

### September 2021 wordoku

E			V	M		L			E
					O			R	I
	R		L			O	S		L
L		N				I		M	M
									N
	S		M			N		L	O
	E	R				L		N	R
O			N						S
		L		I	M				V

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 pigment that was possibly one of the first compounds to be made synthetically.

### September 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									

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

Email: [chemistryworld@rsc.org](mailto: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](http://www.chemistryworld.com/privacy)).

### September 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

Mother (2)

Thrust (3)

Unit of mass (4)

Simpson's character (5)

IT professional (10)

Theoretical physicist and Nobel prize winner (5, 8, 5)

## Cryptic

## Across

- Geneticist advised Ray make changes right away (4, 3, 6)
- Hoody plays a rap around King's Head (5)
- Task actor to play something found on the breakfast table (5, 4)
- Again take in a robber's fancy (8)
- English poet boring burrow (6)
- Moan about outline lacking feeling (11)
- Steal from the Girobank (3)
- Pixie fallen oddly on return (3)
- Nice area turned bad but arranged alphabetically! (11)
- Complaint about prosody lacking one primary orator (6)
- A fraud in treatment not scared (8)
- A tale about Guam reveals another place (9)
- Country urchin appreciates but not all of it (5)
- Hunches about otter's tree (5, 8)

## Down

- Trade around Peru for flight out (9)
- Old salt found in sackcloth (7, 2, 6)
- 22 Down Physicist endlessly fussy about top University's chalk (5, 5)
- Testy tribe turns to minerals (10)
- A fish jelly? (4)
- Engineer at airline amongst others (5, 4)
- A dad transitions to regularity (15)
- Without Charlie, Nick's returned to surface (4)
- On arrangement unearth den below (10)
- Are molars rearranged by mouth swab? (4, 5)
- Payment for riverside sketch? (4, 5)
- 20 Appreciates the accommodation (4)
- 22 See 3 Down
- Vulgar bottom! (4)

## Quick

## Across

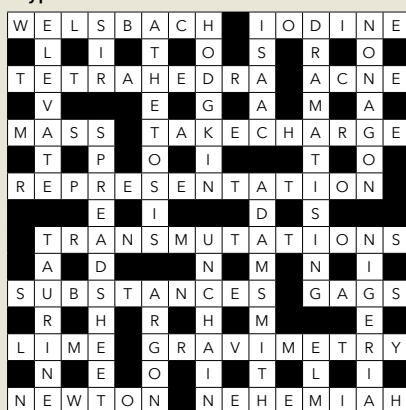
- Organic compound with the general formula  $RSO_3H$  (non-lupac spelling) (9, 4)
- Culture \_\_\_\_\_, nutritive substances that might be found in a petri dish (5)
- Mars (3, 6)
- Discharge (8)
- \_\_\_\_\_ O Lawrence, inventor of the cyclotron (6)
- Scottish botanist eponymised in a particular type of motion (6, 5)
- Pollinator (3)
- Unit of heat (abbreviation) (3)
- Electrode made by US inventor Lee De Forest who in 1906 used it to create the first amplifying vacuum tube (7, 4)
- Biological catalyst (6)
- External parasite (8)
- Rock samphire (3, 6)
- Style (5)
- Aerobic bacterial transformation of ammonia to nitrate (13)

## Down

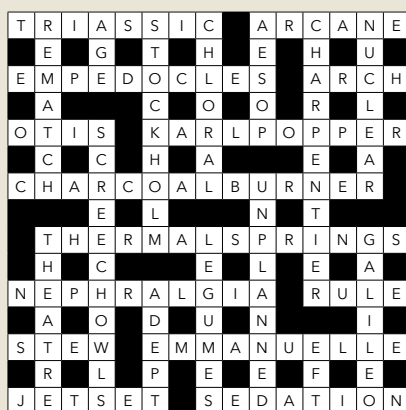
- Balanced (9)
- Austrian scientist after whom an SI defining constant is named (6, 9)
- Cures (5)
- Of limited radio frequency (10)
- Cipher (4)
- Quinone  $C_6Cl_4O_2$  (9)
- Swiss mathematician and physicist known for their principle about fluid flow that underpins aeronautics (6, 9)
- Ignore a marked alteration (4)
- Italian inventor of the barometer (10)
- Prostrate (9)
- English physicist, mathematician and astronomer who anticipated stellar nuclear fusion (9)
- Alleviate (4)
- Greek letter often associated with fatty acids (5)
- Against (4)

## August 2021 solutions and winners

## Cryptic crossword



## Quick crossword



## Wordoku

The chemical element was BERYLLIUM

## August winners

Science scramble  
Liz Canty  
Deeside, UK

## Science scramble

- End
- Tend
- Trend
- Intrude
- Interlude
- Gertrude Elion

Wordoku  
G D Hosken  
Maidstone, UK

Cryptic crossword  
Paul Baker  
Stevenage, UK

Quick crossword  
Peter Jones  
Sandwich, UK

Do not panic! Remove the fragments of glass and put them in a rigid plastic bottle for disposal. On a lino floor, pour sulfur powder on the mercury spill and wait for 15 to 20 minutes, then sweep it up and dispose of it as mercury waste. Alternatively, you can use a specially designed mercury clean-up pad to safely absorb the spilled material. Mercury on a wooden floor or carpet is more difficult to clean up. For a wooden floor, pour zinc powder in any cracks to form zinc amalgam (do not mix zinc and sulfur), which is less able to form mercury vapour. For carpet the clean-up can be rather destructive - consider cutting the contaminated section out of the carpet and sending it away as mercury waste.

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

## On the spot

