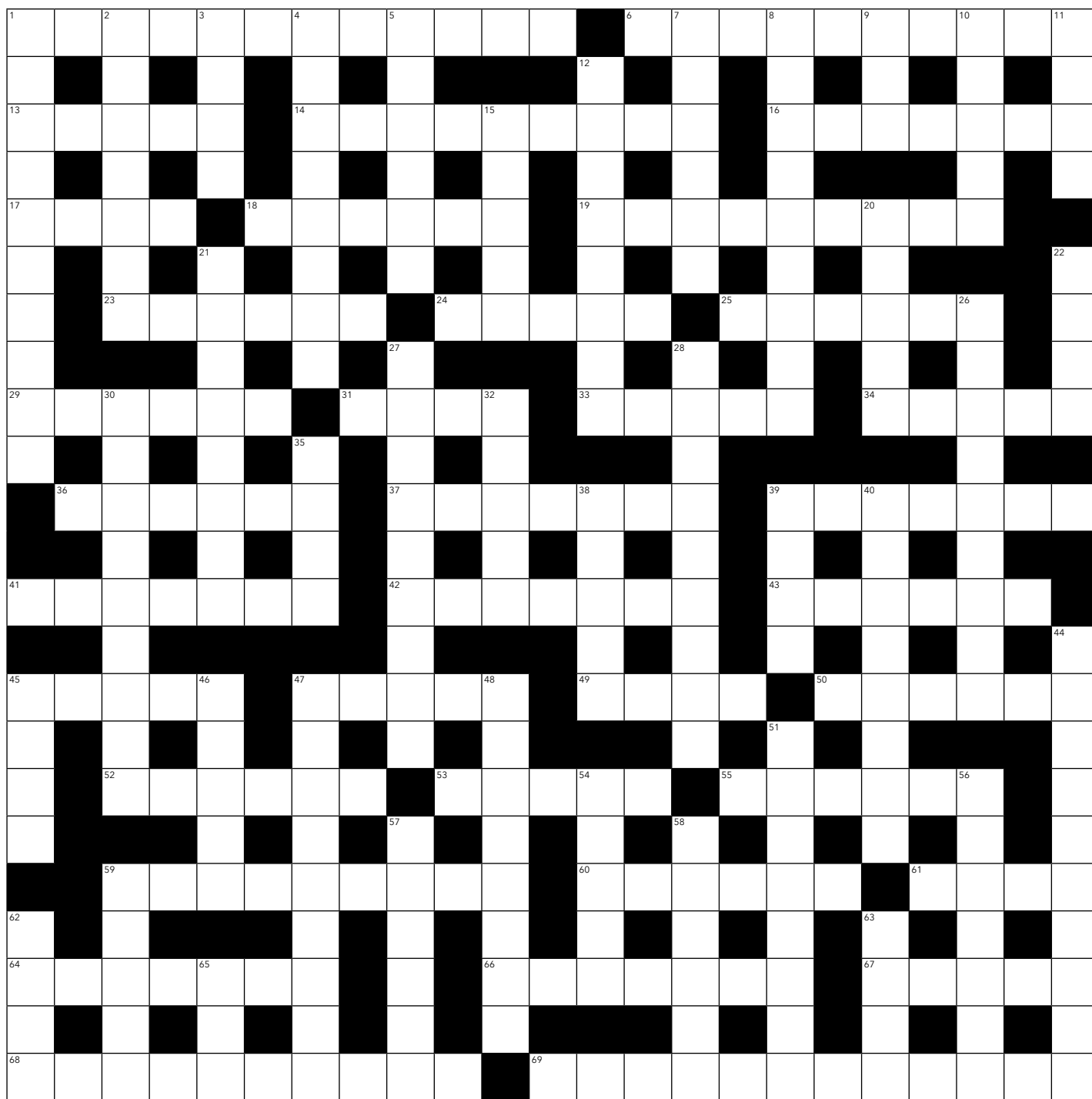


## December 2023 Jumbo CrOsSWORD



### Entry form

This month there are only two prize puzzles: the cryptic elements crossword and the quick regular crossword. For each crossword, a winner will be selected from all the correct entries received. Each winner will receive a hamper just in time for Christmas.

