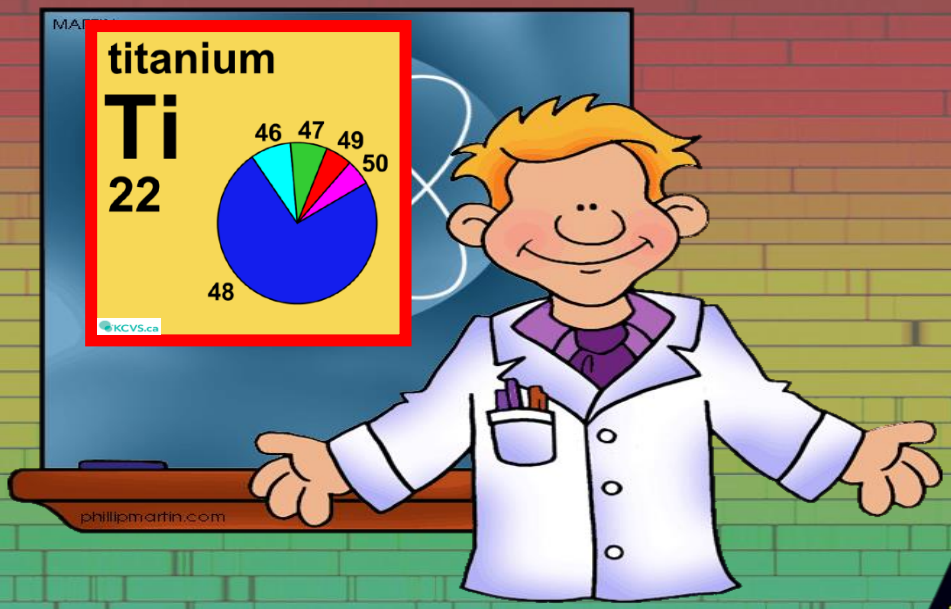
Industria aerospaziale; biciclette; attrezzi sport

MEDICINA:

Marker tumorale

INAF - Osservatorio Astronomico d'Abruzzo

Titanio



ISOLATO nel 1795
da Heinrich Klaproth

MADE BY S. CRISTALLO

Principalmente formatosi in
COALESCENZA DI
DUE NANE BIANCHE

Si utilizza in...

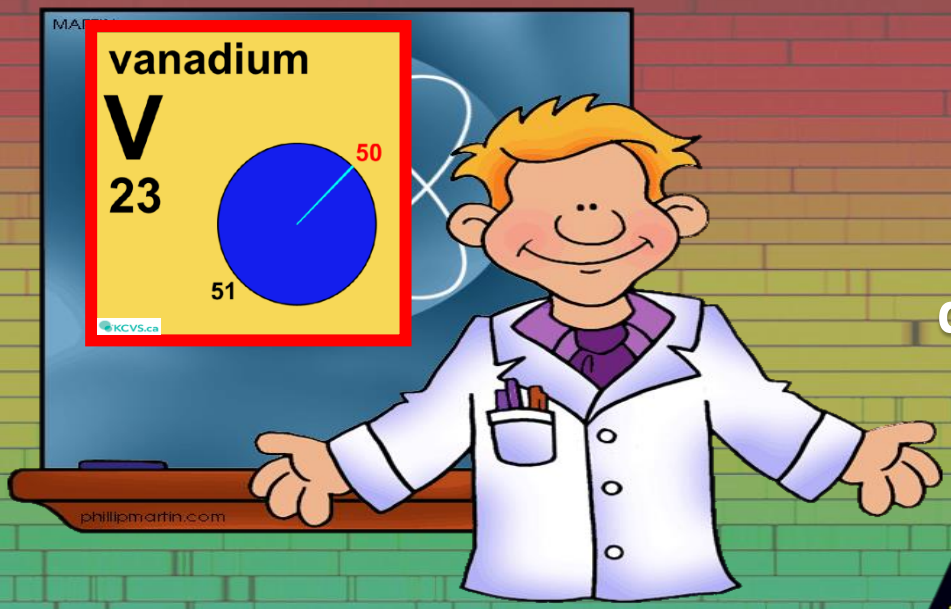
INDUSTRIA:

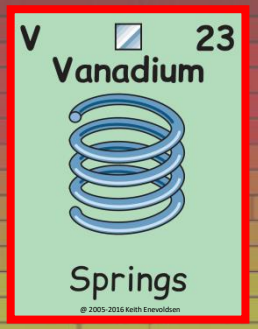
Industria aerospaziale e navale; missilistica

MEDICINA:

Protesi biomedicali

Vanadio





ISOLATO nel 1867

da Henry Enfield Roscoe

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI DUE NANE BIANCHE

Si utilizza in...

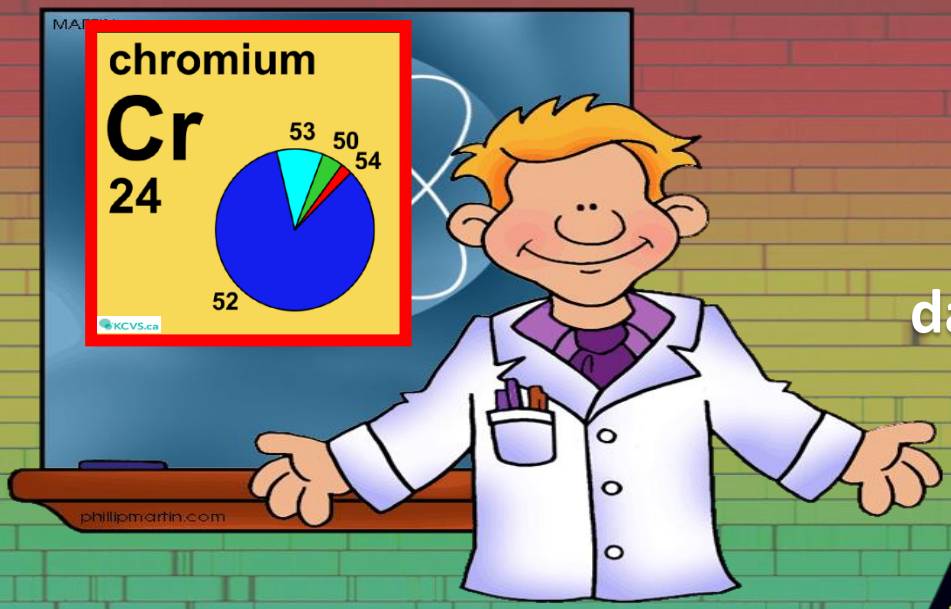
INDUSTRIA:

Industria aerospaziale; ceramica

MEDICINA:

Protesi biomedicali

Cromo



ISOLATO nel 1797

da Nicolas-Louis Vauquelin

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI DUE NANE BIANCHE

Si utilizza in…

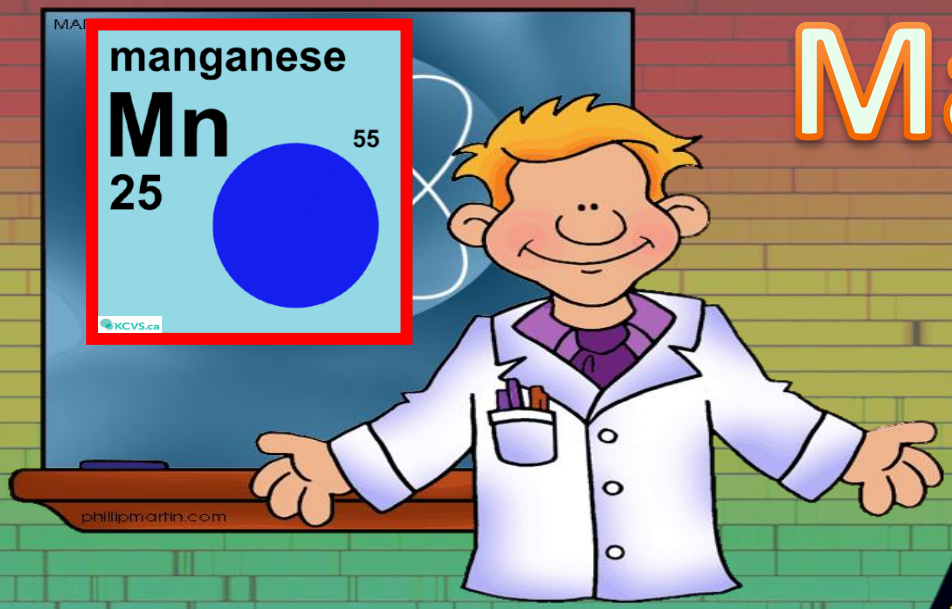
INDUSTRIA:

Industria siderurgica

MEDICINA:

Potenziatore dell'insulina; protesi biomedicali

Manganese



ISOLATO nel 1774
da Johan Gottlieb Gahn

MADE BY S. CRISTALLO

Principalmente formatosi in
COALESCENZA DI
DUE NANE BIANCHE

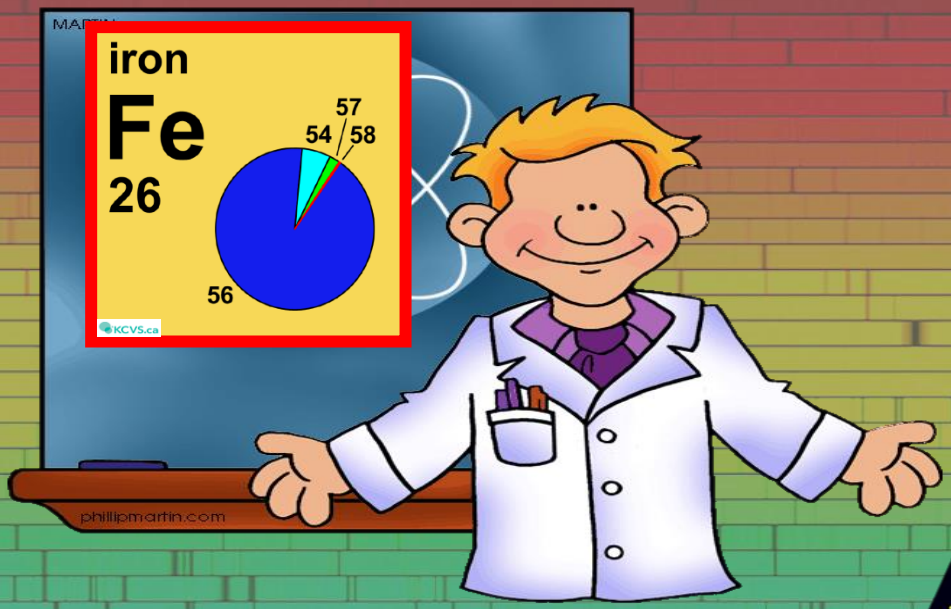
Si utilizza in...

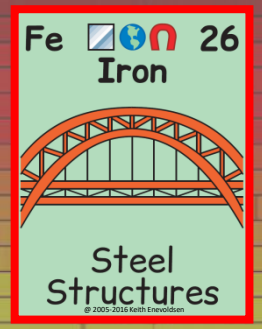
INDUSTRIA:
Industria siderurgica

MEDICINA:
Trattamento osteoporosi

INAF - Osservatorio Astronomico d'Abruzzo

Ferro





NOTO sin dall'antichità

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI DUE NANE BIANCHE

Si utilizza in…

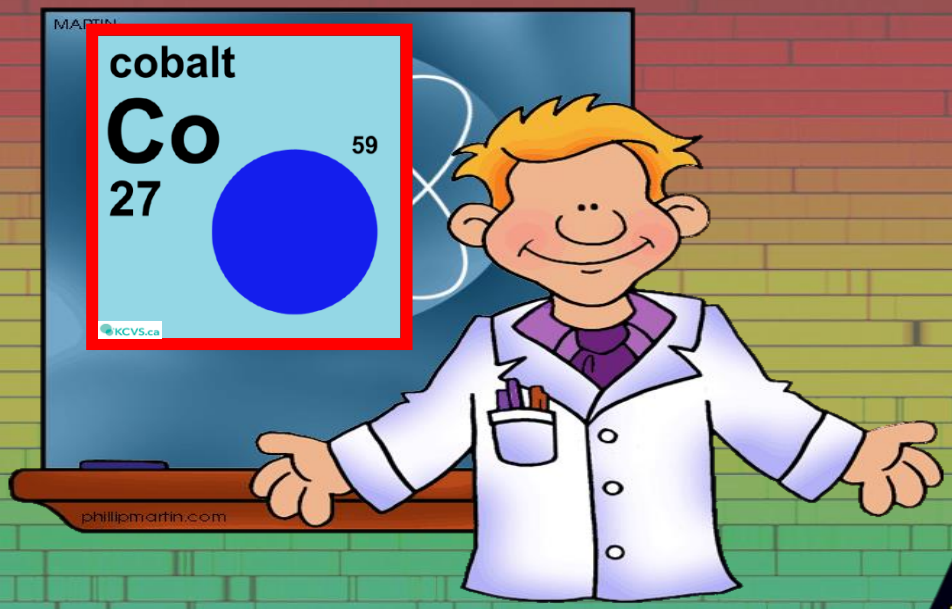
INDUSTRIA:

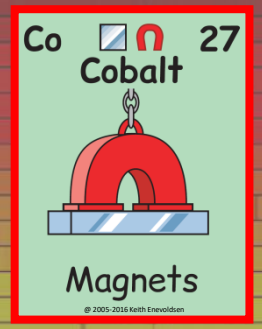
Un po' di tutto, ma principalmente per l'acciaio

MEDICINA:

Trattamento varie malattie; esame PET

Cobalto





ISOLATO nel 1797

da George Brandt

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI DUE NANE BIANCHE

Si utilizza in...

INDUSTRIA:

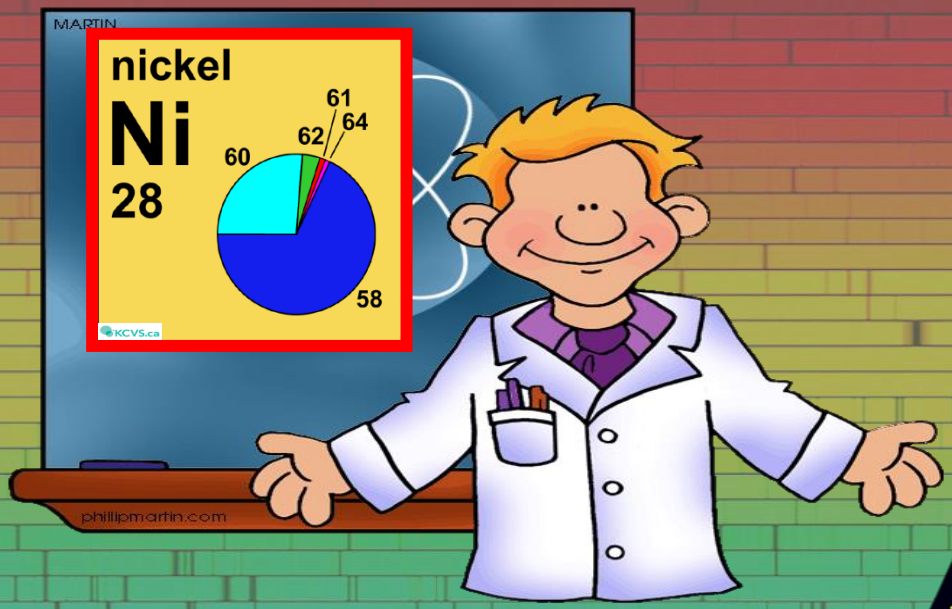
Studio dei materiali; industria metallurgica

MEDICINA:

Radioterapia

INAF - Osservatorio Astronomico d'Abruzzo

Nichel



ISOLATO nel 1751

da Axel F. Cronstedt

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI DUE NANE BIANCHE

Si utilizza in...

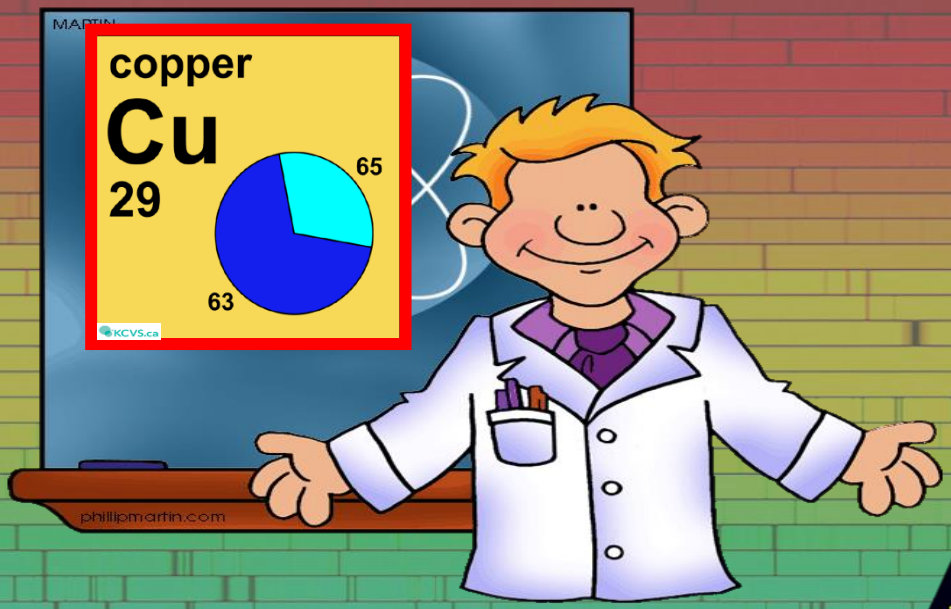
INDUSTRIA:

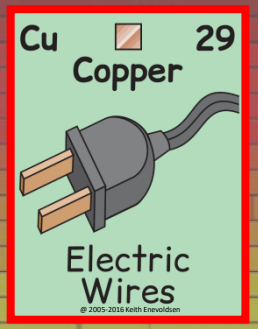
Sintesi leghe; additivo anticorrosivo

MEDICINA:

Strumenti chirurgici; PET; radioimmunoterapia

Rame



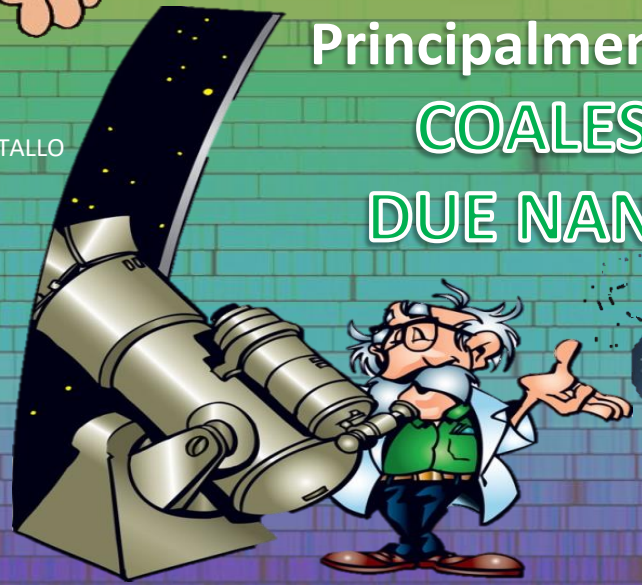


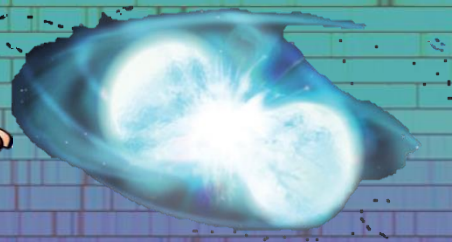
NOTO sin dall'antichità

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI DUE NANE BIANCHE





Si utilizza in...

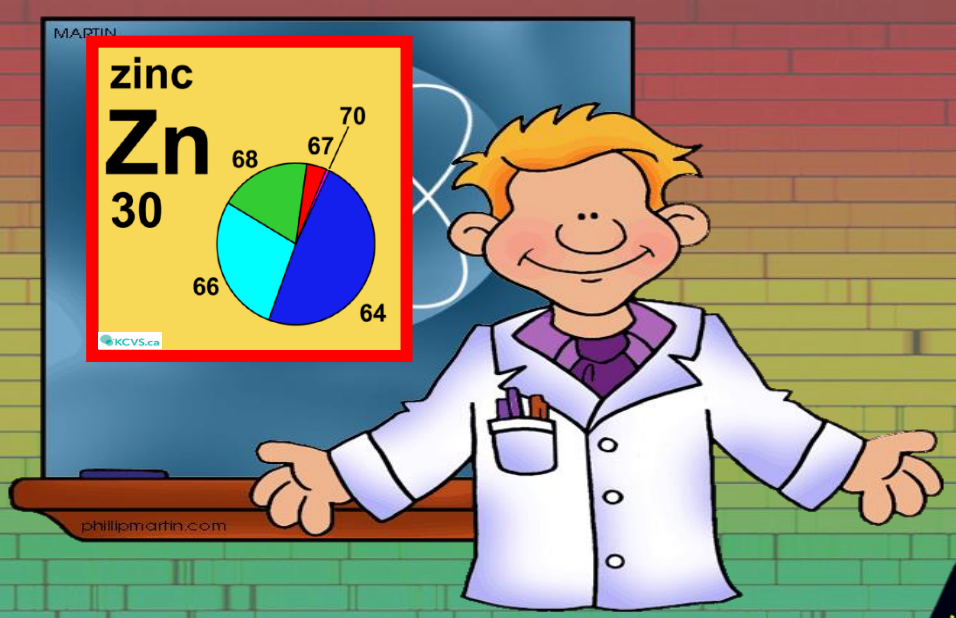
INDUSTRIA:

Componenti elettriche; scambiatore di calore

MEDICINA:

Antinfiammatorio; PET; radioterapia

Zinco



MADE BY S. CRISTALLO

ISOLATO nel 1746
da Andreas Marggraf

Principalmente formatosi in
COALESCENZA DI DUE NANE BIANCHE

Si utilizza in...

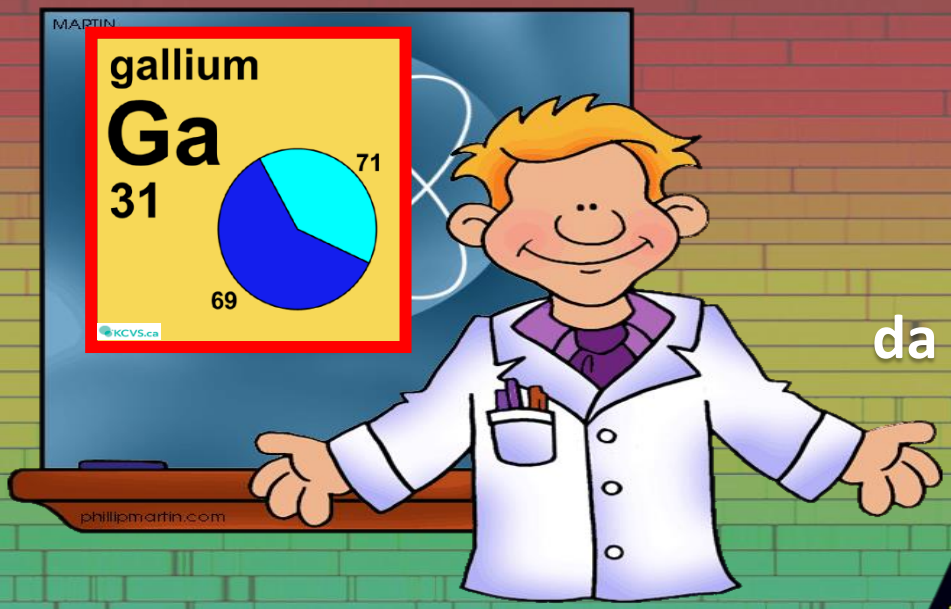
INDUSTRIA:

Strumenti musicali; medicinali; batterie; sapone

MEDICINA:

PET; radioterapia

Gallio



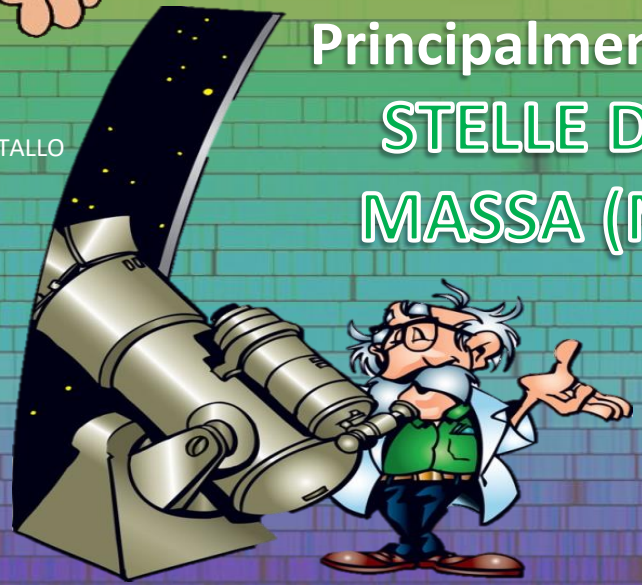
ISOLATO nel 1875

da P. É. Lecoq de Boisbaudran

MADE BY S. CRISTALLO

Principalmente formatosi in

STELLE DI GRANDE MASSA ($M>10\ M_{SUN}$)



Si utilizza in...

INDUSTRIA:

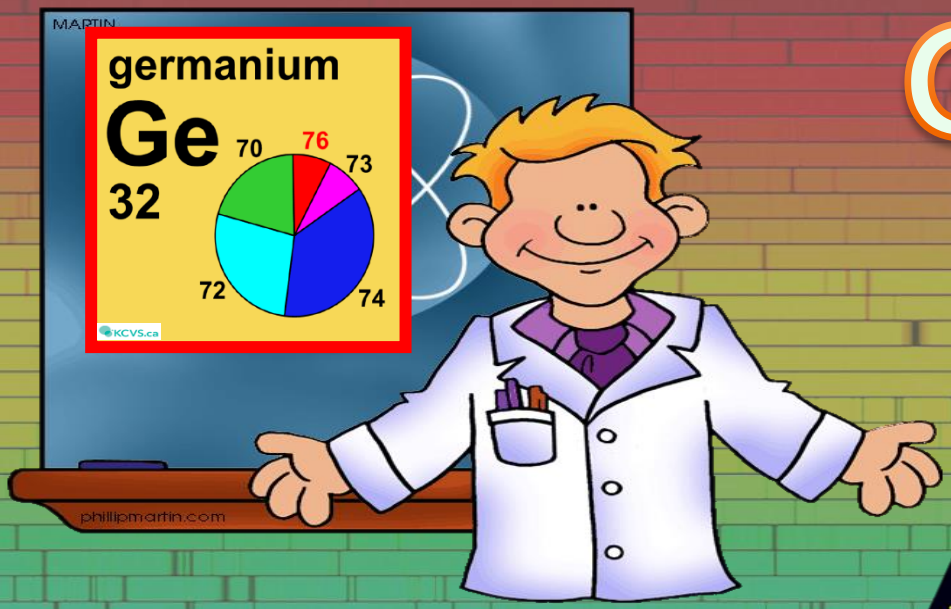
LED; pannelli solari; Blu-rays; semiconduttori

MEDICINA:

PET; scintigrafia; tracciamento tumori

INAF - Osservatorio Astronomico d'Abruzzo

Germanio



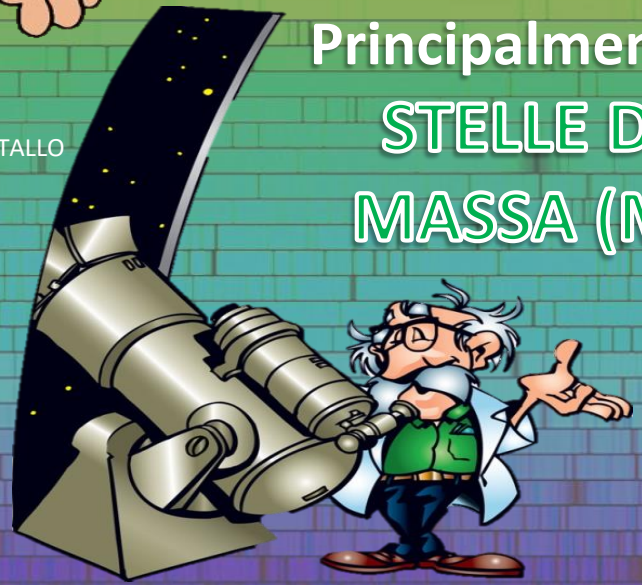
ISOLATO nel 1886

da Clemens Winkler

MADE BY S. CRISTALLO

Principalmente formatosi in

STELLE DI GRANDE MASSA ($M>10\ M_{SOLE}$)



Si utilizza in...

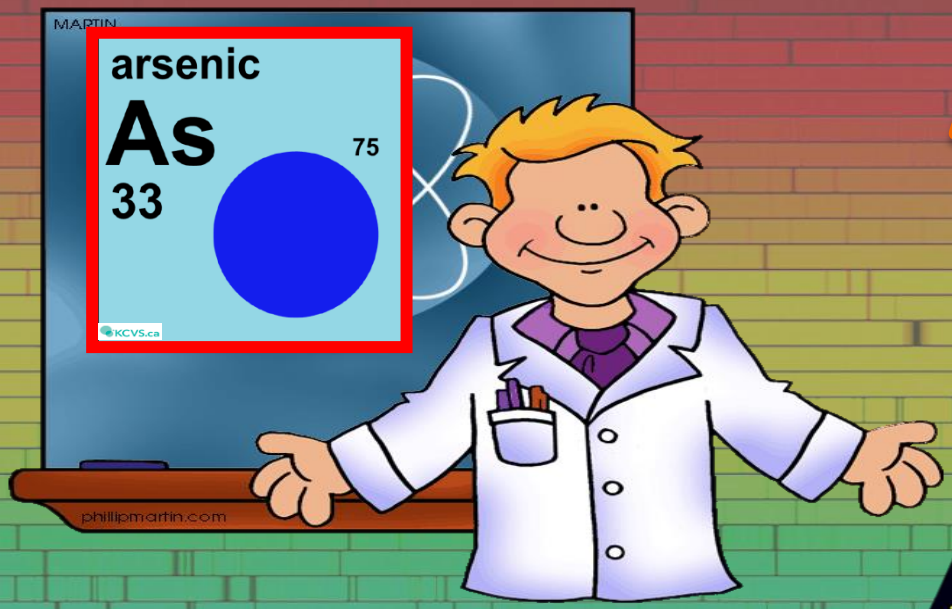
INDUSTRIA:

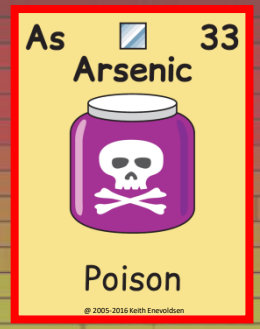
Semiconduttori; transistors; sintesi leghe; lenti

MEDICINA:

PET; tracciamento tumori

Arsenico





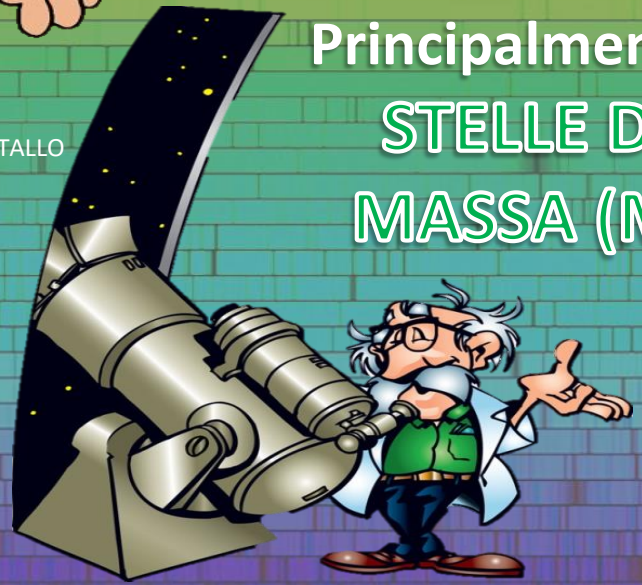
ISOLATO nel 1875

da Johann Schroeder

MADE BY S. CRISTALLO

Principalmente formatosi in

STELLE DI GRANDE MASSA ($M>10\ M_{SOLE}$)



Si utilizza in...

