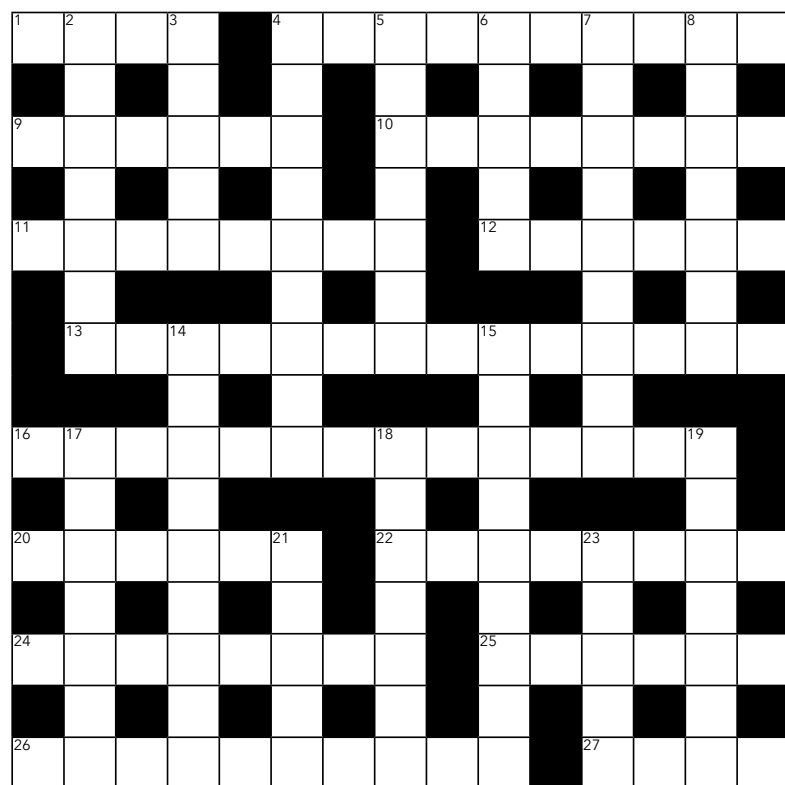


August 2024 crossword



August 2024 wordoku

													A
	E		N		A			R					C
	A		C	T	R			S					E
	C							N					L
A			R	S	N					E			M
L		S						R			T		N
T	S			N					L	R			R
	L								A				S
			L		M								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, rearrange one of the overall diagonals to give the only clergyman honoured with a Royal Society of Chemistry blue plaque.

Cryptic

Across

- 1 Celebrity squeals on comeback (4)
- 4 Lit alembic to produce gold with lead for example? (10)
- 9 Kid's two-wheeled hybrid vehicle? (6)
- 10 Salts taking payments for evening work by the sound of it (8)
- 11 Burns half the common shorter statues (8)
- 12 We lay around near eastern latitude (6)
- 13 Defy kid's record about the radiochemist (9, 5)
- 16 Biochemist Jane found diner abroad (8, 6)
- 20 Caravan with its own power source? (6)
- 22 Worked at crisis time (8)
- 24 Pagan in India composed (8)
- 25 Second fiddle took a chair in the compound (6)
- 26 Theory Bach composed for the astronomer (5, 5)
- 27 Keen about the joint (4)

Down

- 2 Remove to launch (7)
- 3 Voice over in obscure Dublin (5)
- 4 Bizarrely blokes love fresh borders found in the library (9)
- 5 Surfaces in Yemeni's citadel (7)
- 6 Some into talking, sum! (5)
- 7 Adele arranges short holidays in contract (9)
- 8 A little squire landing in the country (7)
- 14 Merchants upset the physicist (5, 4)
- 15 With AI, Tolkien writes about clay (9)
- 17 Arrange a surety for the Thames perhaps (7)
- 18 Trains first employee to mix a drink (7)
- 19 Mike leaves mainline engineer to find the chemical (7)
- 21 Not all panic limbering up for the ascent (5)
- 23 Blunt physicist? (4)

Quick

Across

- 1 Hormone secreted by the anterior pituitary gland (abbrev) (4)
- 4 Unvulcanised natural rubber (10)
- 9 Wood decay caused by fungi (3, 3)
- 10 Iron-bearing sedimentary rock (8)
- 11 Benzodiazepine drug (8)
- 12 Yield (6)
- 13 The first woman to earn a doctorate from the University of Breslau (5, 9)
- 16 Scottish chemist and co-recipient of the 2021 Nobel prize in chemistry for the development of asymmetric organocatalysis (5, 9)
- 20 _____ acid, $C_3H_6O_3$ (6)
- 22 Goes directly from solid state to gaseous state (8)
- 24 Windswept snow features (8)
- 25 Most common and stable form of TiO_2 in nature (6)
- 26 Meaning of λ in the Bragg equation $n\lambda=2d\sin\theta$ (10)
- 27 Common form of iron oxide (4)

