

July 2021 wordoku

				A				S	A
L		E	M				R		E
M				H				N	H
N		S							L
A	L							S	M
							N		N
	M			S					O
S		H				R	A		R
R				L					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 to give the surname of a US-based interdisciplinary chemist with special interest in the bioinorganic chemistry of cancer.

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

Email: chemistryworld@rsc.org

Name

Address

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.....

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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).

July 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

Tin (3)

Biblical character (4)

Vitamin (6)

Device that causes fires (10)

Discoverer of hydrogen (3, 5, 9)

Cryptic

- Across**
- Clean samples with appropriate brush to begin with (4)
 - Restrict pet's action abroad (10)
 - Strong lasers contain the chemist (6)
 - Make teenager confused (8)
 - I can't turn gem into something drawing (8)
 - Outer north road plays a very small part but with strong force! (6)
 - Medical specialist treated oldies' impetigo (14)
 - Hypothesis not about plants' final conversion process? (14)
 - Dingos preying on a little bird (6)
 - Metal helping to make resistant aluminium (8)
 - Return unfinished image to Kiri and cut art from the paper (8)
 - Painter somehow burns everything initially (6)
 - King smug about no evidence? (7, 3)
 - Implement original routine at king's enthronement (4)

- Down**
- 2, 4 Down Polymer chemist recreates a lethal scarecrow (7, 9)
 - A little hobo's onto something particular (5)
 - See 2 Down
 - Japanese scientist reportedly out of fashion (7)
 - Some often chill the fish (5)
 - Examples of drama about pigs? (9)
 - Titian oddly altered soot marks (7)
 - Connect tinker with oddly ignored sibling perhaps (9)
 - Linger on around his first opera (9)
 - Endlessly muse about his initial approach. Superheavy! (7)
 - Gin hotel not refurbished for diddly! (7)
 - Heavenly body? It upsets punks! (7)
 - Wish for portion of early earnings (5)
 - Wild bream colour? (5)

Quick

- Across**
- Indian lentil dish (4)
 - See 19 Down
 - Part of filtration apparatus (6)
 - Sizes of ammunition (8)
 - Surname of sibling astronomers Caroline and William (8)
 - Antelopes of southern Africa (6)
 - Organic chemist, awarded the 1947 Nobel prize for work on dyestuffs and alkaloids (6, 8)
 - The pattern of electromagnetic radiation emitted or absorbed as particles of one element transition between energy states (6, 8)
 - Physicist who worked with Lise Meitner on nuclear fission (6)
 - Sinks (a ship) (8)
 - Without iron oxides (4-4)
 - Indiscriminate (6)
 - Fungus which resembles fungi of the genus *Morchella* (5, 5)
 - Spinning toy (2-2)

- Down**
- Arrogance (7)
 - _____ Pauling, US chemist and double Nobel laureate (5)
 - Acid formally known as oil of vitriol (non-lupac spelling) (9)
 - Fish also known as snake mackerel (7)
 - _____ Sharman, chemist and first British astronaut (5)
 - Simple decision (2-7)
 - Herb (7)
 - Ruined areas left after the blitz (4, 5)
 - Unit of radioactivity named after a French physicist (9)
 - Haitian island (7)
 - Chemist and microbiologist eponymised in a process of partial sterilisation (7)
 - 19, 4 Across British biochemist and one of the first two women elected a fellow of the Royal Society (7, 10)
 - Seraglio (5)
 - Flower whose name derives from the French 'to think' (5)

June 2021 solutions and winners

Cryptic crossword

H	O	M	O	G	E	N	I	S	E	A	S	A	P
E	I	L	O	A	C	C	S						
M	A	C	R	O	B	A	R	Y	P	H	O	N	Y
P	H	C	E	I	R	U	C						
	A	L	K	A	L	I	N	E	E	A	R	T	H
B	E	E	I	C	E	I							
I	D	L	E	N	E	S	S	D	O	U	D	N	A
O	S	T	P	G									
L	E	T	U	P	S	J	E	N	N	I	F	E	R
O	W	I				N	I	A	Y				
G	E	I	G	E	R	C	O	U	N	T	E	R	
I	T	L	H	M	I	A	A						
C	O	C	K	S	C	O	M	B	O	R	D	E	R
A	H					L	R	N	A	I			
L	A	Y	S		B	I	O	A	S	A	Y	E	D

Quick crossword

L	A	W	R	E	N	C	I	U	M	V	L	E	I	
E	O	D	A	M						A	N			
A	L	L	O	W	R	I	B	O	S	O	M	E	S	
D	F	A	A	R	C	B	A							
	R	O	R	S	C	H	A	C	H	T	E	S	T	
G	A	D	A	R	R	I								
L	I	M	E	K	I	L	N	B	E	R	T	H	A	
I	E	S												
A	R	C	A	N	E	C	A	R	B	O	N	Y	L	
L	A	D				S	E	A	E					
C	E	P	H	A	L	O	S	P	O	R	I	N		
E	S	L	T	L	S	K	B							
L	J	U	B	L	J	A	N	A	I	R	E	N	E	
L	L	L	G	N	T	E	E							
S	K	E	W		N	O	R	T	H	E	R	N	E	R

Wordoku

The chemist working on vaccine preservation was Asel SARTBAEVA

June winners

Science scramble
John Sheridan
Wokingham, UK

Science scramble

- Ace
- Race
- Nacre
- Cranes
- Arsenic
- Canisters
- Ascertain
- Sir Isaac Newton

Wordoku
Ian Hatton
Reigate, UK

Cryptic crossword
Quentin Palmer
Leighton Buzzard, UK

Quick crossword
Jakki Egan
Glasgow, UK

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

Drying oils react with the air in an exothermic free radical cross-linking reaction. When they are spread thinly over a wooden wall this is a harmless process that allows the paint product to properly function. However, if a pile of oily rags are allowed to stand, this exotherm can lead to spontaneous combustion. It's very bad idea to roll up a painting rug soaked in drying oil for storage in your house or shed. It would be better to dispose of the oily rug, while for interim storage it is advisable to leave it soaking in a bucket of water.

On the spot

