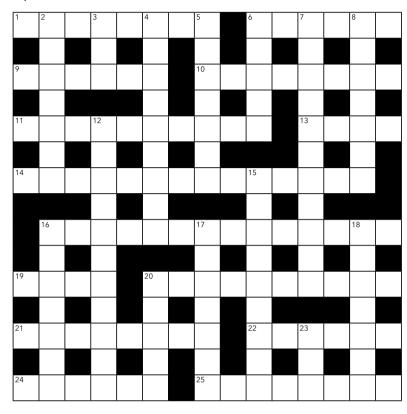
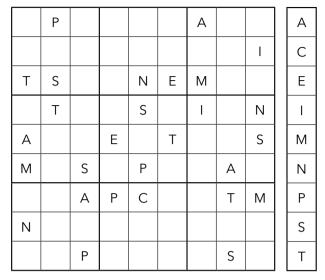
## April 2023 crossword



## April 2023 wordoku



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 chemist who predicted the use of solar energy in 1912.

## Cryptic

- Across
- 1 Tries to sort Matt's pet (8)
- 6 Bold user oddly ordered twice (6)
- 9 Designed infrared tube test for protein (6)
- 10 People who forget sins came around (8)
- 11 Gives fish as greetings (10)
- 13 Even Rodney's cross about this mineral (4)
- 14 Kitchen equipment made out of poor seersucker (8, 6)
- 16 Mike adds acid to a crucible to make the compound (7, 7)
- 19 Initially exceptional man turns out to be average (4)
- 20 Yankee left her nylon bed transforming the mineral (10)
- 21 Care a bit about the bugs (8)
- 22 See 20 Down
- 24 Somehow bleed a geneticist (6)
- 25 Can crockery be metal? (8)

## Down

- 1 Shifting rain hit somewhere to disappear into (4, 3)
- 3 Regular repair of auditory apparatus (3)
- 4 Tail pouch could become essential (9)
- 5 Fancy the French park's vitality (7)
- 6, 18 Down Philosopher dined with editors abroad (5, 7)
- 7 Not to be fazed, he unblocks middle drain needing repair (11)
- 8 Astronomer to secure the old romantic initially (7)
- 12 Without the salt, sealant dried right away on mixing (11)
- 15 Playing a bum violin, I left for the compound (9)
- 16 Endlessly teaches learner to bond (7)
- 17 Unusually dormant fixer (7)

#### 18 See 6 Down

- 20, 22 Across I leave rhenium ores with top assistant to create stable compound (5, 6)
- 23 Left heartless lan to return with nothing (3)

#### Quick Across

- 1 CH<sub>3</sub>CH<sub>2</sub>CH<sub>2</sub>OH (8)
- 6 Metallic element responsible for verdigris (6)
- 9 Acid also known as hexanedioic acid (which is the lupac preferred name) (6)
- 10 People taking a position of power by force (8)
- 11 See 16 Down
- 13 London district (4)
- 14 Shape with 24 identical faces (14)
- 16 Braking radiation (14)
- **19** Barbary sheep (4)
- 20 Inhales (8, 2)
- 21 Yellow pigment, a form of lead oxide (8)
- 22 Type of nuclear reactor, named after the alloy used to clad its fuel rods (6)
- 24 Author of Silent Spring (6)

25 Went out (8)

### Down

- 2 Electron donor (7)
- 3 Young seal (3)
- 4 Trinkets (9)
- 5 White opacity in the cornea (7)
- 6 Sealant (5)
- 7 Type of bat (11)
- 8 Earthen (7)
- 12 Type of food poisoning named after the bacterium that causes it (which is itself named after a pioneer of sterile surgery) (11)
- 15 Rubbery material composed of long chainlike molecules (9)
- 16, 11 Across US cytogeneticist and Nobel prize-winner (7, 10)
- 17 Operating room (7)
- 18 Smelly (7)
- 20 English philosopher and alchemist (5)
- 23 State of matter (3)

# April 2023 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	Hearing organ (3)
2	Harvest (4)
3	Extra (5)
4	Units of electrical current (7)
5	Reimbursements (10)
6	British biochemist and microbiologist (7, 10)

