

May 2021 wordoku

		O		M				I
		N	T		S			A
		I		B	T			
B	O		I		N		S	T
			M	U		I		
S			B		A	N		
M				O		B		

A
B
I
M
N
O
S
T
U

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 surname of an Italian chemist who works at the interface of materials science and catalysis.

May 2021 crossword

	1	2		3		4		5		6		7		
8														9
10										11				
12						13								
14				15					16			17		
									18					
19								20						
						21								
22		23										24		
25								26						
	27													

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 May 2021**. The winners of this month's puzzles will be published in the June 2021 issue, along with the solutions.

Email: chemistryworld@rsc.org

Name

Address

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.....

.....

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 2021 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

	Vehicle (3)
	Competition (4)
	Combine chemically (5)
	Incinerate (7)
	19th century author of popular science books (4, 6)

Cryptic

Across

- 1 Chemist began long rest differently (5, 1, 7)
- 10 Trace ants around substances (9)
- 11 Lobbed over reportedly (5)
- 12 Loves revised answer (5)
- 13 Treated malady with gin compound (9)
- 14 Endlessly grouse about odd roomie being thorough (8)
- 16 Eve shy around radiochemist (6)
- 19 Fertiliser prepared at shop (6)
- 20 Emo left clue about H₂O, for example (8)
- 22 Laze around in fun condition (9)
- 24 Some of Ma's picnic jelly (5)
- 25 Weapons sunk last submarine surprisingly (5)
- 26 First lady right behind colourful conifer (9)
- 27 Rewrite letter about artisan (13)

Down

- 2 Gill hated smashing window (9)
- 3 Mini treats with a little salt (5)
- 4 Metal irritant aluminium contains (8)
- 5 Attempts dissertations (6)
- 6 Auntie Deb ordered gas (9)
- 7 Bucolic in the outer Urals (5)
- 8 Sorted copier's prints for medicines (13)
- 9 A fifth of crypt teen went around (5, 3, 4)
- 15 On arrangement Sam nurses polar explorer (9)
- 17 Men quiet about first professional kit (9)
- 18 Bond can't love abroad (8)
- 21 Roxanne always hides temper (6)
- 23 Yogi transformed ski centre fair (5)
- 24 Predict some inaugural event (5)

Quick

Across

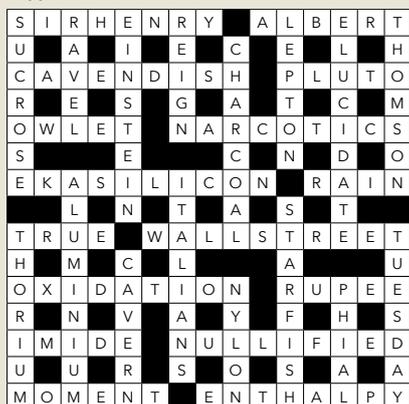
- 1 German physicist after whom a unit of electrical resistance is named (5, 5, 3)
- 10 Hormones that regulate male characteristics (9)
- 11 Snake (5)
- 12 Circles (5)
- 13 Type of chemical connection (5, 4)
- 14 Term describing a homogeneous mixture with a melting point below that of any of its constituents (8)
- 16 Teacher (6)
- 19 Type of tuna (6)
- 20 Member of the board (8)
- 22 Discoverer of acetylcholine's role as an endogenous neurotransmitter (4, 5)
- 24 Italian physicist after whom a synthetic element is named (5)
- 25 Nobel prize-winning biochemist who discovered key metabolic reactions that take place in living cells (5)
- 26 Pitchblende (9)
- 27 Heart attack (7, 6)

Down

- 2 _____ limit, maximum luminosity of a stellar body at equilibrium, named after an English astronomer (9)
- 3 Origins (5)
- 4 _____ heat capacity, symbol C_p (8)
- 5 Subatomic particles composed of one quark and one antiquark (6)
- 6 Local anaesthetic commonly used in dentistry (9)
- 7 Pachyderm (5)
- 8 Canadian physicist, known for research on nuclear transmutations (7, 6)
- 9 Decided in advance (13)
- 15 Accelerated a reaction (9)
- 17 Minor planets (9)
- 18 Highest navigable lake in the world (8)
- 21 Interstellar cloud (6)
- 23 Greek letter (5)
- 24 Occupation of Gregor Mendel, founder of modern genetics through his work on pea plants (5)

April 2021 solutions and winners

Cryptic crossword



Quick crossword



Wordoku

The named reaction was the KATRITZKY reaction.

Science scramble

- 1 Pi
- 2 Psi
- 3 Pies
- 4 Pipes
- 5 Epilepsy
- 6 Joseph Priestley

April winners

Science scramble
Amy Stockwell
Banbury, UK

Wordoku
Lily Pfaffensteller
Merseyside, UK

Cryptic crossword
Mark Nichols
Rugby, UK

Quick crossword
Graeme McArdle-Capon
Durham, UK

Mark Foreman works in the nuclear chemistry and industrial materials recycling section at Chalmers University of Technology, Sweden.

Do not open the flask. Hexamethyl phosphoramide (HMPPA) is a notorious carcinogen that can be absorbed by skin contact. Using a gloved hand, you should carefully transfer the flask into a wide necked plastic jar or another similar overpack at the first opportunity. Remove your gloves drop them into the overpack or otherwise safely dispose of the gloves, seal the overpack and then label the outside of it. You should make arrangements for it to be stored in the overpack in a secure place while you wait for waste disposal specialists to come and remove it.

Answer to On the spot

On the spot

