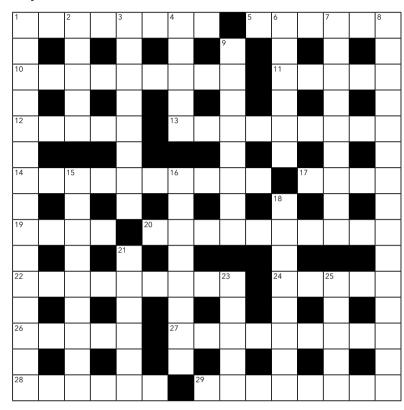
## July 2020 wordoku

				С					С
	0		Н	М				Υ	Е
М			Е				С		G
0	С				Е	Н			Н
		Н		Υ		Е			М
		Ν	G				0	М	Ν
	G				Ν			С	0
Υ				G	С		N		S
				Е					Υ

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 Cuba-born American chemist who is particulary associated with fullerene research.

## July 2020 crossword



# **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, or alternative of equivalent value for non-UK residents.

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.

This month we can only accept electronic entries for the puzzle competitions. Please enter your details below and email a scan or photograph of this page with your completed entries to us by **20 July 2020**. The winners of this month's puzzles will be published in the August 2020 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).

## July 2020 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	Plaything (3)
2	Conservative (4)
3	Postulation (6)
4	Of female parental instincts (8)
5	German chemist and periodic table pioneer (6, 5)

### Cryptic

#### Across

- 1 Wants doc to transform the depressed (8)
- 5 See 28 Across
- 10 Animator upsets a lover (9)
- 11 Test liar about true beginning (5)
- 12 A little trust sometimes corrodes (5)
- 13 See 25 Down
- 14 Racier mule I left out confused radiochemist (5, 5)
- 17 Part of quiz includes something that galvanises (4)
- 19 Some hedonists come back to intersection (4)
- 20 Somehow Roger lost a stargazer (10)
- 22 See 25 Down
- 24 Wagner finally composes endless opera that's fake (5)
- 26 Musical in which some relative returns? (5)
- 27 Courses about peculiar curios lacking poise? (9)
- 28. 2 Down, 5 Across On arrangement. Dan's lover faces war bonds (3, 3, 5, 6).
- 29 Nice Oscar shy about devil's breath (8)

#### Down

- Russian chemist delivered manganese -1 about time! (6, 9)
- 2 See 28 Across
- 3 She turns coypu into meal (4, 4)
- 4 Higher pitch in Mozart's harpsichord (5)
- 6 Drink dispensers assisting vision? (6)
- Not spotted scripted toppling becoming disabling (9)
- Verbal reactions about chemical compound (6, 9)
- 9 Dummy keeps the peace (8)
- 15 Maybe introduce addition of electrons (9)
- 16 Take apart some buns Titch made (8)
- 18 Sir's rule recycled wastes (8)
- 21 In some halibut an exceptional substance (6)
- 23 Geeky loner dysfunctional just a little? (5)
- 25, 22 Across, 13 Across Penicillin cures pox-I upset Paul about this law (5, 9, 9)

### Quick

#### Across

- 1, 18 Down X-ray crystallographer famed for work on DNA (8, 8)
- Home of a tapestry depicting events leading up to the Norman conquest (6)
- 10 Mass of KOH needed to neutralise 1g of a fat or oil (4.5)
- 11 Noble gas (5)
- 12 Small glass bottle (5)
- 13 Rattus norvegicus (6, 3)
- 14 Microscope or telescope lenses; goals (10)
- 17 Large flightless bird (4)
- 19 Loathe (4)
- 20 Travellers (10)
- 22 Nine-sided (9)
- 24 Mineral oil used in IR spectroscopy (5)
- 26 Japanese poetry (5)
- 27 Vitamin B12 (9)
- 28 Relating to the spatial arrangement of atoms in a molecule (6)
- 29 Bluish discoloration of the skin due to oxygen depletion (8)

#### Down

- Genus of long-tailed pterodactyls from the Jurassic period (15)
- Genre written by Asimov, Dick and Le Guin (3-2)
- See 25 Down
- Polymer invented by Wallace Carothers in 1935 (5)
- Transmitter or receiver of radio or TV signals (6)
- Happy hormone (9)
- Inter-species exchange of living cells, tissues or organs (15)
- 9 Struthiopteris spicant (4, 4)
- 15 Aeronautical device invented by Frank Whittle (3, 6)
- 16 Thin layer of plaster on which a fresco is painted (8)
- 18 See 1 Across
- 21 Large rodent of Central and South America (6)
- 23 Physical chemist who won the 1960 Nobel prize for contributions to the development of radiocarbon dating (5)
- 25.3 Down Inventor of the electron capture detector and developer of the Gaia hypothesis (5, 8)

## June 2020 solutions and winners

# Cryptic crossword E | I | N | S | T | E | I | N 0 E N H E I M E N R T R E S P A S S I N G N A M E S $T \mid O \mid I \mid O \mid F \mid W \mid I$ $T \mid H \mid R \mid E \mid N \mid O \mid D \mid Y$ H A M L E T

# Quick crossword A R T E F A C T Y U R I G A G A Ν $I \mid O \mid N \mid I$ $A \mid N \mid O \mid D \mid O \mid N \mid$ Α G O O D YEA

#### Wordoku

The scientific adviser was Julian BRAYBROOK.

#### Science scramble

1 Tea

2 Rate

3 Grate

4 Target

5 Great threat

6 Margaret Thatcher

## June winners

Science scramble Nigel Cooper Huddersfield, UK

Wordoku Robert Jacobs Oxford, UK

Cryptic crossword Rod Barratt Lichfield, UK

Quick crossword George Seaborn Surrey, UK

Scenario and solution provided by CLEAPSS

reactivity a school would not be able to safely dispose of caesium, and so it will need to make use of an expert chemical waste company to dispose of the sample. chemicals, and so parents should be aware of what their children are ordering online. In this situation, the teacher should confiscate the sample and store it with other group 1 metals. Due to its Mhen pupils learn about the reaction of alkali metals with water they may be tempted to try out their own experiments. Many suppliers do not put in place any controls over the ordering of Answer to On the spot

On the spot TIME FOR CAESIUM FEW DAYS LATER A TEACHER DEMONSTRATES REACTIONS OF ALKALI METALS SHE SPOTS A PUPIL WITH WATER DURING A LESSON WHAT SHOULD SHE DO? SHOWING OFF A VIAL ON REACTIVITY TRENDS OF CAESIUM