## May 2022 crossword



May 2022 wordoku

|  |  |  |  |  |  | T | A | D | A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M |  | A | T | । |  |  |  | D |
|  | S |  |  |  |  |  |  |  | E |
| A |  |  |  |  | V | M | S |  | 1 |
|  |  |  |  | E |  |  |  |  | L |
|  | T | V | L |  |  |  |  | 1 | M |
|  |  |  |  |  |  |  | M |  | S |
|  |  |  | D | । | S |  | V |  | T |
| L | A | S |  |  |  |  |  |  | V |

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 name of a Dutch atmospheric chemist.

## Cryptic

## Across

1 Missing the ducks, cow moos in the valleys (4)
3 U2 turn odd phrase into takeover (5)

6 Ileft a nice preparation for the skin complaint (4)
9 Somehow a smellier city (9)
11 Zip some Zoom photos (5)
13 A little sloe wine for the pharmacologist (5)
14 Accelerated acts delay engineer (9)
15 Perhaps hotel kip weakens the chemist $(9,6)$

17 Rocket scientist maybe braver when on run $(7,3,5)$
18 Care about albino left out without oxygen (9)
20, 24 Across I play aces wild for this type of compound $(5,4)$

22 Orate about muse (5)
23 Photos shook up poseur's ex (9)
24 See 20 Across
25 Tree forms a safe place but not all of it (5)

26 See a portion of the mine's pyrites (4)

## Down

1 Animal lame around head coach (5)

2 Rat about meeker promoter (9)
4 Risible bouncers recycled the polymers $(8,7)$
5 Poster about oncogenes displaying old equipment (15)
7 Partial scam used by the philosopher (5)
8 Dithers playing wobbly cellos (12)
10 Dawn hitherto stirred US writer $(5,7)$

12 D'oh! King upset the crystallographer (7)
15 Plant base now transformed (7)
16 Lads wrote about these plants (9)
19 Arranged a cab I could count on? (5)
21 Bold bit of Sousa's symphony (5)

## 22 Nerve agent (5)

23 Unrefined (9)
24 August __-_ , German chemist, physicist and mathematician (4)
25 Nuclease which catalyses the
breakdown of RNA (abbrev.) (5)
Nuclease which catalyses the
breakdown of RNA (abbrev.) (5)
26 Superstar (4)

## Quick

Across
1 Chemical___, a compound used to detect unstable compounds (4)
3 Type of brick made with earth, water and organic matter (5)
6 Proton donor (4)
9 Scene (9)
11 Describing a gas that complies with $\mathrm{PV}=\mathrm{nRT}$ (5)
13 Fragrance (5)
14 Yearning for times gone by (9)
15 Winner of the 1990 Nobel prize in chemistry $(5,5,5)$
17 Two-time winner of the Nobel prize in chemistry $(9,6)$
18 Ring caused by sunlight interacting with ice crystals $(5,4)$
20 Preface (5)

## Down

1 Serbian-US inventor and engineer (5)
2 One of the four building blocks of RNA (9)

4 Removal of dangerous substances (15)

5 Fungi that resemble brains $(9,6)$
7 Former deputy prime minister of the UK (5)
8 Double sugar (12)
10 Glycoproteins that bind iron in blood plasma (12)
12 Co-discoveror of helium and founder of the journal Nature (7)

15 Gushes (7)
16 Dexter $(5,4)$
19 ____ Hadron Collider, the world's highest energy particle collider (5)
21 Alkyl radical $-\mathrm{C}_{8} \mathrm{H}_{17}$ (5)

## May 2022 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

| 1 | Symbol of the element Mendeleev <br> called 'eka-silicon' (2) |
| :--- | :--- |
| 2 | Donated (4) |
| 3 | Serious (5) |
| 4 | Destroy (6) |
| 5 | Mean (7) |
| 6 | Italian chemist after whom a <br> chemical constant is named (6, 8) |

## Quick quiz:

1. Which German radiochemist has the formula for uranium fission on their tombstone?
2. Which Austrian physicist has the formula for entropy $S=k \log W$ on their grave?
3. Which English analytical chemist and archaeologist, part of Carter's team to excavate Tutankhamun's tomb, was a pioneer of artifact preservation and forensic science?
4. Which co-discoverer of nuclear fission, who refused to work on the Manhattan Project, has the following epitaph on their gravestone:
'A physicist who never lost her humanity.'
5. Which pioneer of the medicinal use of digitalis has foxgloves engraved on their memorial plaque?

 suo!̣nıos

## 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 $\mathbf{2 0}$ May 2022. The winners of this month's puzzles will be published in the June 2022 issue, along with the solutions.
Email: chemistryworld@rsc.org

Name $\qquad$

Address $\qquad$

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).

## May 2022 Word grid

Use the element symbols from the panel on the right to complete the word grid below.


| Bi | C |
| :---: | :---: |
| Ce | H |
| I | La |
| $P$ | Si |
| Th | $U$ |

## April 2022 solutions and winners



Quick


## Wordoku

The pharmaceutical company was ACCELERON

## Science scramble

1 Act; 2 Tact*; 3 Tract*; 4 Carter; 5 Retrace; 6 Carpenter; 7 Emmanuelle Charpentier. *See corrections (p 4)

Word grid


## April winners

Cryptic crossword
Rebecca Bird Leamington Spa, UK
Quick crossword
Declan Fleming Newton Longville, UK
Wordoku
Christine Murray Cumbernauld, UK
Science scramble
John Hudson
Cockermouth, UK

