

# Solution to ScRaBBAI

By Everett Yip

The goal in solution of this puzzle is pretty straightforward from the instruction text: determine the layout of the board such that the final word played can be found. The only non-trivial variation in the depicted game from that of Scrabble are the tiles used. From the decorative element along the side of the same board provided as well as the strange capitalization interspersed in the instruction text and the bizarre derivation of the game name, it can be inferred that the tiles consist of symbol names of elements from the periodic table of elements, while the associated point values for each is the element's atomic number. This gives the complete set of available tiles with which to solve the puzzle.

Note the following implications of this scheme:

- Some tiles contain more than one letter. When placed on a letter bonus square, it is the tile score that is used to derive the bonus; the number of letters actually on the tile is irrelevant.
- Only a subset of all English words can be produced by combining (concatenating) these tiles. This provides some limits with which to determine valid answers to clues provided.
- A given word that is "spellable" using ScRaBBAI tiles may actually have multiple tile combinations that can produce that word. For example, the word "cup" can be constructed using three tiles [C][U][P] (i.e. with the letters 'C' and 'U' appearing on separate tiles) or two [Cu][P] (i.e. with both of those letters on the same tile.)
- Two words which cross must intersect on a common tile, regardless of the number of letters on it. Both words obviously must use that tile in their combination scheme at the location of intersection.
- No limit on the tile length of words implies that certain bonus combinations that cannot be achieved in Scrabble are available here.
- The letter length of a word is not necessarily the same as the tile length of any of its renderings.

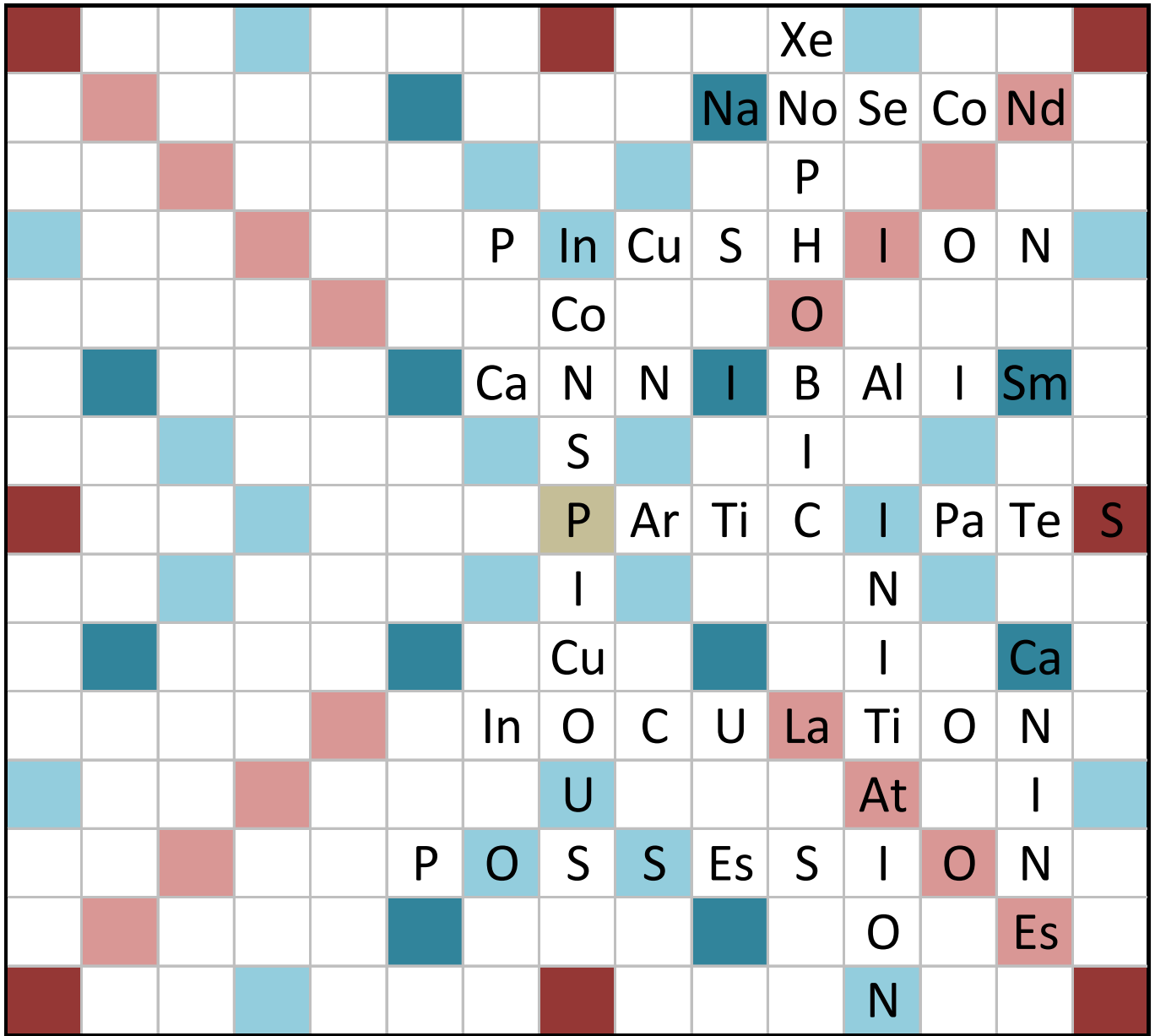
Solving this puzzle is simply an exercise in deduction by