INDUSTRIA:

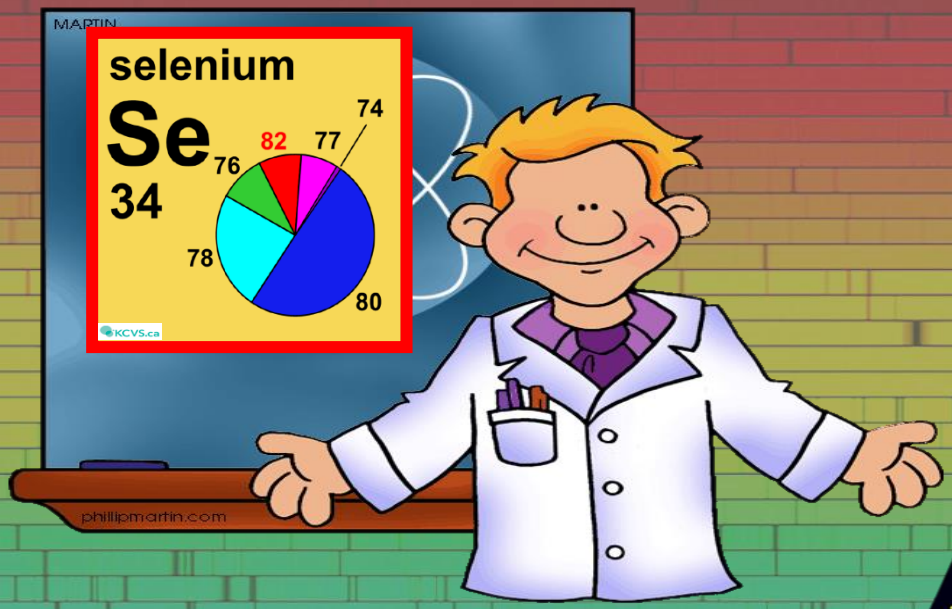
Semiconduttori; sintesi leghe; insetticidi; veleni

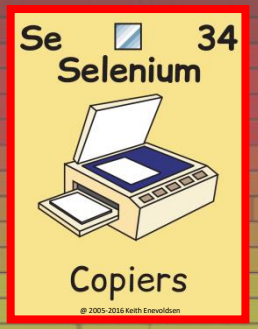
MEDICINA:

PET; chemioterapia ; medicine veterinarie

INAF - Osservatorio Astronomico d'Abruzzo

Selenio





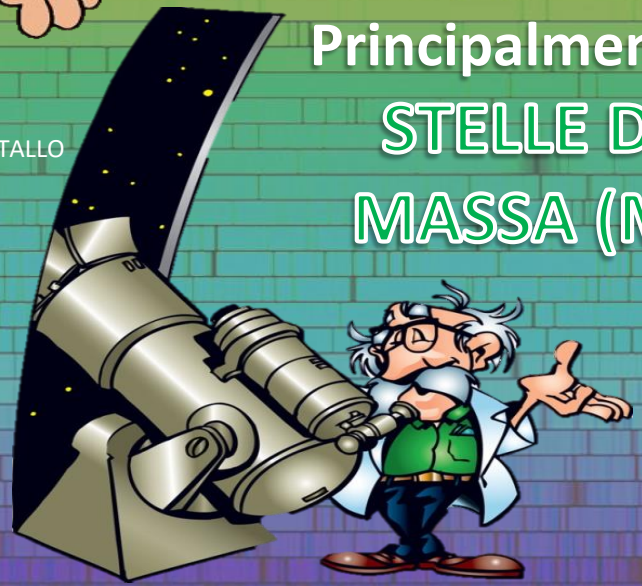
ISOLATO nel 1817

da Jons Jacob Berzelius

MADE BY S. CRISTALLO

Principalmente formatosi in

STELLE DI GRANDE MASSA ($M>10\ M_{SOLE}$)



Si utilizza in…

INDUSTRIA:

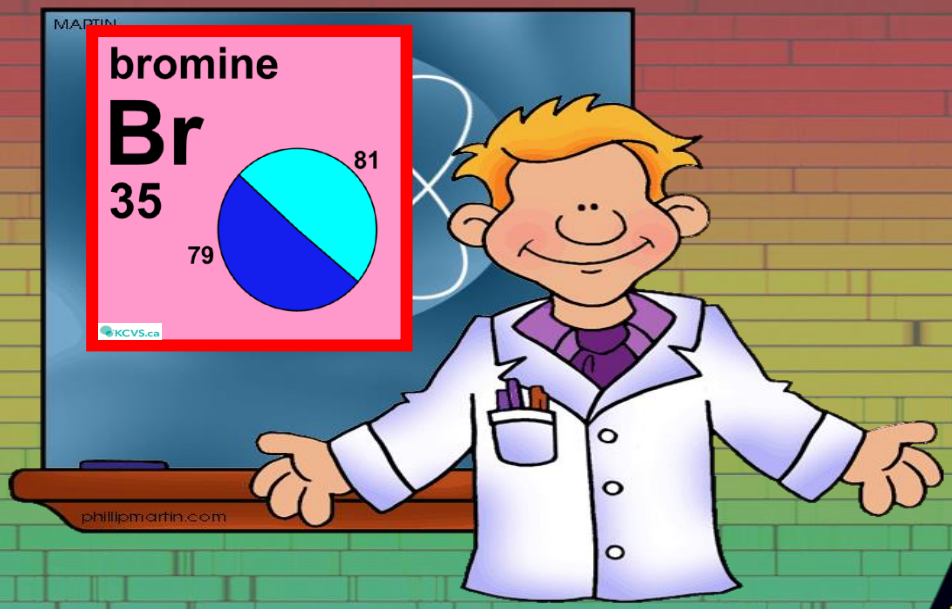
Pannelli solari; fotocellule; fotografia; colorante

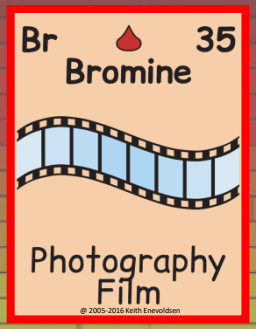
MEDICINA:

Sintesi enzimi; trattamento colesterolo e tiroide

INAF - Osservatorio Astronomico d'Abruzzo

Bromo





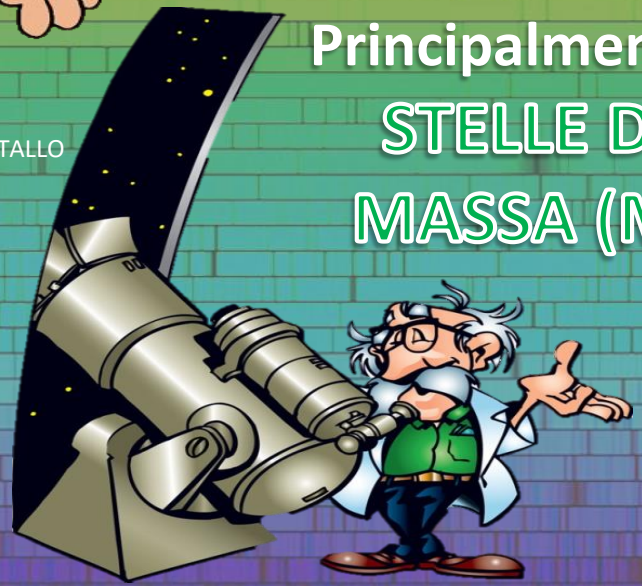
ISOLATO nel 1826

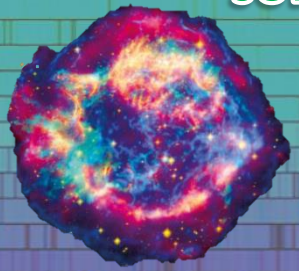
da Antoine Balard

MADE BY S. CRISTALLO

Principalmente formatosi in

STELLE DI GRANDE MASSA ($M>10\ M_{SOLE}$)





Si utilizza in…

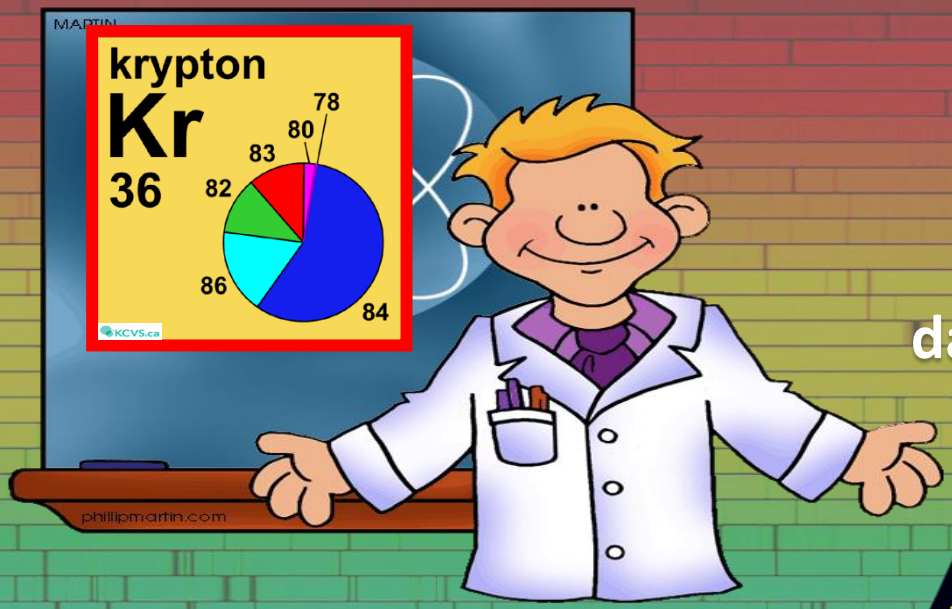
INDUSTRIA:

Crescita alghe e batteri; disinfettanti

MEDICINA:

PET;radio-farmaci; medicine veterinarie

INAF - Osservatorio Astronomico d'Abruzzo



Kripton

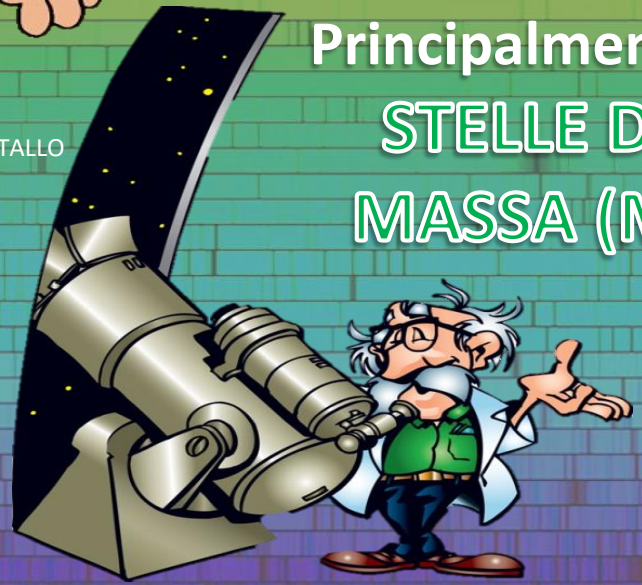
ISOLATO nel 1898

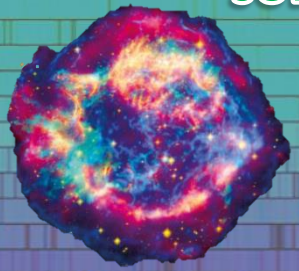
da W. Ramsay e M. Travers

MADE BY S. CRISTALLO

Principalmente formatosi in

STELLE DI GRANDE MASSA ($M>10\ M_{SOLE}$)





Si utilizza in...

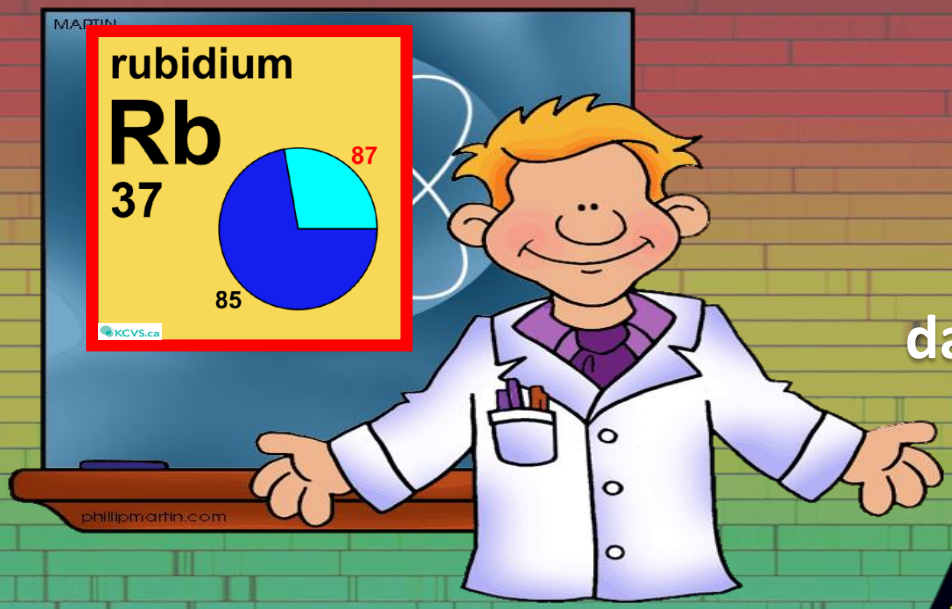
INDUSTRIA:

Luci fluorescenti

MEDICINA:

Tracciante flusso sanguigno

Rubidio



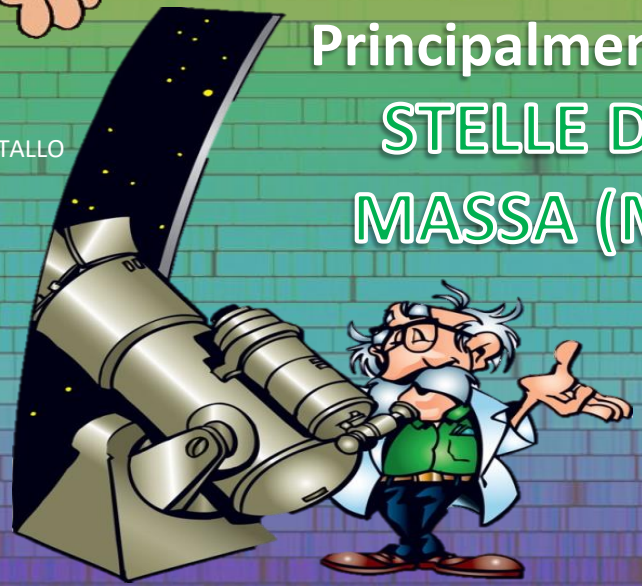
ISOLATO nel 1861

da R. Bunsen e G. Kirchhoff

MADE BY S. CRISTALLO

Principalmente formatosi in

STELLE DI GRANDE MASSA ($M>10\ M_{SOLE}$)



Si utilizza in...

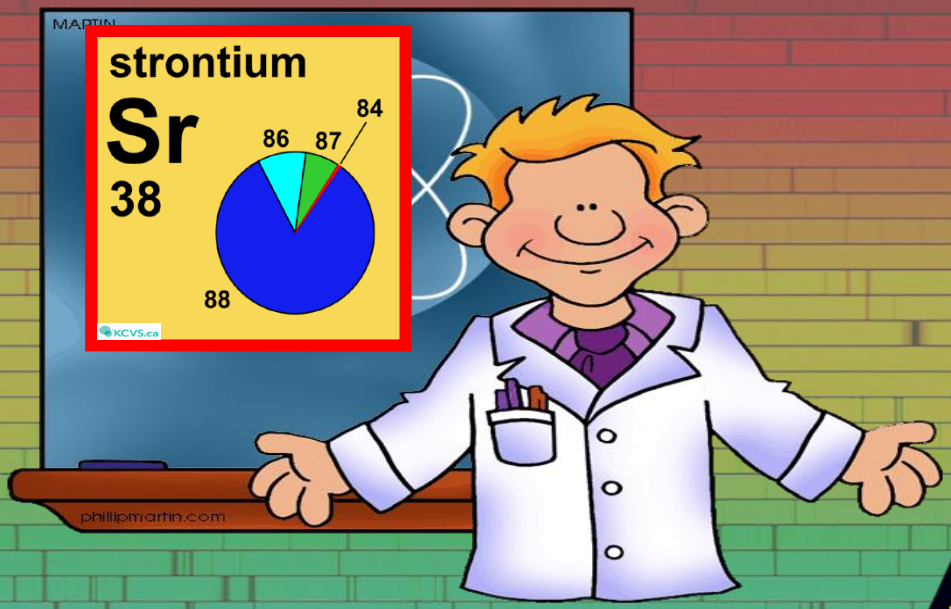
INDUSTRIA:

Propellente razzi; fotocellule; vetri speciali

MEDICINA:

PET; radiofarmaci; monitoraggio del cuore

Stronzio



ISOLATO nel 1808

da Humphry Davy

MADE BY S. CRISTALLO

Principalmente formatosi in

STELLE DI PICCOLA MASSA ($M<10\ M_{SOLE}$)

Si utilizza in...

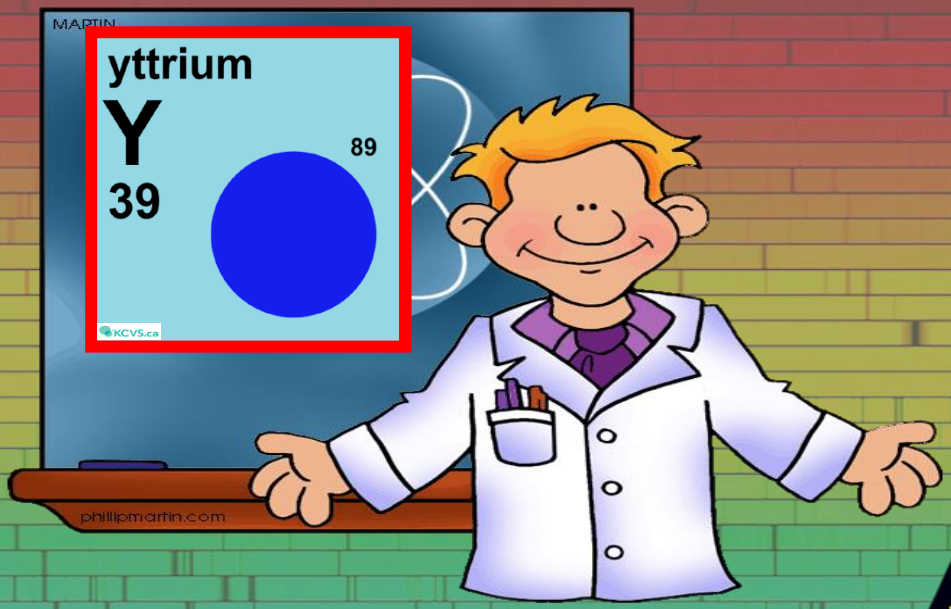
INDUSTRIA:

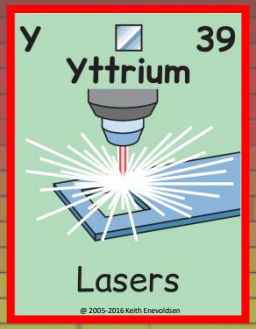
Fuochi artificiali; industria metallurgica

MEDICINA:

Trattamento artriti e osteoporosi; chemioterapia

Ittrio





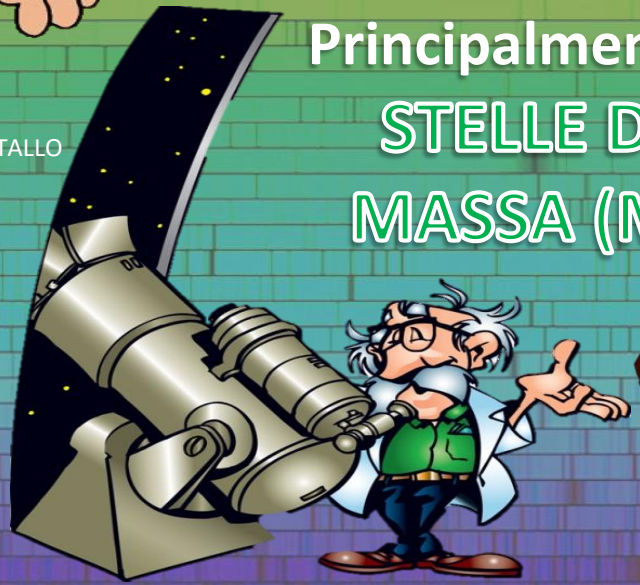
ISOLATO nel 1828

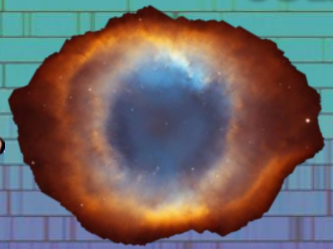
da Friedrich Woehler

MADE BY S. CRISTALLO

Principalmente formatosi in

STELLE DI PICCOLA MASSA ($M<10\ M_{SOLE}$)





Si utilizza in...

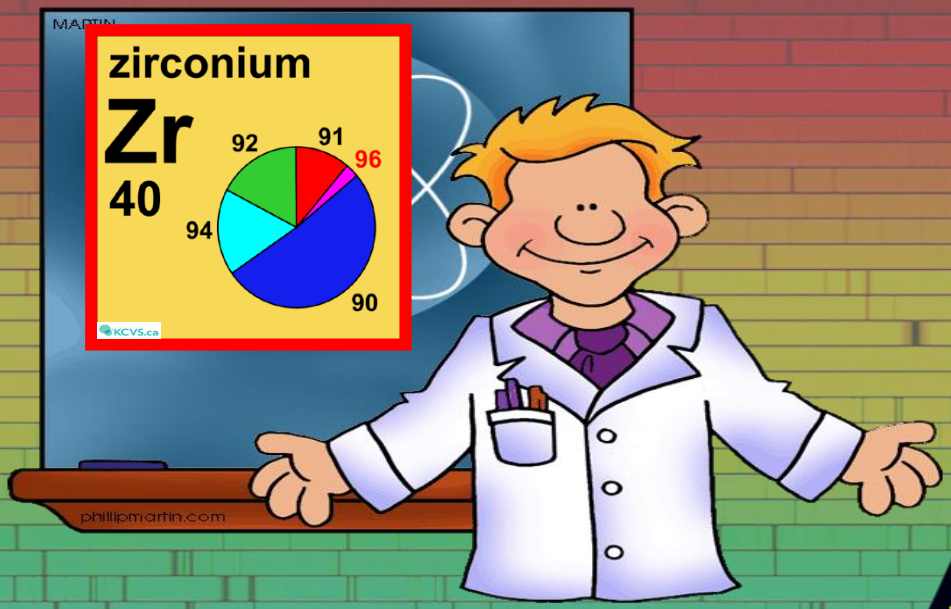
INDUSTRIA:

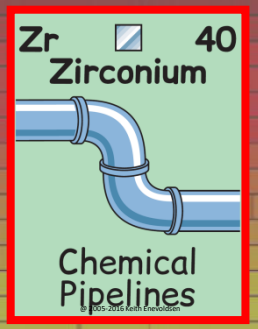
Sintesi leghe; colore rosso per TV; lasers

MEDICINA:

PET; nanobiologia; terapia anti-dolore

Zirconio





ISOLATO nel 1824

da Jöns Jacob Berzelius

MADE BY S. CRISTALLO

Principalmente formatosi in

STELLE DI PICCOLA MASSA ($M<10\ M_{SOLE}$)

Si utilizza in...

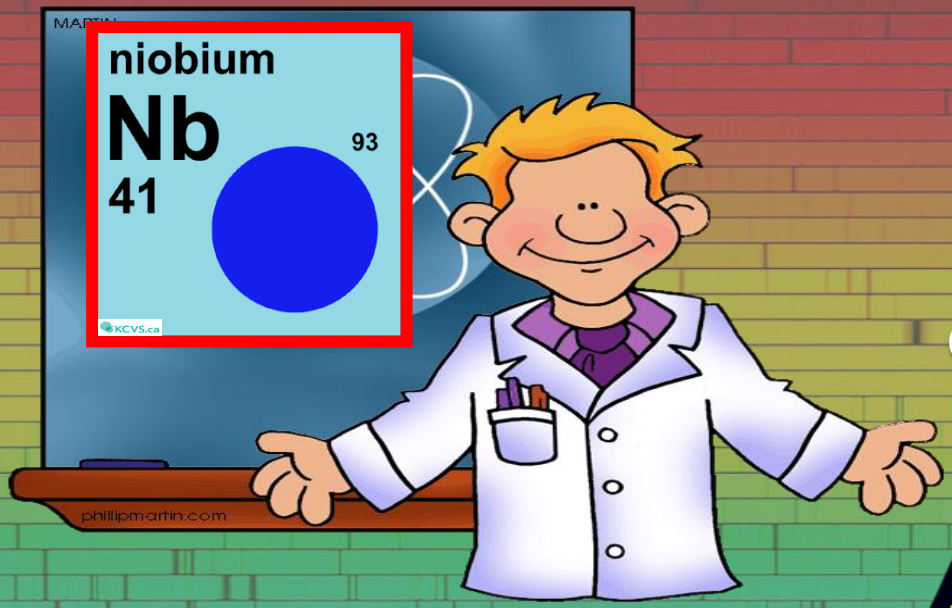
INDUSTRIA:

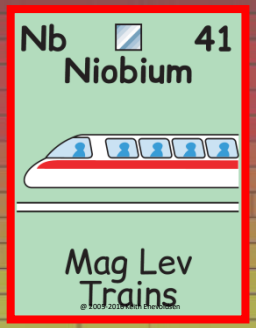
Anti-corrosivo; isolante; industria dentale

MEDICINA:

Trattamento artriti e osteoporosi; chemioterapia

Niobio





ISOLATO nel 1864

da Christian Blomstrand

MADE BY S. CRISTALLO

Principalmente formatosi in

STELLE DI PICCOLA MASSA ($M<10\ M_{SOLE}$)

Si utilizza in...

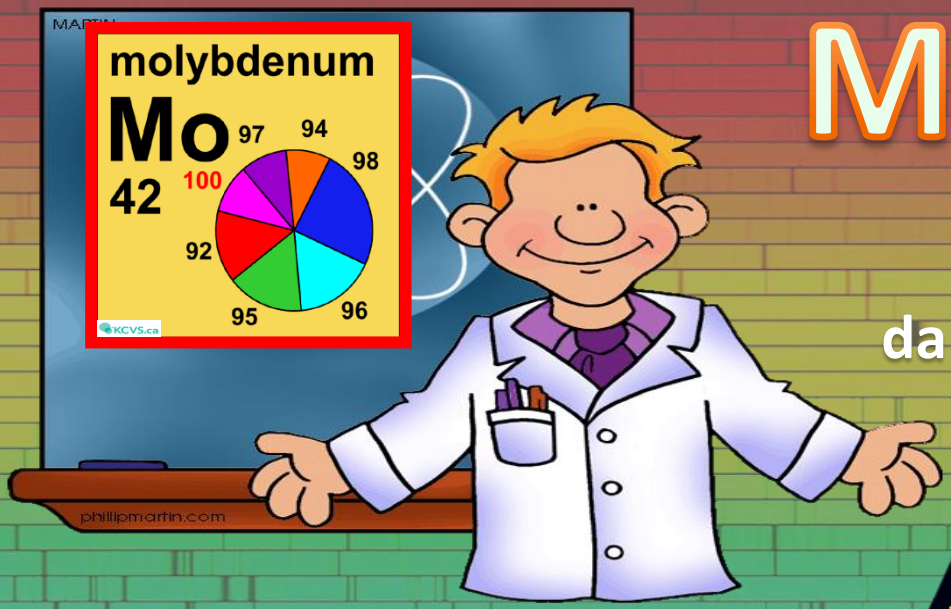
INDUSTRIA:

Sintesi leghe; motori jets e razzi; tubature

MEDICINA:

Imaging tumori

Molibdeno



ISOLATO nel 1778

da Carl Wilhelm Scheele

MADE BY S. CRISTALLO

Principalmente formatosi in

STELLE DI PICCOLA MASSA ($M<10\ M_{SOLE}$)

Si utilizza in...

INDUSTRIA:

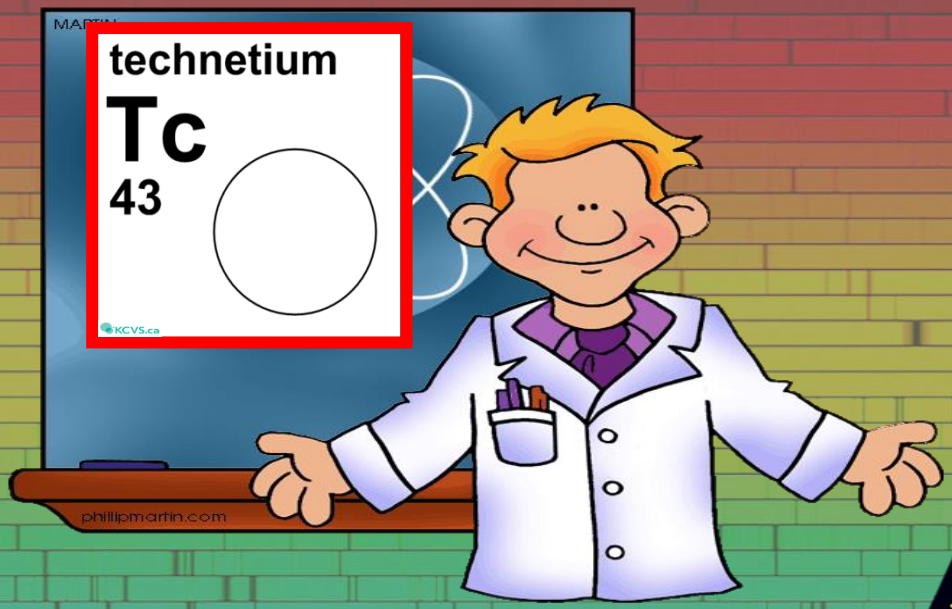
Fili elettrici; industria nucleare; sintesi leghe

MEDICINA:

Radioterapia; attivazione enzimi

INAF - Osservatorio Astronomico d'Abruzzo

Tecnezio



SCOPERTO nel 1937

da C. Perrier ed E. Segrè

MADE BY S. CRISTALLO

Principalmente formatosi in

STELLE DI PICCOLA MASSA ($M<10\ M_{SOLE}$)

Si utilizza in...

INDUSTRIA:

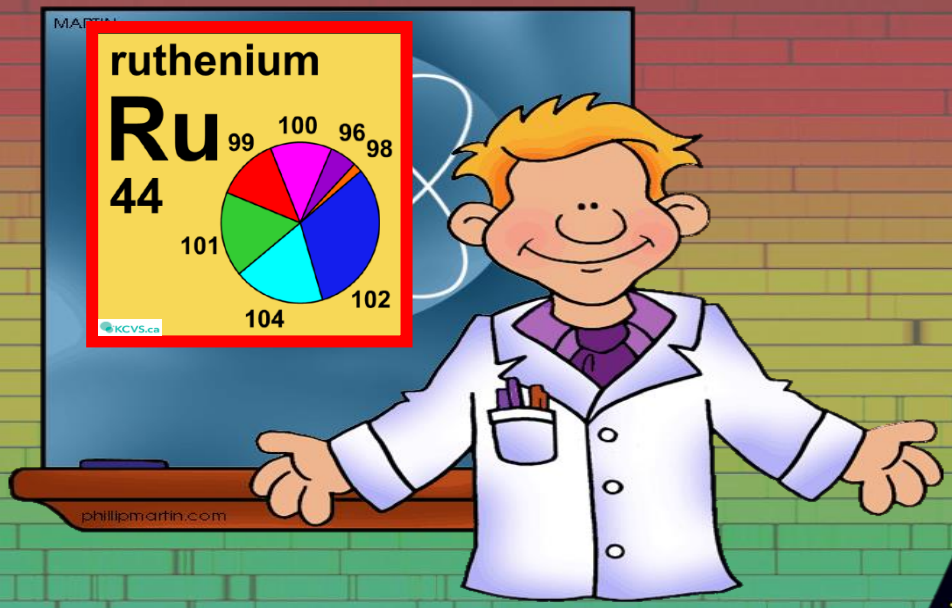
Anti-corrosivo

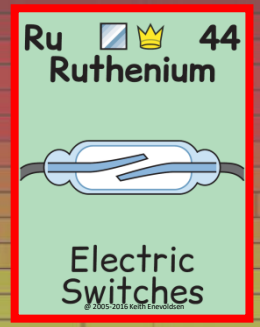
MEDICINA:

Diagnostica tumori (SPECT) e flusso sanguigno

INAF - Osservatorio Astronomico d'Abruzzo

Rutenio





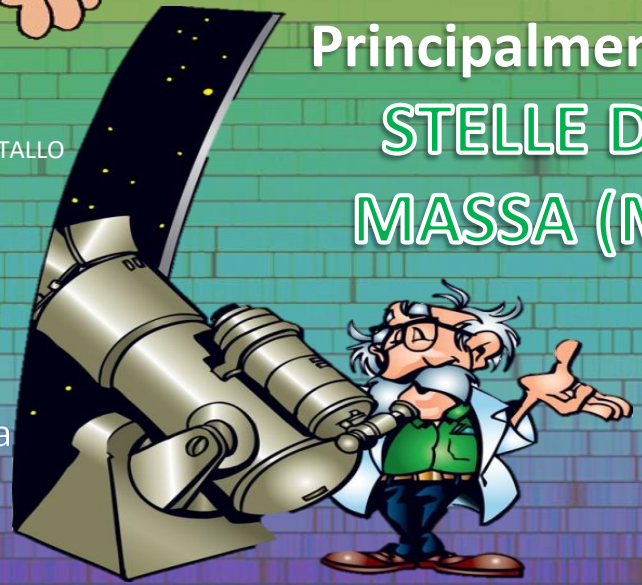
ISOLATO nel 1844

da Karl Ernst Claus

MADE BY S. CRISTALLO

Principalmente formatosi in

STELLE DI GRANDE MASSA ($M>10\ M_{SOLE}$)



Si utilizza in...

