



## Science crosswords

Try these crossword puzzles as an entertaining way for your students to brush up on their science general knowledge.

By Randal Henly

To get back into the swing of the new term, why not jog your brain – and your students' – with a pair of scientific crossword puzzles? The topics covered here span multiple disciplines, both pure and applied, so it's an effective way to get everyone thinking outside the curriculum box.

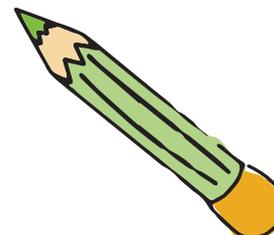
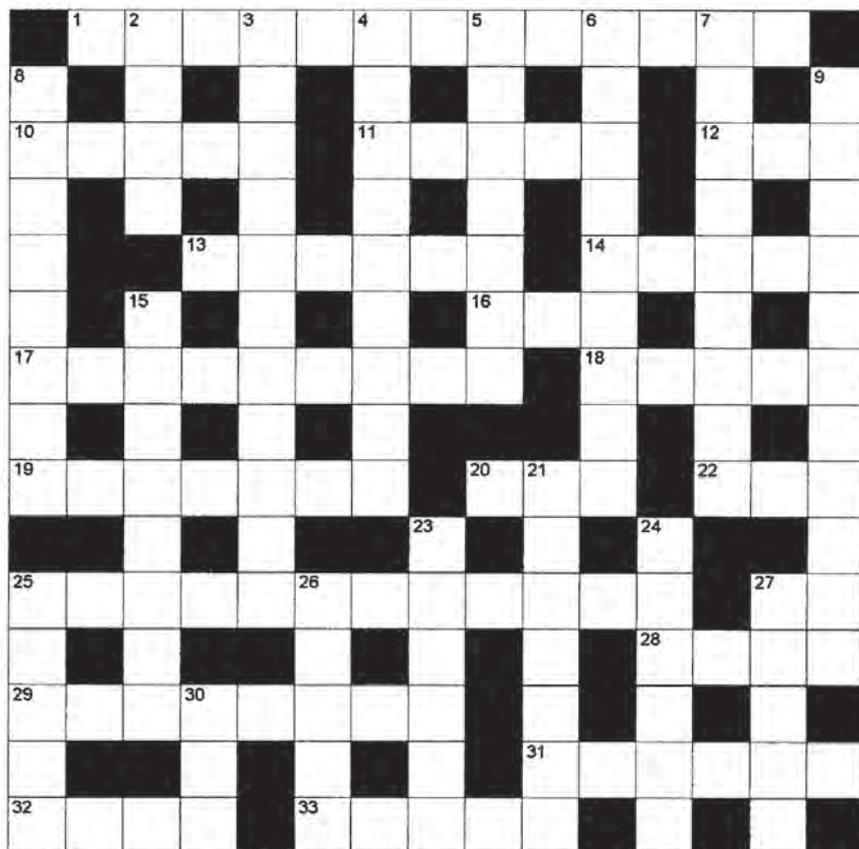
Both crossword puzzles are aimed at students aged around 16 and older. They might also provide an interesting challenge for you (and your colleagues) in the staff room.

If students find some clues too hard or are making slow progress, offer them some helpful hints along the way: you'll find the solutions on page 43.

Randal Henly is a retired science teacher, author of school science textbooks, retired editor of science and music magazines, presenter of science road shows, and a church organist.



