

## ANSWERS AND SOLUTIONS

### Websterisms: In Search of Noah's Headwords

Arthur Schulman

anaconda, android, asteroid, barbecue, belles-lettres, beverage, bob, boggle, caboose, caravan, catchup, master of ceremonies, chaos, condescension, cretin, dandy, debacle, dilettante, duds, egoist, empiricism, escapade, evolve, fossil, freethinker, gnome, guitar, hypochondriac, imbecility, jungle, junk, kickshaw, luscious, museum, nest, onanism, overseer, pagoda, picnic, poker, Polynesia, pragmatist, prestigious, pudenda, rendezvous, soothsaying, stateswoman, text-book, ticket, Yankee.

### New Word Recreations

Oscar Thumpbindle

PRY, QOPH, WON, ZEN, QUIZ, GLUM, GOLFS, FRY  
SIXTY  
XED  
COD, TUCK, JUGS, STAB, BIKE, GIVER, VAT, JAB  
HYMN  
BRAWN

Start at O = COTE and continue SOME, SUCH, CANT, RAID, TROD, THIN, BUSH, MULE, SPAM, BURP, CRIB, LIMN, POND, BALD, HELP. Notice that the connecting edges spell, in order, OSCAR THUMPBINDLE.

### Kickshaws

Louis Phillips

Free-Range Vocabulary: 1-G, 2-A, 3-B, 4-E, 5-I, 6-F, 7-H, 8-D, 9-J, 10-C

### Octopi

Mike Keith

Diana Keith

The first word of the poem has 3 letters, the next 1 letter, the next 4 letters, and so on. If these numbers are written out in order they "spell out" the first 768 digits of the number  $\pi$  (3.14...), with the additional conventions that a 10-letter word represents the digit 0 while words of more than 10 letters represent two consecutive digits (e.g., a 12-letter word means "1 2"). The total number of digits represented, 768, is divisible by eight, so as a further constraint each of the eight stanzas contains exactly  $768/8 = 96$  digits. Pi in eight pieces = Octo-pi, hence the title.

*Diana Keith is the senior-in-high-school daughter of Mike Keith. "Octopi" may be the longest Pi mnemonic on record. I am aware of a 402 decimal "story" that appeared in "The Mathematical Intelligencer" in 1986 (vol. 8, p. 56). – The editor*

## Croctic Puzzle

Julie Sussman

(DOUGLAS R.) HOFSTADTER:  
 GODEL, ESCHER, BACH: (AN ETERNAL GOLDEN BRAID)

...if particles didn't interact with each other, things would be incredibly simple. Physicists would like such a world because then they could calculate the behavior of all particles easily (if physicists in such a world existed, which is a doubtful proposition).

- |                 |                 |
|-----------------|-----------------|
| A. Haws         | N. Escutcheons  |
| B. Osculations  | O. Litchis      |
| C. Flutists     | P. Elliptically |
| D. Schubert     | Q. Sixty-five   |
| E. Tow Low      | R. California   |
| F. Addicts      | S. Humidity     |
| G. Dodecahedron | T. Epiphytic    |
| H. Thistledown  | U. Ricin        |
| I. Edwin Hubble | V. Bathyscaphes |
| J. Ribose       | W. Applaud      |
| K. Gurupi       | X. Crater Lake  |
| L. Owlsh        | Y. Hitches      |
| M. Die Forelle  |                 |

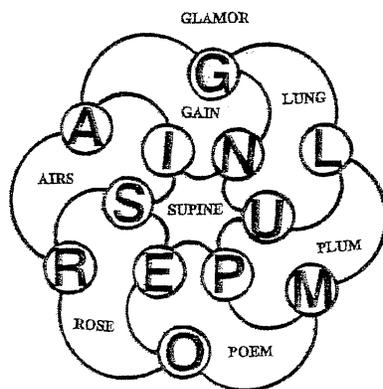
## A Bouquet for Gardner

Jeremiah Farrell  
 Thomas Rodgers

Puzzling Pelargoniums. If there are  $n$  PELARGONIUMS,  $n - 2$  of them are red,  $n - 2$  of them are yellow, and  $n - 2$  of them are green. Thus,  $n \geq (n - 2) + (n - 2) + (n - 2) = 3n - 6$ , or  $n = 3$ . Implicit in the puzzle is that there are only three colors, implying that, in fact,  $n = 3$ . (Otherwise, technically, there could be just two PELARGONIUMS, of some other color.)

Hamiltonian circuit puzzle. One solution is MAR-RAG-RUG-SUR-SUN-SON-ION-OIL-LIE-PIE-PIN-PUN-PUG-PEG-AGE-ALE-LAM-MOL-MOS-MRS.