INDUSTRIA:

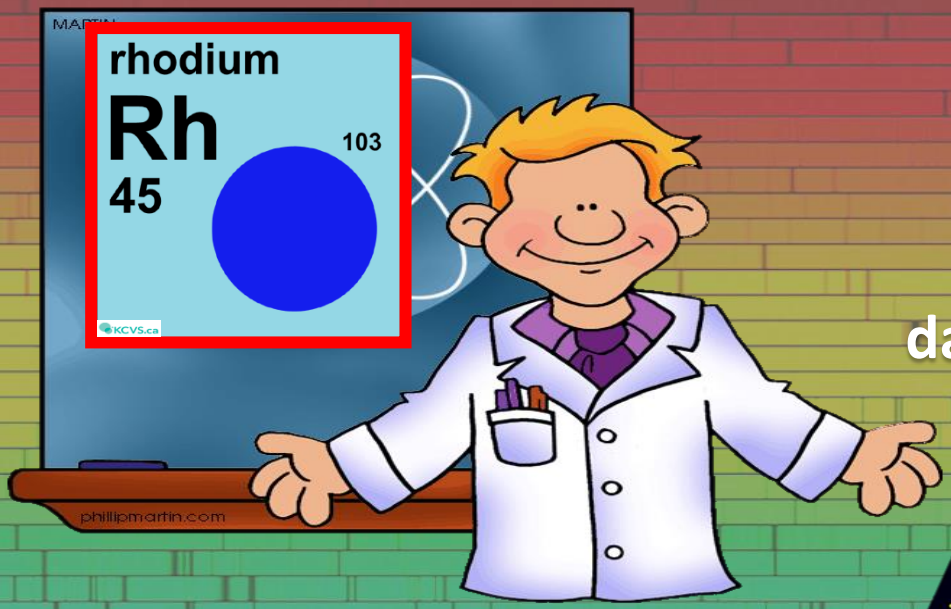
Celle fotovoltaiche; contatti elettrici; ammoniaca

MEDICINA:

Antimalarici; antibiotici; brachiterapia

INAF - Osservatorio Astronomico d'Abruzzo

Rodio



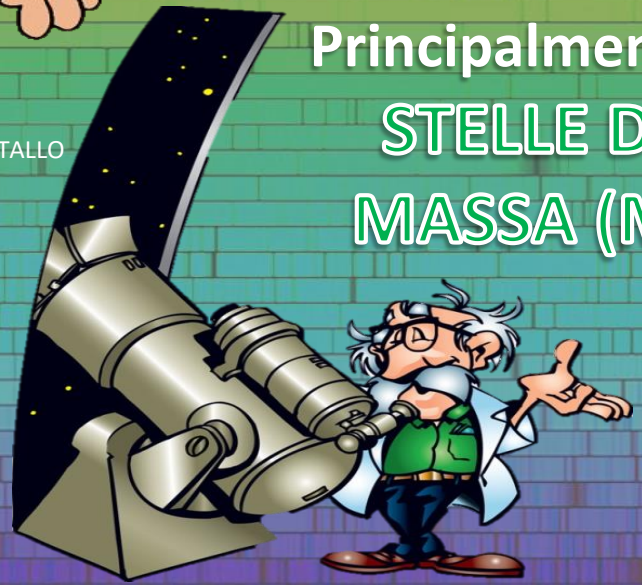
ISOLATO nel 1803

da William Hyde Wollaston

MADE BY S. CRISTALLO

Principalmente formatosi in

STELLE DI GRANDE MASSA ($M>10\ M_{SOLE}$)



Si utilizza in...

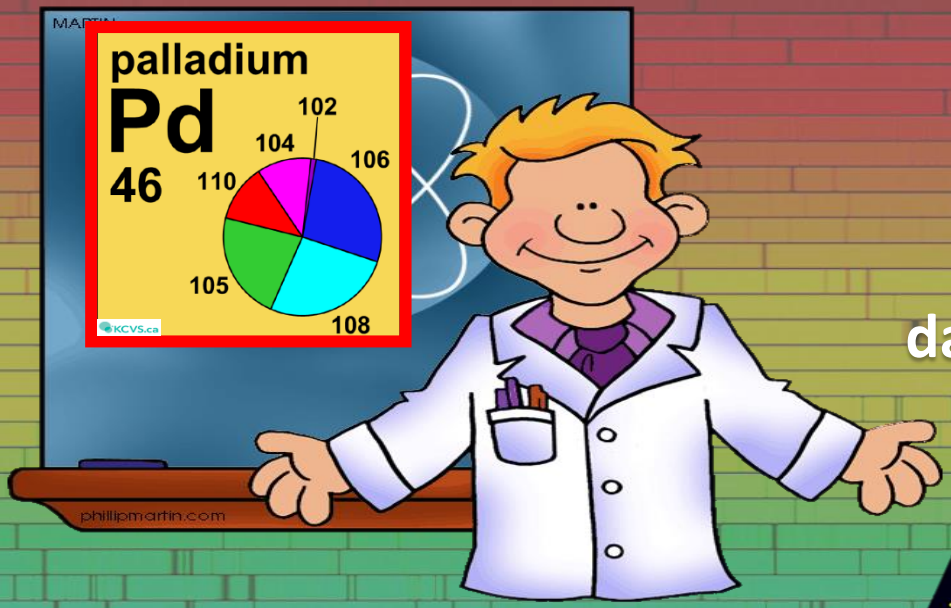
INDUSTRIA:

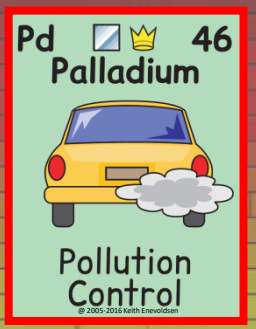
Sintesi leghe; specchi; contatti elettrici

MEDICINA:

Radioterapia; brachioterapia oculare

Palladio





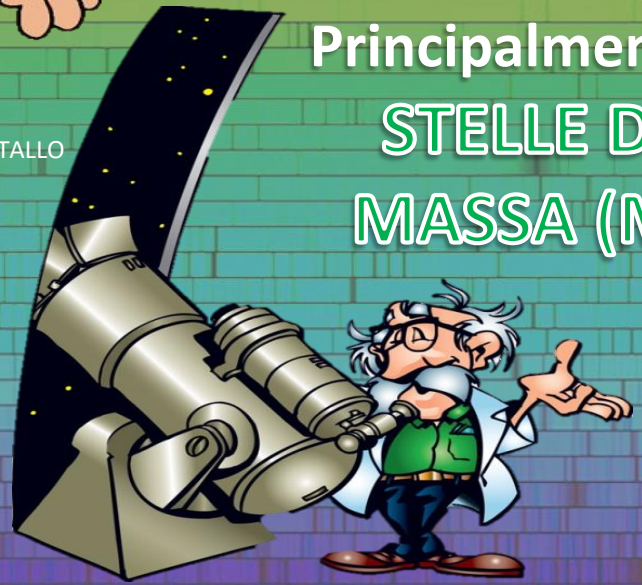
ISOLATO nel 1803

da William Hyde Wollaston

MADE BY S. CRISTALLO

Principalmente formatosi in

STELLE DI GRANDE MASSA ($M>10\ M_{SOLE}$)



Si utilizza in...

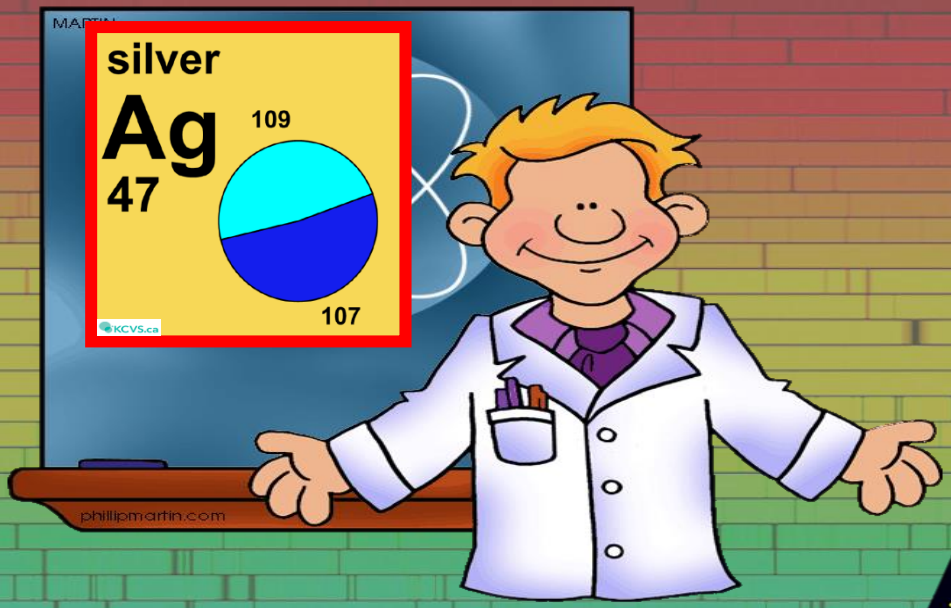
INDUSTRIA:

Celle a conbustibile; marmitte catalitiche

MEDICINA:

Radioterapia; chemioterapia

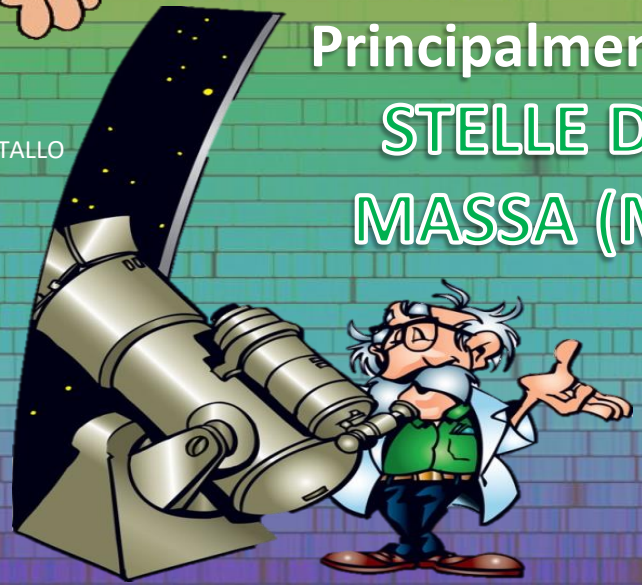
Argento



NOTO sin dall'antichità

MADE BY S. CRISTALLO

Principalmente formatosi in STELLE DI GRANDE MASSA ($M>10\ M_{SOLE}$)



Si utilizza in...

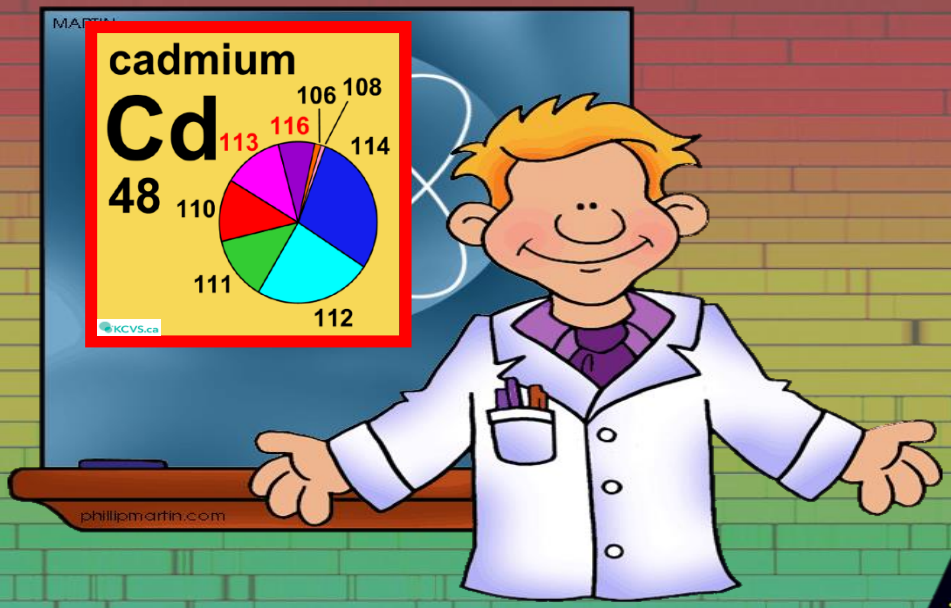
INDUSTRIA:

Gioielli; monete; batterie ad alta efficienza

MEDICINA:

Radioterapia; cerotti; creme

Cadmio



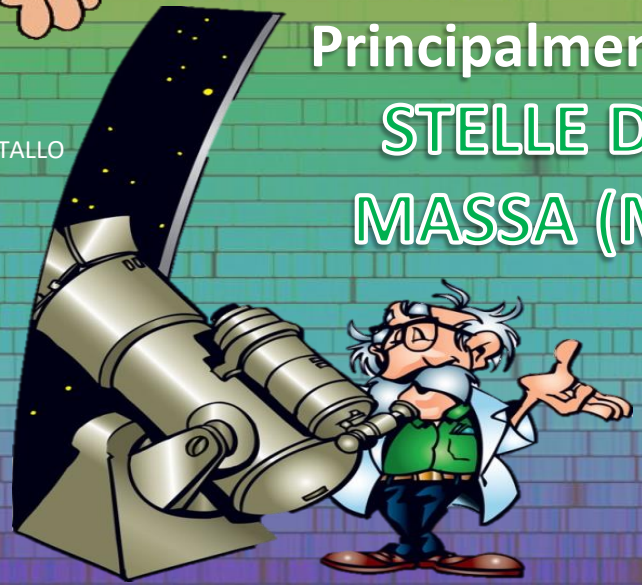
ISOLATO nel 1817

da Friedrich Strohmeyer

MADE BY S. CRISTALLO

Principalmente formatosi in

STELLE DI GRANDE MASSA ($M>10\ M_{SOLE}$)



Si utilizza in...

INDUSTRIA:

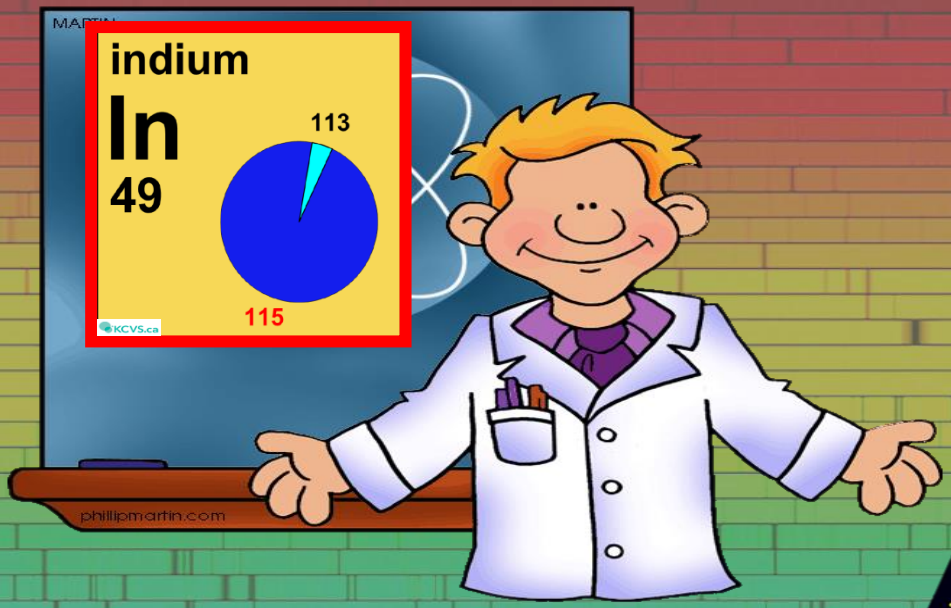
Batterie ricaricabili; anti-corrosivo; sintesi leghe

MEDICINA:

Radioterapia

INAF - Osservatorio Astronomico d'Abruzzo

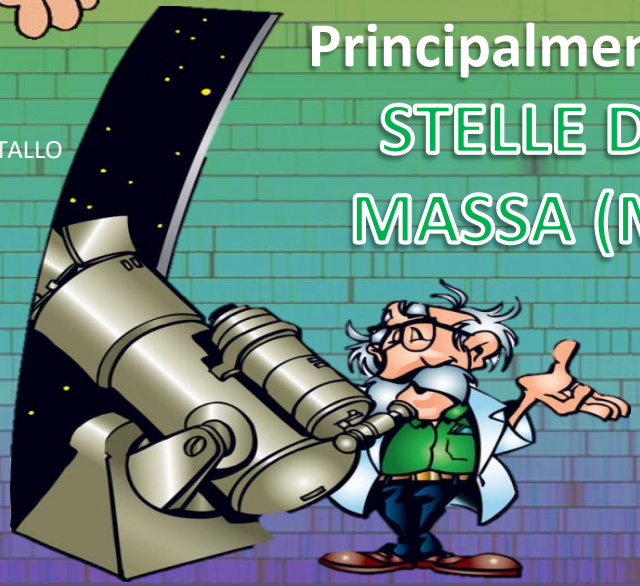
Indio



ISOLATO nel 1867
da Theodor Richter

MADE BY S. CRISTALLO

Principalmente formatosi in
STELLE DI GRANDE MASSA ($M>10\ M_{SOLE}$)



Si utilizza in...

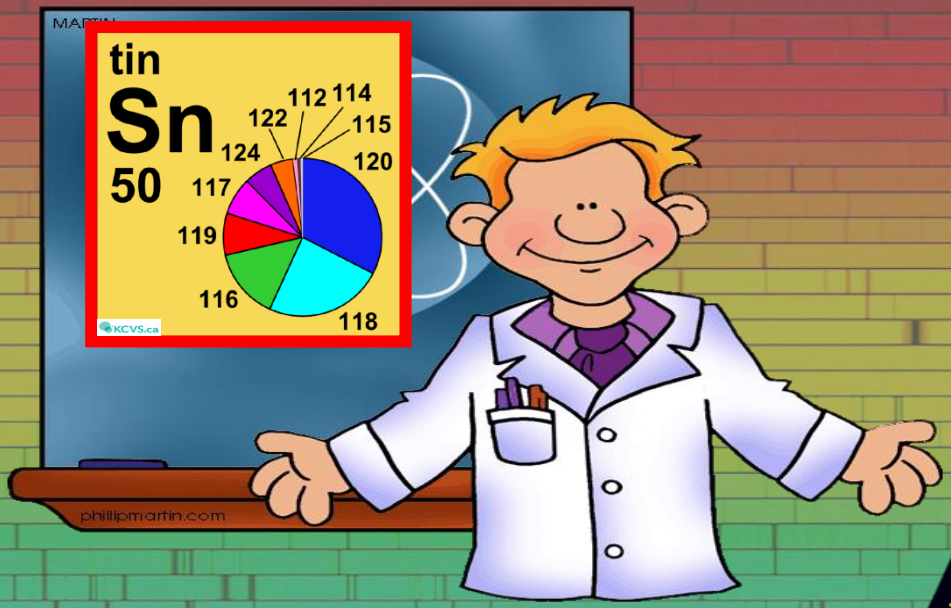
INDUSTRIA:

Transistors; specchi; sintesi leghe; touch-screen

MEDICINA:

Imaging infezioni; chemioterapia

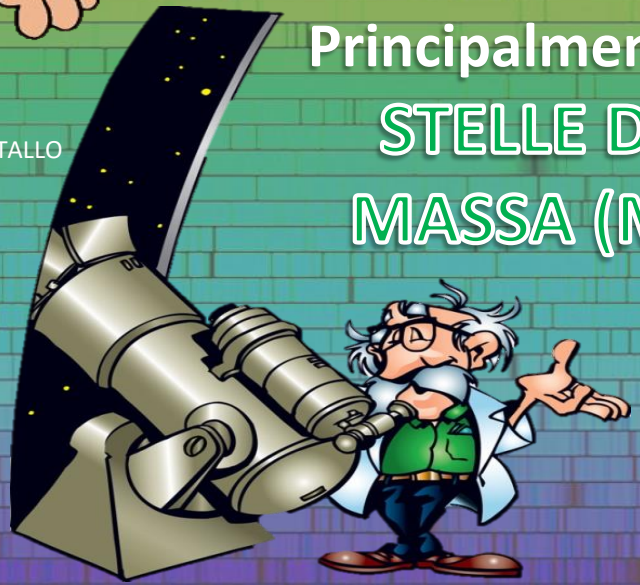
Stagno



NOTO sin dall'antichità

MADE BY S. CRISTALLO

Principalmente formatosi in STELLE DI GRANDE MASSA ($M>10\ M_{SOLE}$)



Si utilizza in...

INDUSTRIA:

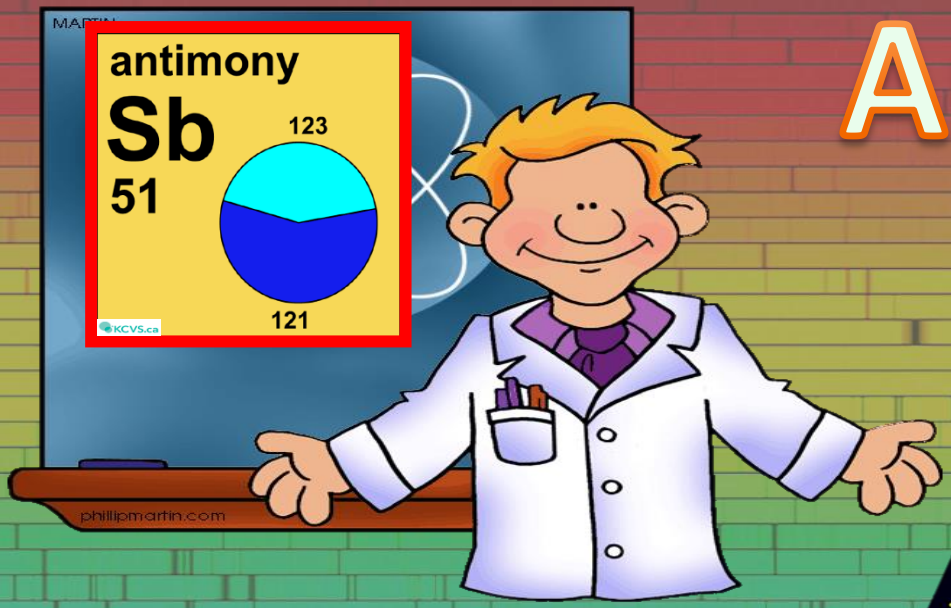
Lattine; vetri; materiali ignifughi; tinture

MEDICINA:

Imaging tumorale; anti-dolorifico;

INAF - Osservatorio Astronomico d'Abruzzo

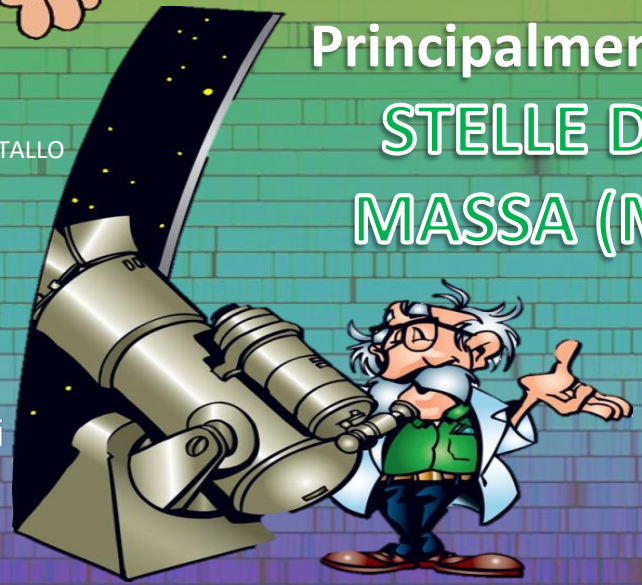
Antimonio



NOTO sin dall'antichità

MADE BY S. CRISTALLO

Principalmente formatosi in STELLE DI GRANDE MASSA ($M>10\ M_{SOLE}$)



Si utilizza in…

INDUSTRIA:

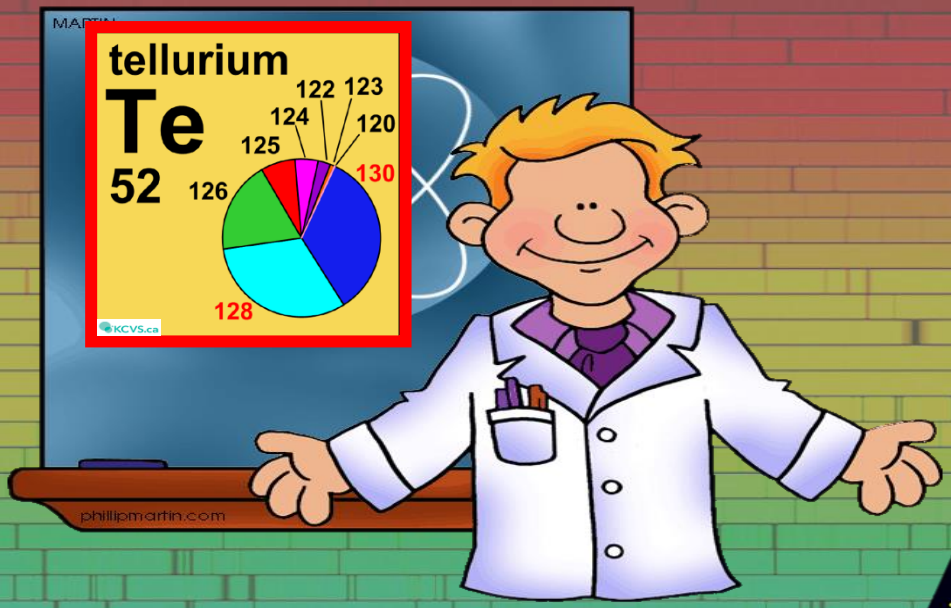
Batterie; sintesi leghe; ceramica; semiconduttori

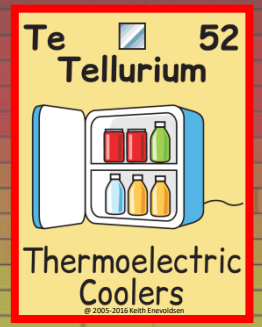
MEDICINA:

PET; radioimmunoterapia; anti-lesmaniosi

INAF - Osservatorio Astronomico d'Abruzzo

Tellurio





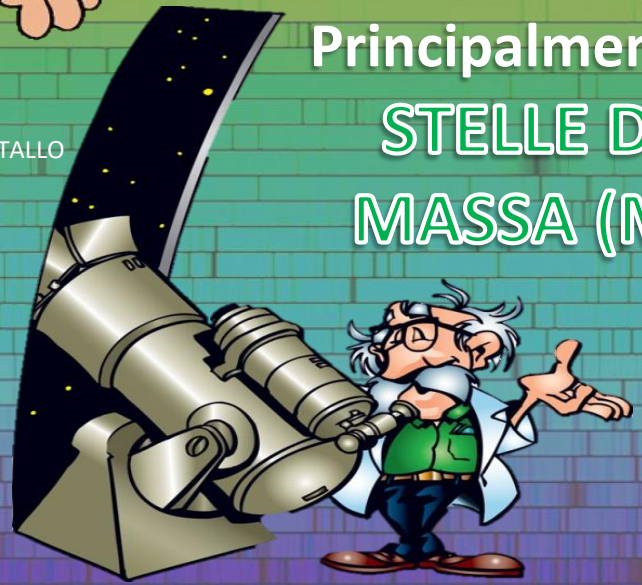
ISOLATO nel 1798

da Martin H. Klaproth

MADE BY S. CRISTALLO

Principalmente formatosi in

STELLE DI GRANDE MASSA ($M>10\ M_{SOLE}$)



Si utilizza in…

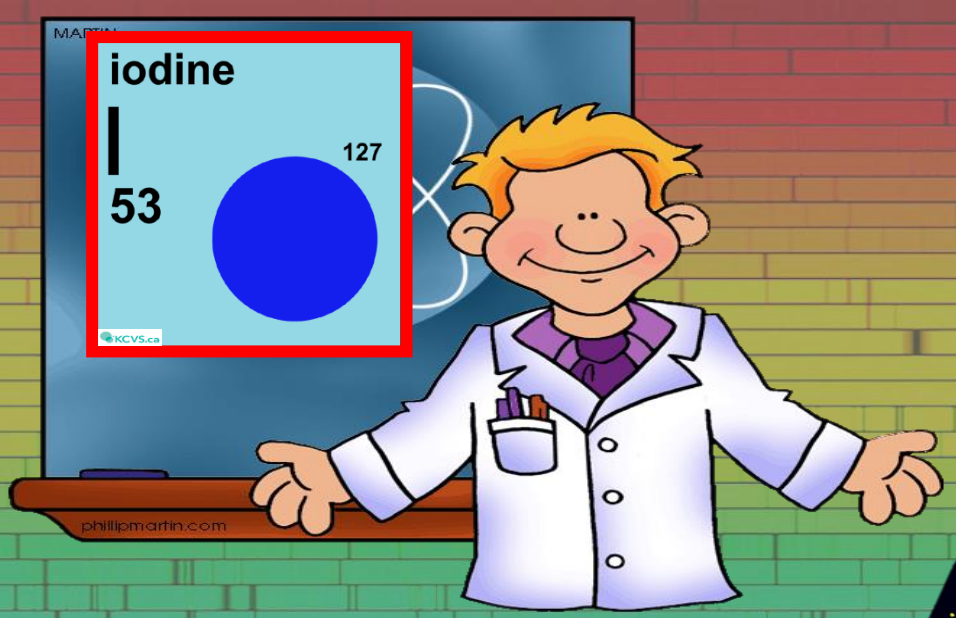
INDUSTRIA:

Sintesi leghe; pannelli solari; semiconduttori

MEDICINA:

PET; SPECT

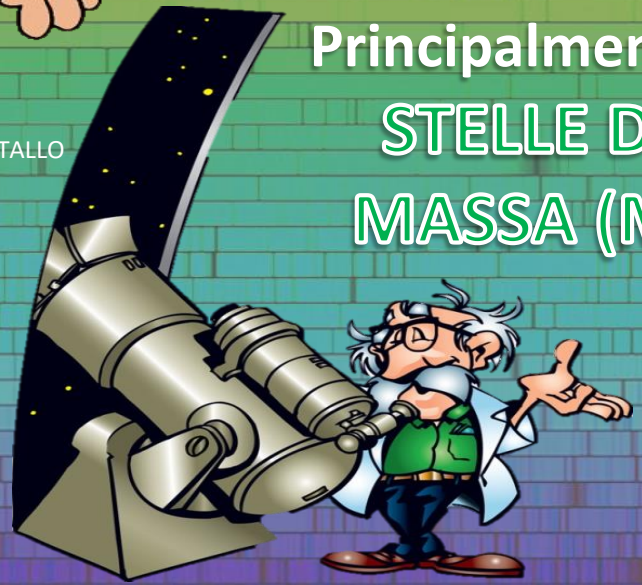
Iodio



ISOLATO nel 1811
da Bernard Courtois

MADE BY S. CRISTALLO

Principalmente formatosi in
STELLE DI GRANDE MASSA ($M>10\ M_{SOLE}$)



Si utilizza in...

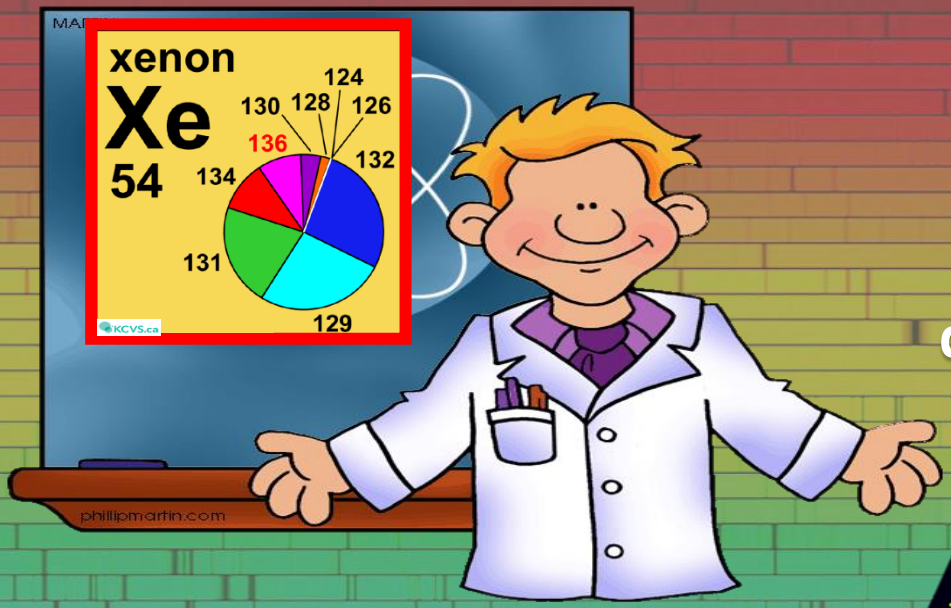
INDUSTRIA:

Disinfettanti; inchiostri da stampa e tinture

MEDICINA:

Radioterapia; PET; SPECT; anti-tiroideo

Xenon



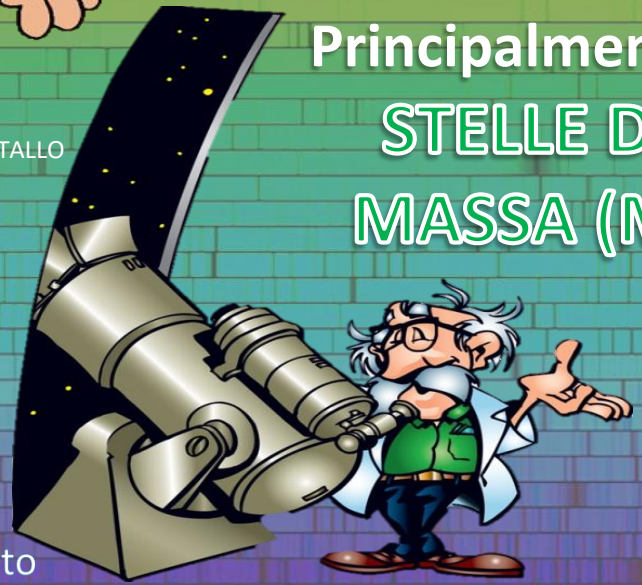
ISOLATO nel 1898

da W. Ramsay e M. Travers

MADE BY S. CRISTALLO

Principalmente formatosi in

STELLE DI GRANDE MASSA ($M>10\ M_{SOLE}$)



Si utilizza in...

