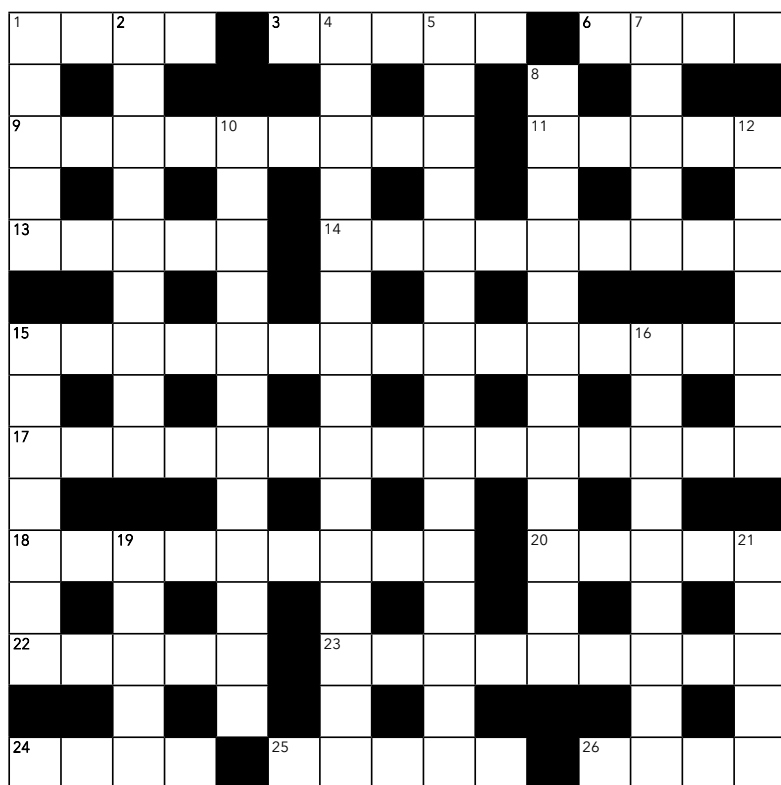


June 2023 crossword



June 2023 wordoku

L				U		M	R		A
U				L			D		D
		I	D			A			E
A	U		E	Q		D		M	I
									L
E		L		I	D		Q	A	M
		E			I	Q			Q
	L			D				R	R
	I	A		M				D	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 name a French chemist working in the area of catalysis for renewable energy development.

Cryptic

Across

- Oddly ignored gorillas producing paintings (4)
- See 6 across (5)
- 3, 14 across
Harry's lab sparklers disturbed the chemist (4, 5, 9)
- Top lathes turn out lab equipment (3, 6)
- Either way they're mythical creatures (5)
- Wing it with concocted Lab ID (2-3)
- See 6 across (9)
- Phonier contract redrafted with humans in mind (15)
- Energy costs which can be positive or negative? (8, 7)
- Ian follows cow crossing for an age (9)
- Between some main trajectories (5)
- Remove from steel utensils (5)
- Irresistible set leaving? Not funny! (9)
- Cooked fast foods that pile on the pounds (4)
- In the arboretum's a sacred tree (5)
- Biochemist not in, being right upset (4)

Down

- Geneticist hiding in the Rannoch oaks (5)
- Smallest digit at the end (6, 3)
- Drugs to treat initial hip cysts? (15)
- Places to treat cancer here with rests? (8, 7)
- Team in exile hiding the compound (5)
- Surprisingly Spain desires such clinics (12)
- Aerial robots upset the science rooms (12)
- Spineless creatures in splinter groups (7)
- Perfect pitch for compound? (7)
- Form of bare light can be corrected (9)
- Alchemist found in far-off Australia (5)
- Sounds like a plea from the German chemist (5)

