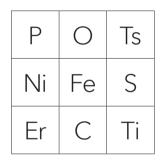
## April 2019 wordoku

						S		С
				R			0	Е
С	I	Е	0		Н			G
I	R				С		Н	Н
	0		Е	I			М	I
н	E				0		S	М
М	S	G	Н		R			0
				S			I	R
						0		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 into the name of a chemist associated with superheavy elements.

## April 2019 word grid



**Prize entry:** Using each element symbol in the grid only once, combine them together to make a single word of 14 letters.

### Word.....

Just for fun: Construct as many other words as you can using a minimum of three symbols, and each symbol only once. 6 words: OK 9 words: Good 12+ words: Excellent

## **Entry form**

There are four prize puzzles on this page: crossword (cryptic answers only); wordoku; science scramble; and word grid. For each puzzle, a winner will be selected from all the correct entries received and awarded a £25 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.

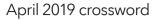
Please enter your details below and either post or email this page with your completed entries to us by **20 April 2019**. The winners of this month's puzzles will be published in the May 2019 issue, along with the solutions.

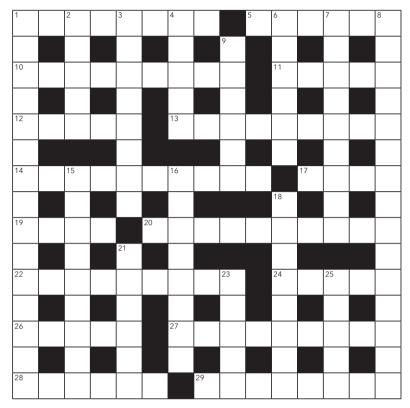
Chemistry World puzzles, Royal Society of Chemistry, Thomas Graham House, Science Park, Milton Road, Cambridge, CB4 0WF, UK Email: chemistryworld@rsc.org

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).





## April 2019 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.

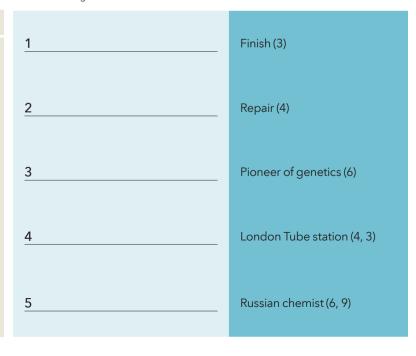
For example:

1 sail

2 snail

3 saline

4 minerals 5 Neil Armstrong



#### Cryptic (prize entry) Across

- 1 Gaia scientist with chastity belt? (8)
- 5 Shelled mob go back to bed (6) 10 I can redesign tiara around sea
- creatures (9) 11 Extreme excess left Charles ordering
- tree (5)
- 12 Ceramically covered a little until edge (5)
- 13 Plied oils around surface (9)
- 14 Sneak in below the funnel? (10)
- 17 Not entirely Dalton's voice (4)
- 19 Detectives leave codicil to snake (4)
- 20 Surprisingly gain a spare amino acid (10)
- 22 Enzyme simply on a transformation (9)
- 24 Kali confused a canine cosmonaut (5)
- 26 Old calculators found back in taxi cab apparently (5)
- 27 Pharmacologist reconstructed wooden toilet Ned vacated (4, 5)
- 28 Excludes jets around outskirts of Chile (6)
- 29, 3 Down In a pickle, Helen's taken a doll to crystallographer (8, 8)

Cryptic (prize entry)

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# March 2019 solutions and winners

0 A

W I D E S P R E A D

1

R

Down

- 1 Italy had acetone transformed to another compound (4, 11)
- Essential vial containing last droplet (5) 2
- 3 See 29 Across
- 4 See 25 Down
- Cow stumbles on flowers reportedly (6) 6
- 7 Our Ben ill around physicist (9) 8 Somehow dandy got heroine
- strengthening bonds (15) 9 Shakesperean village? (6)
- 15 Crashed early Fiat? Not true! (5, 4)
- 16 New resort is part of circuit (8)
- 18 US city orders a halt oddly loudly (8)
- 21 See 25 Down
- 23 Chemist turned up in rattan (5) 25, 21 Down, 4 Down I lie about our
  - rejection of this Nobel prize winner? (5, 6-5)

Quick (just for fun)

M O N T

R

- Quick (just for fun) Across
- 1, 24 American medical scientist, first woman to be elected to the National Academy of Sciences (8, 5)
- 5 US State (6)
- 10 Lights again (9)
- 11 Collection of organisms of a region or period (5)
- 12 Dusk to dawn (5)
- 13 Soaked through or with no double bonds (9)
- 14 Emphasised like this (10)
- 17 Jug (4)
- 19 Sea bird (4)
- 20 Acid with the formula  $H_3PO_4$  (10)
- 22 Impossible to answer or to dissolve (9)

Wordoku

Word grid

1 Set

2 Steel

3 Nestle

4 Elements

5 Lise Meitner

The name of the gas

The nine-symbol word

was OBFUSCATION

Science scramble

was ACETYLENE

- 24 See 1 Across
- 26 Marsh, crime writer (5)
- 27 Having three sides or faces (9)
- 28 City in southwest England (6)
- 29 Extravaganzas (8)

Α

#### Down

- 1 Branch of criminology (8, 7)
- 2 In debt (5)
- 3 See 6 Down
- 4 Quotes or the acronym for a multilateral treaty to protect endangered plants and animals (5)
- 6, 3 Down Physicist awarded the Nobel prize for his work on the photoelectric effect but more well known for other things (6, 8)
- Tall building in which molten lead was 7 dropped to create ammunition (4, 5)
- 8 Old units for luminous intensity (8, 7)
- Fly that carries sleeping sickness (6)
- 15 Rock originally containing pyrite that is then weathered to produce aluminium sulfate (4, 5)
- 16 Impedes, as in a chemical reaction (8) 18 COCl<sub>2</sub>(8)
- 21 Monosaccharide (6)
- 23 Immunoassay technique (abbrev) (5) 25 Element first isolated by
  - Humphry Davy (5)

#### March winners

Science scramble John A S Adams, Chesterfield, UK

Wordoku Graham Reed, New Malden, UK

Word grid Robert Jacobs, Oxford, UK

Crossword John J Ward, Middlesbrough, UK

 $U \mid R \mid E \mid T$ N I | T ROGEN MAL Ε P Р Н N I T T 1 Ε J Ν S M O E O P E N C A S T M I N I N G U N D E R C A R R I A G E S С С S R I 1 Α 1 S I R T Y L I N E N HOSPHATE  $T \mid U \mid T$ 10 D ET С Н R Т 0 D G 1 R 1 1 S L I P S T R E A M T E R E S H K 0 USE S v Т С Ν L Н 0 Υ Ε L O C K H O L M E TICONVUL S Ν S A Т G L Α В М Ν 0 Ν 1 T E R I A S T A T U S MOTHBALL PRIMAL Ε Ν Т Т Α 1 U В Т A M D 0 R ID S Y Ε G Ε G Ε S A D Ε S Ν

#### Charles Harrison is a safety adviser at a UK university

occupational health department may be able to offer additional advice on managing this.

should set out it gloves must either never or always be worn. The academic may even have become sensitised to a chemical over time that would not normally cause such irritation. His or gloves can transfer chemical residues. For this reason, it is important that good lab computer hygiene is practised. To prevent contamination spreading between users, clear rules He should start by washing his hands and consider seeking medical advice. Computers in labs are very vulnerable to contamination. Even without a noticeable spill, people's hands toqs ant nO of rawanA

B E A U T Y S P O T

0

L R

# On the spot

