## August 2022 crossword



## August 2022 wordoku

|  |  | $E$ |  |  |  | $S$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $U$ | $Y$ |  | $I$ |  |  |  |  |  |
| $N$ |  |  |  | $Y$ |  | $I$ |  |  |
|  | $O$ |  |  |  | $U$ |  |  |  |
| $D$ | $U$ |  |  | $M$ |  |  | $O$ | $S$ |
|  |  |  | $D$ |  |  |  | $M$ |  |
|  |  | $M$ |  | $E$ |  |  |  | $O$ |
|  |  |  |  |  | $O$ |  | $D$ | $N$ |
|  |  | $U$ |  |  |  | $M$ |  |  |


| $D$ |
| :---: |
| $E$ |
| $I$ |
| $M$ |
| $N$ |
| $O$ |
| $S$ |
| $U$ |
| $Y$ |

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 chemical element.

## Cryptic

## Across

1 Eliminates cares about first love (6)
4 Here sang new material (8)
9 Turn a literacy lesson into a test (15)
11 Smash the Spanish motor for effect (7)

12 Old chemical company here in Paris (3)
13 By the sounds of it, just a space station (3)
14 Oh! Ed hated developing rash (9)
17 Far left fumarole abroad fuming sulfuric acid (5)
19 See 7 Down
20 Club orders train oil (9)
22 Take part of Nairobi (3)
24 Current samples with less to lose (3)
26 Reveal this type of rock using unusually irregular ore (7)
28 Prepared home-chlorinated compound (15)
29 On arrangement load lens for the crystallographer (8)
30 All at sea, First Admiral leaves Senegal for philosopher (6)

## Down

1 This cat's a fraud by the sounds of it (7)
2 Let enamel become uncompounded (9)
3 Some more trophies from yesteryear (5)
5 Noah converts first investment into capital (5)
6 Lacking energy, pillage oil around Italian town (9)
7, 19 Across Toss sample around for minerals $(5,5)$
8 Overturned Tom's urn for potion (7)
10 On arrangement, avoid orbital edges being a certain shape (7)

15 Ends renal treatment and gets caught up (9)
16 Burundi man ran away to play some heavy metal (7)

18 Vaper orders heartless Eva to disappear (9)
19 Rustled around for pudding (7)
21 Analysts relocating streets (7)
23 Philosopher who's a bit of a pig! (5)
25 Without tritium, triple transformation means danger (5)
27 Changing into new top was a gas! (5)

## Quick

## Across

1 Vinegar acid (6)
4 Alchemical stills (8)
9 Atom-building process associated with the big bang (15)
11 Compress (7)
12 Spectroscopic technique first described by Isidor Rabi in 1938 (abbrev) (3)

13 Look at (3)
14 Purging (9)
17 Lurches (5)
19 See 3 Down
20 Describing open-chain hydrocarbons (9)

22 Unwell (3)
24 Edible tuber (3)
26 The Copper State (7)
28 Scientist like Mary Anning (15)
29 Enzyme that cleaves nucleic acids (8)
30 See 3 Down

## Down

1 Forgetful (7)
2 Meet (9)
3,30 Across, 19 Across
Co-discoverer of artificial radioactivity (5, 6-5)
5 Fabric made from the flax plant (5)
6 Indian ruler (9)
7 Edition (5)
8 Organisations (7)
10 Term first used scientifically to describe the various colours in visible light (7)
$15 \mathrm{C}_{2} \mathrm{H}_{2}$ (9)
16 US City where the first controlled nuclear reaction took place (7)
18 Viruses that use RNA as their genetic material (9)

19 US homeopath convicted of killing his stage singer wife with scopolamine (7)
21 Bird named after a fossil fuel (4, 3)
23 Flame test colour for potassium (5)
25 Subtract (5)
27 African hardwood (5)

## August 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 | Exist (2) |
| :--- | :--- |
| 2 | Wager (3) |
| 3 | Waistband (4) |
| 4 | Seed of the areca palm (5) |
| 5 | Holy city (9) |
| 6 | Chemist who invented the <br> concept of catalysis (9, 7) |

## Quick quiz:

1. Which UK prime minister studied chemistry at university under the tutelage of x -ray crystallographer Dorothy Hodgkin?
2. Which chemist and astronaut was the first Briton in space?
3. Which French student of Marie Curie discovered an element, and which element was it?
4. Which female physicist, nominated dozens of times for Nobel prizes in physics and chemistry but never awarded one, has an element named after her?
5. Which US scientist wrote the following in the book Silent Spring? 'As crude a weapon as a cave man's club, the chemical barrage has been hurled against the fabric of life.'

 :suo! ${ }^{\text {njos }}$

## 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 August 2022.
The winners of this month's puzzles will be published in the September 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).

## August 2022 Word grid

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


| C | Er |
| :---: | :---: |
| Es | H |
| Mo | N |
| P | Ta |
| Se | $U$ |

July 2022 solutions and winners


## Wordoku

The $\beta$-lactamase inhibitor was AVIBACTAM

Science scramble
1 Ne; 2 New; 3 Knew; 4 Wakening; 5 Weakening; 6 Stephen Hawking.

## Word grid



## July winners

Science scramble
Alain Simpson
Hitchin, UK
Wordoku
Bob Mudd Bridgwater, UK
Cryptic crossword lain Challis Cambridge, UK Quick crossword Sue Matejschuk Hitchin, UK

