SOLVING AIDS   RISHU

CIPHERTEXT FREQUENCY COUNT - senorita   (Most frequently used letters)

MOST FREQUENTLY USED LETTER - e

ONE LETTER WORDS – "Must be" "a" or "i."

SHORT WORDS – in, it, is, if, of, no, on,

LOOK FOR WORD "The" – Start of message or repetitive occurrence

POPULAR WORD LETTER BEGINNINGS – an, at, be, de, en, in, no, re, se, th, un

POPULAR WORD LETTER ENDINGS – ing, ion, tion, ed, es, ess, ent

Recreational Mathematics - Kaprekar's Constant – Why is 6174 a magic number?   APEX DX

The following number activity has expanded possibilities but we will introduce it by focusing on its four-digit case. Write down a four-digit number with no repeat digits. Let's pick 3529. Now rearrange the digits to form the largest number that you can, 9532, and the smallest number it will produce, 2359. Subtract these two numbers (largest minus smallest) and get a new number, 7173. Repeat the process, 7731-1377 = 6354. Repeat again, 6543 – 3456 = 3087. And again, 8730 – 0378 = 8352. And again, 8532 – 2358 = 6174. Now, observe: 7641 -1467 = 6174….. again and again and again. For the amateur mathematician who discovered it, D. R. Kaprekar (he lived in India, 1904-1986) this number, 6174, is now known as Kaprekar's constant. All four figure numbers lead to 6174 and have **no doubt generated a basis for a multitude of illusionist's mystifying presentations.** Would there be a Kaprekar constant for three-digit numbers, for five-digit ones?

Universal Phoebee Circular Cipher Slide, for Beaufort, Gronsfeld, Porta, Portax, Vigenere cipher solving. **(Free)**

The Tyro Tutorial
This is available at our ACA web site under Resources. It describes the solution process to some thirty different cipher types, a comprehensive listing of Null Variables by BION and the use of Google as a solving tool.

ZANAC's Gimme a Break – ND Aristocrats (may be digraphs / trigraphs)
A-1, that, A-2, the (3), A-3, you (2), A-4, the (2), A-5, who (3), A-6, th (3), A-7, the, A-8, the (3), A-9, the (2), A-10, he (2), A-11, in (2), A-12, the (2), A-13, the (2), A-14, the (2), A-15, like (2), A-16, ng (3), A-17, the (2), A-18, with, A-19, the (3), A-20, enemies, A-21, po (3), A-22, the (2), A-23, ing (2), A-24, c alliteration, A-25, Antonio.

ZANAC's Gimme a Break - ND Patristocrats (may be digraphs / trigraphs)
P-1, the (2), P-2, Christmas, P-3, that, P-4, ing (2), P-5, too (3), P-6, tree, P-7, never, P-8, that (2), P-9, the (5),
P-10, gazed, P-11, VCAB = just, P-12, HYEI = pine, P-Sp-1, th (5) P-Sp-2, KOHL = with.

