

# ELEMENTS OF SURPRISE

SUSAN THORPE  
Great Missenden, Buckinghamshire, England  
thorped@hotmai.com

**Elemental Word** = one which can be split into elemental symbols.  
**AN** = an element's Atomic Number.

## ELEMENTAL WORDS

### LONGEST

In Word Ways of May 2000 (page 104), Chris Cole offered as a contender for the longest elemental word the 25-letter H.Y.PO.TH.AL.AM.I.CO.H.Y.PO.P.H.Y.SE.AL.S (Web.3).

### ELEMENTS

13 of the elements are themselves elemental words:

NE.O.N IR..O.N K.R.Y.PT.O.N AS.TA.TI.NE and TI.N are 5 of them.

The other 8 can be split in 2 or more ways:

|                     |                     |                     |                     |                     |                     |
|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| C.A.R.B.O.N         | B.I.S.M.U.T.H       | AR.SE.N.I.C         | XE.N.O.N            | C.O.P.P.E.R         | S.I.LV.E.R          |
| C.A.R.B.O.N         | B.I.S.M.U.T.H       | AR.SE.N.I.C         | XE.NO.N             | CO.P.P.E.R          | S.I.LV.E.R          |
| S.I.LI.CO.N         | S.I.LI.CO.N         |                     |                     |                     |                     |
| S.I.LI.CO.N         | S.I.LI.CO.N         |                     |                     |                     |                     |
| P.H.O.S.P.H.O.R.U.S | P.H.O.S.P.H.O.R.U.S | P.H.O.S.P.H.O.R.U.S | P.H.O.S.P.H.O.R.U.S | P.H.O.S.P.H.O.R.U.S | P.H.O.S.P.H.O.R.U.S |
| P.H.O.S.P.H.O.R.U.S | P.H.O.S.P.H.O.R.U.S | P.H.O.S.P.H.O.R.U.S | P.H.O.S.P.H.O.R.U.S | P.H.O.S.P.H.O.R.U.S | P.H.O.S.P.H.O.R.U.S |
| P.H.O.S.P.H.O.R.U.S | P.H.O.S.P.H.O.R.U.S | P.H.O.S.P.H.O.R.U.S | P.H.O.S.P.H.O.R.U.S | P.H.O.S.P.H.O.R.U.S | P.H.O.S.P.H.O.R.U.S |
| P.H.O.S.P.H.O.R.U.S | P.H.O.S.P.H.O.R.U.S | P.H.O.S.P.H.O.R.U.S | P.H.O.S.P.H.O.R.U.S | P.H.O.S.P.H.O.R.U.S | P.H.O.S.P.H.O.R.U.S |

### PALINDROMES

B.O.B B.I.B or B.I.B N.O.N or NO.N N.U.N P.I.P P.O.P or PO.P P.U.P or PU.P S.I.S or S.I.S W.O.W  
B.O.O.B N.O.O.N or NO.O.N O.B.B.O O.P.P.O or O.P.P.O O.S.S.O (bucco) or OS.S.O  
P.O.O.P or PO.O.P SE.ES  
C.I.V.I.C LA.V.AL RE.F.ER SE.XE.S  
S.U.C.C.U.S or S.U.C.C.U.S K.I.N.N.I.K or K.I.N.N.I.K or K.I.N.N.I.K or K.I.N.N.I.K  
RE.PA.P.E.R RE.V.I.V.E.R

### TAUTONYMS

C.O.C.O or CO.CO or CO.C.O or C.O.CO H.O.H.O or HO.HO or HO.H.O or H.O.HO

### REVERSALS

Pairs read vertically. Alternative elemental splits are not given.

SN.O.O.P.S S.NA.P.S B.A.T.S B.A.G ER.O.S SN.I.P.E.R GA.RB B.O.N.K CA.RE.S F.IR.ES  
S.P.O.O.N.S SP.A.N.S S.TA.B GA.B SO.RE RE.P.I.N.S BR.AG K.NO.B SE.RA.C S.ER.I.F

### MIAMI WORDS

O.N.I.O.N or O.N.I.O.N S.H.U.S.H SE.N.SE

### CONSECUTIVE ALPHABETICALLY-ARRANGED ELEMENTS

AG.AL (part of Arab head dress) AL.AM (a surname) AM.AR (a village in India) AR.AS (a river in Turkey) AT.AU (a first name) BA.BE BE.BI (Egyptian vizier) CA.SE and CU.DY (both surnames) DY.ER IR.K LA.LI (a first name) MO.N (Japanese emblem) NI.NO (El Nino) RU.S (Medieval people in Eastern Europe) SE.SI (a surname) TE.TH (9<sup>th</sup> letter of the Hebrew alphabet)

### CONSECUTIVE REVERSE ALPHABETICALLY-ARRANGED ELEMENTS

SI.SE (a surname) PA.P NO.NI (a fruit) NI.NE NA.N L.LA (a first name) K.IR (a French cocktail) IR.IN (an Irishwoman) IN.I (a first name) F.EU (Scottish land tenure) ES.ER (a surname) ER.DY (a surname) BA.B (a place in Slovakia) AT.AS and AR.AM (both surnames) AM.AL (a first name – Mrs George Clooney)

## ATOMIC NUMBERS

The Elements with ANs ranging from 1 (hydrogen) to 92 (uranium) are called non-transuranic elements. Transuranic elements are those with an AN of 93 or more.

