## October 2023 crossword



October 2023 wordoku

|  | $D$ |  |  |  |  |  |  | $Z$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $F$ |  | $R$ | $N$ |  | $M$ |
|  |  |  |  | $N$ |  | $E$ |  |  |
|  |  |  | $S$ | $Z$ |  |  | $M$ |  |
| S | M |  |  |  |  |  | $E$ | $N$ |
|  | $F$ |  |  | $R$ | $M$ |  |  |  |
|  |  | $R$ |  | $D$ |  |  |  |  |
| D |  | $A$ | $E$ |  | Z |  |  |  |
| $F$ |  |  |  |  |  |  | $N$ |  |


| $A$ |
| :---: |
| $D$ |
| $E$ |
| $F$ |
| $M$ |
| $N$ |
| $R$ |
| $S$ |
| $Z$ |

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 US bioanalytical chemist born in Argentina.

## Cryptic

## Across

1 Surprisingly greedy rascal loves the second inventor $(7,8)$

9 Transmit disturbing art idea (7)
10 Pesters with a form of extremely swift fines (7)
11 Even Sophocles returns for the repeating sound (4)

12 Cad's nicest about the driers (10)
13 Shrinks treated seducer (7)
15 Prepare treacle for the bright $\operatorname{girl}(7)$

17 Stir someone in the top of the church? (7)

19 Remove previous plot (7)
20 Without Cocker up front, Pulp creeped around to form another group $(4,6)$

22 Little Welsh composer? No, German actually (4)
25 Tidies a teen's den finally on arrangement (7)
26 Juliet leaves large jar overturned to reveal mineral (7)

27 Organic chemist rejoices-amylase ordered $(5,5,5)$

## Down

1 Letters about iodine cure for the radiochemist (5)

2 He's deadly around these groups (9)

3 Take charge with the metal (4)
4 Engineer's nemesis perhaps? (7)
5 Playing violin with energy? It's rock! (7)

6 Lacking something, I fenced it around (9)
7 Inose about for some dye (5)
8 Unyielding form of talent sir's left out (9)

13 Waltz with the Weather Girls? $(4,5)$
14 Maybe snip cress for its firm texture? (9)

16 Battle is a right graft with the French abroad (9)

18 Mike left Sue and Maria working on the continent (7)

19 Enrage left about to grow (7)
21 In there's a kind physicist (5)
23 Writer hardly left without (5)
24 Odd thallic mineral? (4)

## Quick

## Across

1 German chemist, first to isolate beryllium and yttrium $(9,6)$

9 Italian polymath mentioned in Queen's Bohemian Rhapsody (7)

10 Deference (7)
11 Ova (4)
12 Calculus term (10)
13 Concurs (7)
15 Italian polymath known for their experiments on animal magnetism (7)

17 Alchemical apparatus named after a bird (7)

19 Superheavy element named after the Latin name for the place it was discovered in Germany (7)

20 Normalise (10)
22 Movie (4)
$25 \mathrm{NH}_{3}(7)$
26 Element named after the Norse god of thunder (7)
27 US radiochemist involved in the discovery of five superheavy elements $(4,11)$

## Down

1 Amnesia (5)
2 Incoherent (9)
3 Spanish surrealist (4)
4 Different forms of the same element or compound (7)
5 Fish (7)
6 Impediments (9)
7 Nobel laureate, who discovered the role of acetylcholine as an endogenous neurotransmitter (5)
8 Transition metal used in the nib of the Parker 51 fountain pen (9)

13 \& (9)
14 Young waterfowl (9)
16 Qualities of having pH below 7 (9)
18 Rock group who had a single called 'Lithium' (7)

19 \# (7)
21 Author of a series of popular science books featuring Mr Tompkins (5)
23 Preserved Egyptian corpse (5)
24 Recipient of the 1954 Nobel prize in physics for their research in quantum mechanics (4)

## October 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

| 1 | Yurt (3) |
| :--- | :--- |
| 2 | Cog (4) |
| 3 | Scope (5) |
| 4 | Two-time winner of the <br> chemistry Nobel prize (6) |
| 5 | Scottish <br> football club (7) |
| 6 | Puts in order (8) |

## Quick quiz:

1. The Nobel prizes are named after the Swedish chemist, engineer, inventor and philanthropist Alfred Nobel. What was his most famous invention?
2. Which two scientists have been awarded the Nobel prize in chemistry twice?
3. What is the surname of the discoverer of the electron and his son who proved the wave-like behaviour of electrons - both of whom received the Nobel prize in physics (in 1906 and 1937, respectively)?
4. $n \lambda=2 d \sin \theta$ is an equation named after a father and son who jointly received the 1915 Nobel prize in physics for their development of $x$-ray crystallography. What is the name?
5. Complete this quotation from Alfred Nobel:
$\qquad$ is the stomach's worst poison.'


## 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 October 2023. The winners of this month's puzzles will be published in the November 2023 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).

## October 2023 Word grid

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

|  |  | $N$ |  | $S$ |
| :---: | :---: | :---: | :---: | :---: |
| S |  | $O$ |  | $H$ |
|  |  |  | $C$ | $O$ |
| Ti |  | 1 |  |  |
|  |  | $S$ | $H$ |  |


| Al | Ba |
| :---: | :---: |
| C | Ce |
| Es | Fr |
| La | W |
| U | Y |

September 2023 solutions and winners


## Wordoku

The drug used in the
treatment of erectile dysfunction was TADALAFIL
Science scramble
1 Spa; 2 Caps; 3 Space; 4 Places; 5 Capsule; 6 Scapulae; 7 Paracelsus


## September winners

Science scramble
RA Reed
Stoke-on-Trent, UK
Wordoku
Howard Worth
Kent, UK
Cryptic crossword
Amanda Heath
Chertsey, UK
Quick crossword
Nick Gudde
Windlesham, UK

