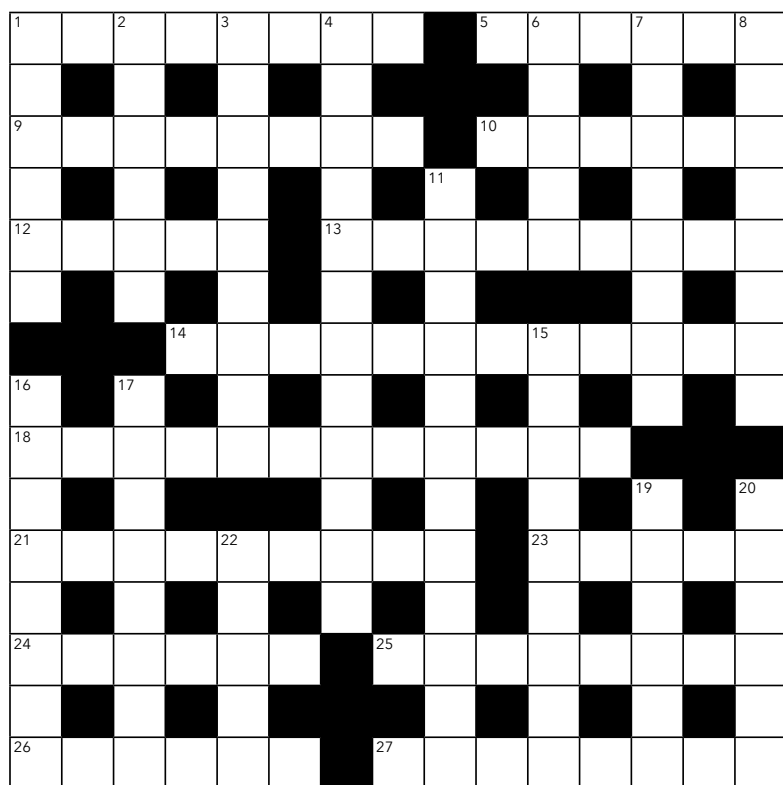


January 2023 crossword



January 2023 wordoku

T		A								A
		N				K	I			E
			T				E			H
	K			M		I	T			I
M				I				S		K
	T	I		K			N			M
	H				S					N
	A	M					N			S
						M		I		T

Solve this wordoku in the same way as a sudoku with letters instead of numbers (each of the nine letters in each row, column and nine-square cell). Once solved, one of the overall diagonals can be rearranged to give the surname name of a Japanese chemist after whom a prize, awarded in alternate years by the Chemical Society of Japan and the American Chemical Society, is named.

Cryptic

Across

- See 8 Down
- Medical centre ducks out of arranging colonic irrigation to begin with (6)
- These technophobes did let us adapt (8)
- Shopkeeper who's more vulgar you might say (6)
- Surprisingly left unit in the dark (5)
- Electrical device transforms local site (5, 4)
- I relocated to Indonesia for this treatment (12)
- Somehow Victor cut crime in the end. Word got around! (12)
- In a stew about lost sauce? (9)
- Extract a little molybdenum from bromine salt solution (5)
- On arrangement, please pass (6)
- Massive coal loss abroad (8)
- Welcomes on stage some particular things (6)
- Lass repaired path with bituminous materials (8)

Down

- He used to inflate balloons (6)
- 19 Down Inventor prepares lead fluorides with no initial assistance (6, 6)
- Turned a neurotic to drink (9)
- Clever lot not upset by this unit (8, 4)
- Bug turned to stone by the sounds of it (5)
- Son cries about death (8)
- 1 Across Astronomer enriches her local doctor (8, 8)
- No symposium leader is against arranging such meetings (12)
- Hot marble treatment for the old salt? (9)
- Cold dessert I holler about on the radio? (3, 5)
- Oddly turns clays into more solid minerals (8)
- See 2 Down
- See 22 Down
- 22, 20 Down She begins to knit extremely rare woollens for the movie director (5, 6)

Quick

Across

- See 16 Down
- See 20 Down
- Type of emanation from radioactive decay (4, 4)
- Insect whose name comes from the serrated appearance of the female's ovipositor (6)
- Acronymic name of the UK premium bonds random number generator (5)
- Compound analgesic containing codeine phosphate and paracetamol (2-7)
- Caribbean capital (5, 7)
- Quantum _____, a phenomenon when the quantum state of particles in a group cannot be described independently of the state of the others (12)
- US actress who was nominated for 11 Down for her role in *The China Syndrome*, a film about a nuclear meltdown (4, 5)
- Laboratory workplace (5)
- Microwave devices (6)
- Element discovered in 1879 by French chemist Paul-Émile Lecoq de Boisbaudran (8)
- Edith _____, children's author (6)
- Issues (8)

Down

- Portable computer (6)
- C_8H_{18} (6)
- Fine china (9)
- Gas mixture used for welding (12)
- 6, 7 Down Chemistry Nobel laureate who also co-authored the play *Oxygen* with Carl Djerassi (5, 8)
- See 6 Down
- Hawthorn (8)
- Oscar (7, 5)
- Cell normally found in bone marrow (9)
- 16, 1 Across Physicist and inventor who married the French chemist Marie-Anne Paulze Lavoisier (8, 8)
- Narrowing (as can happen in the spine) (8)
- 19, 22 Down Italian physicist after whom an element and subatomic particle are named (6, 5)
- 20, 5 Across British chemist after whom the RSC's Cambridge headquarters are named (6, 6)
- See 19 Down

January 2023 science scramble

Similar to a word ladder, each answer provides letters that must appear - including duplicates - in the answer immediately following it. The puzzle's final answer is a scientist or someone who contributed to science.

