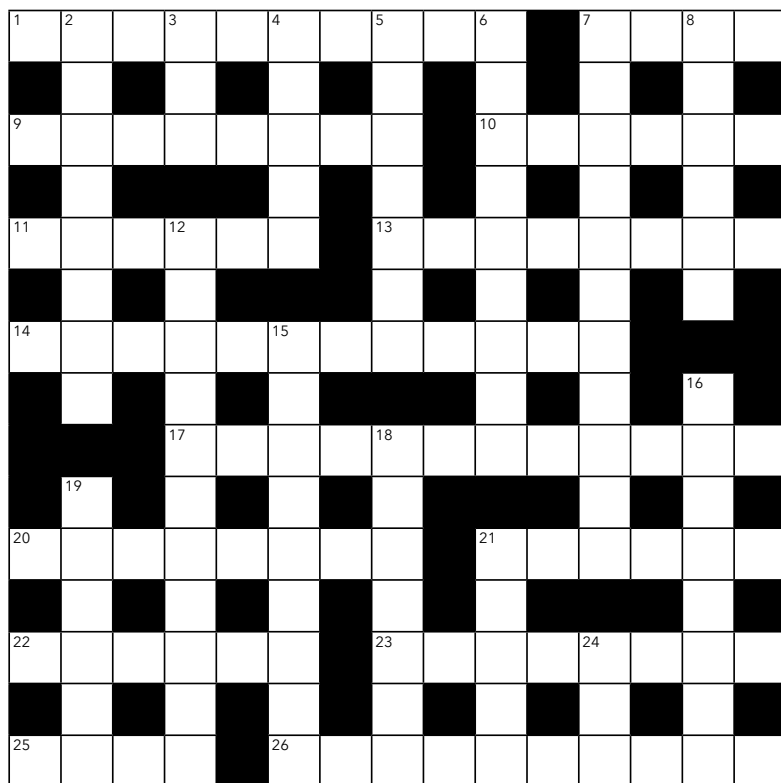


March 2024 crossword



March 2024 wordoku

	L			M									A
		N	G					I	S				E
		S			E			M					G
G	A												I
	S			E				G					L
									S	L			M
	I		R					G					N
L	N							I	A				R
					L				E				S

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 a German chemist with an interest in new materials with application in green energy and catalysis.

Cryptic

Across

- Upset Dorothy regularly with empathy for alternative treatment (10)
- Some hitherto gaudy garment (4)
- Ma opined about the neurotransmitter (8)
- 10, 18 Down Physician has to order diamonds (6, 7)
- River heard just after six? (6)
- 13, 17 Across US chemist flags summer heartache abroad (8, 7, 5)
- A novel form of HF? (4, 8)
- See 13 Across (7, 5)
- Gasp about duet being overshadowed (8)
- Not all twig Glenda likes to dance (6)
- Courageous choir playing Edinburgh first (6)
- Salt for giddy girl say? (8)
- Right away germs become things of value (4)
- Handle a tin amalgam for another type of element (10)

Down

- Pushing up mountains around Congo border region (8)
- Long time away from regular retreat (3)
- This lanthanide ion can cause disease (5)
- Her mate designed the baths (7)
- Yet bitter about the mineral (9)
- British polymath somehow among youths (6, 5)
- Windows repaired by this physicist reportedly (6)
- Mike anxious about the retrievals of the bodies (11)
- I left gallic love confused-unreasonable! (9)
- Joined a little church-related! (8)
- See 10 Across (7)
- Seen pH altered by this gem (6)
- Towels hiding a certain nationality? (5)
- Is able to produce tin? (3)

Quick

Across

- Device for keeping things hot or cold named after its British inventor (5, 5)
- 7, 11 Across US writer who wrote the poem *Cosmic Gall* about the neutrino (4, 6)
- Fruit sugar (8)
- Birthplace of Nobel Prize winning physicist Subrahmanyan Chandrasekhar (6)
- See 7 Across (6)
- Devices for measuring current (8)
- 14, 4 Down US scientist, inventor and women's rights campaigner, who discovered the greenhouse effect often attributed to 7 Down (6, 6, 5)
- Enzymes which catalyse the transfer of a functional group between molecules (12)
- Anaesthetic (8)
- Hook and loop fastener invented by George de Mestral (6)
- Taxonomic category (6)
- German nuclear chemist who was once put forward for the name for dubnium (4, 4)
- Fine-grained soil material (4)
- Scientist who studies flow and deformation of materials (10)

