## September 2023 crossword



September 2023 wordoku

| S |  |  | I |  |  |  | D |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | T |  |  |  |  |  |  | A | F |  |
|  |  |  |  |  |  | A |  |  | E |  |
| A | 1 |  | L |  |  |  |  |  | T |  |
|  | D |  |  |  |  |  |  | F |  |  |
| F |  |  |  |  |  | T |  | L | S | S |
| I |  |  | F |  |  |  |  |  |  |  |
| D | A |  |  |  |  |  |  | S |  |  |
|  |  | M |  |  |  | L |  |  | D |  |


| $A$ |
| :---: |
| $D$ |
| $E$ |
| $F$ |
| I |
| $L$ |
| $M$ |
| $S$ |
| $T$ |

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 spell the name of a drug used in the treatment of erectile dysfunction.

## Cryptic

## Across

1 On arrangement, locate bulb of a certain colour $(6,4)$

7,3 Down A dash around edges of oasis to get salt $(4,3)$

9, 13 Across Death knells alone upset the crystallographer $(8,8)$
10 Sources of surprising sauces? (6)
11 Sodium use a type of sickness? (6)
13 See 9 Across
14 Principle of some shibboleth I considered (5)
16 German chemist who's stern around new starter? (6)
18 Initially mighty tome redrafted around November - it won't last! (6)

20, 25 Across Have oddly ignored farm tractor turning into the compound $(5,2,6)$

22 Pirate revised my bonus $(5,3)$
23 Perhaps first puzzle clues are pots? (6)

24 Bravo-correct and clever! (6)

## 25 See 20 Across

27 Mark found in their caravan (4)
28 Loved hoaxes without Victor around the compound (10)

## Down

2 Box a late supper with salts included (8)

3 See 7 Across
4 Character from Greece in the tavern (5)

5 All in on treatment with wax? (7)
6 Unusual having a different focus (9)
7 Snoring noise? $(5,6)$
8 Lives in England - well satisfied! (6)

12 Physicist cooks cod with herrings (11)

15 Actor arranged plea for the queen (9)
17 Sal modified magma mixes (8)
19 Tory hid abroad and got it in the neck (7)
21 The measure of some tricky piece (6)

23 Chat about Charlie becoming an issue (5)
26 Right before previous king (3)

## Quick

## Across

1 Essential oil $(5,5)$
7 Groups (4)
9 Slope (8)
$10 \mathrm{C}_{2} \mathrm{H}_{6}$ (6)
11 Cached (6)
13 Not poisonous (8)
14 Leave the services (5)
16 Having a low pH (6)
18 Capture (6)
20 Theoretical physicist and Nobel Laureate who had a boson named after them (5)
22 Curve described by $y^{2}=4 a x$ (8)

## 23 See 27 Across

24 Geneticist famous for their work on peas (6)
25 A formulaic description of a chemical reaction (8)

27, 23 Across Science writer whose Conversations on Chemistry inspired Michael Faraday $(4,6)$

28 Organic compound with the functional group $-\mathrm{N}^{+} \equiv \mathrm{C}^{-}$(10)

## Down

2 British biochemist awarded the 1957 Nobel prize in chemistry for their work on nucleotides $(4,4)$

3 Show agreement (3)
4 Measure of the quantity of product formed in relation to the reactant consumed, in a chemical reaction (5)
5, 23 Down US astronomer who published an early catalogue of stellar spectra using their own system of stellar classification $(7,5)$

6 Location of the prime meridian (9)
7 Theoretical physicist famous for their thought experiment with a cat (11)
8 Water-soluble polyphenol present in many foods (6)

12 Firework $(5,6)$
15 Swiss mathematician and physicist famous for their principle which underlies aviation (9)
17 Minor planet (8)
19 Drug with no therapeutic effect (7)
21 Lead ore (6)
23 See 5 Down
26 Element with the shortest name (3)

## September 2023 science scramble

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

For example:
1 sail, 2 snail, 3 saline, 4 minerals, 5 Neil Armstrong

| 1 | Health resort (3) |
| :--- | :--- |
| 2 | Headwear (4) |
| 3 | 'The final frontier' (5) |
| 4 | Locations (6) |
| 5 | One way of delivering <br> medication (7) |
| 6 | Shoulder blades (8) |
| 7 | Swiss physician, philosopher <br> and alchemist (10) |

## Quick quiz:

1. Which allotrope of carbon (once called plumbago or black lead) is named after the Greek 'to draw'?
2. Which acid is named after the insects it was originally distilled from?
3. Which protein derives its name from the Latin for cheese?
4. What is lunar caustic now known as?
5. Smithson Tennant discovered two elements, osmium and what other one, missing from this quotation:
'I should incline to call this metal $\qquad$ from the striking variety of colours which it gives while dissolving in marine acid.'


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

## September 2023 Word grid

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


| Am | B |
| :---: | :---: |
| Er | Ge |
| K | Kr |
| Li | O |
| Po | Ta |

## August 2023 solutions and winners



## Wordoku

The company in the specialty chemical and personal care sector was ELEMENTIS
Science scramble
1 Era; 2 Lear; 3 Ravel; 4 Marvel; 5 Removals; 6 Mary Somerville


## August winners

Science scramble Alan Bodley
Orpington, UK
Wordoku
David Roebuck
Leicester, UK
Cryptic crossword
David McKillen
Carrickfergus, UK
Quick crossword
Ashleigh Fletcher
Paisley, UK