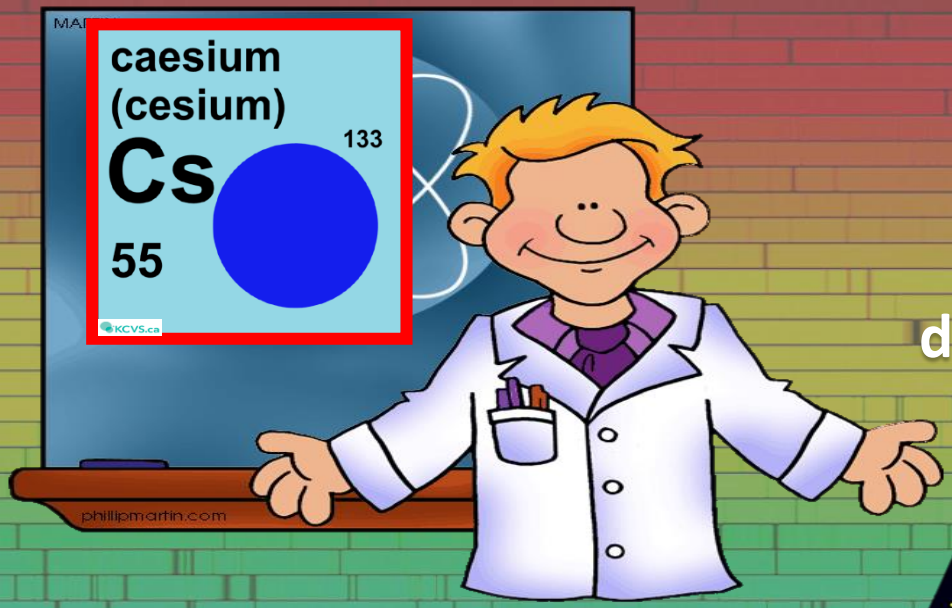
INDUSTRIA:

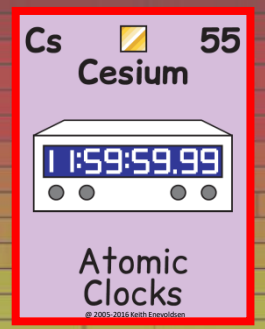
Lampade; lettini solari; impacchettamento cibo

MEDICINA:

Imaging polmonare; anestesia; mezzo di contrasto

Cesio





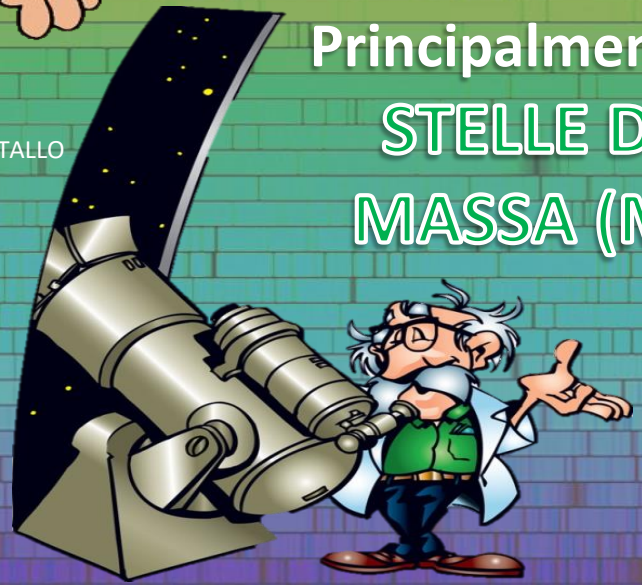
ISOLATO nel 1860

da R. Bunsen e G. Kirchhoff

MADE BY S. CRISTALLO

Principalmente formatosi in

STELLE DI GRANDE MASSA ($M>10\ M_{SOLE}$)



Si utilizza in...

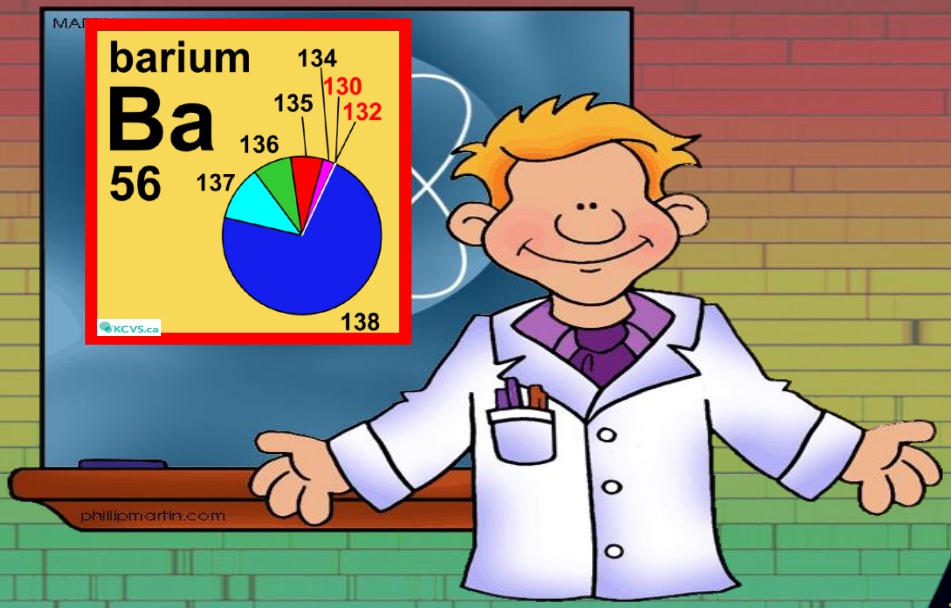
INDUSTRIA:

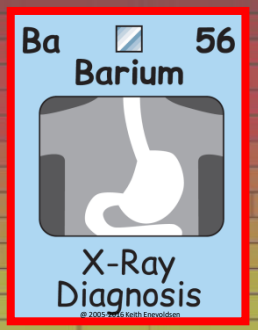
Impacchettamento cibo; celle fotoelettriche

MEDICINA:

Radioterapia; chemioterapia

Bario





ISOLATO nel 1774

da Carl Scheele

MADE BY S. CRISTALLO

Principalmente formatosi in

STELLE DI PICCOLA MASSA ($M<10\ M_{SOLE}$)

Si utilizza in...

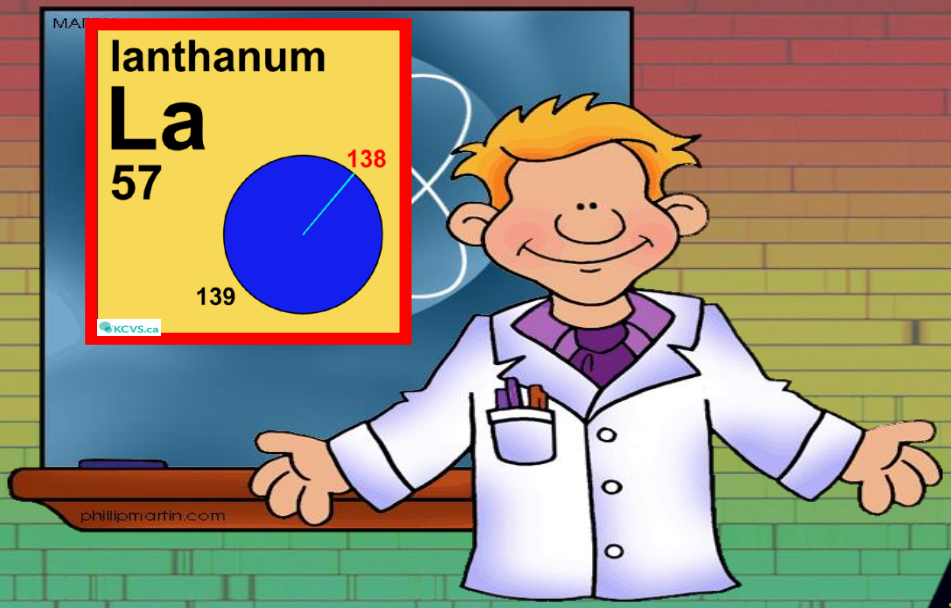
INDUSTRIA:

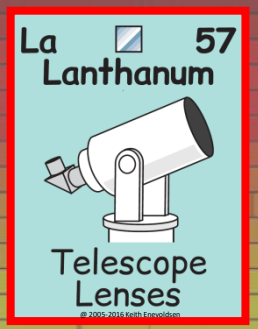
Superconduttori; vernici; lavorazione vetro

MEDICINA:

Diagnostica apparato digerente

Lantanio





ISOLATO nel 1839

da Carl Gustav Mosander

MADE BY S. CRISTALLO

Principalmente formatosi in

STELLE DI PICCOLA MASSA ($M<10\ M_{SOLE}$)

Si utilizza in...

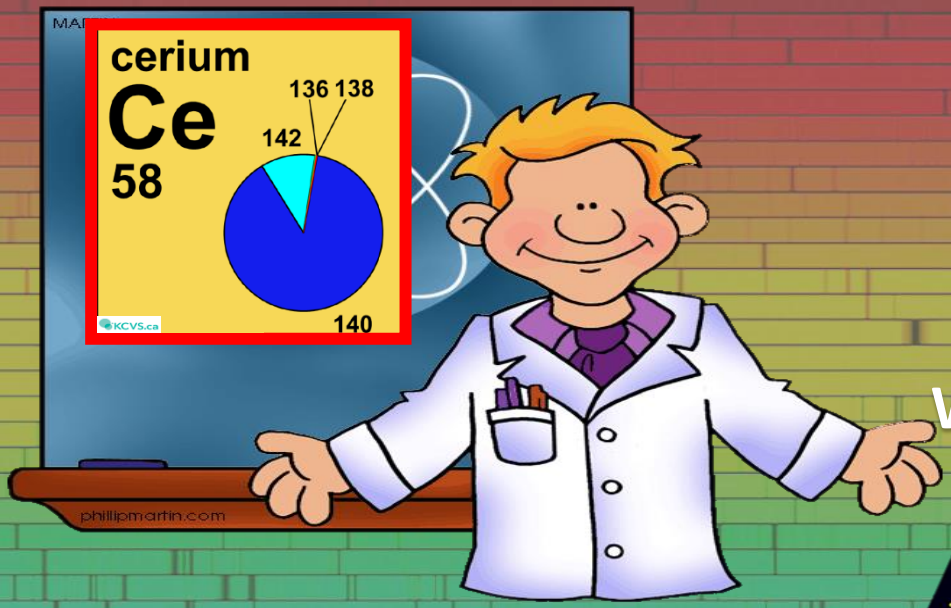
INDUSTRIA:

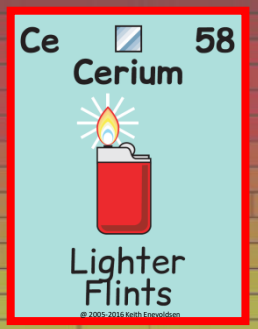
Proiettori; batterie; auto a idrogeno

MEDICINA:

Radioterapia; cura malattie renali

Cerio





ISOLATO nel 1803

da J.J. Berzelius,

W. Hisinger e M.H. Klaproth

MADE BY S. CRISTALLO

Principalmente formatosi in

STELLE DI PICCOLA MASSA ($M<10\ M_{SOLE}$)

Si utilizza in...

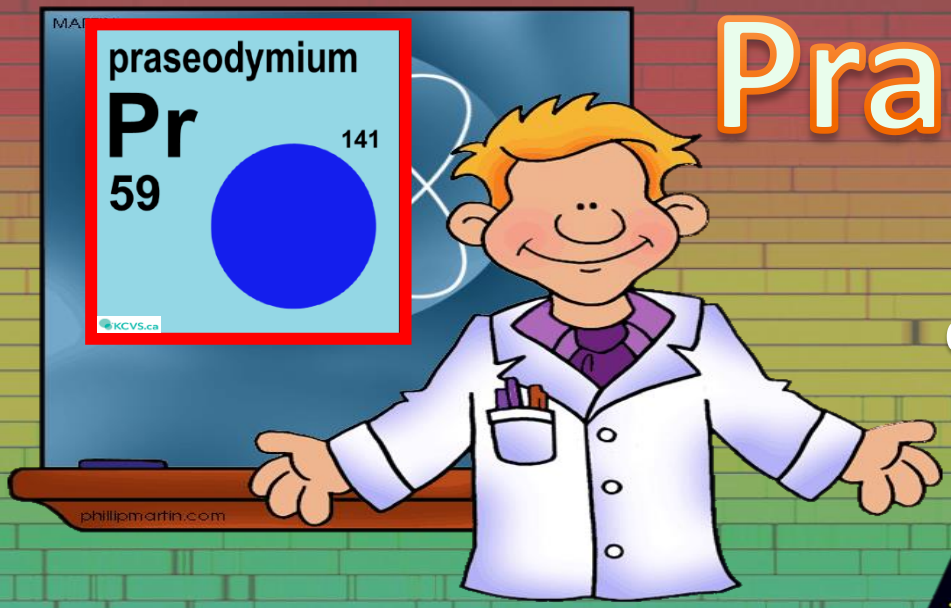
INDUSTRIA:

Trattamenti chimici e petrolchimici; accendini;

MEDICINA:

Radioterapia; brachiterapia; chirurgia plastica

Praseodimio



ISOLATO nel 1885

da C.A.F. von Welsbach

MADE BY S. CRISTALLO

Principalmente formatosi in

STELLE DI PICCOLA MASSA ($M<10\ M_{SOLE}$)

Si utilizza in...

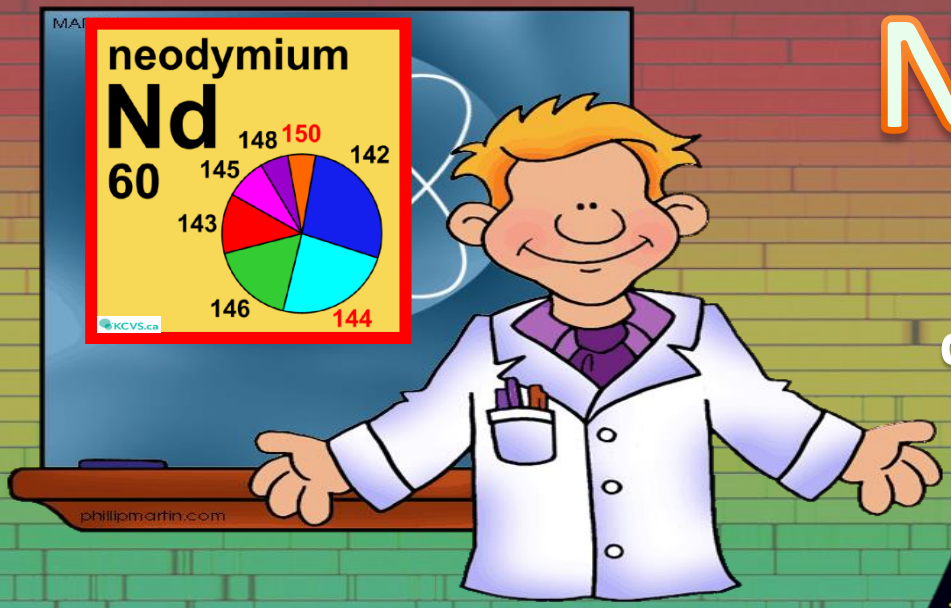
INDUSTRIA:

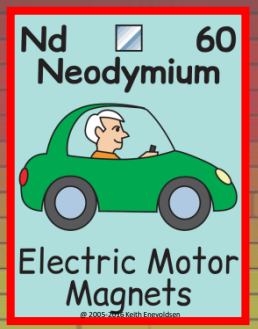
Occhiali da saldatore; colorazione vetri e smalti

MEDICINA:

PET; brachiterapia;

Neodimio





ISOLATO nel 1885

da C.A.F. von Welsbach

MADE BY S. CRISTALLO

Principalmente formatosi in

STELLE DI PICCOLA MASSA ($M<10\ M_{SOLE}$)

Si utilizza in...

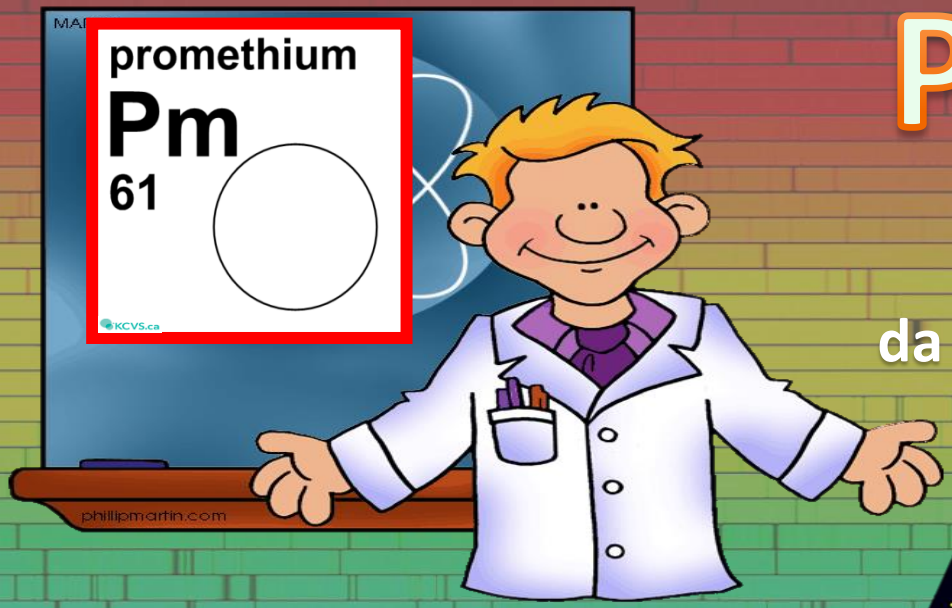
INDUSTRIA:

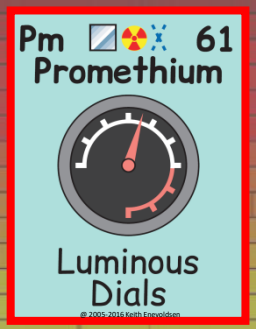
Colorazione vetri e smalti; magneti

MEDICINA:

Risonanza magnetica

Promezio





SCOPERTO nel 1945

da J. Marinsky, L. Glendenin e C. Coryell

MADE BY S. CRISTALLO

Principalmente formatosi in

STELLE DI PICCOLA MASSA ($M<10\ M_{SOLE}$)

Si utilizza in...

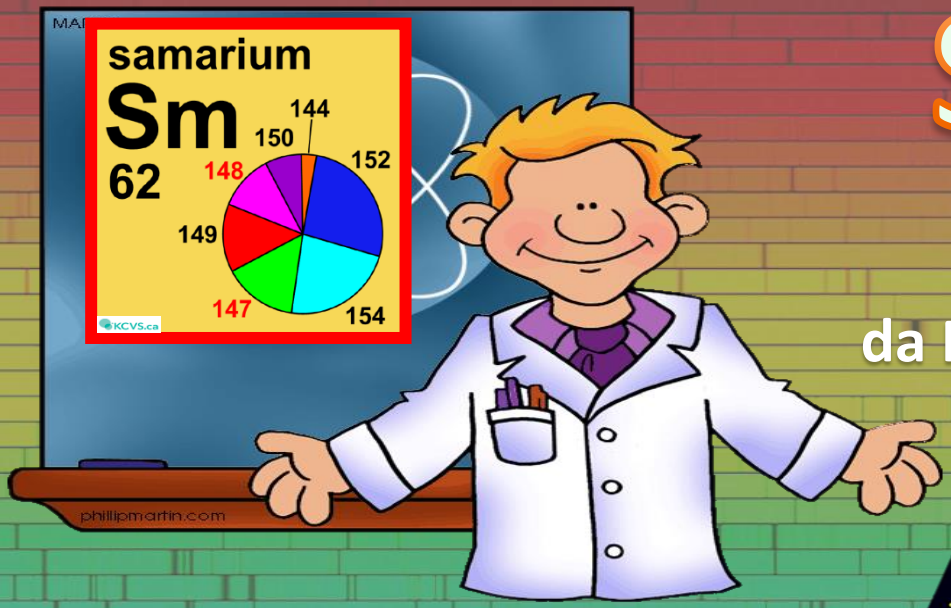
INDUSTRIA:

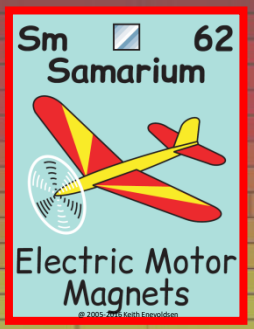
Reattori nucleari; batterie nucleari

MEDICINA:

Pacemakers; sorgente X portatile

Samario





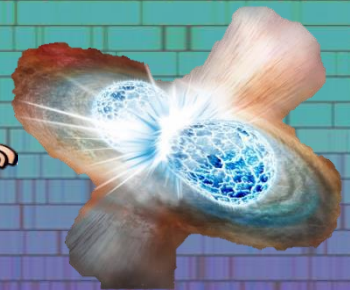
ISOLATO nel 1879

da P.É. Lecoq de Boisbaudran

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI DUE STELLE DI NEUTRONI



Si utilizza in...

INDUSTRIA:

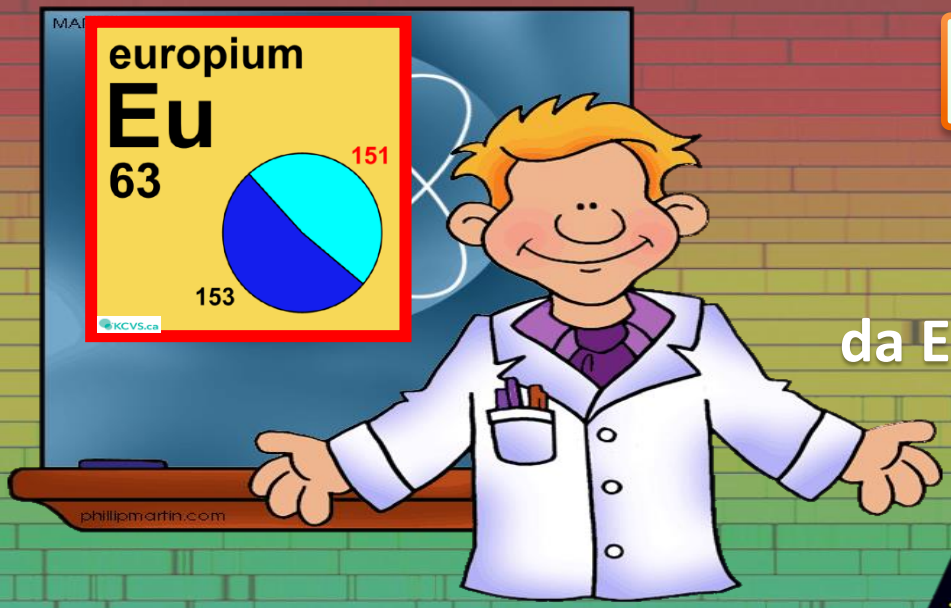
Reattori nucleari; lasers; magneti

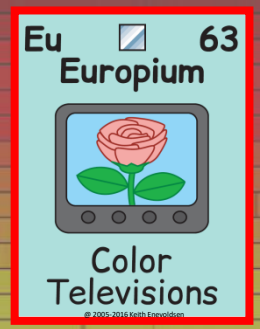
MEDICINA:

Anti-dolorifico; radiofarmaci

INAF - Osservatorio Astronomico d'Abruzzo

Europio





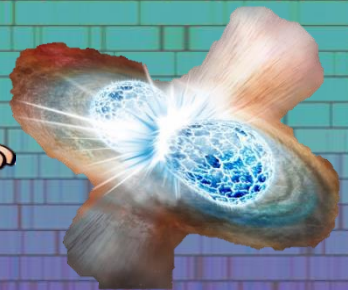
ISOLATO nel 1901

da Eugène-Anatole Demarçay

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI DUE STELLE DI NEUTRONI



Si utilizza in...

INDUSTRIA:

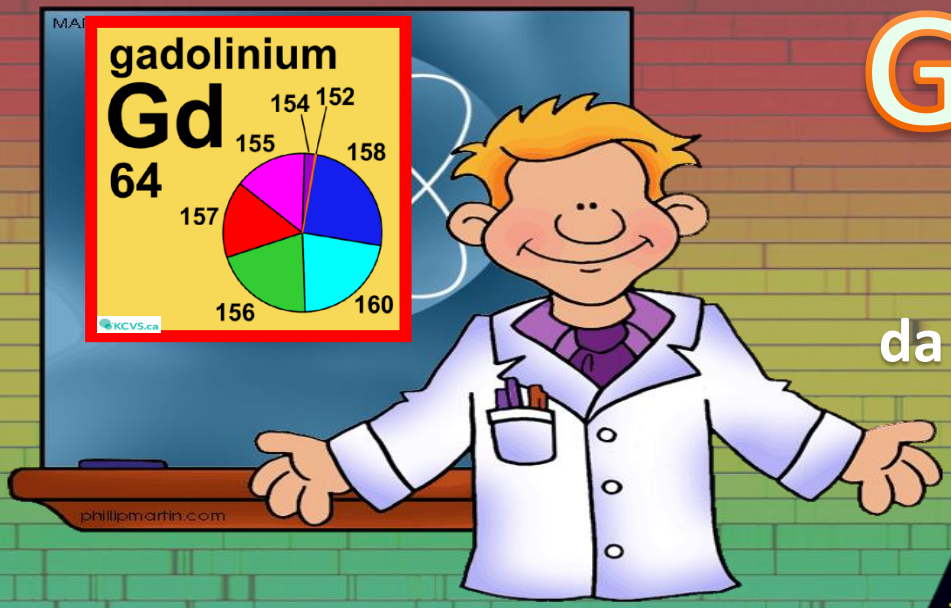
Colori TV; reattori nucleari; stampa Euro

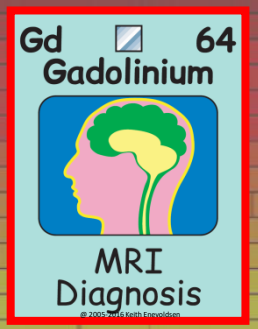
MEDICINA:

Imaging risonanza magnetica

INAF - Osservatorio Astronomico d'Abruzzo

Gadolinio





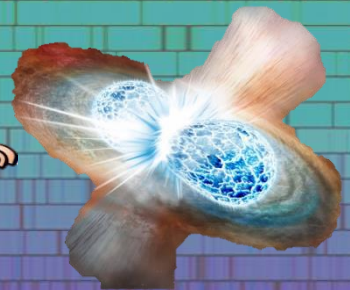
ISOLATO nel 1904

da G. Urbain e H. Lacombe

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI DUE STELLE DI NEUTRONI



Si utilizza in...

INDUSTRIA:

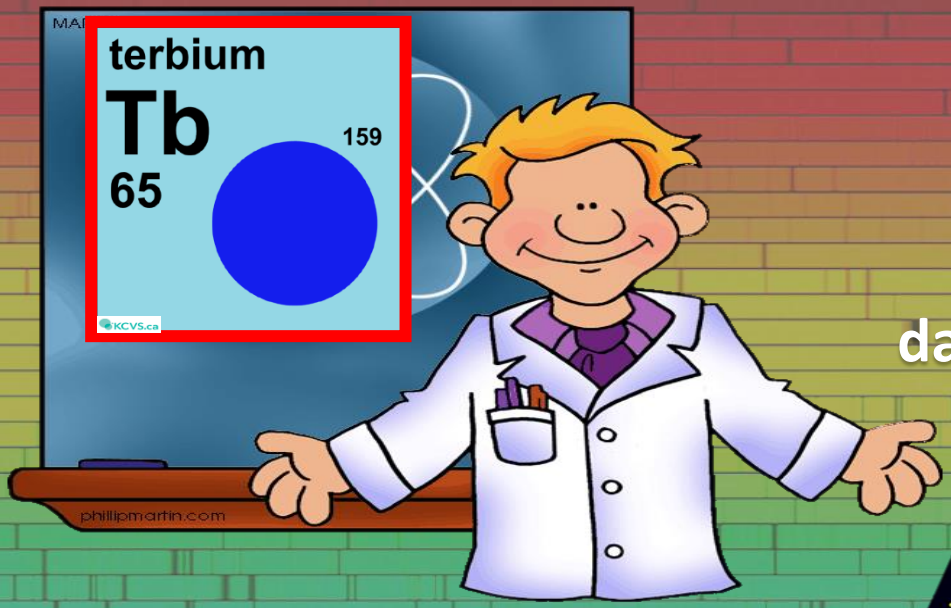
Colori TV; sintesi leghe; magneti

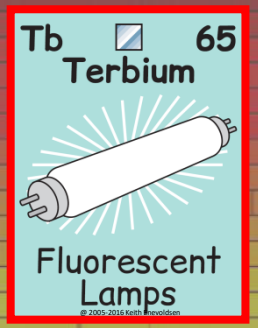
MEDICINA:

Risonanza magnetica; Neutron Capture Therapy

INAF - Osservatorio Astronomico d'Abruzzo

Terbio





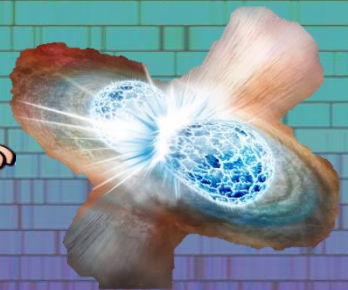
ISOLATO nel 1843

da Carl Gustav Mosander

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI DUE STELLE DI NEUTRONI



Si utilizza in...

INDUSTRIA:

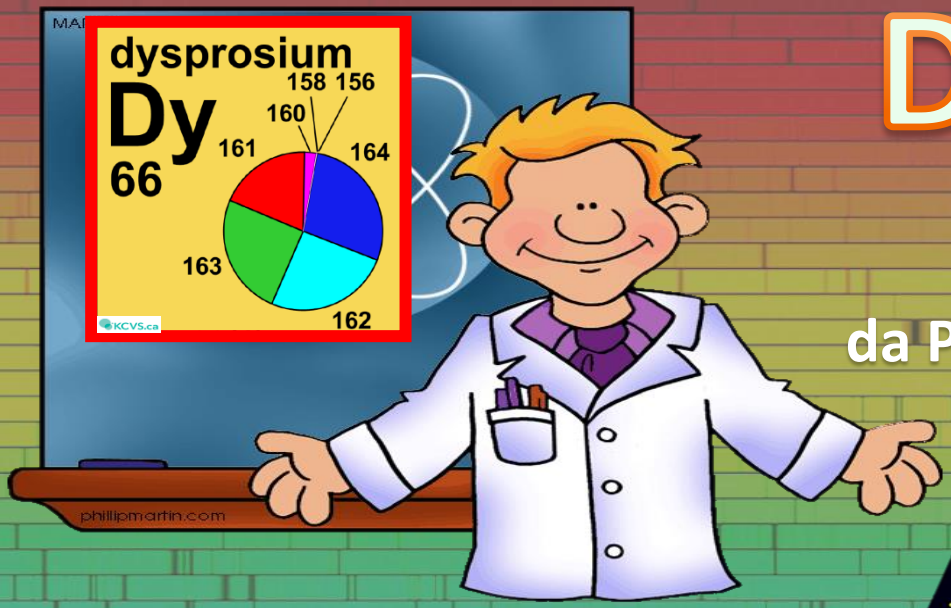
Sintesi leghe; dischi a stato solido; lasers

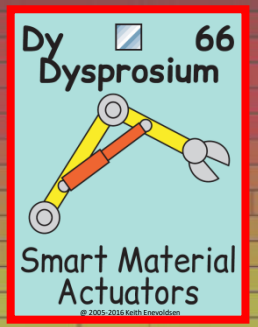
MEDICINA:

Radioterapia; imaging raggi X

INAF - Osservatorio Astronomico d'Abruzzo

Disprosio





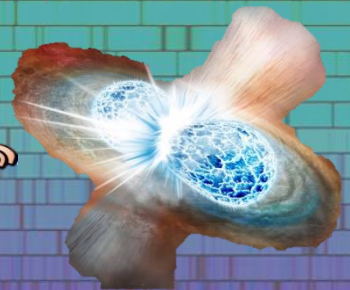
ISOLATO nel 1886

da P.É. Lecoq de Boisbaudran

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI DUE STELLE DI NEUTRONI



Si utilizza in...