Hexagonal prism problem. The best set of words we found is GLAMOR, SUPINE, GAIN, LUNG, PLUM, POEM, ROSE, and AIRS. (See Figure 8.)



Nim-like game. Our hint for the Nim-type game is to take advantage of the symmetry of the board, keeping in mind the complement of your opponent's play. For further insights on this kind of strategy, see Gardner's "The Game of Hex" [1, Chapter 8] and "Dodgem and Other Simple Games" [10, Chapter 12].

**Punk Whiz 6****Anil**

1. airstrip 2. bearer bond 3. doing things (*or* doings) by half 4. go over hir head 5. Get out of my face!  
 6. open-minded 7. out of circulation 8. thick as thieves 9. Don't waste your breath. 10. easy chair 11. fu-  
 ture tense 12. ghetto blaster 13. Keep looking up! 14. liability 15. life 16. lowest common denom-  
 inator 17. make good time 18. master race 19. natural history 20. on the fence 21. on the other hand  
 22. kick the habit 23. king crabs 24. knock 'em dead 25. huff and puff 26. industrial relations 27. Lie  
 back and think of England. 28. lost in thought 29. money talks 30. high-fidelity 31. homophobe 32.  
 hydrant 33. let your hair down 34. lowers 35. penny wise, pound foolish 36. pinking shears

**What's In? – A Name! – Part IV****Steven Kahan**

- |  |  |
|--|--|
| 1. a <b><u>b</u></b> NORMA <b><u>L</u></b>                     | 21. <b><u>T</u></b> ODD <b><u>l</u></b> er                   |
| 2. a <b><u>d</u></b> VANCE                                     | 22. <b><u>S</u></b> HAR <b><u>I</u></b> ng                   |
| 3. a <b><u>B</u></b> RA <b><u>D</u></b> e                      | 23. <b><u>J</u></b> ULIE <b><u>n</u></b> ne                  |
| 4. b <b><u>R</u></b> OCCO <b><u>l</u></b> i                    | 24. nu <b><u>C</u></b> LE <b><u>O</u></b> lus                |
| 5. ca <b><u>T</u></b> ARA <b><u>ct</u></b>                     | 25. <b><u>H</u></b> OMER <b><u>o</u></b> om                  |
| 6. ch <b><u>A</u></b> MBER                                     | 26. pi <b><u>L</u></b> LARS                                  |
| 7. des <b><u>T</u></b> ROY                                     | 27. <b><u>L</u></b> IZ <b><u>A</u></b> rd                    |
| 8. d <b><u>I</u></b> RENE <b><u>s</u></b> s                    | 28. <b><u>M</u></b> ATT <b><u>r</u></b> ess                  |
| 9. <b><u>M</u></b> ACK <b><u>e</u></b> rel                     | 29. re <b><u>T</u></b> ALIA <b><u>t</u></b> e                |
| 10. es <b><u>C</u></b> AR <b><u>O</u></b> Le                   | 30. <b><u>M</u></b> ASON <b><u>r</u></b> y                   |
| 11. <b><u>R</u></b> ICK <b><u>e</u></b> ty                     | 31. sh <b><u>A</u></b> DE <b><u>L</u></b> Ess                |
| 12. f <b><u>R</u></b> ENE <b><u>t</u></b> ic                   | 32. si <b><u>M</u></b> IL <b><u>E</u></b> S                  |
| 13. h <b><u>A</u></b> LVIN <b><u>g</u></b>                     | 33. sl <b><u>A</u></b> VER <b><u>Y</u></b>                   |
| 14. <b><u>M</u></b> AR <b><u>C</u></b> hing                    | 34. s <b><u>I</u></b> NG <b><u>A</u></b> long                |
| 15. hi <b><u>S</u></b> TOR <b><u>I</u></b> c                   | 35. str <b><u>A</u></b> NG <b><u>E</u></b> L <b><u>y</u></b> |
| 16. h <b><u>E</u></b> LIOT <b><u>T</u></b> rope                | 36. sup <b><u>r</u></b> e <b><u>M</u></b> AC <b><u>Y</u></b> |
| 17. in <b><u>F</u></b> ER <b><u>N</u></b> o                    | 37. ta <b><u>T</u></b> AM <b><u>I</u></b>                    |
| 18. in <b><u>T</u></b> er <b><u>F</u></b> A <b><u>I</u></b> TH | 38. <b><u>T</u></b> HE <b><u>A</u></b> ter                   |
| 19. ja <b><u>L</u></b> ap <b><u>E</u></b> NO <b><u>S</u></b>   | 39. va <b><u>G</u></b> RAN <b><u>T</u></b>                   |
| 20. j <b><u>E</u></b> LLIE <b><u>s</u></b>                     | 40. ven <b><u>D</u></b> ET <b><u>T</u></b> A                 |