

October 2018 wordoku

L	F							
	A			I				
S			A	L		O		
	L		I			K		
K		A					E	
	P			E			I	
			K	I				
F					A			K
			F		O	E	P	

A
E
F
I
K
L
O
P
S

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 into the name of a green chemist.

October 2018 word grid

Ra	I	N
S	Te	Er
V	B	Te

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

Word.....

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; molecule search; 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 October 2018**. The winners of this month's puzzles will be published in the November 2018 issue, along with the solutions.

Chemistry World puzzles, Royal Society of Chemistry, Thomas Graham House, Science Park, Milton Road, Cambridge, CB4 0WF, UK
 Email: chemistryworld@rsc.org

Name

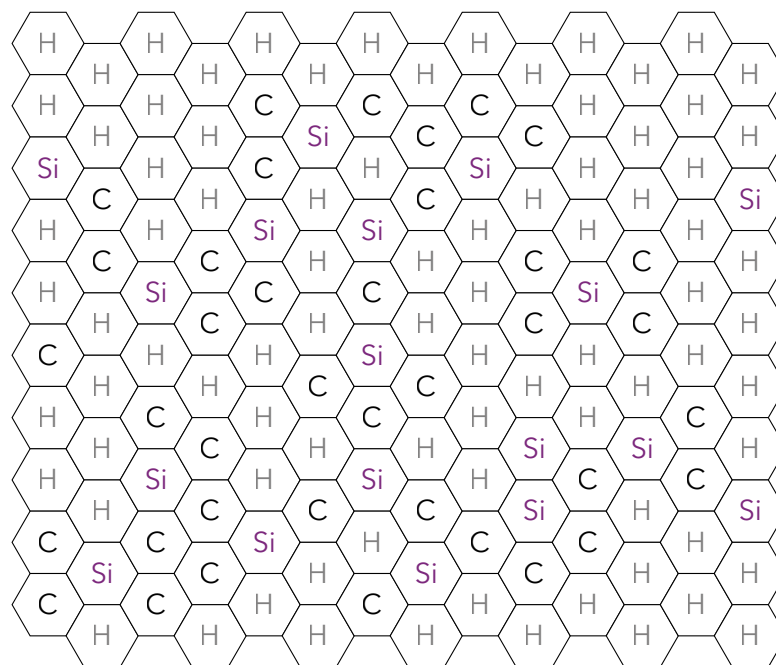
Address

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).

October 2018 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								

October 2018 molecule search



Connect atoms in adjacent cells using single or multiple bonds to reveal the hidden molecules. The hexagonal grid might necessitate some minor distortion of bond angles.

Find the molecule with the formula $\text{SiC}_4\text{H}_{12}$

Clue: The compound is well known to anyone who has done nuclear magnetic resonance spectroscopy.

Cryptic (prize entry)

Across

- Clown ordered ammo - that's the custom! (6, 3)
- Oddly precast turf (4)
- Nate's left straightened and corrected! (7)
- Even Carol left it around an Asian (7)
- Weapon in keep entrance returned (4)
- Star plays endless lute with Bee Gees (10)
- Spoons out initially innocuous toxins (7)
- Getting on after gent taken care of (7)
- Trivial moan about endless line (7)
- See 5 Down (7)
- Assortment of change in tin I left? Charming! (10)
- Part of church not entirely collapsed (4)
- Oddly teamed cart turned turtle (7)
- Fighter for example leaves lager brew concoction (7)
- Initially not everyone often noticed this element (4)
- Critical I confuse lateness (9)

Quick (just for fun)

Across

- French physicist who contributed to quantum theory (1892-1987) (2, 7)
- Drinks in small amounts (4)
- 21 Down American medical physicist awarded Nobel prize for developing radioimmunoassay technique (7, 5)
- See 23 Down (7)
- Limbs (4)
- Primitive organism (5, 5)
- Remain longer than expected (7)
- Swedish-German chemist (1742-1786) (7)
- Describing a type of limestone (7)
- $\text{Na}_2\text{CO}_3 \cdot 10 \text{H}_2\text{O}$ (3, 4)
- Somebody who goes or has gone to one of eight prestigious American colleges or universities (3, 7)
- Section of land that extends into water (4)
- Author of *The Hobbit* (7)
- Girella nigricans* (7)
- Small stick (4)
- Swiss traditional singers (9)