Quick

Across

- Avoirdupois weight (4)
- Antarctic explorer (5)
- Birthplace of explorer and Nobel laureate Fridtjof Nansen (although at the time the city was called Christiania) (4)
- Mixture of dried plant materials used to scent a room (9)
- Incorrect (5)
- Describing a major organic fraction of soil, peat and coal (5)
- British peer who vanished after being suspected of murder (4, 5)
- Bacterial compounds which can cause serious food poisoning (9, 6)
- Self-hardening alloys containing about 11-15 % of element 25 (9, 6)
- Tinea cruris (5, 4)
- Previous occupants of the Andes (5)
- Language often used in biological binomial names (5)
- Compounds used for treating Wilson's disease (4, 5)
- Softest mineral on the Moh's scale of hardness (4)
- Ampoules (5)
- Symbol (4)

Down

- Distance down (5)
- Robot (9)
- US chemist who shared the 2022 Nobel prize in chemistry 'for the development of click chemistry and bioorthogonal chemistry' (7, 8)
- Anaesthetic, $\text{Br}_3\text{CCH}_2\text{OH}$ (15)
- Member of a school of Hellenistic philosophy founded by Zeno of Citium in Athens (5)
- Butterflies found in Norfolk, England (12)
- Repetitive or periodic variations (as seen in alternating current) (12)
- Beginning (7)
- Having two maxima (in a statistical distribution) (7)
- Describing part of the gastrointestinal tract (9)
- C_8H_{17} group (5)
- _____ Solomon, American atmospheric chemist known for their discovery of CFC depletion of the ozone layer (5)

June 2023 science scramble

Similar to a word ladder, each answer below provides letters that must appear 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 | Spoil (3) |
| 2 | Earthy material (4) |
| 3 | Sphere of monarchy (5) |
| 4 | Leaflet (6) |
| 5 | Tastier (like some beers) (7) |
| 6 | Fabric (8) |
| 7 | Austrian physicist (8, 4) |

Quick quiz:

- The surgeon Joseph Lister is known as a pioneer of antiseptic surgery, using carbolic acid. What is carbolic acid now known as?
- The English physician, chemist, geologist and botanist William Withering pioneered the use of which plant for the treatment of heart conditions and indeed has this plant carved on his memorial stone?
- The German pioneer of chemotherapy, Paul Ehrlich, tried many organic compounds based on a toxic element to treat syphilis. Eventually number 606 worked and was known as the 'magic bullet.' What was the element?
- The painkiller 'aspirin' (and other similar analgesics) is based on salicylic acid (or its derivatives). The word 'salicylic' derives from the Latin name for the tree whose bark it was isolated from. Which tree?
- 'A night with Venus leads to a life with (what element)' refers to a previous treatment for venereal disease?

Solutions: 1. Phenol (C₆H₅O); 2. Foxglove (Digitalis purpurea); 3. Arsenic; 4. Willow (Salix); 5. Mercury

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 2023**.

The winners of this month's puzzles will be published in the July 2023 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 2023 Word grid

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

		S		S
As				I
	I		U	S
		U		
S	O		Ni	

At	Er
H	La
Ne	P
Ra	Se
Ti	W

May 2023 solutions and winners

Cryptic

K	I	N	P	I	R
E	R	N	E	S	T
T	E	T	F	C	O
H	Y	E	N	A	F
Y	N	E	E	F	R
L	E	F	T	B	A
C	H	A	R	L	E
R	C	F	A	N	
A	T	T	A	I	N
Z	I	N	I	I	G
I	N	O	R	G	A
E	N	O	V	E	Y
S	V	A	N	T	E
T	L	S	R	R	O

Quick

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

Wordoku

The hormone involved in regulating sleep and circadian rhythms is MELATONIN

Science scramble

1 Bat; 2 Beat; 3 Beast;
4 Barbers; 5 Arbiters;
6 Liberators; 7 Albert Ghiorso.

Word grid

P	H	Os	Ge	Ne
Lu	S	Cr		
C	H	I	N	O
K	F	Si		
S	La	Y	Er	S

May winners

Cryptic crossword
Glynn Harrington
Chorley, UK

Quick crossword
Peter Ham
Cardiff, UK

Wordoku
Sue Howarth
Wychbold, UK

Science scramble
Richard Milner
Selby, UK