## PERIODIC TABLE BINGO

 $Hydrogen\ H$  the lightest element, HOH = water

**Helium He** only 2 electrons, named for the Greek word for sun (Helios)

Lithium Li batteries

Beryllium Be forms strong lightweight alloys with copper

**Boron B** heat resistant glassware, used in eardrops & as a pesticide

 $Carbon\ C$  basis for all organic chemicals, essential for life

Silicon Si 90%+ of the crust is silicate minerals, computer chips, sand, glass

Germanium Ge computer chips & transistors

**Nitrogen** N most abundant element in the Earth's atmosphere

**Phosphorus P** fertilizers, explosives, and detergents

Arsenic As semiconductors and in pesticides

**Oxygen O** essential for respiration in most living organisms

 $Sulfur\ S$  combined with Hydrogen (H) it can smell of rotting eggs.

Selenium Se photocells

Fluorine F forms compounds used to prevent tooth decay

Chlorine Cl used in pools as a disinfectant.

Bromine Br (flame retardant) curtains, couches, etc...

Iodine I used in medicine to disinfect skin before surgery

**Neon Ne** Inert gas which produces a red glow in lights

**Argon** Ar noble gas used in welding metals, denser than air

Krypton Kr produces a whitish glow in lights

**Xenon Xe** general anaesthetic

Radon Rn radioactive noble gas used in treating cancer

**Sodium Na** It & Chlorine = common table salt, required for nerve signals

 $Potassium\ K$  reacts violently in water, used in fertilizer

**Cesium Cs** silvery white metal used in making photocells

 $Rubidium\ Rb$  soft lustrous metal used in spacecraft engines

Americium Am radioactive, smoke detectors

**Magnesium Mg** used in making lightweight alloys (an alloy is a mix of metals)

Calcium Ca in limestone used to make cement, found in pipes from of hard water

Barium Ba radioactive tracer in medicine

Radium Ra treats cancer & in medical research

Aluminum Al lightweight metal, used in airplanes & pop cans

Tin Sn making cans, alloy with copper forms bronze

Lead Pb once used for plumbing, symbol comes from Latin name plumbum,

**Titanium Ti** metal used in making strong lightweight alloys,

Chromium Cr shiny metal used in electroplating steel, oxidation

Manganese Mn metal used in alloys to reduce oxidation

Iron Fe manufacturing, building materials, main component of steel

Cobalt Co metal used to make alloys, magnets & heat-resistant tools

Nickel Ni coins, batteries, jewellery & electroplating

Copper Cu utensils, wiring, plumbing & electric motors

Silver Ag shiny lustrous metal; best conductor of heat & electricity; jewellery, mirrors

Gold Au valuable metal used for many money systems; used in jewellery, coins

**Cadmium Cd** yellow paint pigments, batteries & nuclear reactors control rods

Mercury Hg toxic metal, liquid at room temp.; thermometers, barometers, electric switches

Platinum Pt electronics, catalytic converters & jewellery

Tungsten W metal used in alloys with high density & high melting point

 $Vanadium\ V$  makes shock resistant steel & used as catalyst

Zinc Zn galvanize iron, forms alloy with copper called brass

 $Uranium\ U$  radioactive used as fuel in nuclear reactors, heaviest natural element

