

General Codes to Know:

- Binary
- Ternary
- ASCII
- Morse
- Braille
- Semaphore
- NATO
- American Sign Language
- Pigpen
- International Maritime Signal Flags
- Caesar shift
- QWERTY ⇔ DVORAK
- Cryptogram
- Vigenere Cipher
- Book Cipher
- Playfair Cipher
- Chemical element numbers

Useful sites:

- [Onelook](#)
- [Quinapalus](#)
- [Rumkin Cipher Tools](#)
- [ghex](#)
- [Mapping Great Circles](#)
- [Quipqiup](#)

Behavioral Strategies:

- Make sure you have all the data for the puzzle. Ask yourself if you're missing an entire page of the puzzle.
- If everything you're doing feels right but you're not getting gibberish, try asking yourself the following: am I ordering things correctly? (e.g. try column-major order instead of row-major order for a grid, try reading things in the reverse order, separate the letters into two groups and read the groups separately),
- If you're working on a meta puzzle and are stuck, don't have everyone stare at the same spreadsheet. Once the obvious work has been done and everyone's tried working on it together for a while, have people duplicate the spreadsheet and try working on it individually without communicating their ideas. This leads to a greater variety of approaches being tried, increasing the chance of getting unstuck.
- If a puzzle requires shading in things to form a picture, coloring, or any visually precise work, do it in an image editing program such as GIMP.
- Don't have multiple people work on easy puzzles. If one person is really excited to do a person, let him/her work on it alone.

Identifying common puzzle elements:

When you see...	You should try...
Small numbers (≤ 26)	Converting numbers to letters (1 = A, 2 = B, etc.)
Smaller numbers (≤ 15)	Indexing the numbers into words in the puzzle (e.g. the number 7 and the word RAINFOREST = the 7th letter of RAINFOREST = R)
Lots of repeated digits	Use a phone keypad as if you were texting (e.g. 227773323 = 22-777-33-2-3 = BREAD). A helpful site is http://phonespell.org/
Medium numbers ($65 \leq n \leq 128$)	Converting numbers to letters via ASCII (http://www.asciitable.com/index/asciifull.gif)
Small and medium numbers ($1 \leq n \leq 118$)	Treating numbers as element numbers and looking at chemical symbol.
Numbers that might be years ($1000 \leq n \leq 2050$)	Treating the numbers as years
Large numbers ($n > 100$)	Factorizing the numbers
A list of words or sentences	Looking at the first letter of each word / sentence
A list that is sorted (e.g. words presented in alphabetical order)	Find another way of sorting the words (e.g. a list of people could be sorted by date of birth, a list of words could be sorted by scrabble values)
A list of words and little or nothing else	Diagonalizing the words (i.e. take the 1st letter of the 1st word, 2nd letter of the 2nd word, etc.)
A list of words and little or nothing else	Googling several of the words together and seeing if the words all fit into some category (names of pasta, names of kings)
A list of words and little or nothing else	Looking if there are common substrings, especially prefixes and suffixes (e.g. you

	might form a chain like WISH -> SHINE -> NECTAR -> ARCHED -> EDIT -> etc.)
A list of words and little or nothing else	See if the words are completely or mostly composed of chemical symbols (e.g. BANANA = Ba Na Na, or HECTARE = He C Ta Re)
A list of words all of the same length	Seeing if the words can be put into a word ladder (e.g. COLD -> CORD -> CARD -> WARD -> WARM)
A “word” in alphabetical order	Anagramming, possibly adding or removing a letter (e.g. ADEIIKPW = WIKIPEDIA, AABMNTU = BATMAN + U)
A long sentence with little actual content	Looking at the first letter of each word, or looking at capitalized letters.
A long sentence with little actual content	Looking for thematic substrings (that can cross word boundaries, so e.g. MARGARITA LYCHEE contains ITALY)
Crossword clues	Google the exact clue + the word “crossword” (e.g. the first result when on Google for “Animation collectible crossword” gives the answer CEL)
Crossword clues with numbers besides them	Treating the numbers as the length of the answer to the crossword clue
Pairs of words	Concatenating the pairs and see if you can form a new word using the ending letters from the first word and beginning letters from the second (e.g. THERMOS + COWARD has MOSCOW in the middle)
Pairs of words of the same length	Seeing if the same letter appears in the same position (e.g. CANDY and SONAR both have an N in the 3rd position)
Pairs of gibberish	Interweaving the gibberish (e.g. HMNUU and OUCLS becomes HOMUNCULUS)
A word search	Look at the remaining letters

