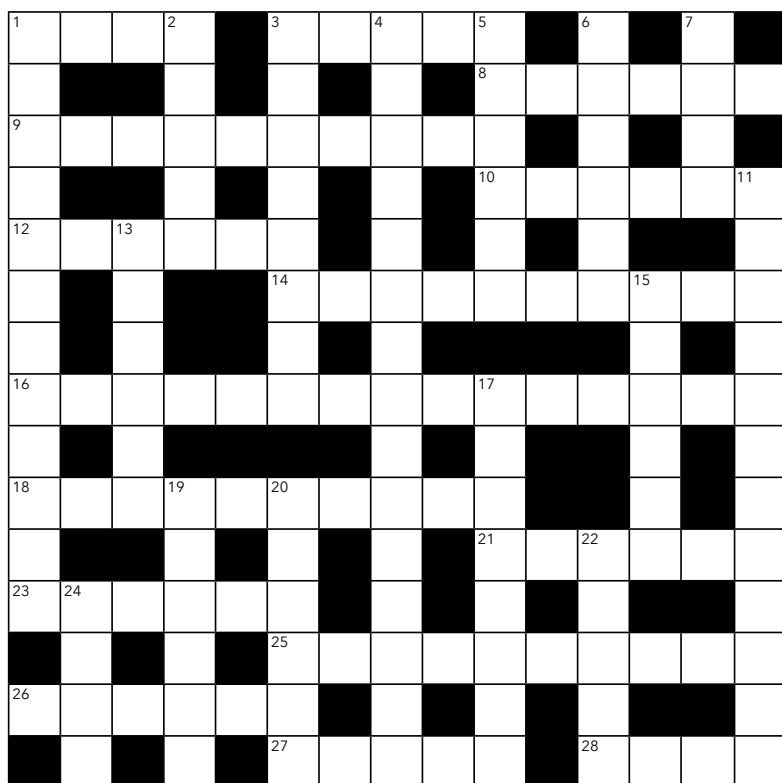


June 2022 crossword



June 2022 wordoku

L	M		O										E
S				E	I	O							G
	O	I	G					S					I
	G			V	L	S							L
	S		E		G		V						M
		E	S	M			G						N
	L				E	V	N						O
		N	V	G						S			S
					S		O	G					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 the surname of an Italian-born materials scientist known for their work on photonic structures.

Cryptic

Across

- 1 Rock containing chromium and silver (4)
- 3 Some suppose Diana modelled (5)
- 8, 28 Across Juliet saw phones modified by English physicist (6, 4)
- 9 Repeat cure on arrangement to get better (10)
- 10 Assessing the sailor (6)
- 12 Only some cool items rock (6)
- 14 Pain thence dispersed by drug (10)
- 16 Physicist not involved in drink scandal anyhow (5, 10)
- 18 Great hotel when restyled completely (10)
- 21 A portion of the Savoy's terrific seafood (6)
- 23 Fancy Green Party finally? Could be potential! (6)
- 25 RIP, palmist - broadcasting light in the underworld? (6, 4)
- 26 Origin of ketchup by the sound of it (6)
- 27, 22 Down Mineral melts soaps surprisingly (5, 5)
- 28 See 8 Across

Down

- 1 Somehow tardy bachelor left out compound (12)
- 2 Architect in opening auditions (5)
- 3 Sort of respect leading professor's doctrines (8)
- 4 Chemist unearths ravines abroad (6, 9)
- 5 Island DJ plays R&B around A&E (6)
- 6 Fly around set twice (6)
- 7 First of Shakespeare's plays inspires new twist (4)
- 11 Dragon potion a form of hormone (12)
- 13 A little goblin nets a bird (6)
- 15 Mashed potatoes so lacking in this vessel (6)
- 17 It's a metal or I'm much mistaken (8)
- 19 The old love the three Rs - another way of studying the planets (6)
- 20 Engineer eyes the French palace (6)
- 22 See 27 Across
- 24 Some marine onto something noble (4)