B				
H	Rb	Al	Na	Mg
C	S	Ni	В	K
Si	Mn		Kr	Hg
F	Xe	Cl	W	Fe
U	Cd	Ba	Ge	Ca

B				
Не	I	Br	Pt	О
P	As	Cs	Co	Am
Rn	Pb		Ti	Ar
Cr	Cu	Au	Ag	Ra
N	Se	Zn	Ne	V

B				
Li	Ag	Co	I	Kr
P	U	Al	Be	W
Fr	Sn		Ca	Cd
H	Pt	Ge	Rn	O
F	Ne	Br	Xe	He

B				
H	Ra	Cu	Rb	Fe
Ba	Ni	Sn	Li	K
Cs	Au		V	Mg
Ti	C	Pb	Si	Na
Zn	В	Be	Cr	Mn

B				
N	S	Se	Cd	K
C	Ge	Pt	S	Rn
W	Cu		I	Cl
Li	O	Mg	Ar	P
Br	Am	F	Kr	Ca

B				
Se	Zn	Ni	U	В
Al	Ra	Ti	Na	Mn
Fe	Au		Ba	Pb
Cr	Co	Cs	Mg	Rb
Hg	V	Ne	Be	Ag

B				
He	Al	Xe	Ge	U
Cs	Pb	Si	Fe	Mg
Br	Am		Co	Ba
Ag	Be	Kr	Cd	S
О	Rn	K	H	F

B				
Не	Mn	Xe	Na	V
H	Mg	Si	F	Fe
W	Be		N	Rb
Cl	U	Hg	Kr	Ba
Cd	Ar	Pt	Cs	Rn

B				
K	Cr	He	Si	Pb
Al	В	Ca	Li	Ti
C	Ge		Sn	Am
Cu	N	P	As	S
I	Se	Ni	Br	Au

B				
O	Se	Ra	F	S
H	He	P	Co	Pt
V	Kr		Cl	U
Ar	Br	Li	Rn	Xe
Am	Mg	Ne	Ca	W

B				
Na	Sn	Cr	Au	Rb
Pb	Cu	Cs	Ag	Cd
Ni	K		Ra	Ti
Ge	Hg	Si	Fe	Al
Co	C	Mn	Ar	Xe

B				
Be	H	Se	O	В
Rn	As	Ge	I	Br
Cl	Na		N	Am
Ne	Kr	Al	Cu	Hg
Fe	Co	Ca	Ra	Cs

B				
K	Pt	Mg	He	Li
Pb	W	Rb	U	C
Ba	Sn		As	Au
Ag	Ti	Cl	Cr	Ni
I	Cd	Xe	Si	Mn

B				
Si	N	F	Ne	V
Be	S	Zn	H	P
Ge	O		Se	Br
Rn	Ba	Ni	В	Ar
Hg	Na	K	Cs	Pt

B				
He	F	Ne	Be	Ar
Si	Mn	Kr	O	I
Mg	Pb		Fe	Cd
Au	Am	Ca	As	U
V	Co	Rb	Ra	Al

B				
Sn	W	P	N	S
Ti	Cl	Xe	В	H
As	Cr		C	Cu
I	Ag	Li	Rn	Cs
Al	Ni	Hg	Mn	Mg

B			6	
Na	Cr	Co	Cd	Am
Ca	Ra	Ti	Fe	K
Rb	Sn		Pb	Pt
Si	В	Li	V	U
F	Br	Kr	Xe	Ge

B				
H	Ne	O	Cl	S
P	Ar	W	N	Zn
Mg	Se		Be	Ba
C	Cu	Ag	Au	Cd
Am	Al	Mn	Ni	Hg

B				
Na	Ca	Rn	Be	He
В	Ar	Fe	S	Se
I	K		Co	P
Br	Cl	Rb	Ba	Ge
Mg	Kr	Cr	H	Xe

B				
Li	Pt	Cs	Ne	Sn
F	Pb	W	Si	C
As	Ra		O	Ti
Zn	N	Cu	V	Ag
Au	Na	Cr	Hg	U

B				
Al	Se	I	P	Cl
Br	Rn	Mg	Cd	Kr
H	U		Si	Li
Cs	As	O	Pt	S
Rb	K	Ca	Co	Xe

B				
Am	Ba	Cu	Ti	Fe
Ag	Ni	Au	W	V
Pb	Zn		Ra	Ge
N	Sn	В	C	F
Ne	Ar	H	Xe	Si

B				
Li	Mn	Na	C	Rb
Pt	I	Ni	W	Ar
Zn	Sn		В	Ca
P	Ne	Ra	Cr	Cu
Au	Hg	V	As	N

B				
He	Na	K	Be	Cs
Rb	Cd	Hg	Mn	As
Al	Cl		Li	Ra
Ne	Ti	Rn	Pb	Am
Ni	Cu	Au	Fe	Co

B				
Se	Cl	Ti	C	Li
Br	Xe	K	Cs	Be
H	Cr		Cu	Cd
W	U	Ba	Rb	Am
Al	Co	Pt	O	Ge

B				
He	Ti	F	Si	Mg
Mn	Na	В	Fe	P
S	Ag		Rn	V
Zn	N	Sn	As	Se
Ca	Pb	Ra	Ar	Ne

B				
Cl	O	Ni	Cs	Hg
Si	Au	F	I	Ar
Ti	Kr		Ra	Br
Rn	Mg	Hg	P	Cu
Sn	V	U	Be	Fe

B				
Ca	Rb	Ni	Cd	Cl
Mn	В	I	Ge	Cr
Kr	Xe		W	H
Zn	N	S	Pt	Se
Ne	Na	K	As	He

B				
Li	C	Ba	Am	Al
Pb	H	Co	Ag	Ne
Kr	Au		Na	Cs
Rb	Cr	V	U	Ra
Mg	Cu	O	Ge	Be

B				
He	P	Xe	Al	Sn
Ba	Ca	Co	Br	Fe
Cd	Pt		Ar	Pb
Se	Rn	I	Si	В
F	As	N	Li	C

B				
S	Ni	Au	Sn	Ti
Co	U	Cl	Ba	Ag
Rb	Mn		Am	Zn
K	Pt	Cu	W	Cr
Hg	Ge	Br	P	O

B				
Н	Be	Si	He	Kr
Xe	C	As	Cl	S
Ne	Ar		Li	Cs
K	N	I	В	Rn
Na	Se	F	Mg	Am

B				
Ca	Au	Ag	Al	V
Ni	Ra	W	Pb	Fe
Mn	Hg		Zn	Ti
C	Se	Ne	Cd	Na
Br	P	He	Li	Ge

B				
Si	Xe	Kr	Cs	K
В	F	O	Be	Ra
Ca	Cd		Pt	V
U	Cr	Ti	Am	Rb
Sn	Co	Cu	W	Zn

B				
Mg	Hg	H	Pb	N
As	Ba	S	Ag	Au
Ni	I		Cl	Al
Ar	Fe	Xe	Mn	Rn
Ge	He	K	O	Br