Down

- 2 Of the heart (7)
- 3 SI unit of frequency (5)
- 4 Gelatinous liquid inside a cell (9)
- 5 Peak (7)
- 6 Speedometer (abbrev) (5)
- 7 Small dryer (4, 5)
- 8 Lie (7)
- 14 Greek philosopher and naturalist (9)
- 15 Birthplace of the physicist James Clerk Maxwell (9)
- 17 Chilean desert (7)
- 18 US neurologist and pathologist, eponymised in the name of a disease caused by increased secretion of 1 Across (7)
- 19 Shapes of acicular crystals (7)
- 21 Reason (5)
- 23 Bury (5)

Quick quiz:

- The process used to make which palindromic UK food product was originally invented by a German organic chemist also known for his condenser, and who was the chemist?
- Which compound found in tonic water is used to treat malaria?
- Which now common chemistry concept was introduced in 1909 by Danish chemist Søren Sørensen when he was head of the famous Carlsberg Laboratory in Copenhagen?
- The first amino acid to be isolated from a vegetable can make your urine smell. What is the vegetable?
- Unscramble these anagrams to make the names of four food colouring additives currently allowed in the UK: ACE TENOR, NO CHALICE, INCOME RAIDING, YELP ONCE. Which one is made from crushed beetles?

Solutions:
 1. Oxo and Justus von Liebig 2. Quinine 3. The pH scale 4. Asparagus 5. Carotene, Cochineal, Indigo Carmine and Lycopenene. Cochineal is made from crushed beetles.

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 August 2024**. The winners of this month's puzzles will be published in the September 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).

August 2024 coronene puzzle

This 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 a compound.

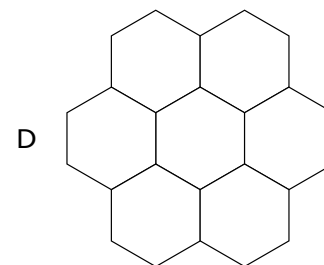
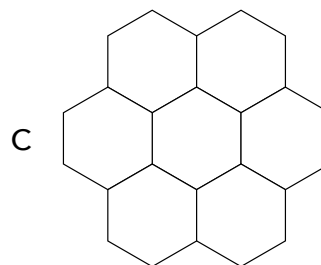
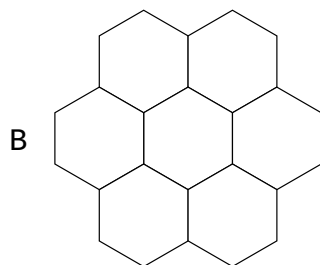
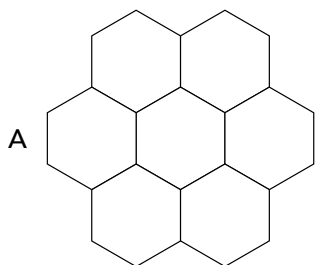
Elements:

A. Bi, Ca, Cu, I, N, S, Ts

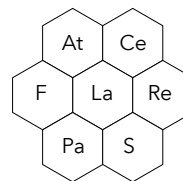
B. Al, Br, Cr, Ne, O, Th, W

C. Ba, F, K, Mo, O, Pa, Ti

D. Ca, Ds, Dy, Mo, N, K, Po



For example:



Answers:

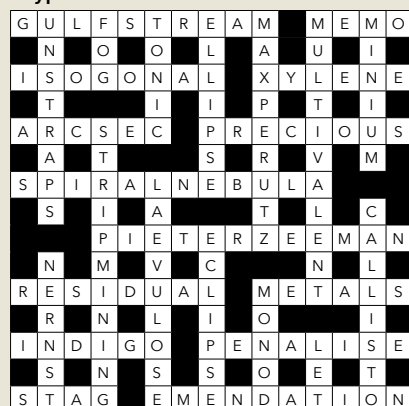
Atlas

Flare

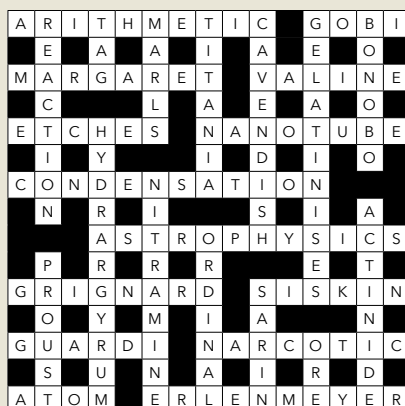
Palace

July 2024 solutions and winners

Cryptic



Quick



Wordoku

The drug commonly used to treat Type 2 diabetes was METFORMIN

Coronene puzzle

- A. Cheer, Sheds, Where
 B. Asps, Caper, Sepal
 C. Estate, Potage, Stay
 D. Inept, Nonets, Sneer

The compound running across was heptane.

June winners

Coronene
 Alistair Raffel
 Warrington, UK

Wordoku
 Glyn Thomas
 Newport, UK

Cryptic crossword
 Paul Baker
 Stevenage, UK

Quick crossword
 Robin Price
 Cowes, UK