## Crossword 1



## Clues

## Across

1. The scale on which wind speeds are given (8,5)
10. The path of a planet (5)
11. Scientist James and the unit of energy (5)
12. State in which molecules are very widely dispersed (3)
13. Smelling or tasting like oxidised fat (6)
14. Prefix meaning 'between' (5)
16. Abbreviation for 'and the rest' (3)
17. Electrical device that converts alternating current to direct current (9)
18. A negatively charged particle in electrolysis (5)
19. Bright and misty areas in the sky caused by very distant groups of stars (7)
20. The short name for the mammal *Equus asinus* (3)
22. Substance that exudes from certain plants and hardens on its surface (3)
25. The region of the atmosphere from about 7 km to 16 km above the Earth's surface (12)
27. Symbol for element 38 (2)
28. Narrow beams of radiation (4)
29. Prevent the passage of energy such as heat (8)
31. An outer planet of the Solar System (6)
32. Prefix meaning  $10^9$  (4)
33. Form of water above its boiling point (5)

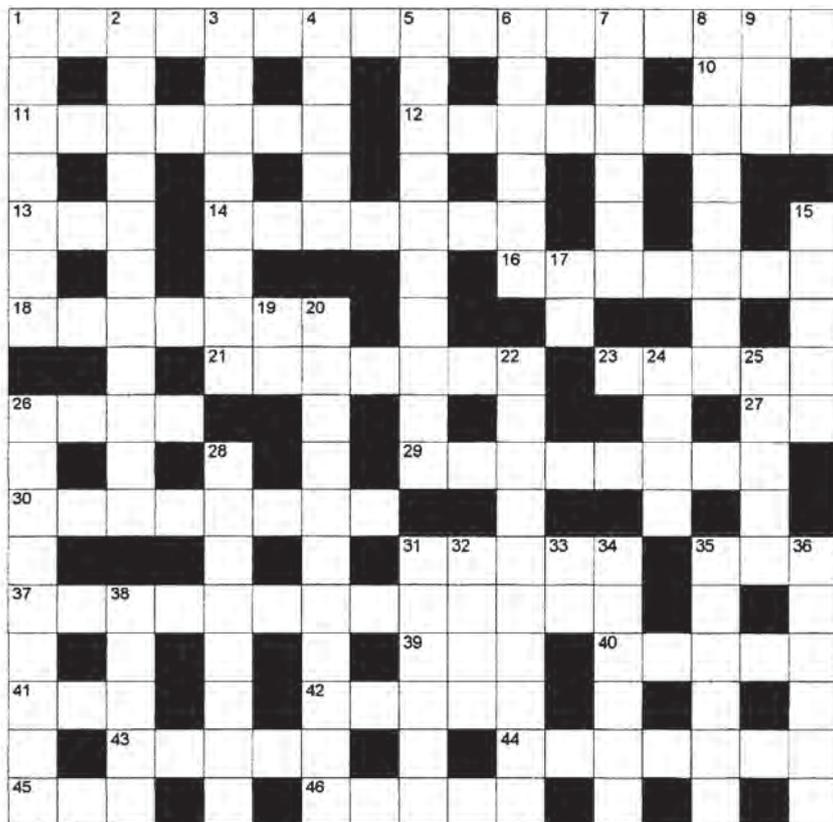
## Down

2. Flows out, like the tide (4)
3. Electromagnetic waves of wavelength less than 380 nm (11)
4. The lens in a microscope that is furthest from the eye (9)
5. Sound accompanying 7 down (7)
6. Substances in the laboratory and in all other places (9)
7. Electrical discharge from clouds to Earth (9)
8. Positive electron (8)
9. Scientists who study stars (11)
15. Huge floating blocks of solid  $H_2O$  (8)
21. The breast bone (7)
23. Its volume is given by  $\frac{4}{3} \pi r^3$  (6)
24. Pertaining to spring (6)
25. Wasp's defence weapon (5)
26. Elongated circles, the shape of eggs (5)
27. Saturated sugar solution (5)
30. The home country of Thomas Edison (1,1,1)