INDUSTRIA:

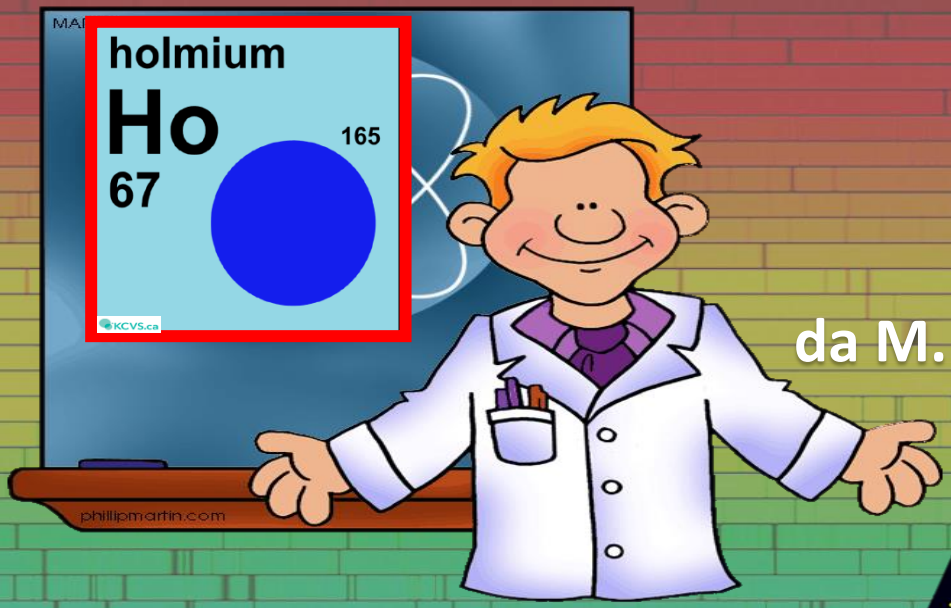
Reattori nucleari; magneti; lampade

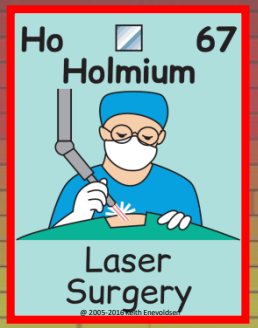
MEDICINA:

Radiosinovectomia (artriti)

INAF - Osservatorio Astronomico d'Abruzzo

Olmio





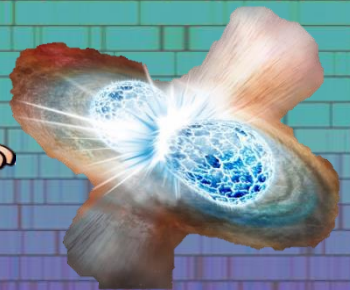
ISOLATO nel 1878

da M. Delafontaine e J.-L. Soret

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI DUE STELLE DI NEUTRONI



Si utilizza in...

INDUSTRIA:

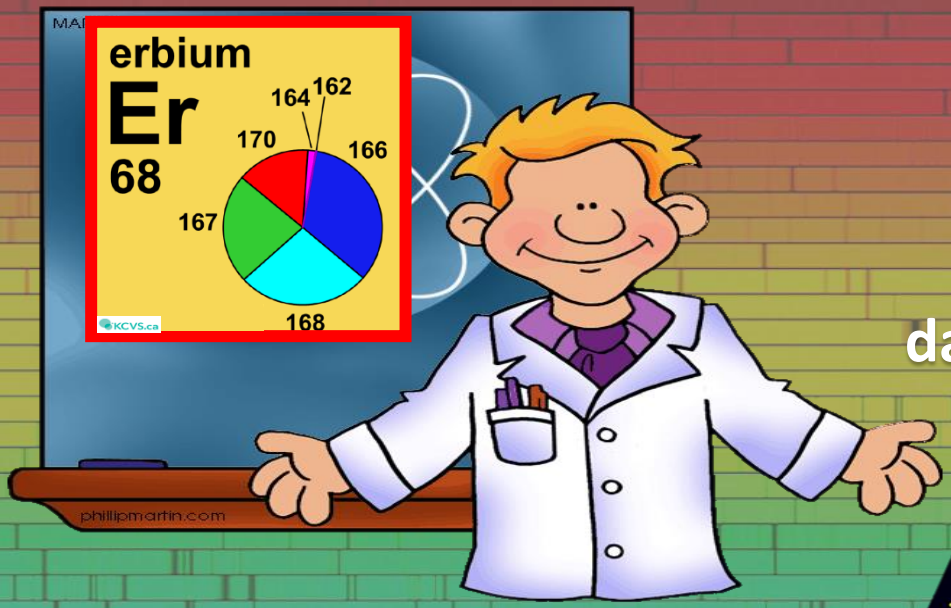
Sintesi leghe; magneti; reattori nucleari

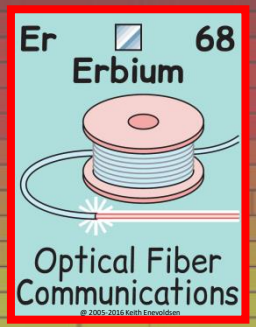
MEDICINA:

PET; SPECT; radioimmunoterapia

INAF - Osservatorio Astronomico d'Abruzzo

Erbio





ISOLATO nel 1843

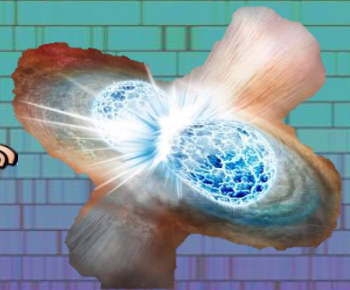
da Carl Gustav Mosander

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI

DUE STELLE DI NEUTRONI



Si utilizza in...

INDUSTRIA:

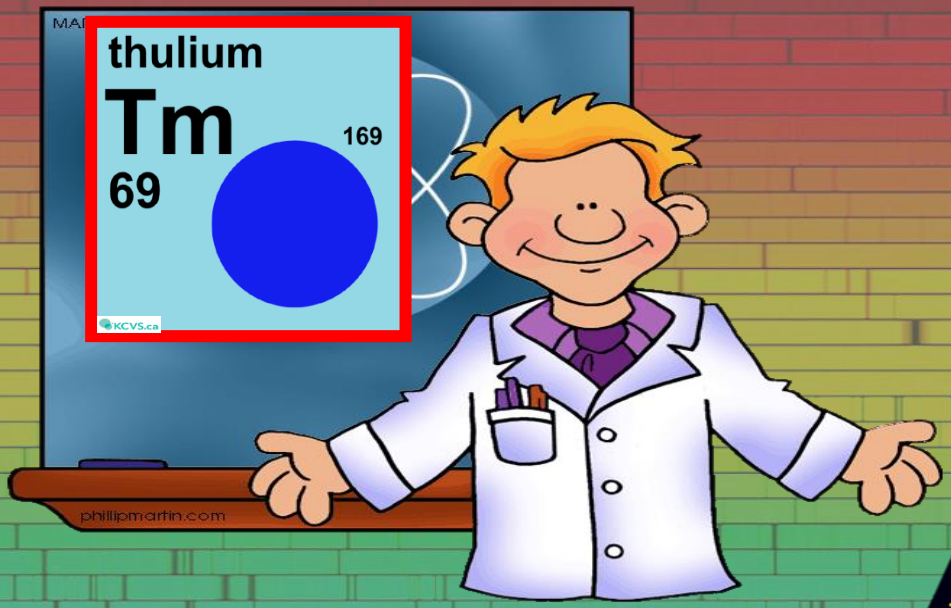
Fibre ottiche; lasers; sintesi leghe; amplificatori

MEDICINA:

Radiosinovectomia (artriti)

INAF - Osservatorio Astronomico d'Abruzzo

Tulio



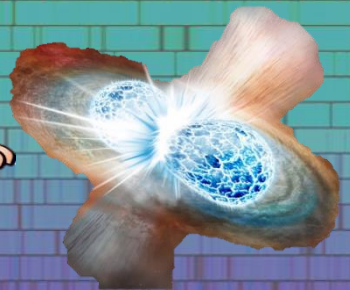
ISOLATO nel 1879

da Per Teodor Cleve

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI DUE STELLE DI NEUTRONI



Si utilizza in...

INDUSTRIA:

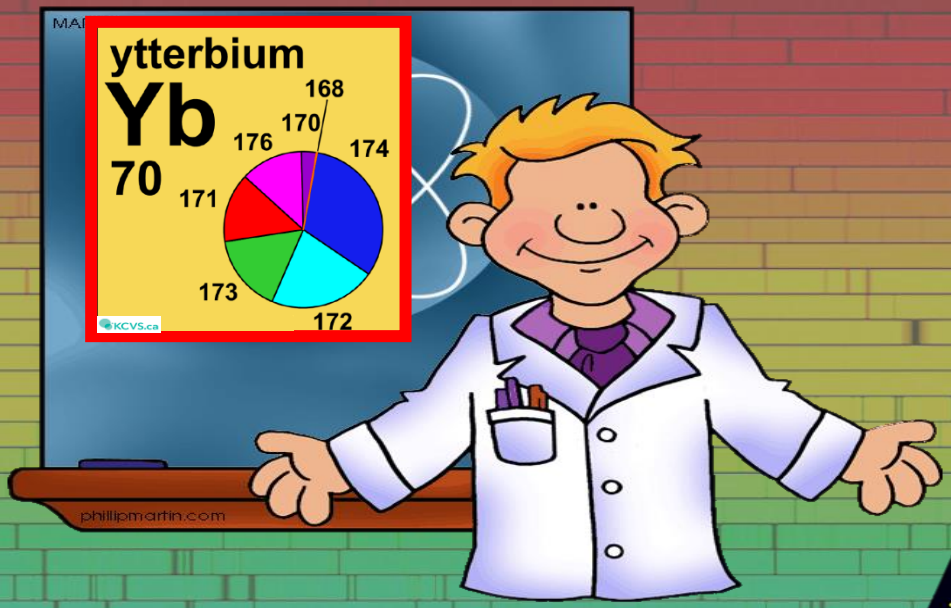
Radiografia saldature; lasers

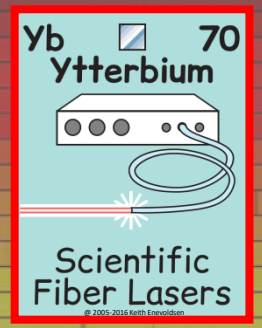
MEDICINA:

Radiosinovectomia; lasers; raggi X portatili

INAF - Osservatorio Astronomico d'Abruzzo

Itterbio





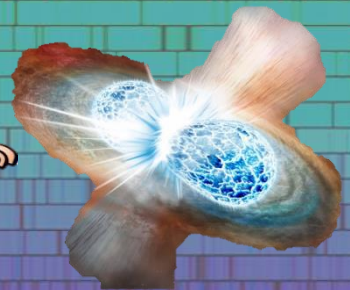
ISOLATO nel 1907

da Georges Urbain

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI DUE STELLE DI NEUTRONI



Si utilizza in...

INDUSTRIA:

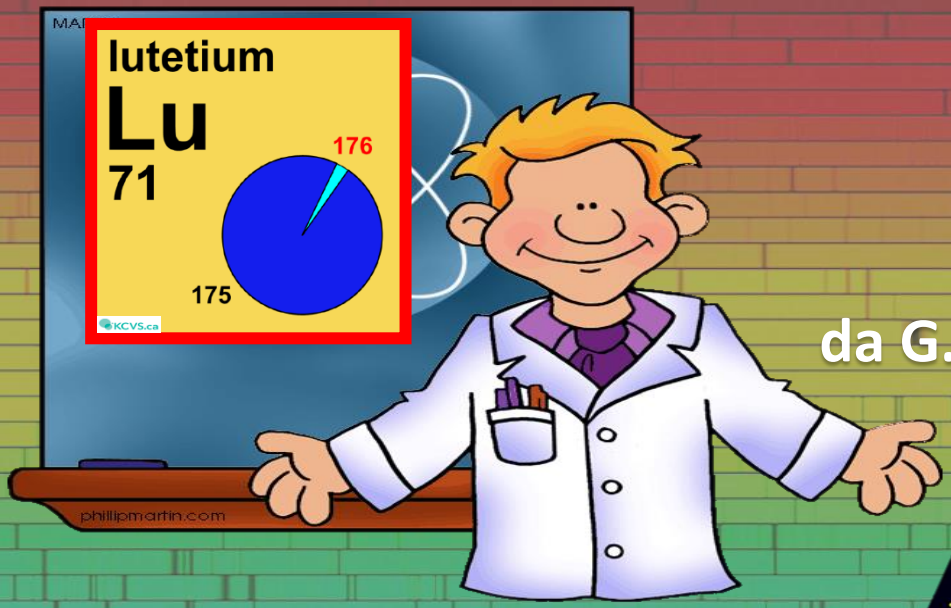
Sintesi leghe; radiografia saldature

MEDICINA:

Brachiterapia; raggi X portatili

INAF - Osservatorio Astronomico d'Abruzzo

Lutezio



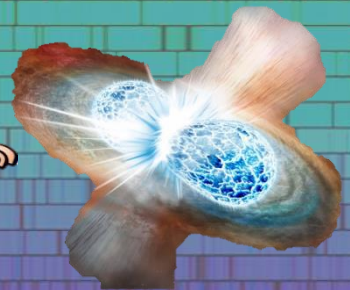
ISOLATO nel 1907

da G. Urbain C.A. von Welsbach

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI DUE STELLE DI NEUTRONI



Si utilizza in...

INDUSTRIA:

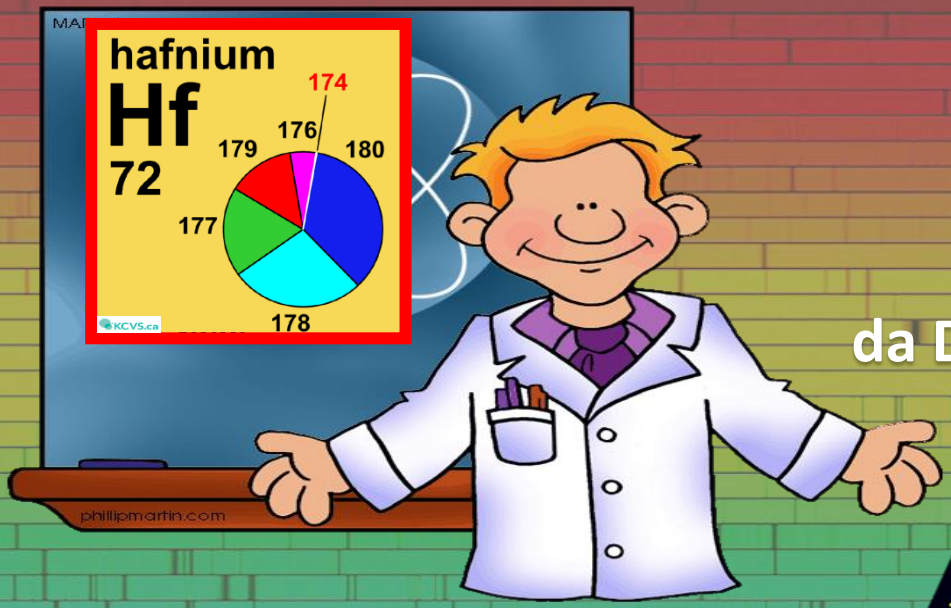
Industria petrolchimica; datazione meteoriti

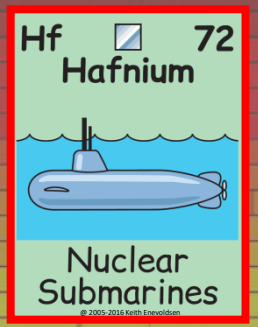
MEDICINA:

Radioimmunoterapia; cure palliative

INAF - Osservatorio Astronomico d'Abruzzo

Afnio





ISOLATO nel 1923

da D. Coster e G.C. de Hevesy

MADE BY S. CRISTALLO

Principalmente formatosi in

STELLE DI PICCOLA MASSA ($M<10\ M_{SOLE}$)

Si utilizza in...

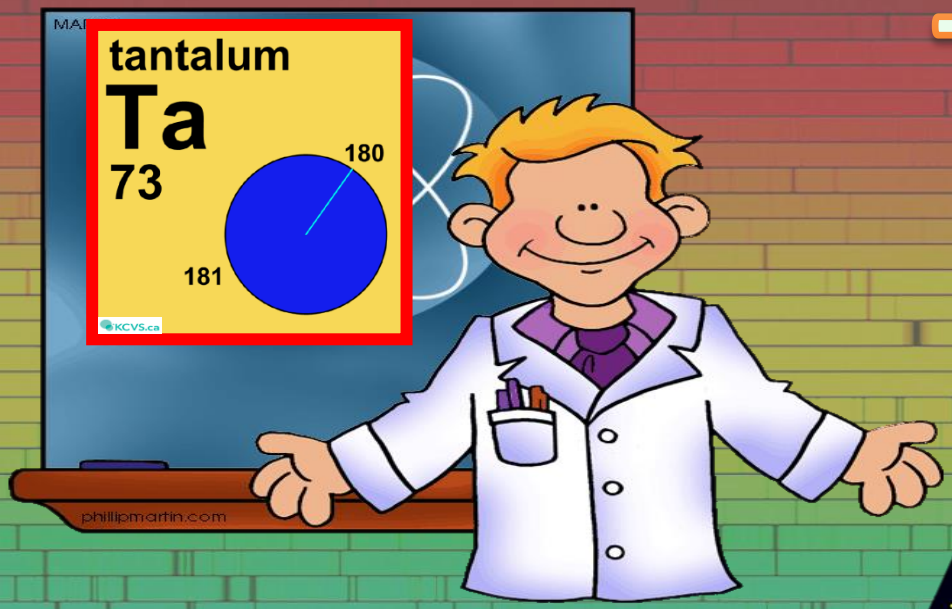
INDUSTRIA:

Tecnologia nucleare; leghe; creazione vuoto

MEDICINA:

Radioterapia

Tantalio



ISOLATO nel 1824

da Jöns Berzelius

MADE BY S. CRISTALLO

Principalmente formatosi in

STELLE DI PICCOLA MASSA ($M<10\ M_{SOLE}$)

Si utilizza in...

INDUSTRIA:

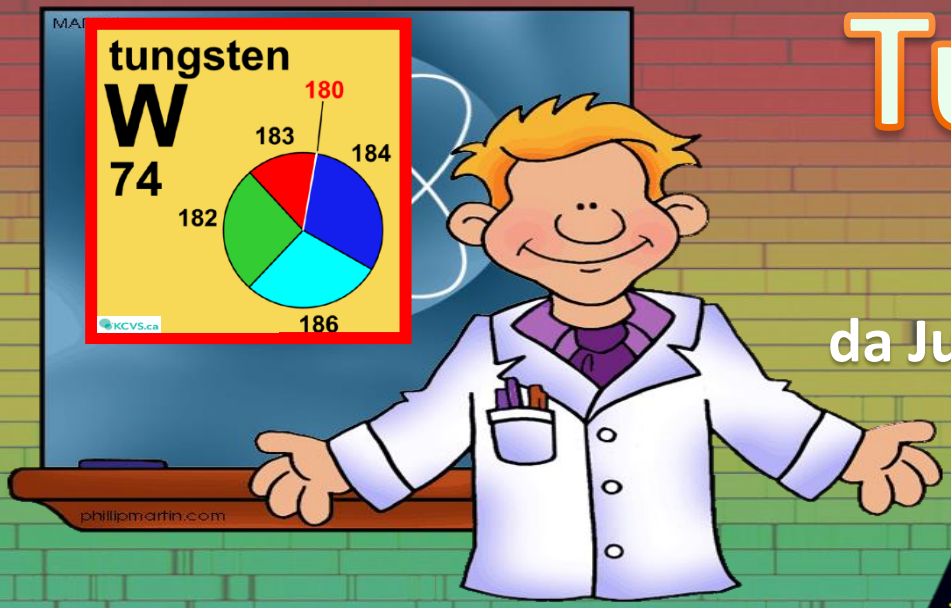
Elettronica; sintesi leghe; impianti dentali

MEDICINA:

Angiografia; strumenti chirurgici

INAF - Osservatorio Astronomico d'Abruzzo

Tungsteno



ISOLATO nel 1783

da Juan José e Fausto Delhuyar

MADE BY S. CRISTALLO

Principalmente formatosi in

STELLE DI PICCOLA MASSA ($M<10\ M_{SOLE}$)

Si utilizza in...

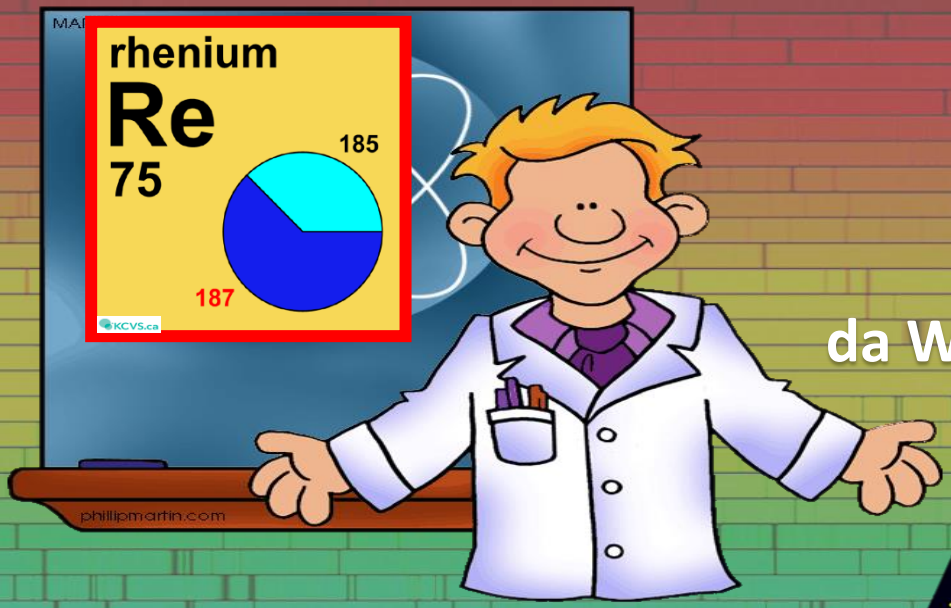
INDUSTRIA:

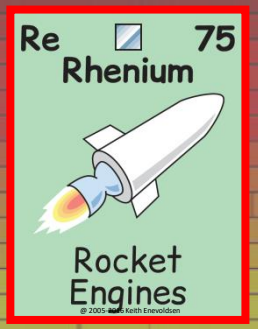
Elettrodi per lampadine; sintesi leghe

MEDICINA:

Strumenti oncologici; radioterapia

Renio





ISOLATO nel 1925

da W. von Noddack, I. Noddack

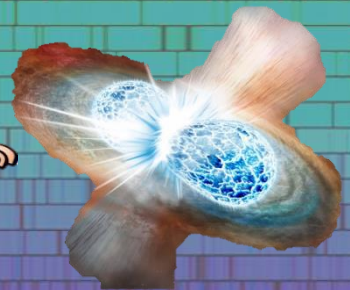
e O.C. von Berg

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI

DUE STELLE DI NEUTRONI



Si utilizza in...

INDUSTRIA:

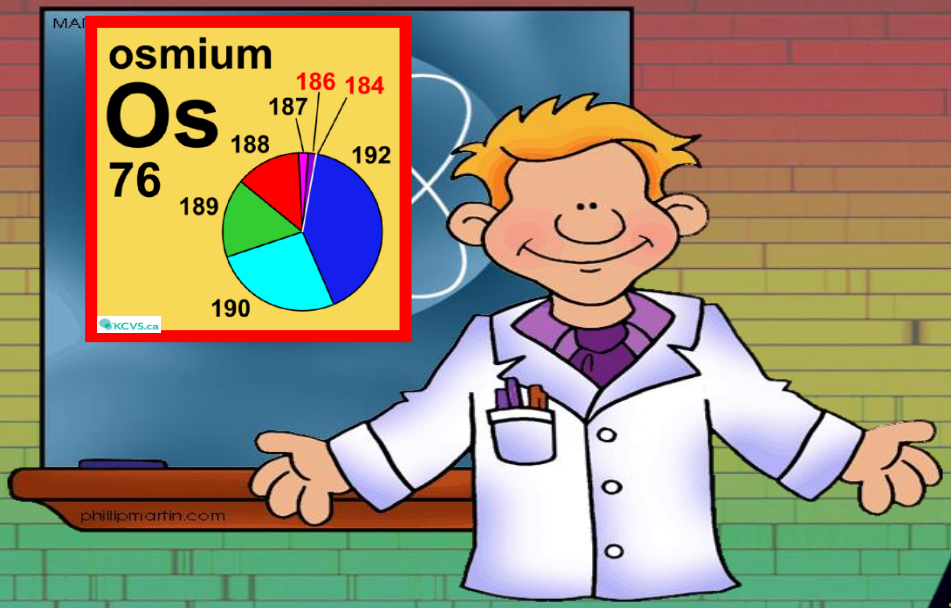
Industria petrolchimica; sintesi leghe

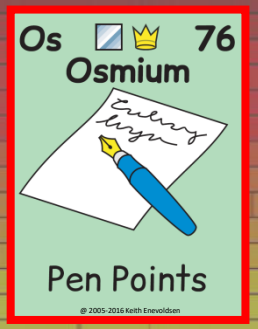
MEDICINA:

Radiosinovectomia; cure palliative

INAF - Osservatorio Astronomico d'Abruzzo

Osmio





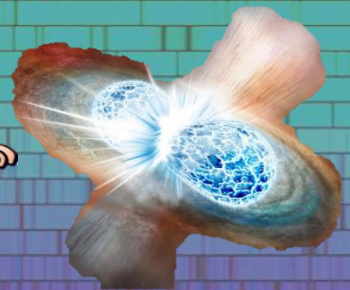
ISOLATO nel 1803

da Smithson Tennant

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI DUE STELLE DI NEUTRONI



Si utilizza in...

INDUSTRIA:

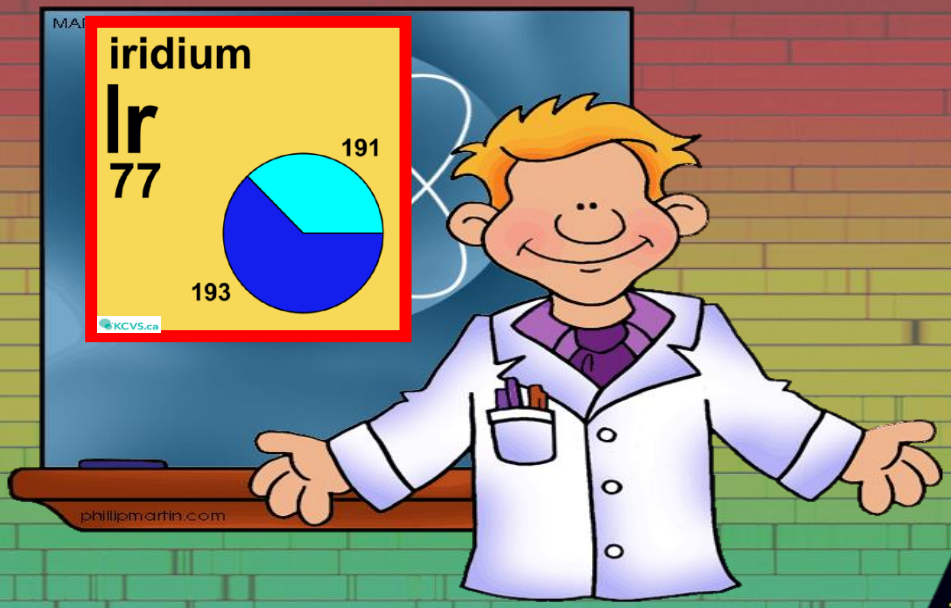
Penne stilografiche; contatti elettrici; aghi

MEDICINA:

Anti-infiammatorio; fissazione chimica

INAF - Osservatorio Astronomico d'Abruzzo

Iridio



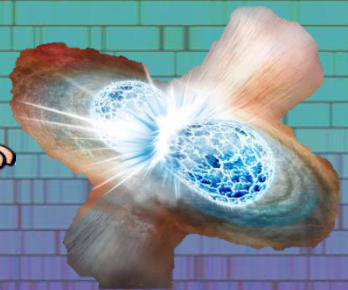
ISOLATO nel 1803

da Smithson Tennant

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI DUE STELLE DI NEUTRONI



Si utilizza in...

INDUSTRIA:

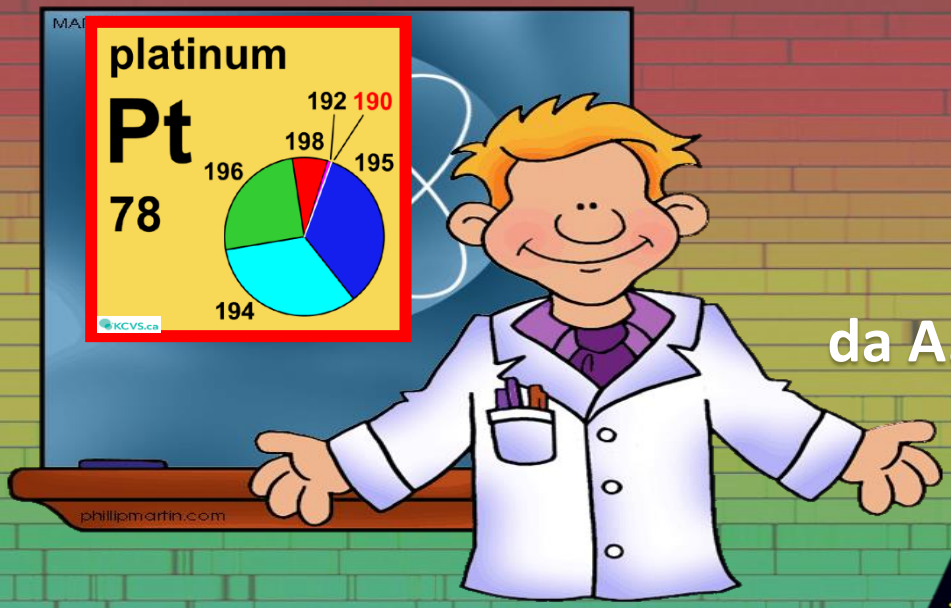
Contatti elettrici; anti-corrosivo; sintesi leghe

MEDICINA:

Brachiterapia; medicina nucleare

INAF - Osservatorio Astronomico d'Abruzzo

Platino



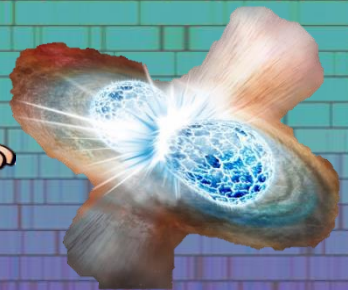
ISOLATO nel 1735

da A. de Ulloa e J.J. y Santacilia

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI DUE STELLE DI NEUTRONI



Si utilizza in...