A normal crossword	Looking for clues with unnatural wording																
A normal crossword	Reading down the diagonals																
Two crosswords with the same layout	Overlaying them and looking for the same letter in the same position																
A grid of letters or bigrams	Form (usually related) words by selecting one square from each column (e.g. <div data-bbox="824 548 1409 810" data-label="Table"> <table border="1"> <tr> <td>N</td> <td>AL</td> <td>A</td> <td>M</td> </tr> <tr> <td>C</td> <td>D</td> <td>IU</td> <td>N</td> </tr> <tr> <td>L</td> <td>E</td> <td>O</td> <td>UM</td> </tr> <tr> <td>SO</td> <td>E</td> <td>CI</td> <td>D</td> </tr> </table> </div>	N	AL	A	M	C	D	IU	N	L	E	O	UM	SO	E	CI	D
N	AL	A	M														
C	D	IU	N														
L	E	O	UM														
SO	E	CI	D														
A list of bigrams	Treat them as state abbreviations or chemical elements																
A grid	See if some lines are thicker than others (e.g. a 16x16 grid might have thicker lines to indicate a 4x4 grid of 4x4 squares)																
A grid partially filled with numbers or other non-letter symbols	Treating it as some sort of Nikoli puzzle and solving it																
A 4x4 grid where 15 of the squares contain things	Treating the grid as a 15 puzzle																
A 3x2 grid or a 3x2n grid	Using braille																
A 5xn grid	Using binary (each row/column of 5 = a number from 1 to 26 in binary)																
Groups of 8 or 7, or something with dimension 8 or 7.	Using ASCII																
Pictures	Reverse google image searching them																
Chemical elements	Looking at their positions on a periodic table. Maybe you can trace out letters or they all lie in the same row / column.																

The word Caesar in the title or flavortext (e.g. Julius Caesar, Caesar salad, Caesar Palace, etc.)	Caesar shifting (http://rumkin.com/tools/cipher/caesar.php)
Something in the title or flavortext that hints at England	Translating between British and American English (e.g. TOILET ⇔ LOO or ELEVATOR ⇔ LIFT)
Something in the title or flavortext that hints at England	Cockney rhyming slang (e.g. “Apples and pears” = STAIRS)
Triplets of cities	Using semaphore by plotting the cities on a map, and treating one city as the “center” and the other two cities as the “hands”
A recipe	Finding a dish that actually corresponds to the recipe (it is helpful to google some 2 or 3 lines of the recipe together)
Words with a high frequency of b’s, d’s, f’s, g’s, h’s, j’s, l’s, q’s, t’s, or y’s	Thinking about ascenders and descenders.
A series of directions (up down left right)	Tracing them out as paths to make letters
20 triangles	Making an icosahedron
12 pentagons	Making a dodecahedron
Basic colors (e.g. red, orange, yellow, green, cyan, magenta, blue, etc.) but not shades	Mixing colors, either additively (i.e. as light) or subtractively (i.e. as paint).

Flavortext Dictionary:

- “Elements”, “Elementary”, “Row”, “Period”, “Chemical”, etc: Look at chemical elements.
- “Blind”, “Seeing”, “Raised”, “Dots”, etc: Use Braille
- “Bit”, “Zero”, “One”, “Bite”, etc: Use Binary
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