Down

- Element in Euro banknotes which glows red under UV light (8)
- Part of a circle (3)
- See 14 Across (5)
- $C_2H_3O_2$ (7)
- Unit of length (9)
- British physicist who had a light-scattering effect named after him (4, 7)
- Capital of Zimbabwe (6)
- Stupidly (11)
- Rubbery material (9)
- Seeks to find something (8)
- Disaccharide composed of glucose and 9 Across (7)
- First name of the author of *Silent Spring* (6)
- Essential (5)
- Swine (3)

Quick quiz:

- Which metallic element is at the centre of a chlorophyll molecule?
- William Withering pioneered the use of the wild plant *Digitalis purpurea* for the treatment of heart complaints. What is the plant's common name?
- Which element was first isolated from seaweed by French chemist Bernard Courtois?
- The popular garden plant *Hydrangea* can act like a reverse litmus test turning pink or blue depending on the pH of the soil due to the plants' uptake (or absence) of which element?
- Getting hit over the head with a cricket bat is likely to result in a headache. Why might something in the cricket bat help with that?

Solutions: 1. Magnesium 2. Foxglove 3. Iodine 4. Aluminium 5. Traditionally cricket bats are made of willow which is a source of salicylic acid - the basis of many painkillers.

Entry form

There are four prize puzzles on this page: cryptic crossword; quick crossword; wordoku; and coronene. 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 March 2024**. The winners of this month's puzzles will be published in the April 2024 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).

March 2024 coronene puzzle

This new puzzle is based on coronene. Using the elemental symbols (and not switching the 2 letters of any 2-letter elemental symbols), place each of the seven elemental symbols in the hexagons to spell out three words reading diagonally (plurals allowed). In each of the four puzzles there will be a shared element in the middle hexagon which when combined and reading across will spell out the name of another compound.

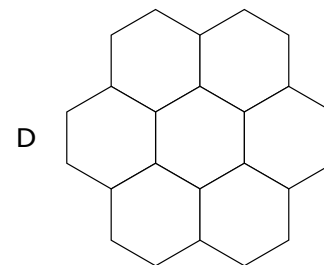
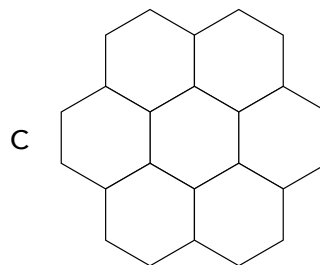
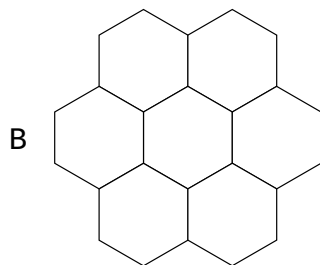
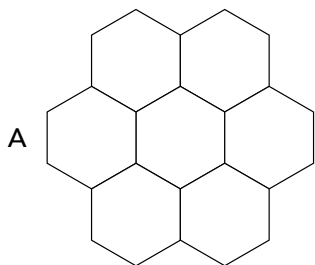
Elements:

A. Am, B, Ba, Co, Er, Es, Ra

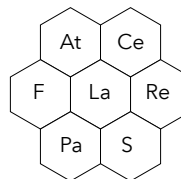
B. Ac, Am, Cl, Es, Se, Te, U

C. At, In, No, Re, S, Ta, Te

D. Ar, Dy, Ge, Li, Ne, Re, S



For example:



Answers:

Atlas

Flare

Palace

February 2024 solutions and winners

Cryptic

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

Quick

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

Wordoku

The new cancer drug mentioned in *Chemistry World's* Pharmaceuticals round-up 2023 was ADAGRASIB

Coronene puzzle

- A. Colic, Police, Slits
 B. Almond, Osmose, Remote
 C. Honey, Knees, Sinew
 D. Canes, Money, Tenets

The compound running across was Limonene.

February winners

Coronene
 M N Wesley
 Luton, UK

Wordoku
 Graeme McArdle-Capon
 Durham, UK

Cryptic crossword
 Helen Smalley
 Woodley, UK

Quick crossword
 Gareth Hart
 Henley-on-Thames, UK