INDUSTRIA:

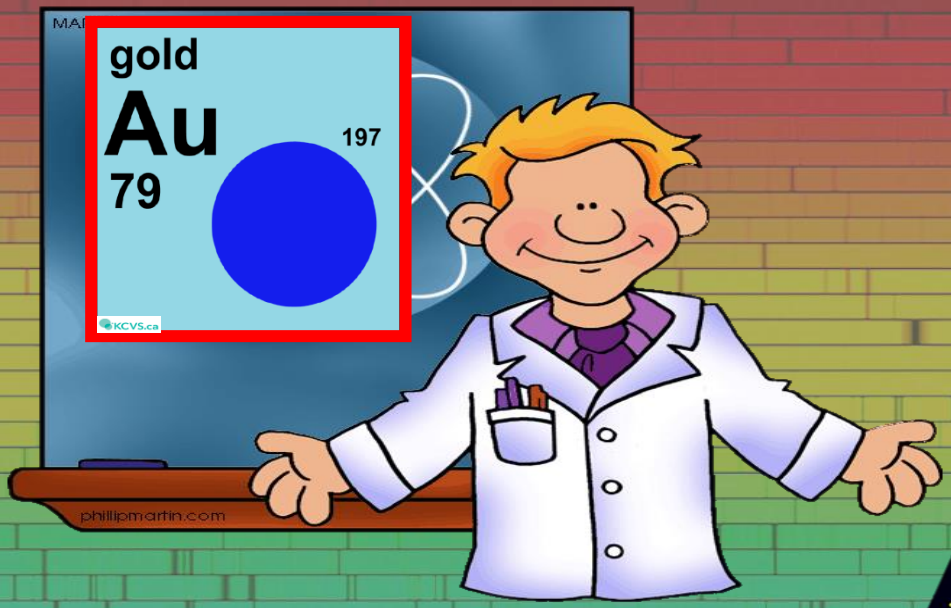
Sintesi plastiche; gioielli; componentistica missili

MEDICINA:

Antitumorale; pacemakers; defibrillatori; cateteri

INAF - Osservatorio Astronomico d'Abruzzo

Oro

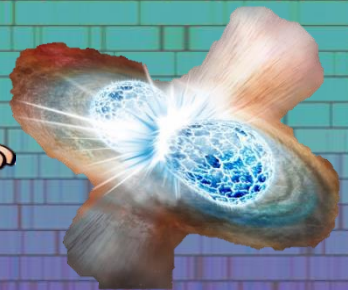


MADE BY S. CRISTALLO

NOTO sin dall'antichità

Principalmente formatosi in

COALESCENZA DI DUE STELLE DI NEUTRONI



Si utilizza in…

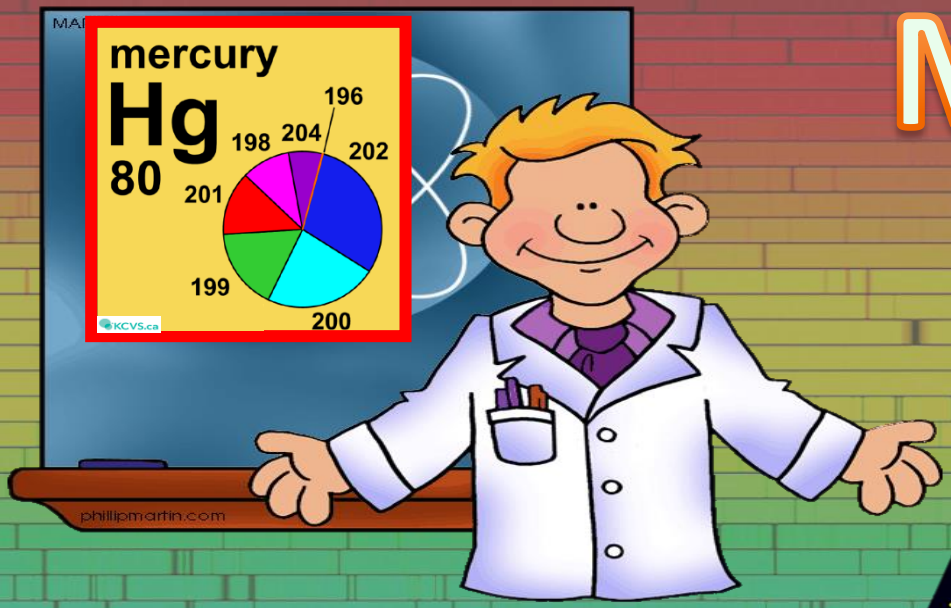
INDUSTRIA:

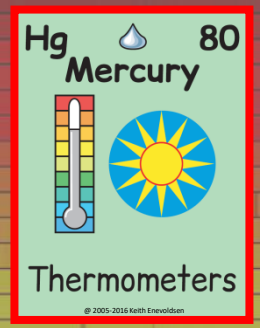
Dentistica; elettronica; gioielli; computers

MEDICINA:

Antitumorale; anti-reumatoide; nanobiologia

Mercurio





NOTO sin dall'antichità

MADE BY S. CRISTALLO

Principalmente formatosi in

STELLE DI PICCOLA MASSA ($M<10\ M_{SOLE}$)

Si utilizza in…

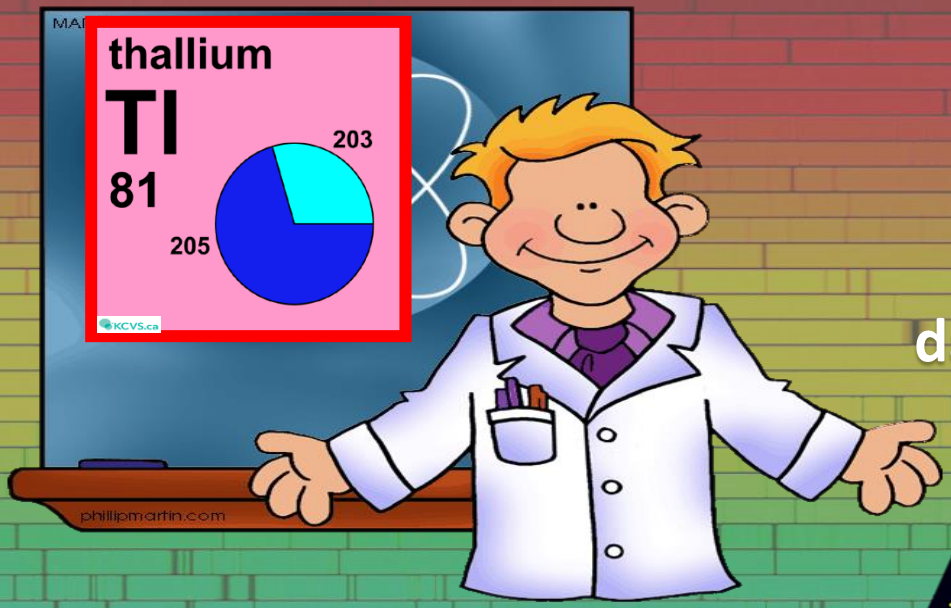
INDUSTRIA:

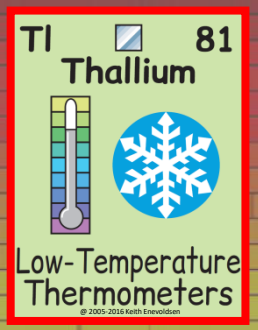
Termometri; barometri; orologi; lampadine

MEDICINA:

Anti-sifilide, anti-parassitario; anti-settico (obsoleti)

Tallio





ISOLATO nel 1735

da Claude Auguste Lamy

MADE BY S. CRISTALLO

Principalmente formatosi in

STELLE DI PICCOLA MASSA ($M<10\ M_{SOLE}$)

Si utilizza in...

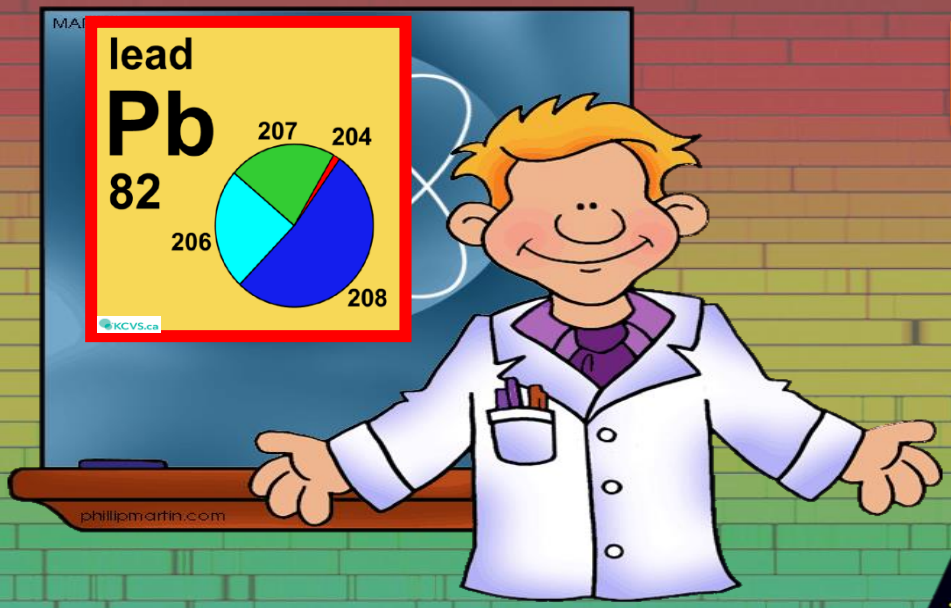
INDUSTRIA:

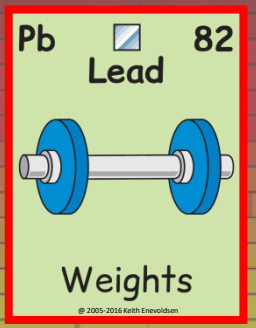
Elettronica; farmaceutica; produzione vetro

MEDICINA:

Scintigrafia; test sotto sforzo (medicina nucleare)

Piombo





NOTO sin dall'antichità

MADE BY S. CRISTALLO

Principalmente formatosi in

STELLE DI PICCOLA MASSA ($M<10\ M_{SOLE}$)

Si utilizza in…

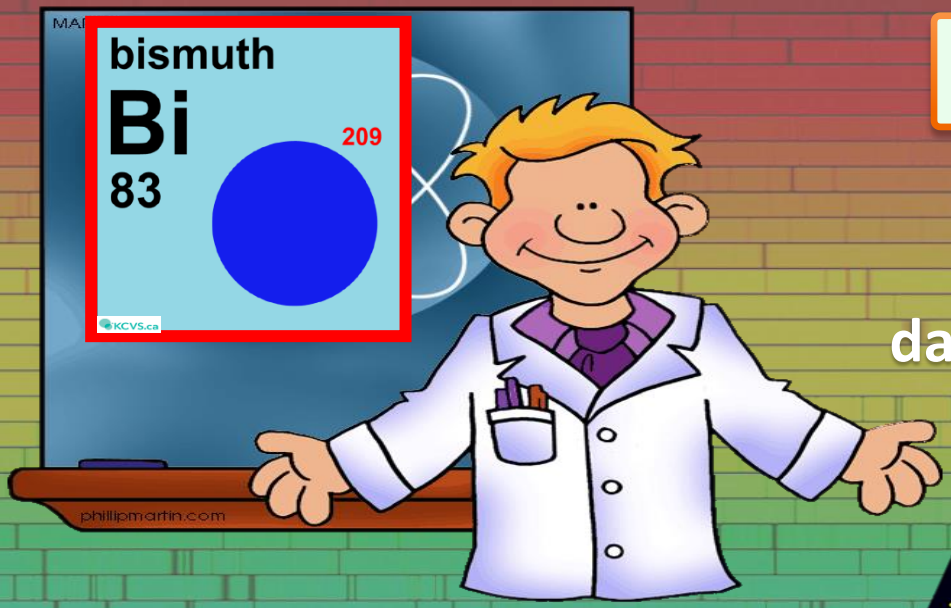
INDUSTRIA:

Batterie; munizioni; pesi; schermatura radiazioni

MEDICINA:

Grembiuli anti-radiazioni

Bismuto



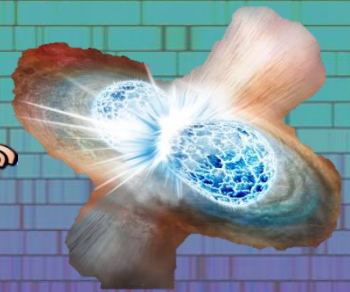
ISOLATO nel 1753

da Claude Geoffroy Junine

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI DUE STELLE DI NEUTRONI



Si utilizza in...

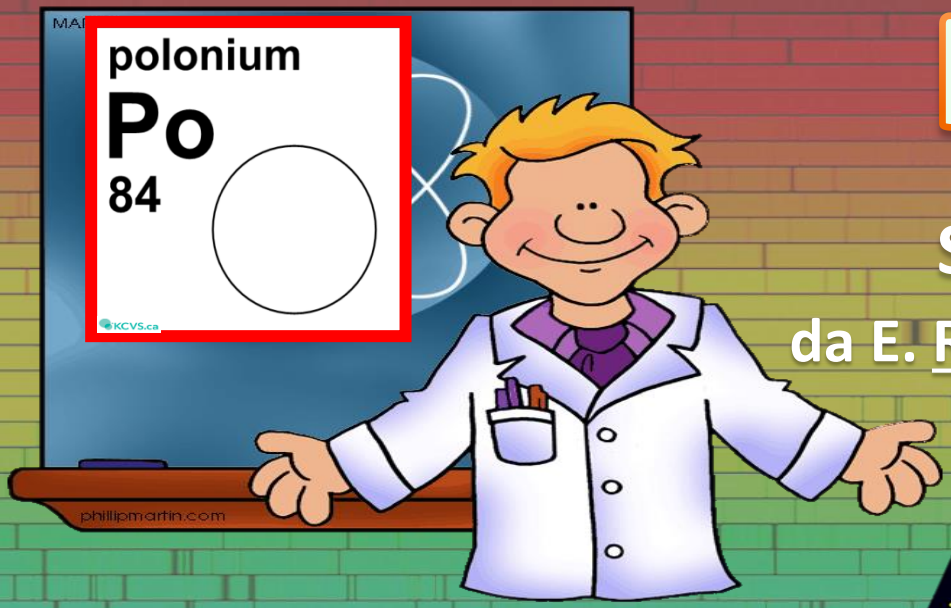
INDUSTRIA:

Sintesi leghe; sistemi anti-incendio

MEDICINA:

Radioimmunoterapia;

Polonio



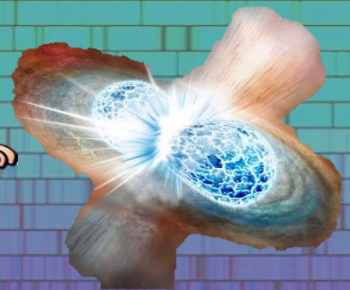
SCOPERTO nel 1898

da E. Rutherford and R.B. Owens

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI DUE STELLE DI NEUTRONI



Si utilizza in...

INDUSTRIA:

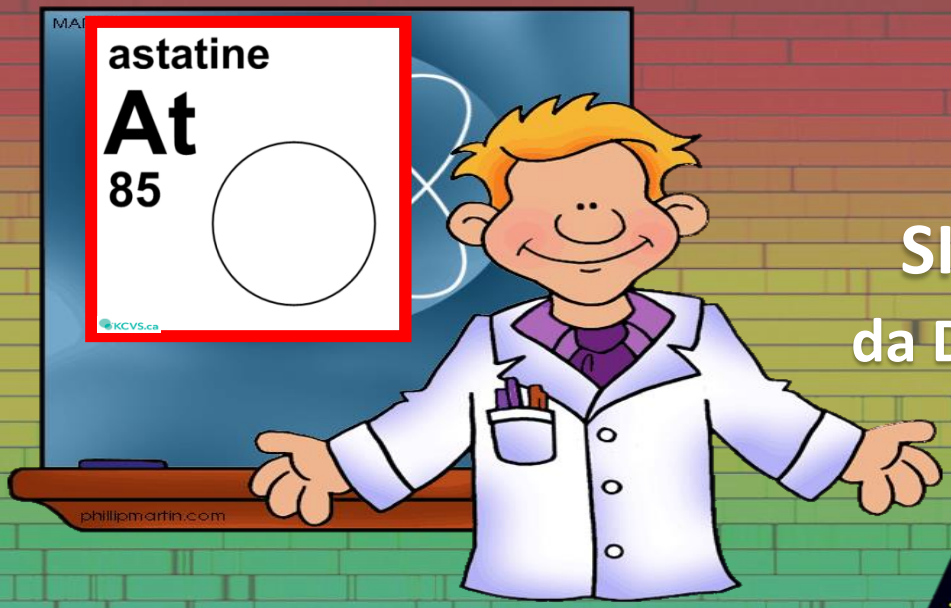
Anti-statico; sorgente di energia per satelliti

MEDICINA:

Nessuno

INAF - Osservatorio Astronomico d'Abruzzo

Astato



SINTETIZZATO nel 1940

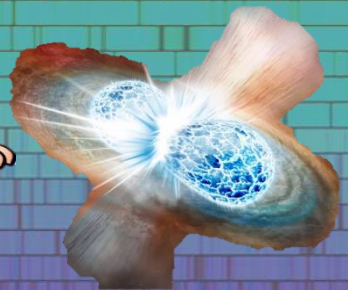
da D.R. Corson, K. MacKenzie

ed E. Segrè

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI DUE STELLE DI NEUTRONI



Si utilizza in...

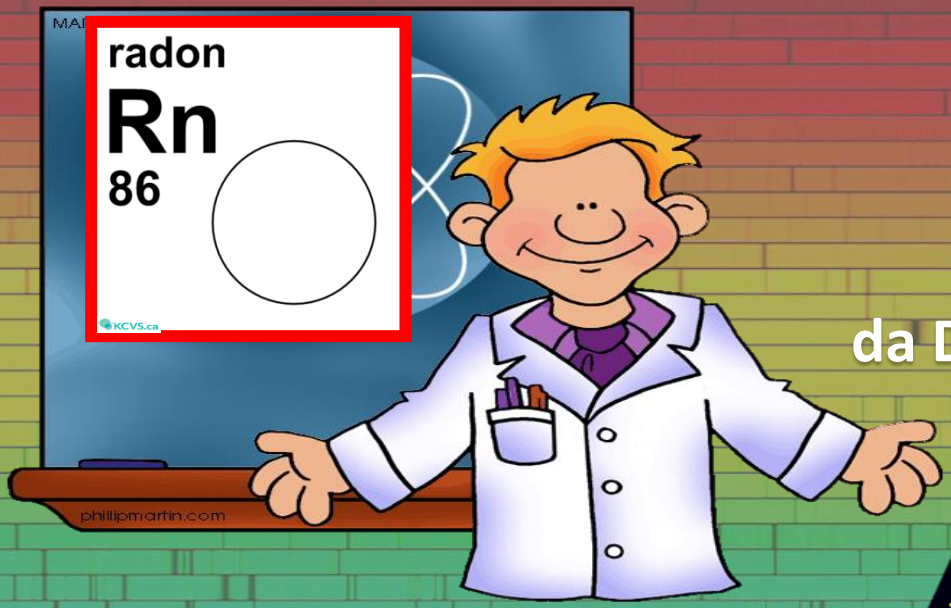
INDUSTRIA:

Tracciante radiazioni

MEDICINA:

Trattamento ipertiroidismo; radioterapia

Radon



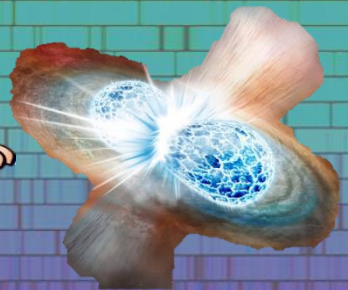
SCOPERTO nel 1899

da D.R. Corson, K. MacKenzie ed E. Segrè

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI DUE STELLE DI NEUTRONI



Si utilizza in...

INDUSTRIA:

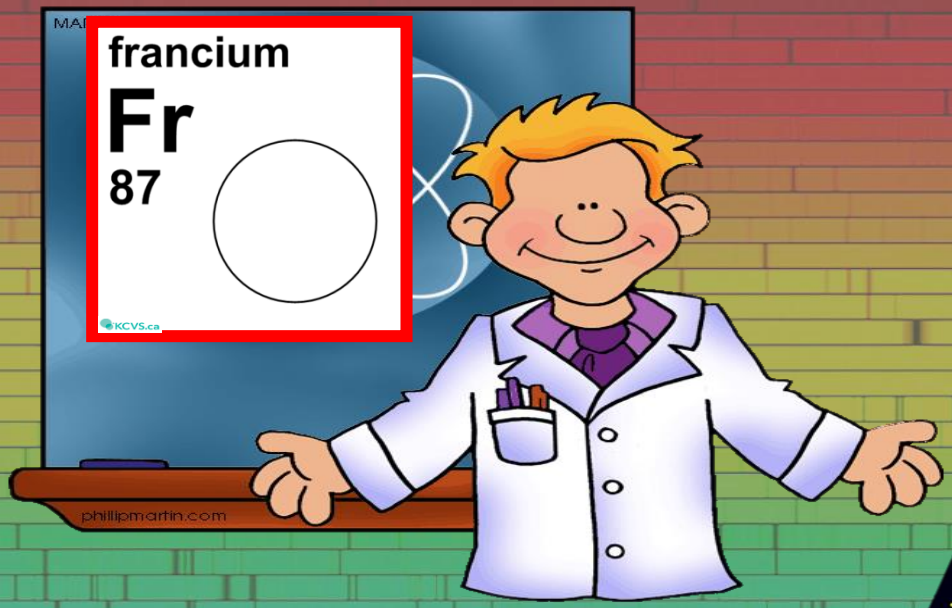
Nessuno

MEDICINA:

Anti-tumorale; anti-artritico; brachiterapia

INAF - Osservatorio Astronomico d'Abruzzo

Francio



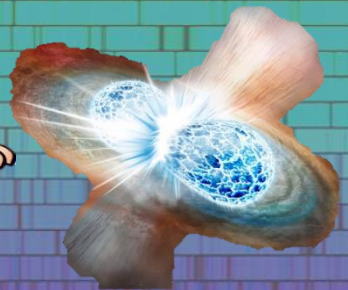
SCOPERTO nel 1939

da Marguerite Perey

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI DUE STELLE DI NEUTRONI



Si utilizza in...

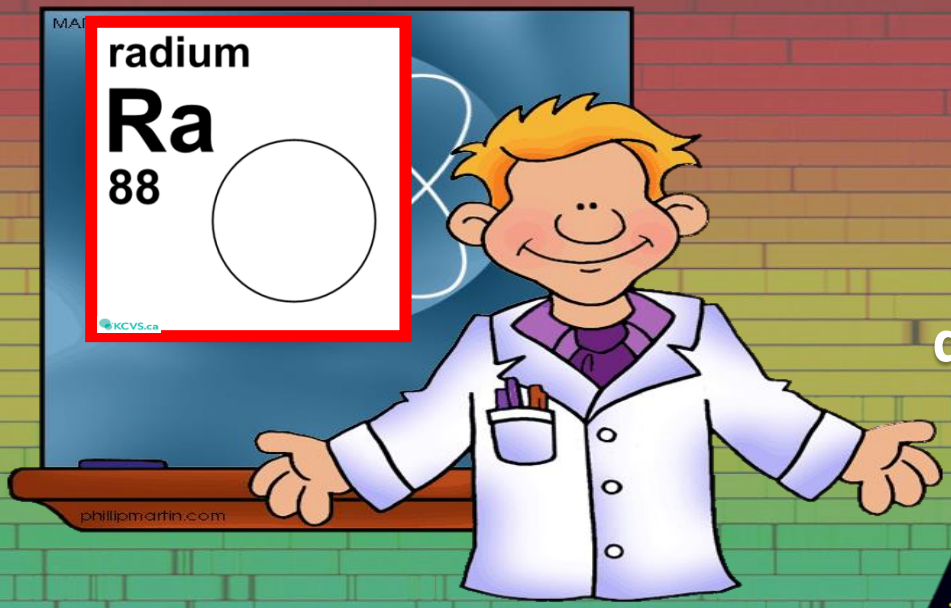
INDUSTRIA:

Nessuno

MEDICINA:

Nessuno

Radio



SCOPERTO nel 1898

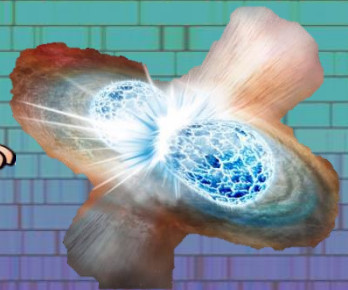
da Marie e Pierre Curie

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI

DUE STELLE DI NEUTRONI



Si utilizza in...

INDUSTRIA:

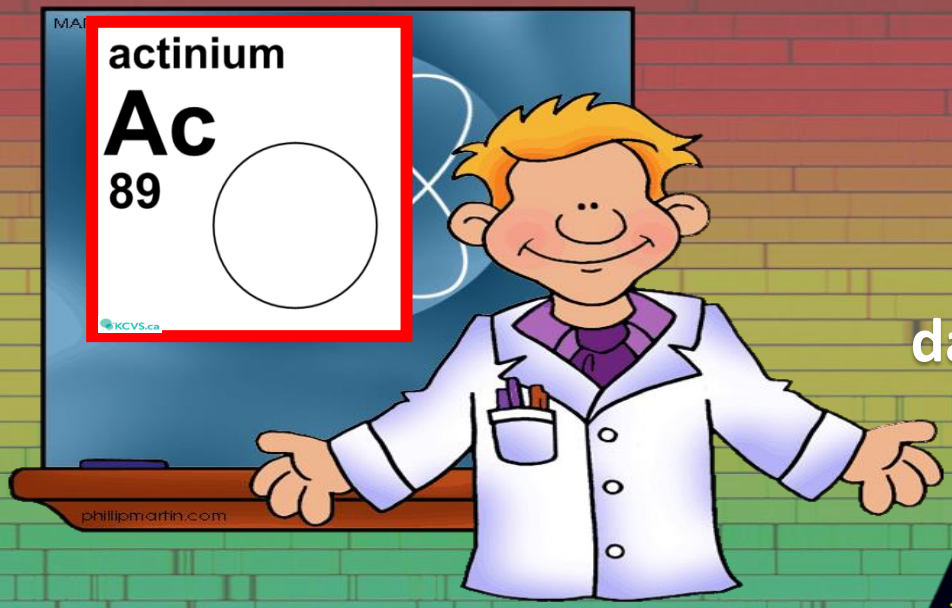
Nessuno

MEDICINA:

Brachiterapia

INAF - Osservatorio Astronomico d'Abruzzo

Attinio



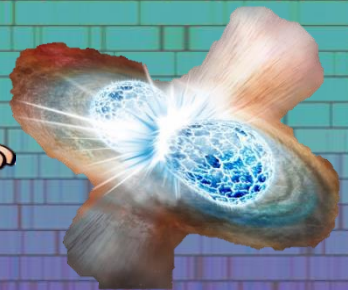
SCOPERTO nel 1899

da André-Louis Debierne

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI DUE STELLE DI NEUTRONI



Si utilizza in...

INDUSTRIA:

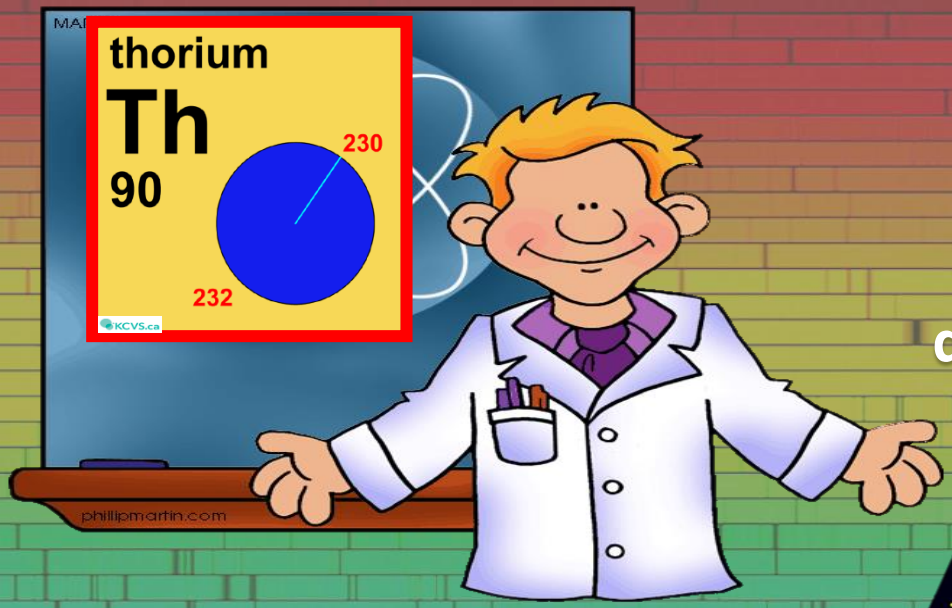
Nessuno

MEDICINA:

Anti-tumorale; radioimmunoterapia

INAF - Osservatorio Astronomico d'Abruzzo

Torio



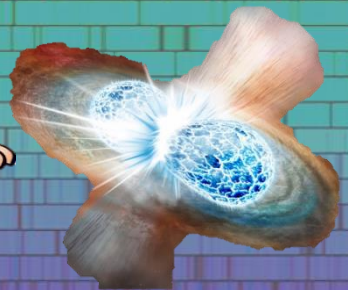
SCOPERTO nel 1815

da Jöns Jakob Berzelius

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI DUE STELLE DI NEUTRONI



Si utilizza in...

INDUSTRIA:

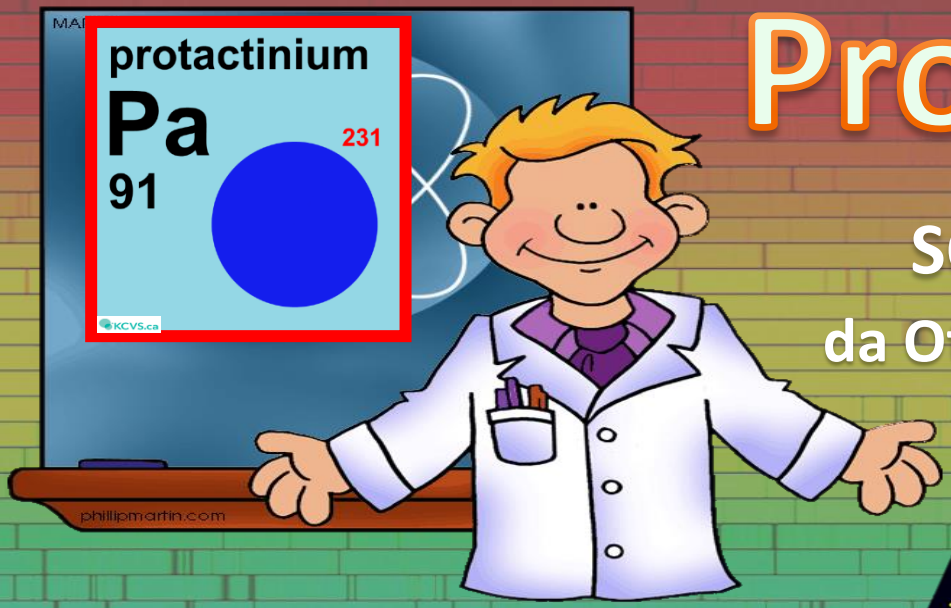
Combustibile nucleare; sintesi leghe;

MEDICINA:

Nessuno

INAF - Osservatorio Astronomico d'Abruzzo

Protoattinio



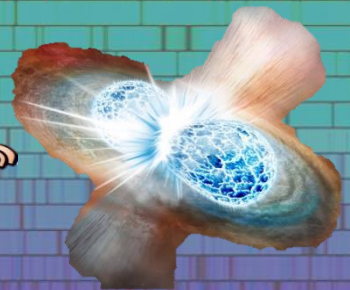
SCOPERTO nel 1918

da Otto Hahn e Lise Meitner

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI DUE STELLE DI NEUTRONI



Si utilizza in...

INDUSTRIA:

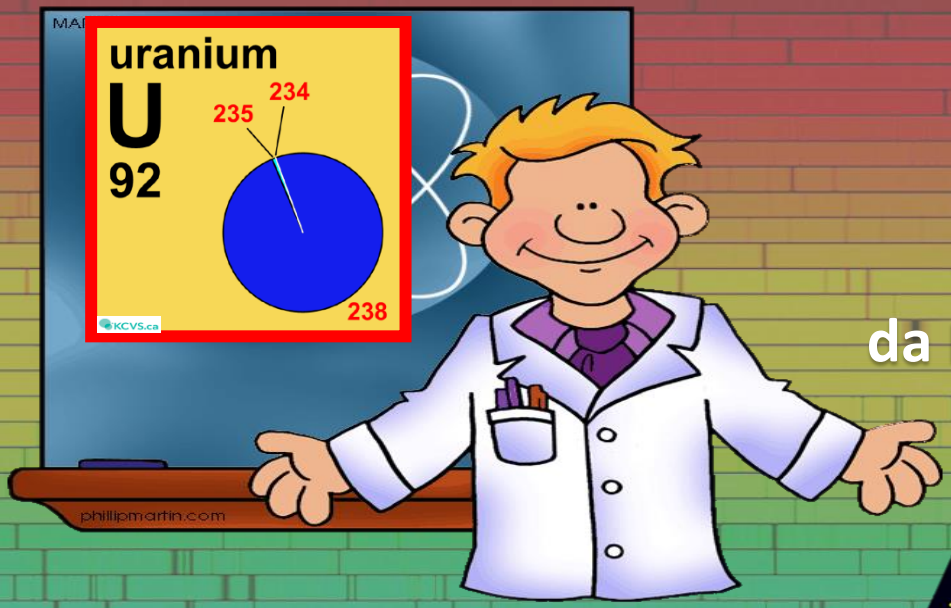
Nessuno

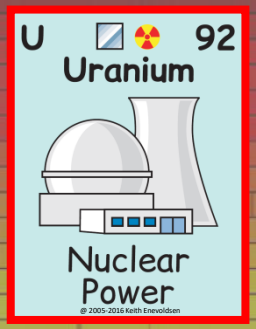
MEDICINA:

Nessuno

INAF - Osservatorio Astronomico d'Abruzzo

Uranio





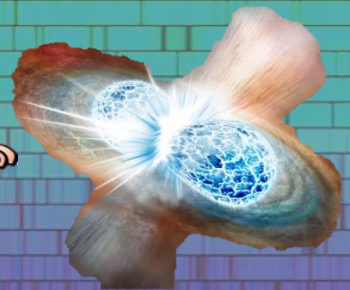
SCOPERTO nel 1789

da Martin Heinrich Klaproth

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI DUE STELLE DI NEUTRONI



Si utilizza in...