## Crossword 2



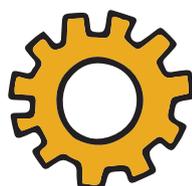
### Down

1. General name for a nuclear particle (7)
2. The temperature at which ice, water and water vapour can exist together (6,5)
3. Very reactive Group 1 element (8)
4. It hatches from the egg of an arthropod undergoing complete metamorphosis (5)
5. Instrument for measuring atmospheric moisture (10)
6. Greek letter, symbol for wavelength (6)
7. Visible discharges of electricity (6)
8. Noble metal (8)
9. Dried grass for animals (3)
15. Angle of less than 90° (5)
17. Symbol for 3 down (2)
19. It's not 'yes' (2)
20. Type of reaction in which  $\Delta H$  is positive (11)
22. Plane figures with straight sides at right angles to each other (10)
24. Iridescent gemstone (4)
25. Compound formed by the reaction of an organic acid and an alcohol (5)
26. Electromagnetic radiation from space (6,3)
28. Benjamin, the American who invented the lightning conductor (8)
31. Traditional name for the acid in vinegar (6)
32. Prefix meaning  $10^6$  (4)
33. Symbol for first transition element (2)
34. One of two ways of arranging electrical components in a circuit (6)
35. Pertaining to the stars (6)
36. Stores of water vapour in the atmosphere (6)
38. Reduces in temperature (5)

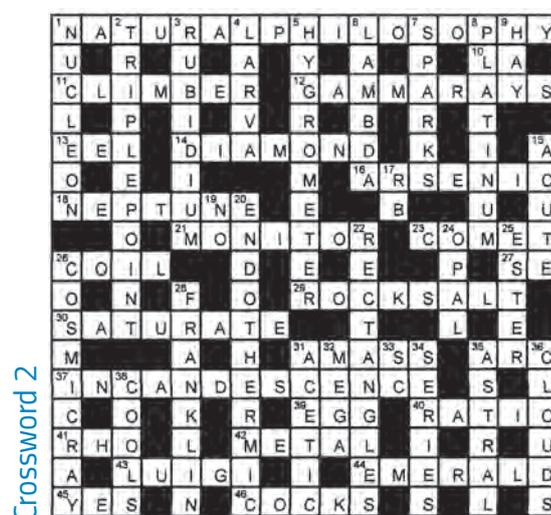
### Clues

#### Across

1. 'Science' was originally called this (7,10)
10. Symbol for the first member of the lanthanide elements (2)
11. One that goes up, like a mountaineer or a rose (7)
12. Emissions from cobalt-60 (5,4)
13. Long, slippery fish (3)
14. Crystalline carbon (7)
16. Poisonous Group 5 element (7)
18. Planet and legendary god of the sea (7)
21. Computer screen (7)
23. Astronomical body with tail (5)
26. Solenoid (4)
27. Symbol for semiconductor element (2)
29. Sodium chloride from the earth (4,4)
30. Dissolve as much as possible in (8)
31. Hoard or accumulate (5)
35. Part of a circle (3)
37. White hotness (13)
39. Ovum or female gamete (3)
40. The relation of one number to another (5)
41. The 17th Greek letter; symbol for resistivity (3)
42. Type of element that loses electrons on ionisation (5)
43. Galvani's first name (5)
44. Bright green gemstone (7)
45. It's not 'no' (3)
46. Male birds (5)



## Solutions to science crosswords



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*Science in School* is published and funded by EIROforum ([www.eiroforum.org](http://www.eiroforum.org)), a partnership between eight of Europe's largest intergovernmental scientific research organisations.

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Germany  
[editor@scienceinschool.org](mailto:editor@scienceinschool.org)  
[www.scienceinschool.org](http://www.scienceinschool.org)

**Publisher:** EIROforum, [www.eiroforum.org](http://www.eiroforum.org)

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**Copy editor:** Dr Caroline Hadley, Inlexio, Australia

**Composition:** Graphic Design Studio Nicola Graf, Germany

**Printer:** Colordruck Leimen, Germany

**Distributor:** CFG Circle Fulfillment GmbH, Germany

**Web development:** alperion Software GmbH, Germany

### ISSN

Print version: 1818-0353

Online version: 1818-0361

### Cover image

Richard Bizley/Science Photo Library