SO-1. QR Code. PARROT: Baconian. Black squares are b, white squares are a. "many" in first line. **SCORPIUS**
SO. A-24. Describent to cryptologist. K4. Reference to solvers search for high frequency letter input. **NIVEK**
SO. P-12. A human pause. K3. (XOWEM) Begins, "At the" refers to Olympic grand gesture. **TSIOLKOVSKY**
SO. X-4. Catalan. Trips. K2. (passar) Plaintext begins, "Em meu" **GGMA**
SO. X-5. Esperanto. Hellish quote. K2. (venas al) First two proper nouns, "Pordo, Inferno" **SHMOO**
SO. X-8. French Patristocrat. Common view. K@. (dan la me-) Plaintext begins, "Aimer" **THE DOC**
SO. E-7. Morbit. From Mitch Hedberg. (code) Rib tickler, begins, "I would," code involved. **AILUROPHILE**
SO. E-15. Nihilist Transposition. Recognition. (make an) Begins, "I never" **SHMOO**
SO. E-18. Bazeries. Life finds a way, (lava flow) **TIGER'S EYE**
MSREP: Key begins, "1o" Refers to Hawaii cricket.
SO. E-20 Ragbaby. From 1941 movie. (become) PARROT: Begins, Even a man" **BION**
SO. E-22. Tridigital. The Brits loved them. (together) PARROT: Begins, "In a collaboration" **WORD WIZARD**
SO. E-24. CM Bifid. Puzzling phenomenon. (roriginremainsunexplained) Begins "The minimum" **PELKABO**
SO. E-25. Quagmire III. Inherited wealth. (thousandacresinalland) Period Eight. **BION**
SO.E-Sp. Numbered key. Team leader. (isaquarterback) **MANDRAKE**
Crib begins at position 14. Plaintext begins, "A good"
SO. C-9.Multiplication. (Two words, 9-0) W = 7, U = 3, C = 1 **LIONEL**
SO. C-12. Undecimal Additions. (Three words, 0-A) D = 2, Y = 5, L = 8 **THE RAT**
SO. C-Sp-1. Base 13 Addition. (Three words, 0-C) P = 3, F = 7, Z – 9 **WORD WIZARD**
SO. AC-1382. Compressocrat. Spectacular ending. MSREP: About an eclipse. Starts, "At the very end" **SHMOO**
SO. AC-1385. Quagmire IV. Searching for the nonexistent. Period Ten. **BION**
 (-stonthesubstancethatwast-) Crib placed at position 225.
ND-1. Ornamental. Merry Treesmas! Tridigital cipher. Parrot: Third word, "holidays" **BECASSE. CONFUOCO**
ND-3. Triplet. Key Phrase. Begins, "The largest" **BION**
ND. A-25. Independence. K3V. Second proper noun, "Tavani" **GGMA**
ND. P-Sp-2. Celebration, KE. (QCNB) Begins with that special day of the year. **ARDUINNA**
ND. X-3. Afrikaans Aristocrat. Tale. K2. (minste) Plaintext begins, "Ten minste" **DONSIE**
ND. X-7. ???? Stay calm. K2. PARROT: Latin language. **THE RAT**
ND. X-8. Portuguese Patristocrat. Secret of long living. K2. (queria) Begins, "Voce po" **THE DOC**
ND. E-1. Beaufort. Well-chosen music. (-BUHWYM NBY LCXY NBY) Period 10. Begins, "A delight" **SHMOO**
ND. E-2. Morbit. Family centered. (BIGY) Plaintext begins, "Tel-" **APEX DX**
ND. E-3. Railfence. Nutrition. (TOWWBCHC) Plaintext begins, "Veg-" **CONFUOCO**
ND. E-4. Gronsfeld. Ancient construction. (JYLCIX) Period Nine. Plaintext begins, "Watson" **BION**
ND. E-6. Incomplete Columnar. Dave Barry on visiting Paris. (NIOLCMNM) Period 5, begins, "You" **HODDI**
ND. E-7. Checkerboard. Seaside workout. (-FIQQBI) Plaintext begins, "Did you hear" **H20**
Alternate solving methos: Assign ciphertext letters to each plaintext letter and solve as a Patristocrat.
ND. E-9. Pollux. National treasure. Extended crib: (and was), begins with "The" **BECASSE**
ND. E-11. Gromark: Choosing. (the results) MSCREP: Crib extension (-nted at the results) position 80 **DANEEL**
ND. E-12. Monome-Dinome. Help needed. (business) Crib is last plaintext word. **PHILLIES**
Can also be solved as a Patristocrat after acquiring ciphertext digits.
ND. E-19. Phillips. Apparition. MSCREP: Crib extension (man who wasn't there he) begins at XFZDV **THE DOC**
ND. C-4. Division. (Two words, 0-9) Two five letter words, beginning with L and P. **CTHULHU**
ND. C-6. Equations. (Three words, 9-0) C = 9, D = 6, I = 2 **TOMMY**
ND. C10. Duodecimal Square Root. (Two words, 1-0) First word begins with B, ends with K **ARIES**
Second word begins with T, ends with D.

Sunny Ciphering, LIONEL