INDUSTRIA:

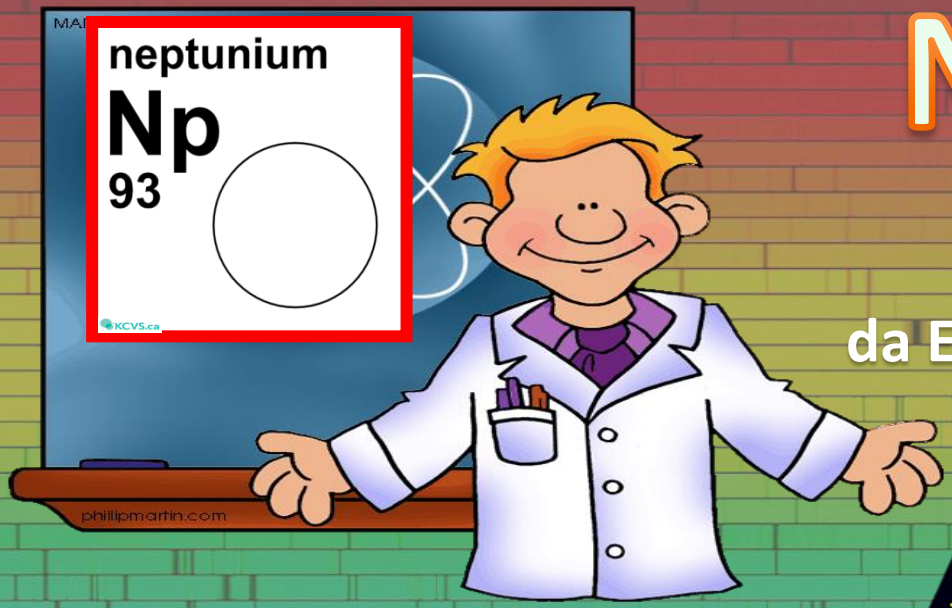
Combustibile nucleare; zavorra

MEDICINA:

Medicina nucleare

INAF - Osservatorio Astronomico d'Abruzzo

Nettunio



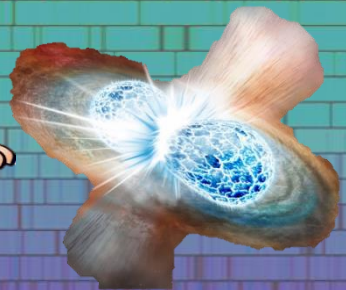
SCOPERTO nel 1940

da E. McMillan e P.H. Abelson

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI DUE STELLE DI NEUTRONI



Si utilizza in...

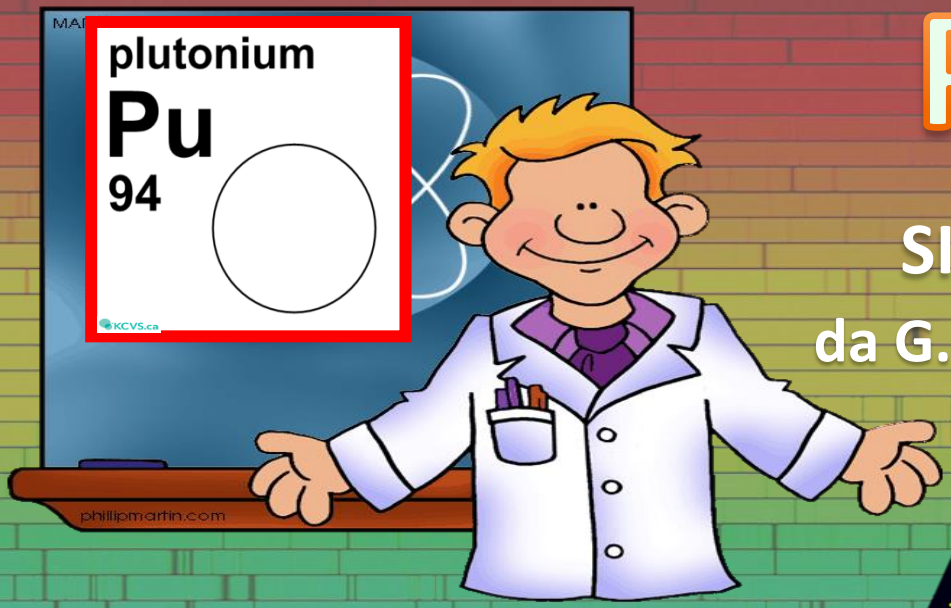
INDUSTRIA:

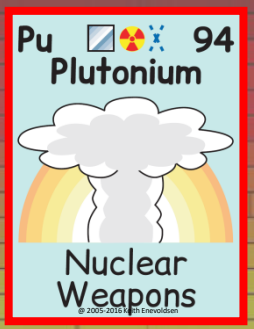
Reattori nucleari veloci

MEDICINA:

Nessuno

Plutonio





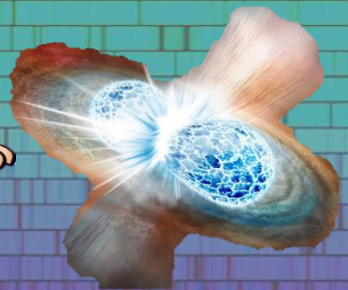
SINTETIZZATO nel 1940

da G. Seaborg, E. McMillan, J.W. Kennedy e A.C. Wahl

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI DUE STELLE DI NEUTRONI



Si utilizza in...

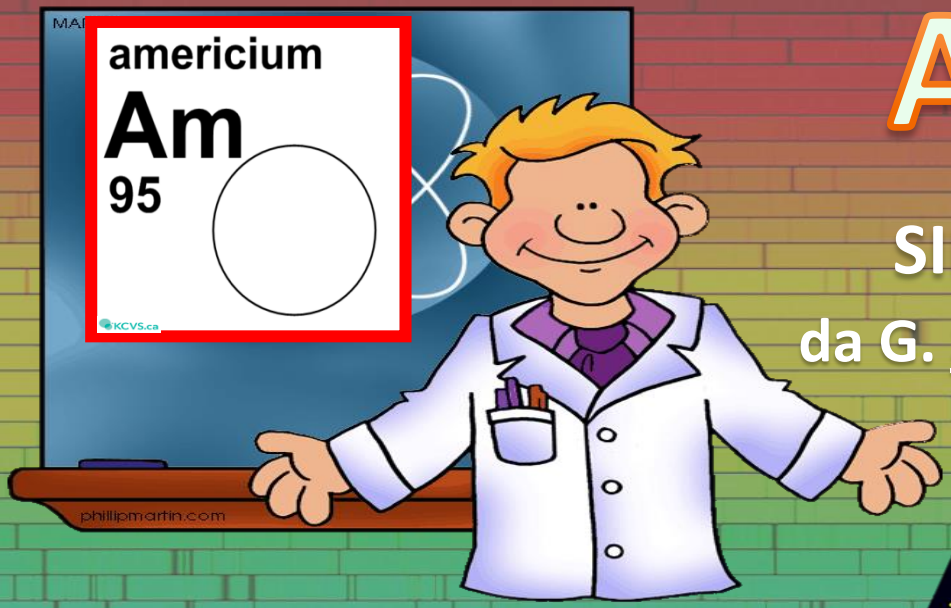
INDUSTRIA:

Reattori, batterie e propulsione nucleari

MEDICINA:

Pacemakers

Americio



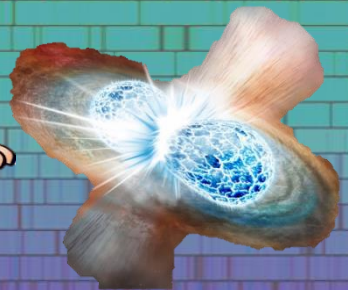
SINTETIZZATO nel 1944

da G. Seaborg, L.O. Morgan, R.A. James e A. Ghiorso

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI DUE STELLE DI NEUTRONI



Si utilizza in...

INDUSTRIA:

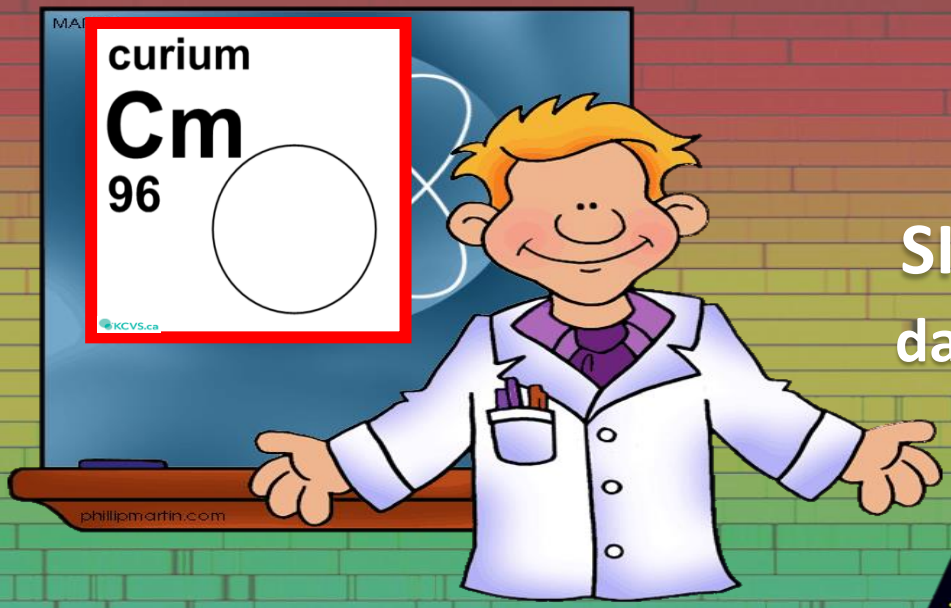
Rivelatori di fumo; misuratore di spessore

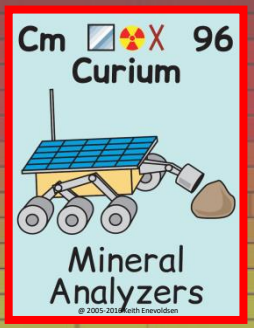
MEDICINA:

Pacemakers

INAF - Osservatorio Astronomico d'Abruzzo

Curio





SINTETIZZATO nel 1944

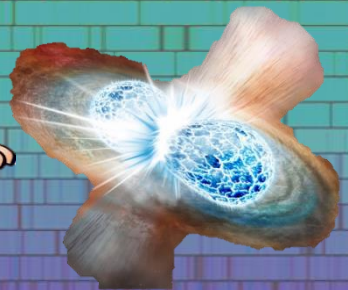
da G. Seaborg, R.A. James

e A. Ghiorso

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI DUE STELLE DI NEUTRONI



Si utilizza in...

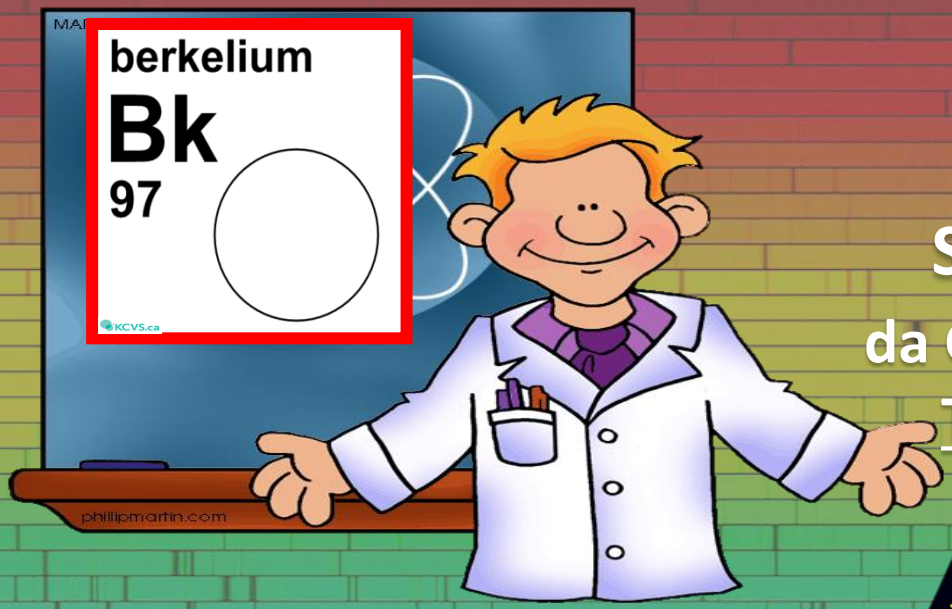
INDUSTRIA:

Reattori e propulsione nucleari

MEDICINA:

Pacemakers

Berkelio



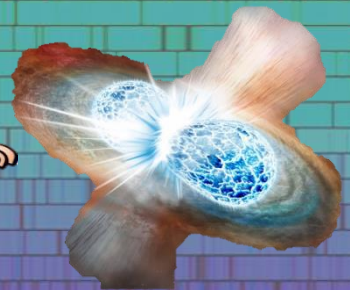
SINTETIZZATO nel 1949

da G. Seaborg, A. Ghiorso, S.G. Thompson e K. Street Jr

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI DUE STELLE DI NEUTRONI



Si utilizza in...

INDUSTRIA:

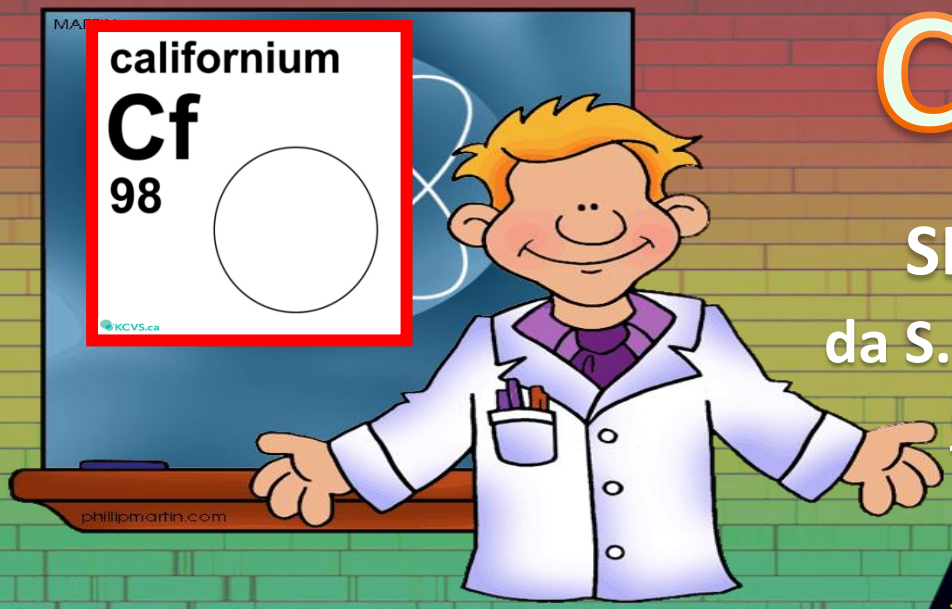
Nessuno

MEDICINA:

Nessuno

INAF - Osservatorio Astronomico d'Abruzzo

Californio



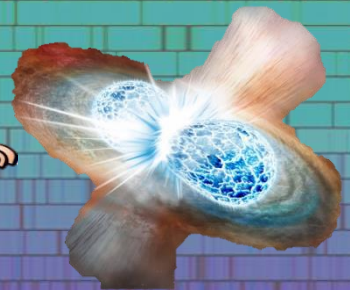
SINTETIZZATO nel 1950

da S. Thompson, K. Street Jr., A. Ghiorso e G. Seaborg

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI DUE STELLE DI NEUTRONI



Si utilizza in...

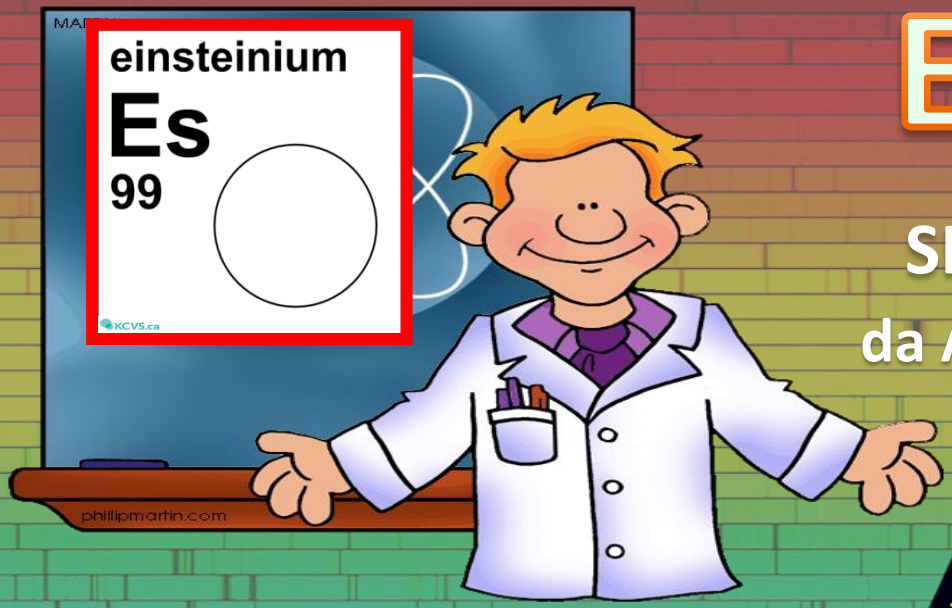
INDUSTRIA:

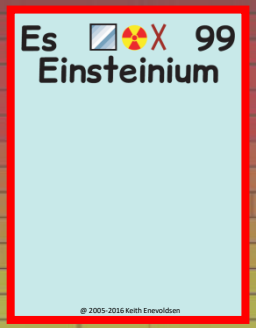
Metal-detectors; industria mineraria

MEDICINA:

Brachiterapia; BNCT

Einstenio





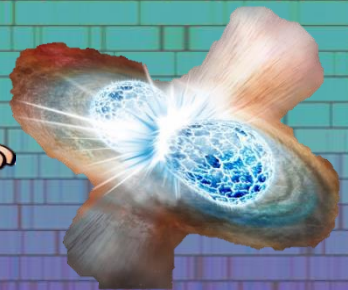
SINTETIZZATO nel 1952

da A. Ghiorso e G.R. Choppin

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI DUE STELLE DI NEUTRONI



Si utilizza in...

INDUSTRIA:

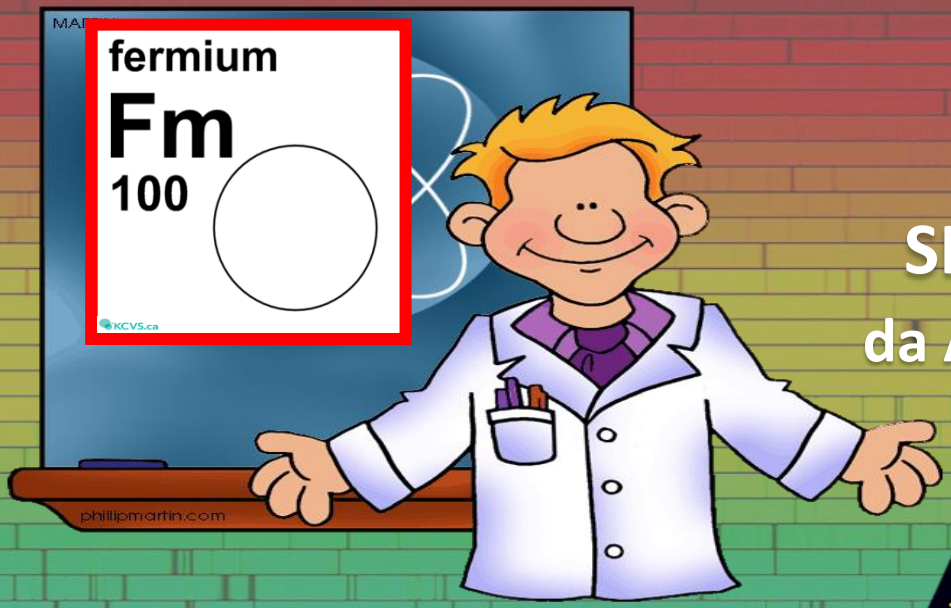
Nessuno

MEDICINA:

Nessuno

INAF - Osservatorio Astronomico d'Abruzzo

Fermio



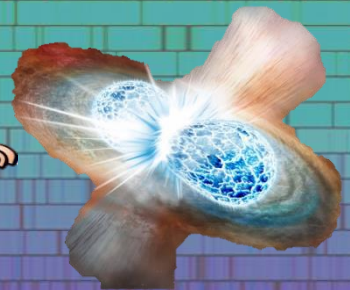
SINTETIZZATO nel 1952

da A. Ghiorso e collaboratori

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI DUE STELLE DI NEUTRONI



Si utilizza in...

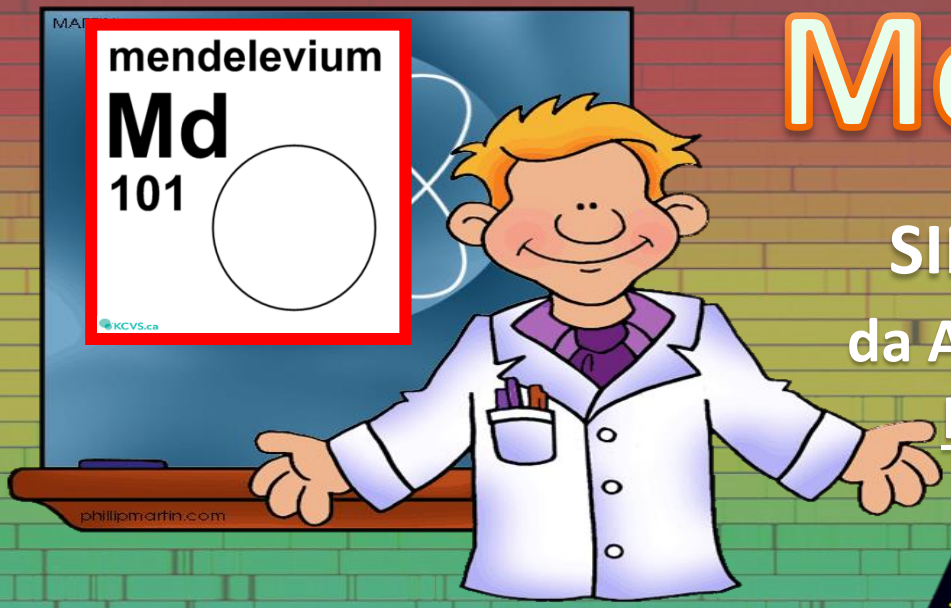
INDUSTRIA:

Nessuno

MEDICINA:

Nessuno

Mendelevio



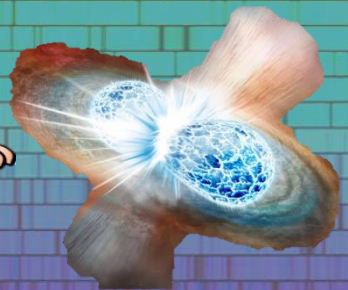
SINTETIZZATO nel 1955

da A. Ghiorso, G. Seaborg, B. Harvey e G. Choppin

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI DUE STELLE DI NEUTRONI



Si utilizza in...

INDUSTRIA:

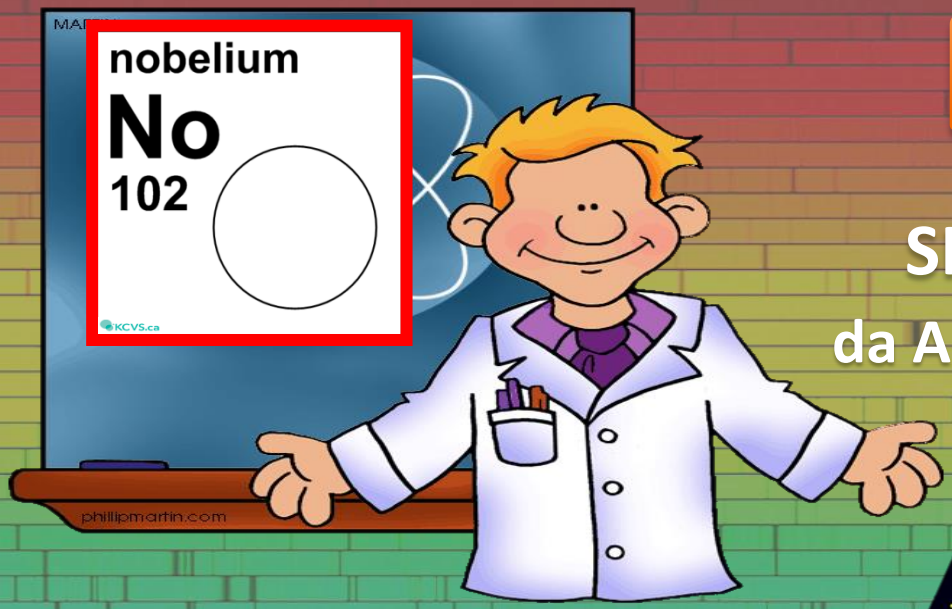
Nessuno

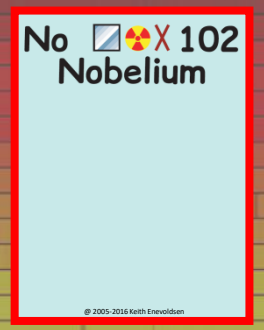
MEDICINA:

Nessuno

INAF - Osservatorio Astronomico d'Abruzzo

Nobelio





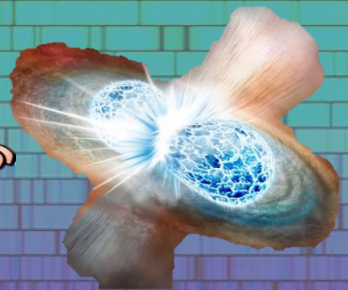
SINTETIZZATO nel 1958

da A. Ghiorso, T. Sikkeland, J.R. Walton e G. Seaborg

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI DUE STELLE DI NEUTRONI



Si utilizza in...

INDUSTRIA:

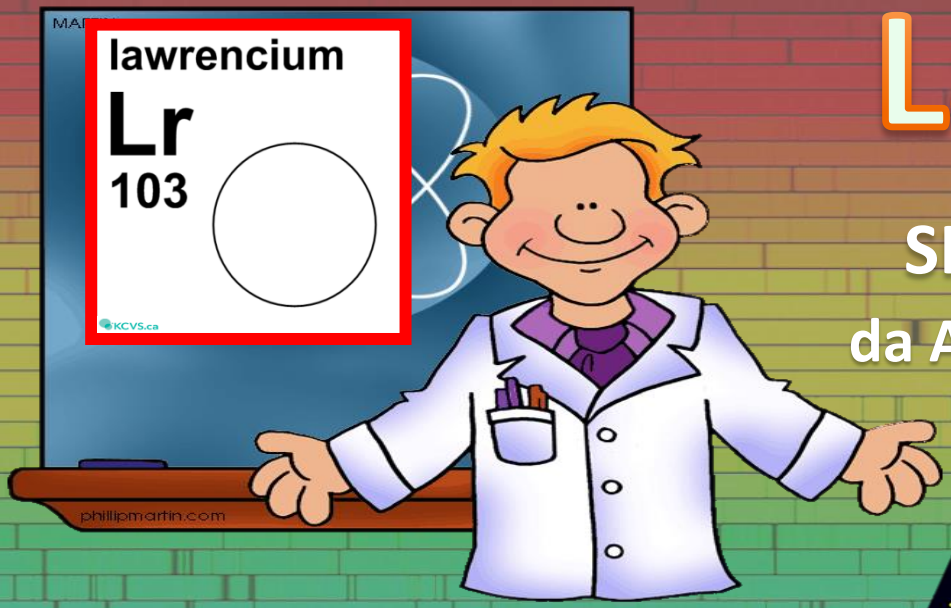
Nessuno

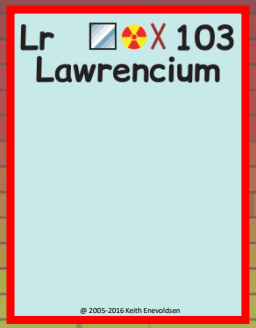
MEDICINA:

Nessuno

INAF - Osservatorio Astronomico d'Abruzzo

Laurenzio





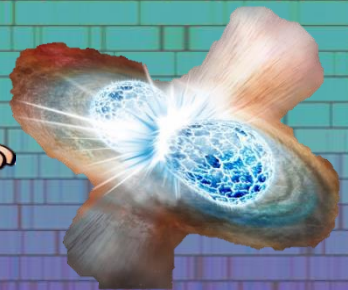
SINTETIZZATO nel 1961

da A. Ghiorso, T. Sikkeland, A. Larsh e R.M. Latimer

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI DUE STELLE DI NEUTRONI



Si utilizza in...

INDUSTRIA:

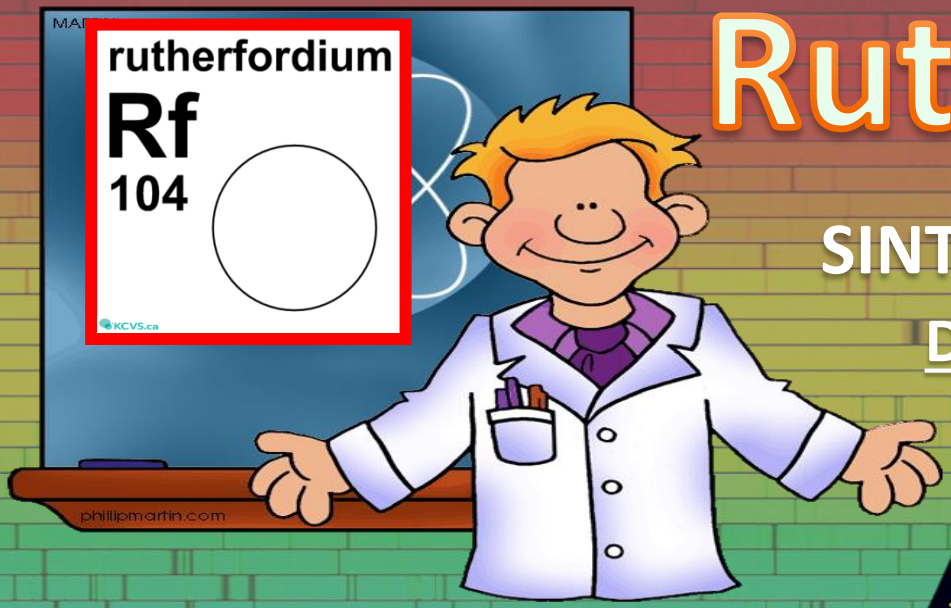
Nessuno

MEDICINA:

Nessuno

INAF - Osservatorio Astronomico d'Abruzzo

Rutherfordio

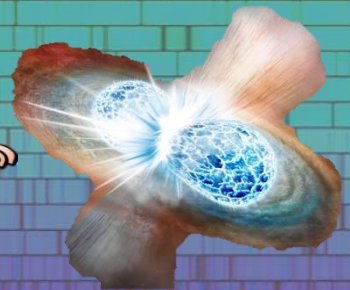


SINTETIZZATO nel 1964 al Dubna JINR (Russia)

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI DUE STELLE DI NEUTRONI



Si utilizza in...

INDUSTRIA:

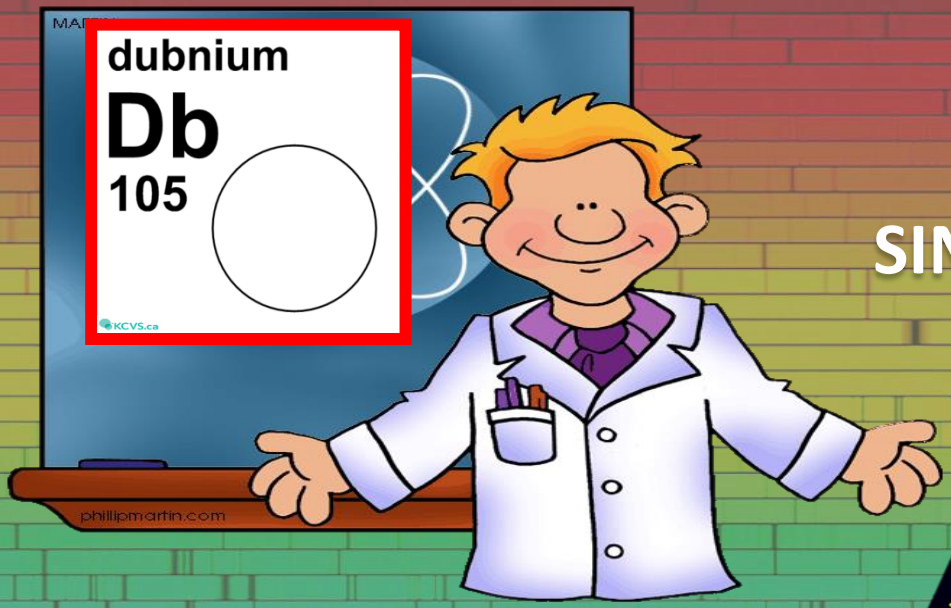
Nessuno

MEDICINA:

Nessuno

INAF - Osservatorio Astronomico d'Abruzzo

Dubnio

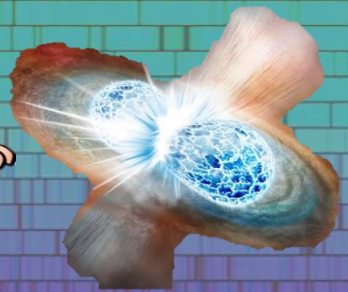


MADE BY S. CRISTALLO

SINTETIZZATO nel 1968 al Dubna JINR (Russia)

Principalmente formatosi in

COALESCENZA DI DUE STELLE DI NEUTRONI



Si utilizza in...

