November 2019 wordoku

|  |  |  | S |  |  |  | K |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | A | T | M |  | H |
|  |  |  |  |  |  | I |  | T |
|  |  | E |  | D | K |  |  |  |
|  | K | I |  |  |  | H | E |  |
|  |  | T | I | S |  | D |  |  |
| K |  | M |  |  |  |  |  |  |
| T |  | A | K | M |  |  |  |  |
|  | S |  |  |  | A |  |  |  |

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 ninesquare cell). Once solved, one of the overall diagonals can be rearranged into the name of a biochemical metabolite found in plants and microorganisms.

## November 2019 word grid

| C | Al | O |
| :---: | :---: | :---: |
| B | Re | N |
| I | Ra | Ti |

Prize entry: Using each element symbol in the grid only once, combine them together to make a single word of 13 letters.

Word... $\qquad$
Just for fun: Construct as many other words as you can using a minimum of three symbols, and each symbol only once.
6 words: OK, 9 words: Good, 12+ words: Excellent

## Entry form

There are four prize puzzles on this page: crossword (cryptic answers only); wordoku; science scramble; and word grid. For each puzzle, a winner will be selected from all the correct entries received and awarded a $£ 25$ 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 either post or email this page with your completed entries to us by 20 November 2019. The winners of this month's puzzles will be published in the December 2019 issue, along with the solutions.
Chemistry World puzzles, Royal Society of Chemistry, Thomas Graham House, Science Park, Milton Road, Cambridge, CB4 OWF, UK 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).

| $A$ |
| :---: |
| $D$ |
| $E$ |
| $H$ |
| $I$ |
| $K$ |
| $M$ |
| $S$ |
| $T$ |

November 2019 crossword


## November 2019 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

2

3

4

## 5

6

Consume (3)

Direction (4)

Moisten during cooking (5)

Lightweight fabric (7)

Electrical storage devices (9)

Theoretical physicist ( 6,8 )


Read about the opportunity at: rsc.li/part-time

## Cryptic (prize entry)

## Across

1 Ready gun for rooster (4)
3 Lacking tungsten, merely fashioned newer flask (10)
10 Left out, girls drive around this green (9)
11 Little harmony concealing the composer (5)
12 With a little ruthenium, Fred transmuted thorium into another element (13)
14 The French chew over this African antelope (6)
16 More culpable right after I smashed titanium luge (8)
18 Mums' aria rearranged into metal? (8)
19 Seen surrounding chromium filter (6)
21 Never-ending halibut seen around nine? (13)
24 Juvenile gnu only returning when heartless lion has gone (5)
25 Answers wild son's spree? (9)
26 Paramount or just gone off horses? (10)
27 Magnates oddly ignoring the workers (4)

## Quick (just for fun)

## Across

1 Wise men (4)
3 Beta blocker used to treat performance anxiety (amongst other things) (10)
10 German philosopher, author of Thus Spoke Zarathustra (9)
11 Types of clouds (5)
12 Hard-working (13)
14 Large stable block of the Earth's crust (6)
16 Reject (4, 4)
18 Communications satellite operator (8)
19, 20 Down Book by 4 Down on the effects of pesticides on wildlife $(6,6)$
21 Preliminary (13)
24 Special talent (from Yiddish) (5)
25 Skinks (9)
26 Oxbow lakes (Australian) (10)
27 Hard coarse-grained stone (4)

October 2019 solutions and winners


Quick (just for fun)


## Wordoku

The name of the chemist was Eugenia KUMACHEVA

## Word grid

The nine-symbol word was PROBABILISTIC

## Science scramble

1 Hat
2 Heat
3 Lathe
4 Ethanol
5 Kathleen Lonsdale

## Down

1 Containing a single ring of atoms (10)
2 Surname of the first American to orbit the Earth and first name of an American chemist eponymised in element 106 (5)
4 $\qquad$ Carson, American biologist and conservationist (1907-1964) (6)
5 Plucking implement (8)
6 Lack of agreement (14)
7 Carbonate sedimentary rock (9)
8 Cut of meat (4)
9 Country of birth of Jaroslav Heyrovsky, inventor of the polarographic method of analysis (14)
13 Something issued at intervals (10)
15 Medically remedial (eg against a toxin) (9)
17 Moon of Jupiter (8)
20 See 19 Across
22 Relating to the periodic rise and fall of the sea due to the moon's gravitational pull (5)
23 UK bird charity (abbrev) (4)
27 Narrow fissure (4)

## January winners

Science scramble
D J Jones Wolverhampton, UK
Wordoku
Omofolawe Otun Reading, UK
Word grid
Timothy Weakley Dundee, UK
Crossword
Arnab Bhattacharya
Mumai, India

On the spot