Quick

Across

- 1 Groups (4)
- 3 Carnot _____ of an idealised heat engine (5)
- 8 Gives in (6)
- 9 Debase (10)
- 10 Remove solids from a liquid (6)
- 12 Type of plum (6)
- 14 Protected against armaments (10)
- 16 Conversion of saturated fats to unsaturated fats (15)
- 18 Type of fern (10)
- 21 Human blood group system named after a monkey (6)
- 23 Element that 4 down used in the vulcanisation process (6)
- 25 Invigorating (10)
- 26 Ethnic minority of China (6)
- 27 Nerve agent (5)
- 28 Tie up (4)

Down

- 1 Normalises (12)
- 2 See 22 Down
- 3 Purifier (8)
- 4 American chemist and engineer who developed vulcanised rubber (7, 8)
- 5 As much as one wants to see (6)
- 6 German astronomer (6)
- 7 Border (4)
- 11 Sucrose, for example (7, 5)
- 13 -CH₃ (6)
- 15 Compounds such as litharge (6)
- 17 Element discovered by Daniel Rutherford in 1772 (8)
- 19 Zeeman _____, splitting of a spectral line by a magnetic field (6)
- 20 Old Man of the Sea (6)
- 22, 2 Down Magnesium sulfate (5, 5)
- 24 US state (4)

June 2022 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 | | Young man (3) |
| 2 | | Property (4) |
| 3 | | Describing a point of intersection (5) |
| 4 | | English chemist (6) |
| 5 | | Birthplace of Thomas Graham (8) |
| 6 | | Canadian physicist and Nobel prize winner (5, 10) |

Quick quiz

- The name of which strong-smelling gas derives from the name of an Egyptian deity?
- Which family of drugs was named after a saint?
- Which carbon cage compound is named after an architect known for their geodesic dome designs?
- Which aniline dye was renamed to celebrate a 19th century battle in northern Italy?
- Which compound, produced by Humphry Davy, led Peter Roget (of thesaurus fame) to proclaim the following after inhaling it:
'The effect ... was that of making me vertiginous, and producing a tingling sensation in my hands and feet...'

Solutions: 1. Ammonia (After the god Amun - supposedly camel dung left outside the temple of Jupiter Ammon was converted into a mineral salt named sal ammoniac, salt of Ammon - now known as ammonium chloride) 2. Barbiturates (discovered by Adolf von Bayer on the feast day of St Barbara - although von Bayer would also sometimes claim the name referred to his girlfriend of the time) 3. Buckminsterfullerene (C₆₀) 4. Magenta 5. Nitrous oxide

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 June 2022**. The winners of this month's puzzles will be published in the July 2022 issue, along with the solutions.

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).

June 2022 Word grid

Use the element symbols from the panel on the right to complete the word grid below.

	I	O		N
U				O
		S		O
		I		
	W	N		S

B	Ba
C	Es
K	Ne
No	P
Ta	Ti

May 2022 solutions and winners

Cryptic

C	W	M	S		U	S	U	R	P		A	C	N	E			
A	A				I		O		C		A						
6	M	A	R	S	10	E	I	L	L	E	11	O	O	M	P	H	
	E		K	D			I	N	L		U			O			
13	L	O	E	W	I		12	C	A	T	A	L	Y	S	E	D	
			T	T		O	G	Y								G	
15	S	T	E	P	H	A	N	I	E	K	W	O	L	E	K		
	O		E	W		E	N	O			E			I			
17	W	E	R	N	H	E	R	V	O	N	B	R	A	U	N		
	B			A		U	S		B		D						
19	A	N	14	A	E	R	O	B	I	C	20	L	E	W	I	21	S
	N		B	T		B	O		E		O			A			
22	E	R	A	T	O	23	E	X	P	O	S	U	R	E	S		
			C		N		R		E		T			S			
24	A	C	I	D		25	M	S	A	S	A	26	E	S	P	Y	

Quick

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

Wordoku

The atmospheric chemist was Jos LELIEVELD

Science scramble

1 Ge; 2 Gave; 3 Grave; 4 Ravage; 5 Average; 6 Amedeo Avogadro.

Word grid

Si	Li	C	O	N
Bi		H		I
La	N	O	Li	N
N		P		Th
Ce	N	S	U	S

May winners

Cryptic crossword
Ian Laming
Chippenham, UK

Quick crossword
S Anderson
Cheltenham, UK

Wordoku
David McKillen
Carrickfergus, UK

Science scramble
John Steedman
Broadbridge Heath, UK