INDUSTRIA:

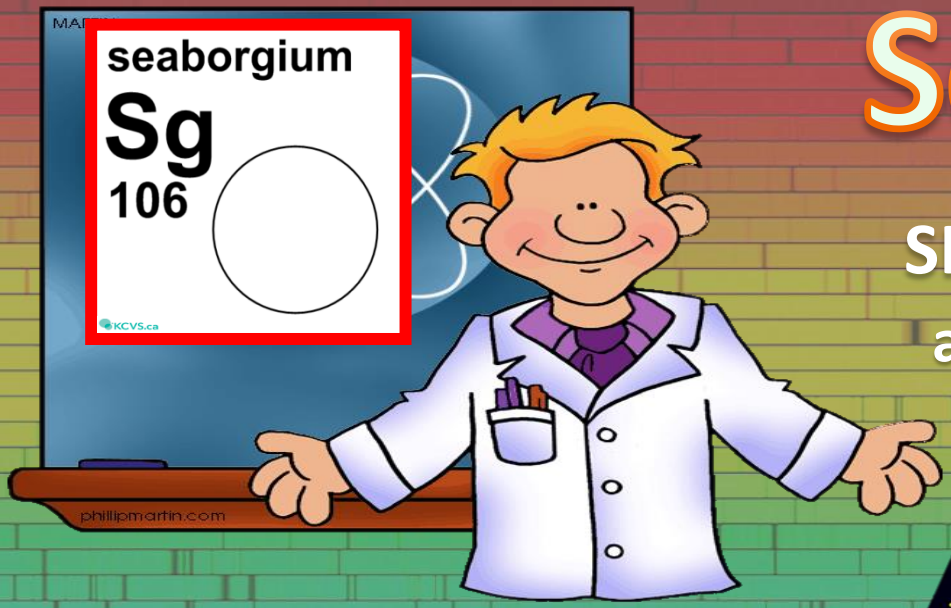
Nessuno

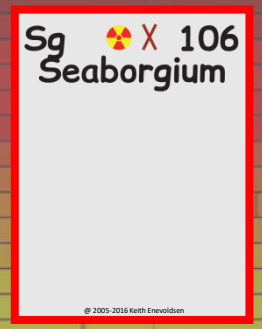
MEDICINA:

Nessuno

INAF - Osservatorio Astronomico d'Abruzzo

Seaborgio

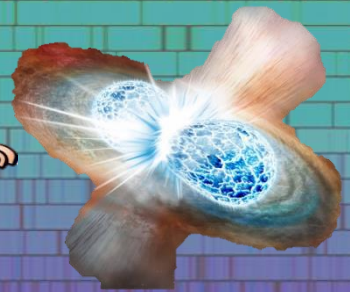




SINTETIZZATO nel 1974
al Dubna JINR (Russia)
e al LBNL (USA)

MADE BY S. CRISTALLO

Principalmente formatosi in
COALESCENZA DI
DUE STELLE DI NEUTRONI



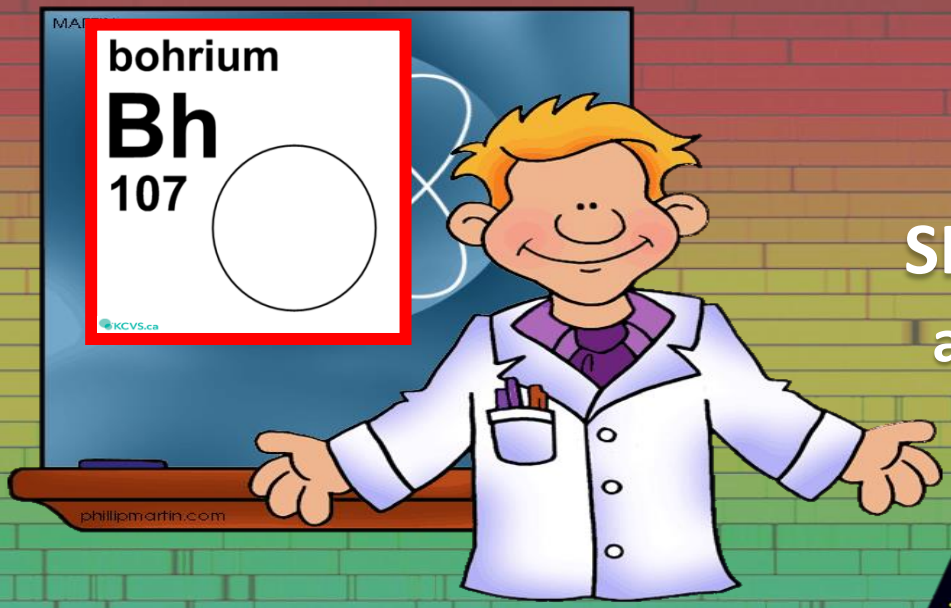
Si utilizza in...

INDUSTRIA:
Nessuno

MEDICINA:
Nessuno

INAF - Osservatorio Astronomico d'Abruzzo

Bohrio



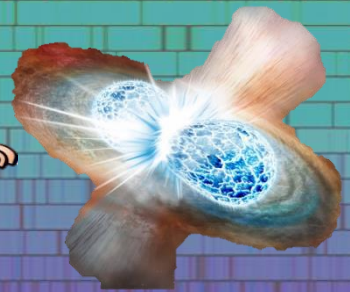
SINTETIZZATO nel 1976

al Dubna JINR (Russia)

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI DUE STELLE DI NEUTRONI



Si utilizza in...

INDUSTRIA:

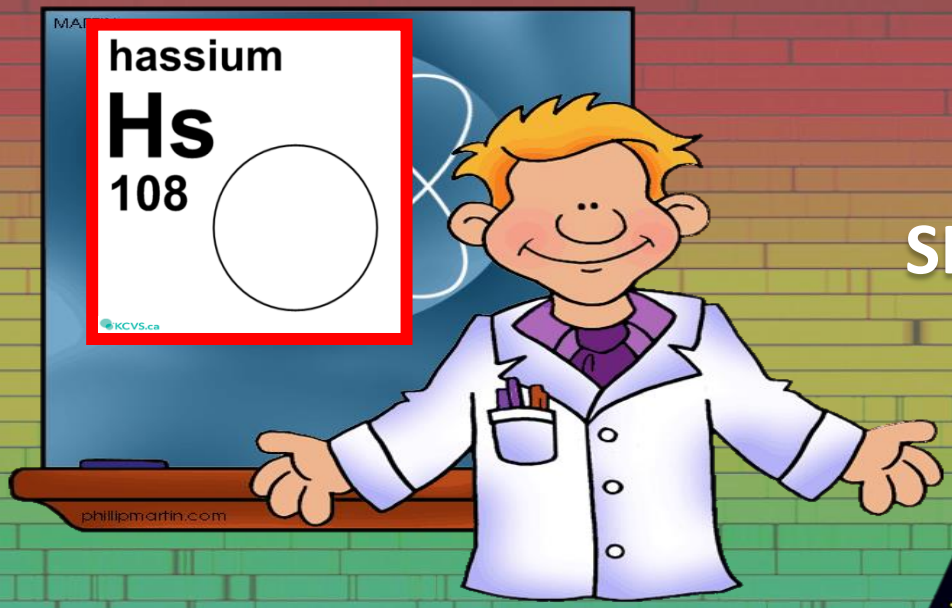
Nessuno

MEDICINA:

Nessuno

INAF - Osservatorio Astronomico d'Abruzzo

Hassio



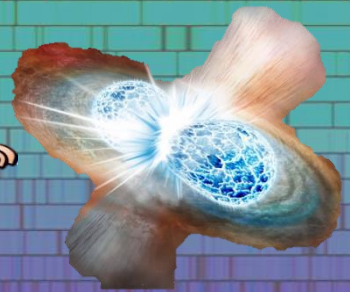
SINTETIZZATO nel 1984

al GSI (Germania)

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI DUE STELLE DI NEUTRONI



Si utilizza in...

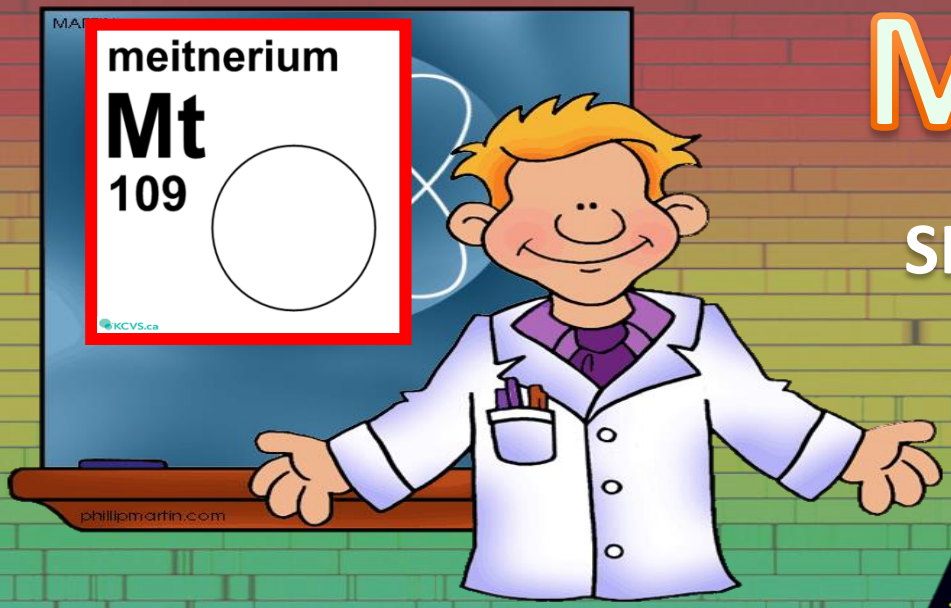
INDUSTRIA:

Nessuno

MEDICINA:

Nessuno

Meitnerio



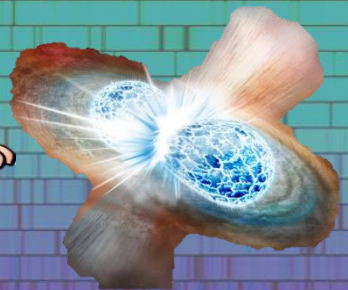
SINTETIZZATO nel 1982

al GSI (Germania)

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI DUE STELLE DI NEUTRONI



Si utilizza in...

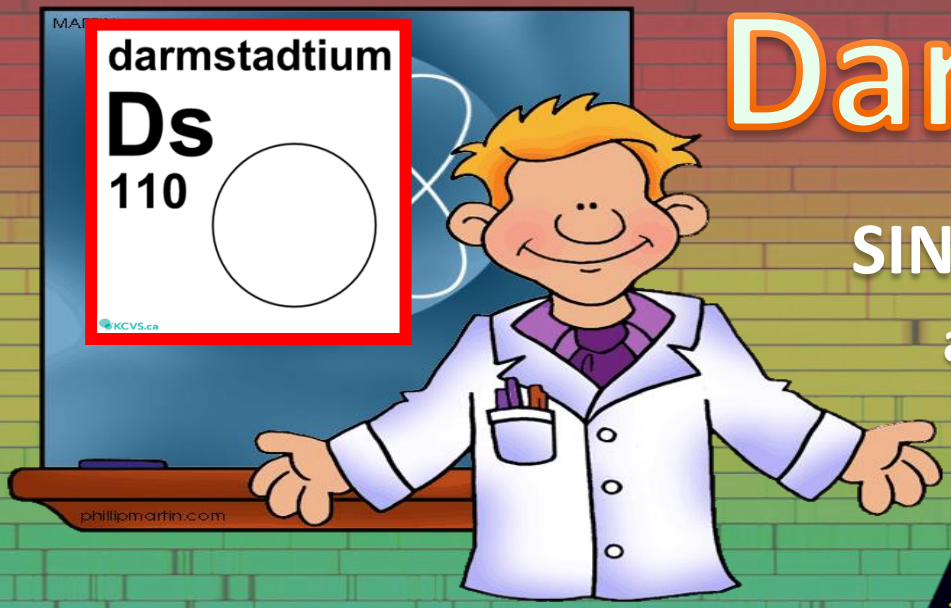
INDUSTRIA:

Nessuno

MEDICINA:

Nessuno

Darmstadtio



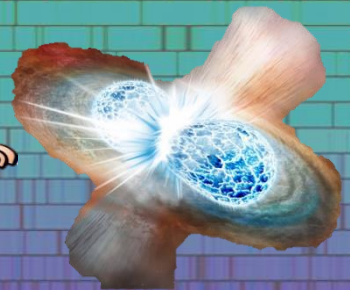
SINTETIZZATO nel 1994

al GSI (Germania)

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI DUE STELLE DI NEUTRONI



Si utilizza in...

INDUSTRIA:

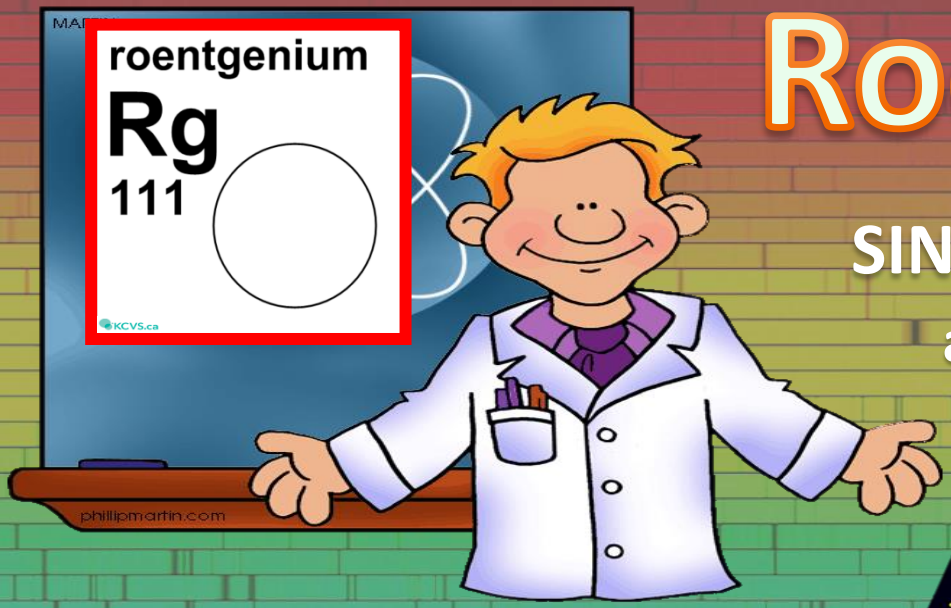
Nessuno

MEDICINA:

Nessuno

INAF - Osservatorio Astronomico d'Abruzzo

Roentgenio



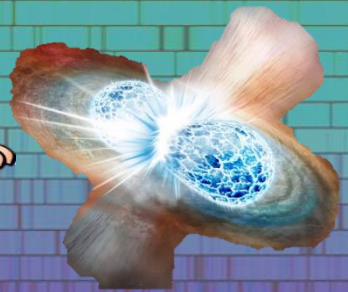
SINTETIZZATO nel 1994

al GSI (Germania)

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI DUE STELLE DI NEUTRONI



Si utilizza in...

INDUSTRIA:

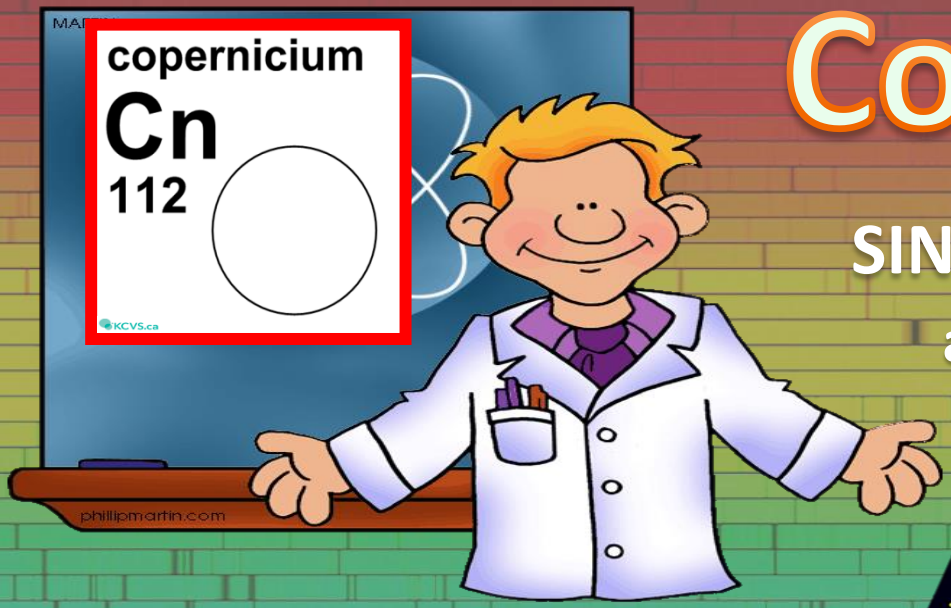
Nessuno

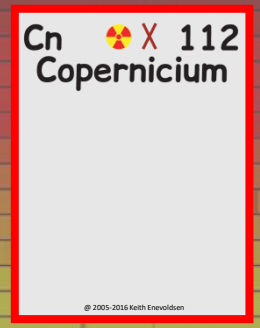
MEDICINA:

Nessuno

INAF - Osservatorio Astronomico d'Abruzzo

Copernicio





SINTETIZZATO nel 1996

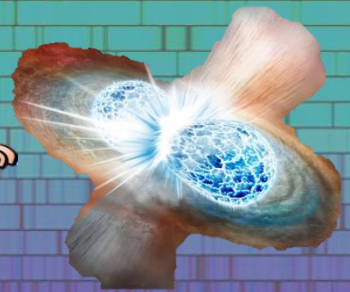
al GSI (Germania)

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI

DUE STELLE DI NEUTRONI



Si utilizza in...

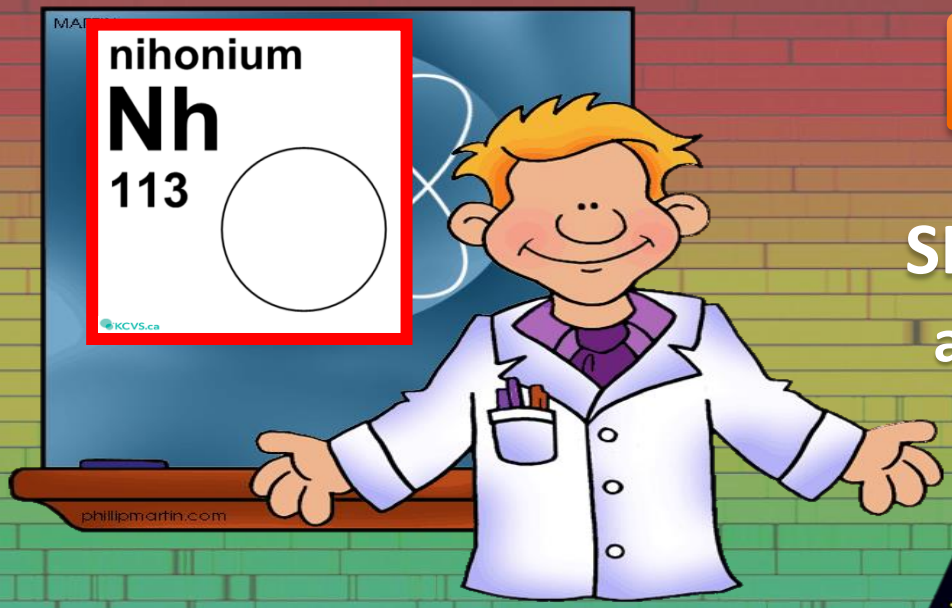
INDUSTRIA:

Nessuno

MEDICINA:

Nessuno

Nihonio



Nh X 113
Nihonium

SINTETIZZATO nel 2004

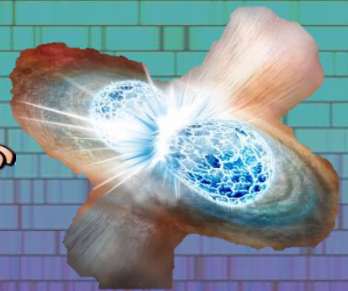
al Dubna JINR (Russia)

e al LLNL (USA)

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI DUE STELLE DI NEUTRONI



Si utilizza in...

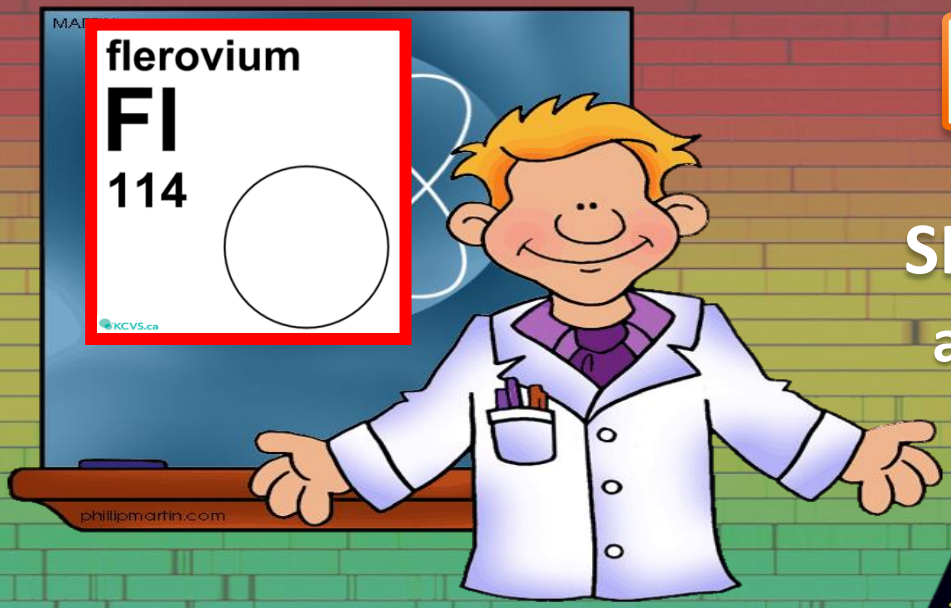
INDUSTRIA:

Nessuno

MEDICINA:

Nessuno

Flerovio



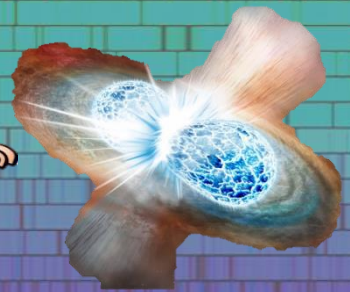
MADE BY S. CRISTALLO

SINTETIZZATO nel 1999

al Dubna JINR (Russia)

Principalmente formatosi in

COALESCENZA DI DUE STELLE DI NEUTRONI



Si utilizza in...

INDUSTRIA:

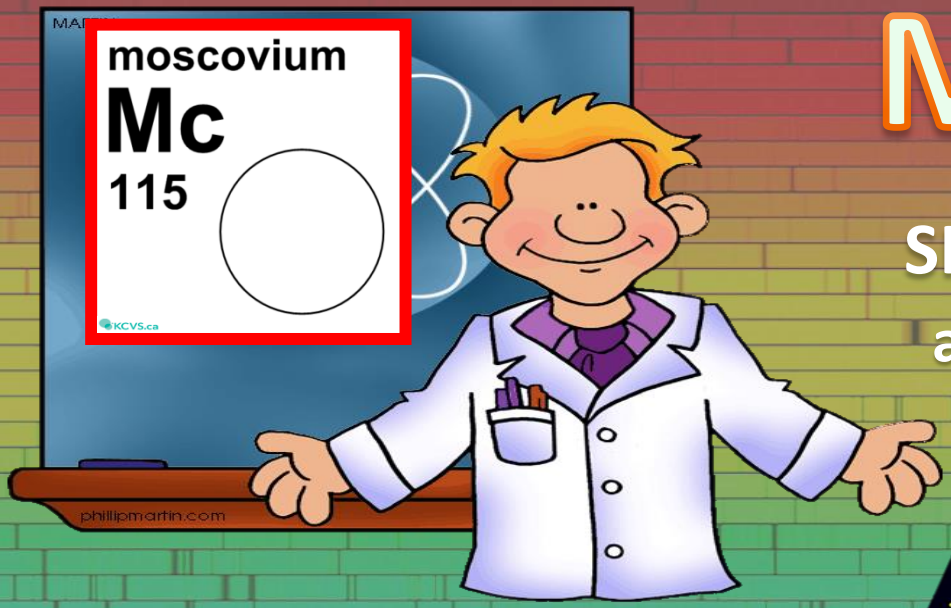
Nessuno

MEDICINA:

Nessuno

INAF - Osservatorio Astronomico d'Abruzzo

Moscovio



SINTETIZZATO nel 2004

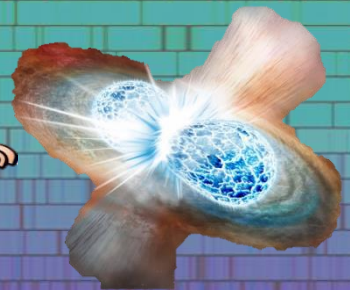
al Dubna JINR (Russia)

e al LLNL (USA)

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI DUE STELLE DI NEUTRONI



Si utilizza in...

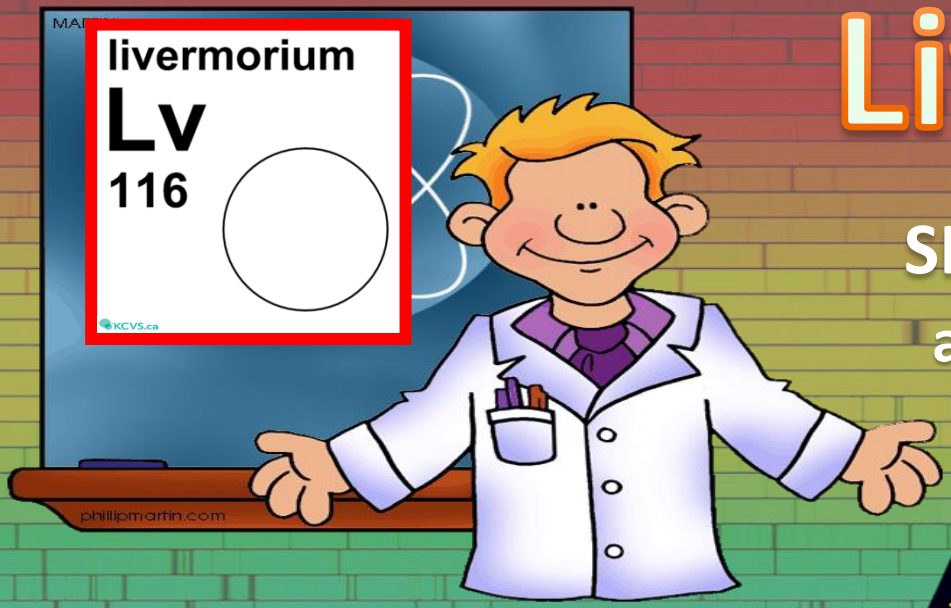
INDUSTRIA:

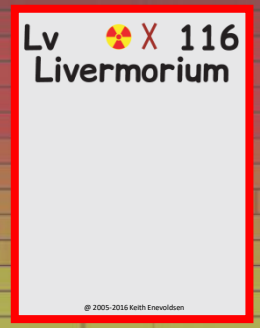
Nessuno

MEDICINA:

Nessuno

Livermorio





SINTETIZZATO nel 2000

al Dubna JINR (Russia)

e al LLNL (USA)

MADE BY S. CRISTALLO

Principalmente formatosi in

COALESCENZA DI

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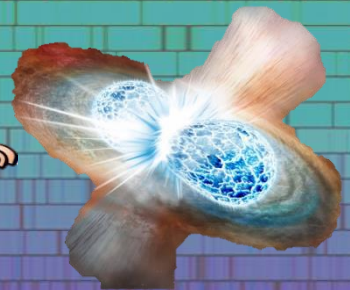

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INDUSTRIA:

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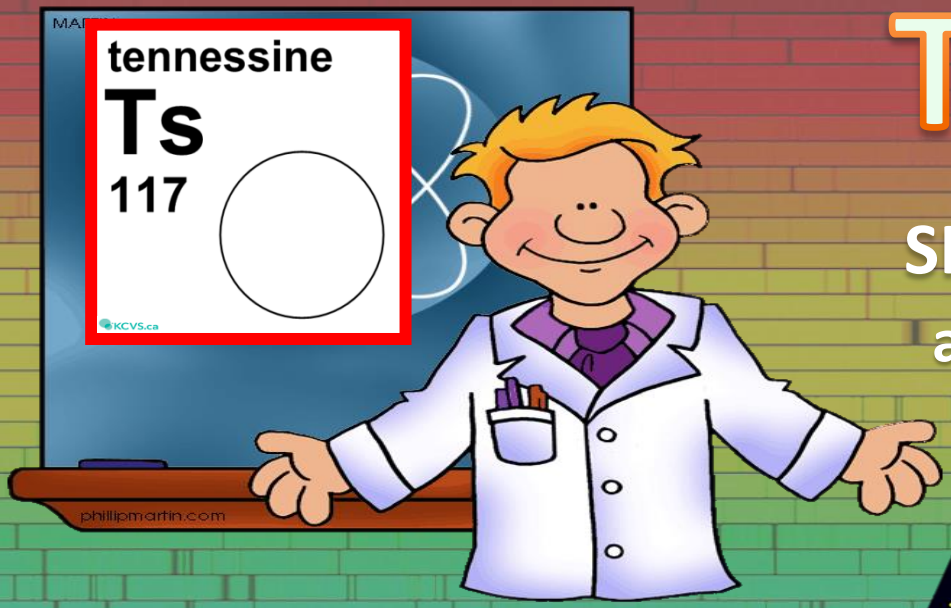
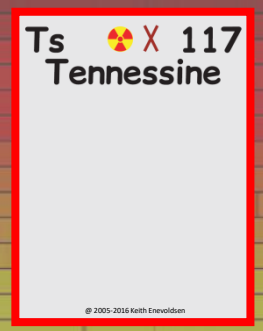
Tennesso





SINTETIZZATO nel 2010

al Dubna JINR (Russia)

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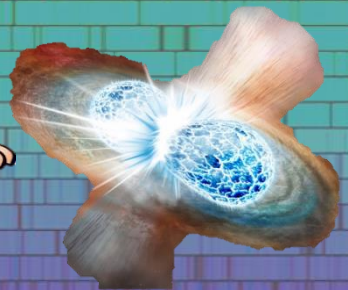

Si utilizza in...

INDUSTRIA:

Nessuno

MEDICINA:

Nessuno

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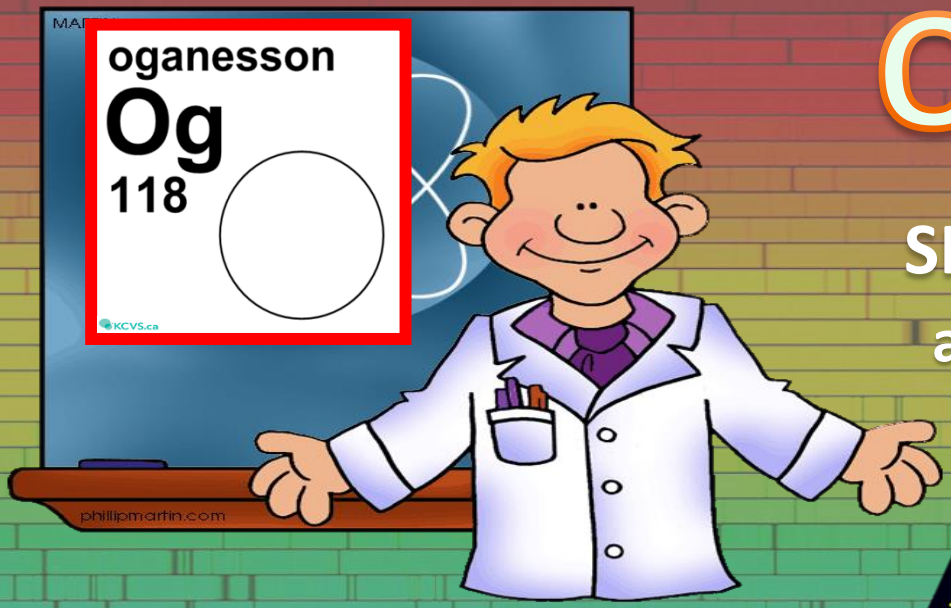
Oganesso



SINTETIZZATO nel 2015

al Dubna JINR (Russia)

e al LLNL (USA)

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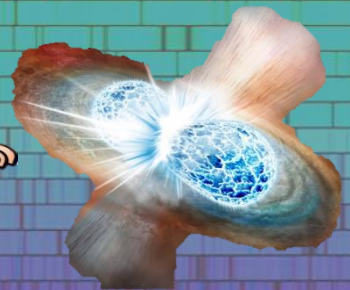

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