Down

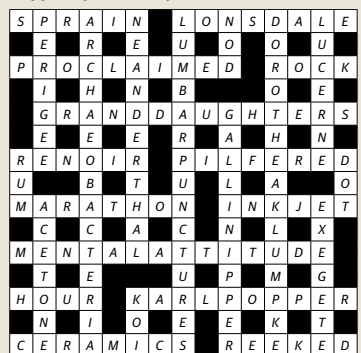
- Concerned about prose letters (14)
- Metal amusing me terribly (9)
- 23 Down Chemist adds sodium hydroxide to extremely hot mixture (4, 4)
- Steps right around saddle (7)
- 19 Across Nobel laureate recasts medal whilst low (7, 7)
- Head off, hoping these change mineral (10)
- Farewell after dropping into eastern Ukraine initially (5)
- Somehow neared polluted fuel (8, 6)
- English chemist ordered first jaunty hat in London (4, 6)
- Violinist stirred apple girl (9)
- Bark about a rattle (7)
- Vehicle brings back a little sub in Moray Firth (7)
- I rue initial complaint about radiochemist (5)
- See 3 Down (4)

Down

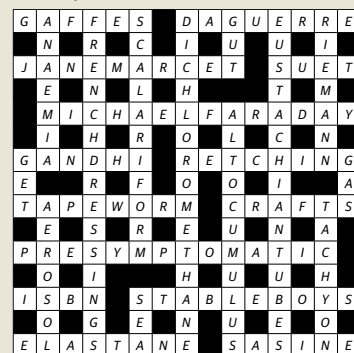
- Skin doctors (14)
- Copper, tin or zinc for example (4, 5)
- Scandinavian city (4)
- American physicist, astronomer and inventor of the bolometer (7)
- Biological catalysts (7)
- Cetacean (5, 5)
- Type of rice dish (5)
- Card players (6, 8)
- Distorted speaking (10)
- Uppermost region of Earth's atmosphere (9)
- Lucidity (7)
- Type of organic compound with a number of biological and drug uses (7)
- See 9 Across (5)
- 10 Across German polymer chemist (4, 7)

September 2018 solutions and winners

Cryptic (prize entry)



Quick (just for fun)



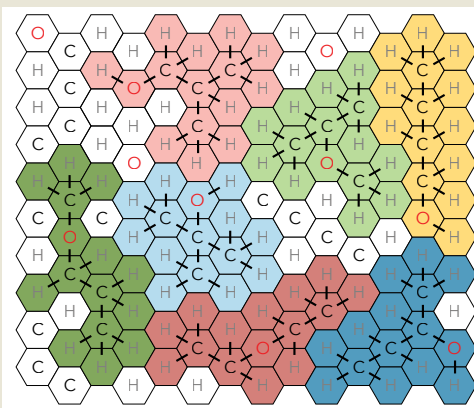
Wordoku

The name of the molecules was ROTAXANES

Word grid

The nine-symbol word was HALLUCINOGENS

Molecule search



The seven molecules, all structural isomers, were 1-butanol, 2-butanol, 2-methyl-1-propanol, 2-methyl-2-propanol, ethoxyethane, 2-methoxypropane and 1-methoxypropane.

Winners

Molecule search

Daniel Delgado-Rosas, Cambridge, UK

Wordoku

David McKillen, Carrickfergus, UK

Word grid

Leslie Thelwall, Reading, UK

Crossword

Norman Hooper, Penzance, UK

Charles Harrison is a safety adviser at a UK university.

The bottle needs to be cooled down as soon as possible. Bulking up waste can be extremely hazardous if incompatible chemicals such as acid chlorides and amines are mixed together. If left uncontrolled, this could become a runaway reaction that could cause a fire or explosion. The bottle is very hot, it may be advisable to evacuate and call for additional help.

Answer to On the spot

On the spot

