

Quick quiz:

1. What are the four states of matter that are observable in everyday life?
2. Which state of matter gets its name from the Greek for chaos?
3. Which two elements are named after US states?
4. Which element has a valley in northern California named after it?
5. What connects the following elements: aluminium, argon, calcium, cobalt, flerovium, gallium, indium, lanthanum, mendelevium, manganese?

Solutions:
 1. Solid, liquid, gas, plasma 2. Gas 3. Californium (after California) and Tennessee (after Tennessee) 4. Silicon 5. Their elemental symbols are all abbreviations for US states: AL, Alabama, AR, Arkansas, MN, Minnesota, CA, California, CO, Colorado, FL, Florida, GA, Georgia, IN, Indiana, LA, Louisiana, MD, Maryland and

Entry form

There are four prize puzzles on this page: cryptic crossword; quick crossword; wordoku; and coronene. 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 February 2024**. The winners of this month's puzzles will be published in the March 2024 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).

February 2024 coronene puzzle

This new puzzle is based on coronene. Using the elemental symbols (and not switching the 2 letters of any 2-letter elemental symbols), place each of the seven elemental symbols in the hexagons to spell out three words reading diagonally (plurals allowed). In each of the four puzzles there will be a shared element in the middle hexagon which when combined and reading across will spell out the name of another compound.

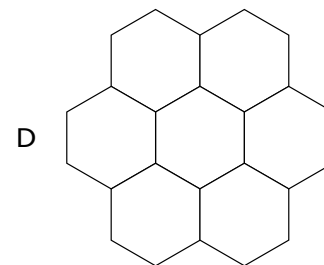
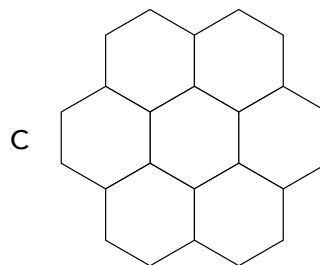
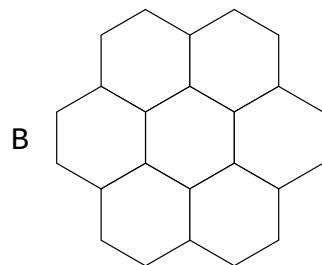
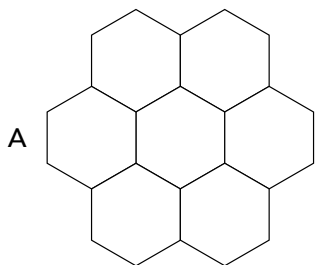
Elements:

A. C, Ce, Co, Li, Po, S, Ts

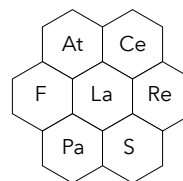
B. Al, Mo, Nd, Os, Re, Se, Te

C. Es, Ho, K, Ne, Si, Y, W

D. Ca, Mo, Ne, S, Te, Ts, Y



For example:



Answers:

Atlas

Flare

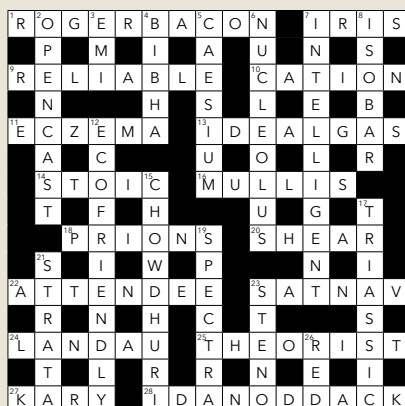
Palace

January 2024 solutions and winners

Cryptic



Quick



Wordoku

The organic chemist who is a past winner of the RSC's Hickinbottom Award was (Vijay) CHUDASAMA.

Science scramble

1 Sin; 2 Sine; 3 Singe;
 4 Genius; 5 Igneous;
 6 Ingenious;
 7 Yuri Oganessian

January winners

Science scramble
 Karen Verrall
 Charfield, UK

Wordoku
 Iain Melvin
 Preston, UK

Cryptic crossword
 Anubh Bhattacharya
 Mumbai, India

Quick crossword
 Ian Laming
 Chippenham, UK