### Quick quiz:

- 1. Phosphorus was discovered by the German alchemist Hennig Brand in 1669 after distilling which commonly available fluid in his quest for the philosopher's stone?
- 2. The symbols ♀ and ♂ are commonly used to denote female and male, but were also alchemical symbols for two planetary metals elements linked to heavenly bodies. What are the elements (and their associated heavenly bodies)?
- 3. Which alchemical apparatus is named after a bird?
- 4. According to an apocryphal story, which famous scientist had some of their alchemical works destroyed in a fire when their dog Diamond knocked over a candle?
- 5. Which Irish writer and poet wrote the following about alchemists in the novella *Rosa Alchemica*:

'...their doctrine was no merely chemical phantasy, but a philosophy they applied to the world, to the elements and to man himself; and they sought to fashion gold out of common metals merely as part of an universal transmutation of all things into some divine and imperishable substance...'

> **Solutions:** 1. Urine 2. Copper (Venus) and Iron (Mars) 3. Pelican (distillation device) 4. Isaac Newton 5. W B Yeats

## March 2023 solutions and winners

Cryptic														
0	R	G	Е	А	Т		G	Т	Ν	R	U	М	М	Υ
R		А		С		А		S		Е		А		U
G	U	G	L	Т	Е	L	М	0		S	U	R	Е	R
А		А		D		Ρ		Т		-		С		Τ
Ν	0	R	R	Т	S	Н		Н	А	D	R	0	Ν	
0		Т		С		0		Т		Е		Ν		0
G	Т	Ν	S		А	Ν	Ν	0	U	Ν	С	Т	Ν	G
R				V		S		С		Т				А
А	Ν	Т	L	Т	Ν	Е	D	Υ	E		Ν	Е	0	Ν
М		Ν		В		С		А		S		L		Е
	Τ	В	Е	R	Ι	А		Ν	U	М	В	Е	R	S
Υ		R		Т		Ρ		А		А		М		S
U	Ν	Ι	Т	S		0	Т	Т	0	L	0	Е	W	Ι
R		Е		S		Ν		Е		L		Ν		А
Т	Ν	F	R	А	R	Е	D		Ι	S	А	Т	Τ	Ν

								v							
Ι	0	D	Ι	Ν	Е		С	А	R	0	Т	Е	Ν	Е	T
Ν		А		U		D		Ν		Т		L		R	S
S	Α	Т	Ι	Ν	W	0	0	D		Т	Н	Е	Т	А	S
А		А		С		R		R		0		А		S	1
Т	0	S	н	Т	К	0		Е	Т	н	Е	Ν	Е		4
Ι		Е		0		Т		Τ		А		0		А	6
А	Ν	Т	S		Ρ	н	0	S	Ρ	н	0	R	U	S	v
В				А		Υ		А		Ν				S	
L	Ι	V	Е	R	F	L	υ	К	E		L	E	V	Ι	
Е		Τ		G		S		Н		L		R		S	
	М	А	Υ	Е	D	A		А	L	1	Q	υ	0	Т	
0		D		Ν		Υ		R		Q		D		А	
Т	R	U	S	Т		Е	V	0	L	υ	Т	Т	0	Ν	
Ι		С		А		R		V		Т		Т		Т	
С	А	Т	А	L	Υ	S	Т		А	D	D	Е	R	S	

# 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 April 2023**. The winners of this month's puzzles will be published in the May 2023 issue, along with the solutions.

Email: chemistryworld@rsc.org

Name .....

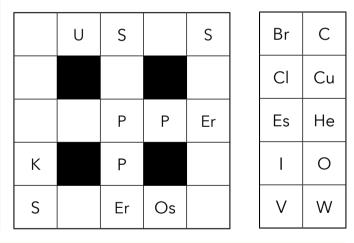
Address \_\_\_\_\_

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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).

# April 2023 Word grid

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



### Wordoku

The UK chemist was Steve ARCHIBALD

Science scramble

1 Spy, 2 Spry, 3 Spray 4 Prayers, 5 Raspberry 6 Karl Barry Sharpless

#### Word grid

Í		u g.			
	в	I	Sm	U	Th
	Lu		0		I
	S	Ρ	0	0	Ν
	He		Th		К
	S	I	Er	Ra	S

#### March winners

Science scramble Marco Albertini, Cambridge, UK

**Wordoku** Bob Mudd, Kilve, UK

**Cryptic crossword** Evert Ditzel, Howden, UK

Quick crossword Ernest Ward, Liphook, UK