You can enter both of the prize draws, but each entrant is only eligible to win one puzzle prize.

Please enter your details and email a scan or photograph of this page with your completed entries to us by **14 December 2023**. The winners of this month's puzzles will be published in the January 2024 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)).

## Prize entry 1: Cryptic elements crossword

Each crossword square can have one or two letters, which must be letters of an elemental symbol, or the letters D or T (for deuterium or tritium). For example, Dalton could be written D(A)lTON.

### Across

- On arrangement, Dicky freed Rod's radiochemist (9, 5)
- Cut wood to eat dinner with? (10)
- 9 Down** Notes about alkali inventor (6, 5)
- Rustic fur? It could be a lemon! (6, 5)
- Elation follows extremely clannish bonding (9)
- Modify diets - that is, in full (2, 3)
- Pat's health treated with these compounds (10)
- Transform Olive's routine style (13)
- Harder refits with initial fitters abroad (7)
- Cries around nine? Could be crocodile tears! (9)
- Extremely clever unions can make things extraordinary (8)
- 65 Down** Love hooch with its hidden compound? (8, 4)
- Leading Austrian leaves Serbian to provide solutions (6)
- Reworked second symphony is on very loud (5)
- Jane wishes some could be not so old (6)
- Smoker in trouble with names? (8)
- Ancient polymath turns to graph (say) (10)
- Rat I catch can be therapeutic (9)
- Iris rearranges one's chargers (8)
- Easiest preparing rich suets right away (8)
- May mind head of state creating such energy (8)
- Works with spouse to order (6)
- Perhaps this boxer is worn out? (3-5)
- Agreement in website's crowdfunding (6)
- Artist who made his name in soups somehow (7)
- Rocks around first island's craters (8)
- French chemist transmutes final element - unreal! (7)
- Treat employees to a sign of office? (8)
- Alternative actor set bait - it can control bugs (12)
- Publication sometimes has hidden charges (7)
- Barium compound in the rock (6)
- Crook's cache upset the creepy crawlies (11)
- Where to demonstrate your skills across the board? (5, 4)
- Phones about extremely gruesome gas (8)
- Certain artists recreate stormiest ponds (14)
- Chosen prophets maybe with a glow (14)

### Down

- Old French money is pain in the neck for this biophysicist (7, 5)
- Engineer nears desks and the lights go out? (10)
- Darn lie about the country (7)
- King's Head Hotel possibly off rich German physicist (9)
- Two lads manipulated the chemist (7)
- Geologist shed weight (6)
- Pray about a neurotic on principle? (13)
- See **13 Across** (5)
- Surprising since he comes from the Far East? (7)
- Gets up last and struggles a little (6)
- Niece turns flours into dye (11)
- Breaks from Aussie's tasks (7)
- Drug in redrafted notice (8)
- Al fresco diners? Sounds like they could choose some underwear! (10)
- Grab a number of eggs (6)
- Sign appears as guitarist plays (11)
- 45 Down** Some doctors swear by them (11, 5)
- Terribly train softie for the truck depot (4, 7)
- Right, not even Bob's run around unseen with this kit in the lab (6, 6)
- Partially suspects mother secretly suffocates (8)
- Redesigns bins as bowls (6)
- Stop! I ate something containing drugs! (7)
- First Chopin and finally Debussy - sweet! (5)
- Doctor hid suntan in subcontinent (9)
- Not holding on to it in Europe for example (11)
- See **27 Down** (5)
- Push tot over for a ball? (4, 3)
- Kind scion stirred the poet (9)
- Letters about crudities that can help you go (9)
- Scrounge tub for a wash? (6, 4)
- Ironic he should have included these alcoves (6)
- Angle part of this kitchen utensil? (4, 5)
- Fires up in parts of the church? (8)
- Oscar leaves crisp ones around for royalty (8)
- Bet on the remainder for support? (8)
- Get back about the chicken shed reportedly (6)
- Pores over the microorganism (5)
- See **29 Across** (4)

## Prize entry 2: Quick crossword

This one is a regular crossword; no element symbols are needed.