### NUMERICAL PALINDROMES

|             |                                      |             |             |               |               |
|-------------|--------------------------------------|-------------|-------------|---------------|---------------|
| 2 ANs       | HE.GE 2.32                           | LI.EU 3.63  | BE.W 4.74   | LA.B 57.5     | B.AT 5.85     |
| B.AM 5.95   | C.OS 6.76                            | N.AG 7.47   | TA.N 73.7   | O.AR 8.18     | BI.O 83.8     |
| PO.O 84.8   | O.ER 8.68                            | FR.O 87.8   | F.IN 9.49   |               |               |
| AL.GA 13.31 | LA.RE 57.75                          | PR.AM 59.95 | HO.OS 67.76 | W.AG 74.47    | PA.K 91.19    |
| 3 ANs       | LI.N.TA 3.7.73 (river in Madagascar) |             |             | B.O.AT 5.8.85 | C.O.RN 6.8.86 |

### NUMERICAL TAUTONYMS

3 ANs H.O.AR 1. 8. 18 CO.HE.N 27. 2. 7 B.O.CE (a fish) 5. 8. 58

### NUMERICAL MIAMI

2 ANs NO.NE 102.10

### REVERSED DIGITS (pairs read vertically)

2 ANs  
 BI.B 83.5 LA.OS 57.76 GA.LA 31.57 GA.GE 31.32 CU.RB 29.37 HO.RN 67.86 AR.C.H 18.6.1  
 IO 53.8 HO.RE 67.75 RE.AL 75.13 V.AL 23.13 TA.U 73.92 ER.OS 68.76 S.O.H 16.8.1

### REPEATED LIKE DIGITS

NA.H 11.1 HE.TI 2.22 (OS, 'hate') LI.AS 3.33 RU.BE 44.4 IR.N 77.7  
 O.RA 8.88 F.ES 9.99

### CONSECUTIVE ANs

Darryl Francis (Feb. 2002 p.43) found 2 words, each made from 3 elements with consecutive ANs:

S.I.P.S 14. 15. 16 CL.AR.K 17. 18. 19

I can add BA.LA.CE 56. 57. 58, (an old form of *balas* = a type of ruby.)

Other words made from consecutive ANs are LI.BE 3. 4 (a first name) N.O (7. 8) O.F (8. 9)

AR.K 18.19 GA.GE 31.32 HO.ER 67. 68 TA.W 73.74 PO.AT 84.85 (a surname)

PA.U 91.92 (a French city)

### CONSECUTIVE ANs IN REVERSE

PA.TH 91.90 SE.AS 34.33 O.N 8.7 HE.H 2.1 BA.CS 56.55

### DOUBLING ANs

HE.BE 2.4 F.AR 9.18 FE.TE 26.52 CU.CE 29.58 (an old Montenegro tribe) SE.ER 34.68  
RU.RA 44.88 (a town in India)

### HALVING ANs

HE.H 2.1 NE.B 10.5 (OE for 'beak' or 'nose') SI.N 14.7 S.O 16.8 CA.NE 20.10 TI.NA 22.11  
KR.AR 36.18 (Ethiopian lyre) RU.TI 44.22 (a first name) NI.SI 28.14 BA.NI 56.28 (plural of 'ban')  
DY.AS 66.33 (a surname) PO.MO 84.42 (an indigenous Californian people)

### AN SHIFTS

C.O.NE 6.8.10 + 10 = S.AR.CA (Dominican Republic) 16.18.20

## PLAYING WITH ALPHABETICALLY CONSECUTIVE SYMBOLS

### AN DIVISIONS

These involve just two symbols.

BA ÷ BE = 56 ÷ 4 = 14      EU ÷ F = 63 ÷ 9 = 7      GD ÷ GE = 64 ÷ 32 = 2  
LA ÷ LI = 57 ÷ 3 = 19      ND ÷ NE = 60 ÷ 10 = 6

### AN EQUATIONS

These involve various numbers of symbols.

BK - BR = C - CA = CD    97 - 35 + 6 - 20 = 48  
- CR + CS - CU + DY = ER    - 24 + 55 - 29 + 66 = 68  
FM + FR - GA - (GD ÷ GE) - (H x HE) - HF = HG    100 + 87 - 31 - (64 ÷ 32) - (1 x 2) - 72 = 80  
- GA + GD - GE + H = HE    - 31 + 64 - 32 + 1 = 2  
(GD ÷ GE) + H + (HE x HF) - HG = HO    (64 ÷ 32) + 1 + (2 x 72) - 80 = 67  
HO = I + IN + IR - K - KR - LA    - 67 + 53 + 49 + 77 - 19 - 36 = 57  
MG + MN + MO + N - NA - NB - (ND ÷ NE) = NI    12 + 25 + 42 + 7 - 11 - 41 - (60 ÷ 10) = 28  
OS + P = PA    76 + 15 = 91  
RU - √S - SB - SC + SE - SI + SM = SN    44 - √16 - 51 - 21 + 34 - 14 + 62 = 50  
- TM + U = V    - 69 + 92 = 23

This equation is formulated from the 6 elements whose symbols begin with the letter B

- B + BA - √BE + BI - BK = BR    - 5 + 56 - √4 + 83 - 97 = 35