## ELEMENTAL CROSSWORD

Mark J. P. Wolf<br>South Milwaukee, Wisconsin

With a little bit of imagination, the Periodic Table of Elements can be seen as a rather strange and inelegant crossword puzzle, which is asymmetrical in form and contains such bizarre words like "RbSrYZrNbMoTcRuRhPd" and "HLiNaKCuRbAgCsAuFr". After major readjustments, here is a crossword puzzle that solves some of those problems. Each square of the solution contains an element, which, when combined, completes a real word. Some elements are used more often than others, of course, and some are not used at all. One of the interesting things about this crossword is that it is not always clear from the boxes how many letters are in any given word, since most elements contain two letters. The same word, for example, can be constructed in more than one way, or even appear in different lengths (for example, "catches" could be "Ca-Tc-He-S", "Ca-Tc-H-Es", "C-At-C-He-S", or "C-At-C-H-Es"). In case you don't have a Periodic Table of Elements handy, here are all 103 named elements, in order, over half of which appear in the puzzle:
$\mathrm{H}, \mathrm{He}, \mathrm{Li}, \mathrm{Be}, \mathrm{B}, \mathrm{C}, \mathrm{N}, \mathrm{O}, \mathrm{F}, \mathrm{Ne}, \mathrm{Na}, \mathrm{Mg}, \mathrm{Al}, \mathrm{Si}, \mathrm{P}, \mathrm{S}, \mathrm{Cl}, \mathrm{Ar}, \mathrm{K}, \mathrm{Ca}, \mathrm{Sc}, \mathrm{Ti}, \mathrm{V}, \mathrm{Cr}, \mathrm{Mn}, \mathrm{Fe}, \mathrm{Co}, \mathrm{Ni}$, $\mathrm{Cu}, \mathrm{Zn}, \mathrm{Ga}, \mathrm{Ge}, \mathrm{As}, \mathrm{Se}, \mathrm{Br}, \mathrm{Kr}, \mathrm{Rb}, \mathrm{Sr}, \mathrm{Y}, \mathrm{Zr}, \mathrm{Nb}, \mathrm{Mo}, \mathrm{Tc}, \mathrm{Ru}, \mathrm{Rh}, \mathrm{Pd}, \mathrm{Ag}, \mathrm{Cd}, \mathrm{In}, \mathrm{Sn}, \mathrm{Sb}, \mathrm{Te}, \mathrm{I}$, Xe, Cs, Ba, La, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu, Hf, Ta, W, Re, Os, Ir, $\mathrm{Pt}, \mathrm{Au}, \mathrm{Hg}, \mathrm{Tl}, \mathrm{Pb}, \mathrm{Bi}, \mathrm{Po}, \mathrm{At}, \mathrm{Rn}, \mathrm{Fr}, \mathrm{Ra}, \mathrm{Ac}, \mathrm{Th}, \mathrm{Pa}, \mathrm{U}, \mathrm{Np}, \mathrm{Pu}, \mathrm{Am}, \mathrm{Cm}, \mathrm{Bk}, \mathrm{Cf}, \mathrm{Es}, \mathrm{Fm}, \mathrm{Md}$, No, Lr.

## ACROSS

1. A possibility
2. Places selling 48-ACROSS
3. Urges on
4. Openings
5. Gain control of
6. Headwear
7. Surreptitious
8. A type of shortwave antenna
9. Too bad
10. Ethnic group of SW Nigeria
11. Explosive sound
12. Like Steve Austin
13. Many-colored
14. Glow with heat
15. Get in touch with
16. Balls
17. Reddish brown
18. Hides in safe place
19. Considerate
20. Do 53-ACROSS again
21. Near or beside
22. Without reservations
23. Tear apart
24. Ideas
25. Swear
26. Burnt wine, literally
27. Entertain
28. Puts a spell on
29. Pinot Noir, Merlot, etc.
30. A practice run
31. Use one's brain
32. Type of cashew tree
33. Repeated showing
34. Can read
35. Cultivates garden
36. Burn slightly
37. Quidnunc attribute
38. North Italian river
39. Willow used for wickerwork
40. Mexican food
41. Like Chicago
42. A school of medicine
43. Dominant or recessive

## DOWN

1. Jovian moon
2. Noisy fight
3. Type of instrument
4. Tea cake
5. Keratinous protrusion
6. Make holes
7. Treasure found here?
8. Pacino film
9. Depp film
10. Fundamental nature
11. White guy
12. Lay waste to
13. Table holding bowl and pitcher
14. Ties
15. Whirlwinds near the Faeroe Islands
16. Struggles with
17. Bottle enclosed in a protective basket
18. Feel pain
19. Type of aircraft
20. Plant nursery
21. Waterways
22. Small
23. Formerly
24. Netlike
25. Goes with "outs"
26. Type of fence
27. Eases
28. Patronizing behavior
29. Coat or delay
30. Fireplace
31. Ointments
32. Compels by force
33. Among other persons
34. Does 22-DOWN again
35. Egg source
36. Going price
37. Prisoner
38. Roman emperor
39. Set into a surface
40. Famous ratio
41. Location
42. Ice cream holder

## A POEM

MARTIN GARDNER
Norman, Oklahoma
This is an excerpt from Gardner's 1969 book Never Make Fun Of A Turtle, My Son (Simon and Schuster, illustrated by John Alcorn).

## Magic Word

"More jam," said Rosie to her Mom.
"I want more jam," said she.
But no one heard
The Magic Word.
Mom took a sip of tea.
"The jam! The jam! The jam!" she cried.
Her voice rang loud and clear.
"I'd like to spread
It on my bread."
But no one seemed to hear.
"Please pass the jam," Rose said at last.
Now that's the thing to say.
When Mother heard
The Magic Word