### Across

- Environmental campaigner and author of *Silent Spring* (6, 6)
- Rod-shaped Gram-negative bacteria that can cause food poisoning (10)
- German physicist and mathematician who has a statistical distribution named after them (5)
- Element named after the Earth (9)
- City where Indian physicist C V Raman studied (7)
- Reaction \_\_\_\_\_: the speed at which a chemical reaction takes place (4)
- 11 Down** CH<sub>3</sub>COOH (6, 4)
- See **52 Across** (9)
- Element that forms the structure of buckminsterfullerene (6)
- See **57 Down** (5)
- See **32 Down** (6)
- Acid present in rhubarb stalks (6)
- Italian chemist and author of *The Periodic Table* (4)
- Organophosphorus nerve agent, C<sub>4</sub>H<sub>10</sub>FO<sub>2</sub>P (5)
- He brings presents (5)
- Country that lends its name to verdigris, the patina on the Statue of Liberty (6)
- Permeated (7)
- Type of carbonated water named after German village (7)
- Sugar substitute, C<sub>5</sub>H<sub>12</sub>O<sub>5</sub> (7)
- Milk sugar (7)
- See **8 Down** (6)
- 12 Down** Hardware failures (5, 8)
- Analysis (5)
- Chelating agent (abbreviation) (4)
- C<sub>2</sub>H<sub>6</sub> (6)
- 19 Across** Distillation apparatus named after German chemist (6, 9)
- Type of carbohydrate (5)
- Semiconductors (6)
- First person to walk on moon (9)
- Having minute spaces through which liquid or air may pass (6)
- Earliest epoch of Jurassic period (4)
- Precipitate (7)
- British chemist and first Western European woman in space (7)
- 63 Down** African American chemist who developed a treatment for leprosy (5, 4)
- Greek polymath and inventor of a screw named after him (10)
- American atmospheric chemist was the first to propose CFC free radical mechanism that is the cause of the Antarctic ozone hole (5, 7)

### Down

- Medieval English philosopher and Franciscan friar (5, 5)
- See **10 down** (7)
- Not difficult (4)
- Another name for 1,2-dihydrobenzene (8)
- Describe (6)
- Nut smell of cyanide (6)
- 43 Across** Eponymous experiment which disproved existence of aether (9, 6)
- Bill \_\_\_\_\_, the science guy (3)
- 2 Down** Old name for silver nitrate (6, 7)
- See **18 Across** (4)
- See **45 Across** (8)
- Relative (5)
- Oil reservoirs (5)
- Yellow arsenic sulphide (8)
- Type of radioactive decay (4)
- South American country which produced a bitumen-based fuel called *orimulsion* (9)
- Most abundant organic polymer on Earth (9)
- Slopes (9)
- Someone pranked on the first day of the fourth month (5, 4)
- 25 Across** US biochemist and prolific science fiction writer (5, 6)
- Inventor of the first practical telephone (4)
- English polymath and author of *Micrographia* (5)
- Totals (4)
- British biochemist awarded the 1957 Nobel prize in chemistry for their work on nucleotides (4, 4)
- Polish-Swiss chemist awarded the 1950 Nobel prize in physiology or medicine for their work on the isolation of cortisone (10)
- English chemist and novelist known for their 1959 lecture *The Two Cultures* (4)
- Old unit of heat (5)
- Ancient Greek philosopher and polymath (9)
- Of lowest age (8)
- Liquids added to reduce concentration of a solution (8)
- Type of radioactive decay (5)
- Latin name for antimony, from which it gets its elemental symbol (7)
- 24 Across** Structure of DNA (6, 5)
- Peninsula where Florence Nightingale became famous during the war there (6)
- Meat jelly (5)
- Notion (4)
- See **67 Across** (4)
- Type of baleen whale (3)

Crosswords compiled by Paul Board, whose puzzle book *Elementary!* is available to order online at: [rsc.li/ElementaryBook](http://rsc.li/ElementaryBook)

Last month's puzzle solutions and winners can be found on p57.