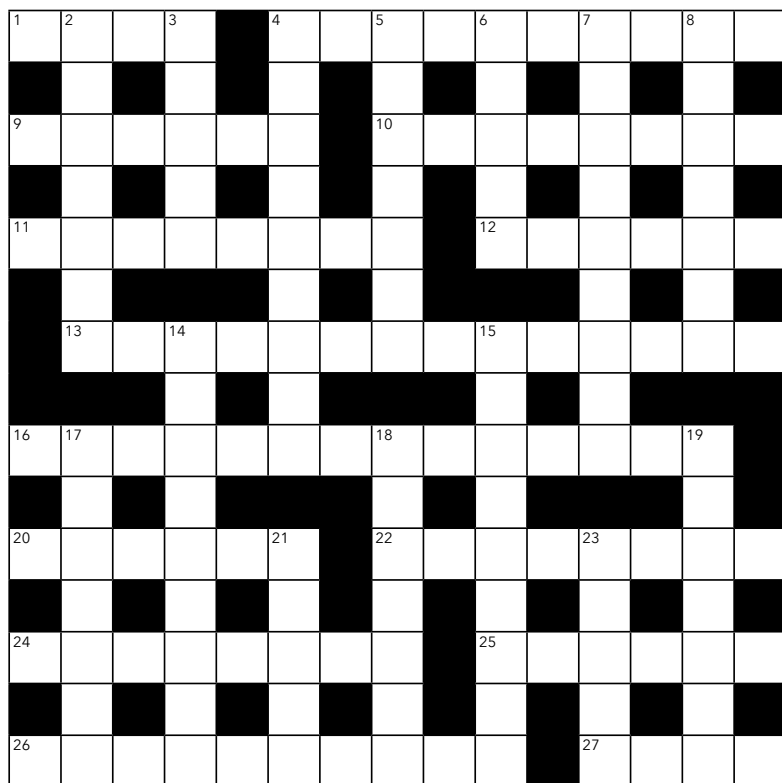


### October 2022 crossword



### October 2022 wordoku

	N		C			M							A
E		A		K									C
R										K			E
N				E	K	O							K
	M		S		A		N						M
		K	N	O								E	N
	K											R	O
				N		K							R
		R			C		S						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 name of a German chemist known for their work on catalysis.

#### Cryptic

##### Across

- Put an end to some of the post-operative care (4)
- I transformed reality TV into a scientific theory (10)
- Saturated? That is dumb design (6)
- Mineral isolated abroad (8)
- Fatty substance left on thin ice bizarrely (8)
- Rules are fine after wrongdoing I've heard (6)
- Surprising envy of adorable chemist (5, 3, 6)
- Scientist designed smart androgens (6, 8)
- Is leaving disguise to upset the pilots (6)
- Some endless reply about plastics? (8)
- Gag a twit concocted had a lot of energy! (8)
- Cloud computing initially managing first 50% of businesses (6)
- Go into his smart engineering charts (10)
- Say nothing about this source of protein (4)

##### Down

- Painting a little intemperately (7)
- Without a drummer to begin with, Dua Lipa plays for the physicist (5)
- Colourful gear changes producing Doppler effects? (3, 6)
- Abandoning top apartment, engineer loans key to Soviet biologist (7)
- Set I'd designed can cause a sea change (5)
- Letters about lout never present (9)
- Titter about a test (7)
- Arranged advert for loan (9)
- Levellers music to my ears? (9)
- Until regular habit transformed the sea creatures (7)
- Rebuilding an initially hilly path reveals hidden hydrocarbon (7)
- Doctor finally prepared my cure. It's elementary! (7)
- Sang about lady's first swear word (5)
- Ideas hidden in some messages (5)

#### Quick

##### Across

- Hydrated double sulfate salt of aluminium (4)
- PhDs (10)
- Equilibrium (6)
- One of the forms of lead oxide (8)
- Former UK prime minister (8)
- Dirtyies (6)
- Scottish polymath who was the first person to be called a scientist in print (4, 10)
- English polymath who coined the term scientist (7, 7)
- Salt used in fertilisers (6)
- Apparatus for converting  $\text{CaCO}_3$  to  $\text{CaO}$  (4, 4)
- Cliffhanger (8)
- Cream of \_\_\_\_\_,  $\text{KC}_4\text{H}_5\text{O}_6$  (6)
- Computer specialist (10)
- Playthings (4)

##### Down

- Metal whose salts are used to treat mood disorders; song by Nirvana (7)
- Device first built at Columbia University in 1953 and used as the timekeeping device in atomic clocks (5)
- Indigestion (9)
- Most abundant metal in the human body (7)
- Antarctic explorer who died after walking from his tent into a blizzard (5)
- Former name of astatine (9)
- Active ingredient of clove oil (7)
- Letting go (9)
- Device that measures the effect of applied forces on a liquid, slurry or suspension (9)
- Line on a graph of temperature v pressure of a fluid (7)
- Alternative name for tungsten from which it gets its elemental symbol (7)
- Berceuse (7)
- Board game (5)
- Topographical feature formed from soluble rocks such as limestone (5)

## October 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	Tin (3)
2	Browse (4)
3	Poles (5)
4	Removes dirt (6)
5	Cavalry (7)
6	People who train birds of prey (9)
7	Directed evolution pioneer (7, 6)

### Quick quiz:

- Which father and son team were jointly awarded the Nobel prize in physics for their work on x-ray crystallography?
- Which scientist, pioneer of electromagnetism and discoverer of benzene, studied under the chemist Humphry Davy?
- What connects Albert Einstein, Lise Meitner, Niels Bohr and Nicolaus Copernicus?
- What non-scientific fact connects Ernest Rutherford, J J Thomson and Stephen Hawking?
- Which romantic poet said that they attended Humphry Davy's public chemistry lectures 'to improve my stock of metaphors'.

**Solutions:** 1. William Lawrence Bragg and William Henry Bragg. The Bragg equation is named after them 2. Michael Faraday 3. They all have elements named after them 4. They are all buried at Westminster Abbey 5. Samuel Taylor Coleridge. (Davy himself wrote poetry too)

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

Email: [chemistryworld@rsc.org](mailto: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](http://www.chemistryworld.com/privacy)).

## October 2022 Word grid

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

				N	Ar	At
		Re		I	B	C
I	S		I	N	Es	H
C					He	K
	I	S	S		Ni	O

## September 2022 solutions and winners

### Cryptic

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

### Quick

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

### Wordoku

The biomaterials researcher was Pamela HABIBOVIC

### Science scramble

- 1 IT; 2 Tim; 3 Mint;  
4 Mitten; 5 Mitten;  
6 Ointments;  
7 Smithsonian.

C	Au	S	Ti	C
Al		W		O
C	As	I	No	S
I		Tc		H
Te	C	H	I	Es

### September winners

**Science scramble**  
Chris Hoggart  
Rye, UK

**Wordoku**  
Philip Clarke  
East Bridgford, UK

**Cryptic crossword**  
Alistair Raffel  
Warrington, UK

**Quick crossword**  
David White  
Clebury Mortimer, UK