For example:

- 1 sail
- 2 snail
- 3 saline
- 4 minerals
- 5 Neil Armstrong

Entry form

There are four prize puzzles on this page: cryptic crossword; quick crossword; wordoku; and science scramble. For each puzzle, a winner will be selected from all the correct entries received and awarded a £25 UK book voucher.

You can enter any or all of the prize draws, but each entrant is only eligible to win one of the individual puzzle prizes each month.

Please enter your details below and email a scan or photograph of this page with your completed entries to us by **20 January 2023**. The winners of this month's puzzles will be published in the February 2023 issue, along with the solutions.

Email: chemistryworld@rsc.org

Name

Address

Participants are advised that any personal information supplied will be processed in connection with this competition and only in accordance with our privacy statement (www.chemistryworld.com/privacy).

1	Knight (3)
2	Male parent (4)
3	Gets up (5)
4	Catastrophes (6)
5	Death of body tissue (8)
6	Faster than sound (10)
7	Astronomer (8, 10)

December 2022 solutions and winners

Cryptic elements crossword

W	Al	La	Ce	C	Ar	O	T	H	Er	S		H	Al	Lu	C	I	N	O	Ge	N	I	C	
Er		V		I		C		Ar				I		C		O		Xe		I		O	
N	I	O	Bi	Te		C	O	V	Er	S	Li	P		I		N	O	N	S	T	O	P	
Er		I		S		Lu		Es		Ti		P		F		I				Ra		Er	
He	Ar	S	Es		O	S	Mo	T	I	C		O	V	Er	Pa	S	Si	O	Na	Te		N	
I		I		Fe		I		S		K		C		S		At		T				I	
Se		Er	O	S	I	O	N		H	Y	D	Ra	Te		B	I	S	H	O	P		C	
N				T		N		D				Te		D		O		Er		Re		U	
Be	N	F	Er	In	Ga		D	I	Ra	C		S	C	I	O	N		S	Au	C	Er	S	
Rg		La		At		P		Ag		Y		S									I		
		O	V	O	I	D	Al		N	I	C	O	La	U	S		T	O	O	Th	P	As	Te
		O		O		La		O	S	Li		C		O		Ra		U		I			
C	O	N	Ge	N	Er	S		S	O	C	Ra	T	I	C		I	N	T	Es	Ta	Te		
		O						T			O		I		N		F		Te			S	
W	H	I	Ne	S		S	Al	I	Er	I		Se	D	At	Es		P	I	Ca	S	S	O	
O		D		K		Y		C		D		Es		D		T						Re	
O		S	P	I	N	Ne	Y		K	I	Na	S	Es		F	I	S	T	U	La		N	
D			F		Rg		Ti		O		U	Fr		S		Er				U		S	
C		T	Ra	F	F	I	C		C	O	P		P	Ar	Ag	Ra	P	Hs		Ho	Ra	Ti	O
Ar		U				S		K		At		Re		O		O			Cu		Ba		Re
V	I	V	I	Se		C	T		O	H	O	Mo	Ge	N	I	Se		B	O	S	O	N	
Er		Al		T		I		F		I				Ar		O		I		S		Se	
S	O	U	T	H	Pa	C	I	F	I	C		Ac	I	D	I	F	I	C	At	I	O	N	

December winners
Cryptic elements crossword
Helen Aspinall, Neston, UK

Quick crossword

L	I	S	E	M	E	I	T	N	E	R		A	S	P	E	R	G	I	L	L	U	S		
A		P		E		M		E				R		I		E		L		E		C		
U	R	I	N	E		P	E	R	R	I	E	R		C		F	U	L	H	A	M	E		
R		R		K		E		N		N		H		R		R				C		P		
A	C	I	D			C	R	E	S	O	L		E	E	L	I	Z	A	B	E	T	H	T	
B		T		C		I		T		E		N		C		C		S				I		
A		S	A	U	N	A	S			S	T	A	I	N		S	T	R	A	T	A	C		
S				L		L		J				U		A		E		K		M		A		
S	V	A	N	T	E			T	A	L	C		S	O	L	I	D		I	D	E	A	L	
I		F		I		A		M		U		L										R		
		F	L	A	V	U	S		E	S	P	A	R	T	O		C	H	Y	M	I	S	T	
		A		A		P		S		E		E		T		A		O		C		A		
R	E	T	O	R	T	S					W	A	L	T	H	E	R		G	A	S	L	A	W
		O						A			A		O		E		E		N		P			
M	I	X	E	S				G	A	T	O	R		B	A	P	S		S	M	O	O	T	H
A		I		W		A		T		U			E		B		I						E	
N		N	E	A	R	L	Y		S	T	A	F	F		S	E	P	T	I	C		N		
G				M		L		N		H		E		S		S		E		H		A		
A		A	M	P	L	I	T	U	D	E		R	E	L	I	S	H		Z	I	N	C		
N		R				P		C		N		M		E		E		E		C		E		
E	L	G	R	E	C	O		L		I	R	I	D	I	U	M		R	E	A	C	T		
S		O		A		L		E		U			G		E		A		G			I		
E	I	N	S	T	E	I	N	I	U	M			O	F	H	A	R	T	S	H	O	R	N	

Quick crossword
Andrzej Zieleniewski, Salisbury, UK