- 1) Determining each of the words from clues given,
- 2) finding the location on the board for each of the words, in order, by considering each word score, and
- 3) inferring the final word from the available places on the board as well as its score and meta-clue.

Depending on the word and the location on the board, the actual tile breakdown is generally deducible at step 1) or 2), or a combination of both, for that play.

The following list shows, for each turn, the clue given, the word played, its tile breakdown, associated bonuses, and play score. After that, the configuration of the board is shown. The final word played, which also is the answer to the puzzle, is **INCONSPICUOUS**.

Round	Clue		Word Bonus	Word Score
1	Involves oneself with; engages oneself in	Tiles <b>P A R T I C I P A T E S</b>		1956
		Scores 15 18 22 6 53 91 52 16		
		Bonuses ×2	×6	
1	Formalized admission into a group or status, sometimes with a ceremony	Tiles <b>I N I T I A T I O N</b>		590
		Scores 53 7 53 22 85 53 8 7		
		Bonuses ×2	×2	
2	Having an abnormal fear of the strange or foreign	Tiles <b>X E N O P H O B I C</b>		488
		Scores 54 102 15 1 8 5 53 6		
		Bonuses	×2	
2	A small firm pillow stuck with needles or pins as a means of holding them until they are needed.	Tiles <b>P I N C U S H I O N</b>		454
		Scores 15 49 29 16 1 53 8 7		
		Bonuses ×2	×2	
3	One billionth of a second	Tiles <b>N A N O S E C O N D</b>		512
		Scores 11 102 34 27 60		
		Bonuses ×3	×2	
3	An owned article	Tiles <b>P O S S E S S I O N</b>		524
		Scores 15 8 16 16 99 16 53 8 7		
		Bonuses ×2 ×2	×2	
4	The eating of flesh of an animal by another animal of the same type	Tiles <b>C A N N I B A L I S M</b>		450
		Scores 20 7 7 53 5 13 53 62		
		Bonuses ×3 ×3		
4	Vaccination	Tiles <b>I N O C U L A T I O N</b>		498
		Scores 49 8 6 92 57 22 8 7		
		Bonuses	×2	
5	Dogs	Tiles <b>C A N I N E S</b>		452
		Scores 20 7 53 7 99		
		Bonuses ×3	×2	
5		Tiles <b>I N C O N S P I C U O U S</b>		404
		Scores 49 27 7 16 15 53 29 8 92 16		
	<i>Final Word</i>	Bonuses ×2		



-  Triple Word Score
-  Double Word Score
-  Triple Letter Score
-  Double Letter Score
-  Starting Position (Double Word Score)

The final word appears vertically down the center of the grid, including the tile placed on the starting square. That word is **INCONSPICUOUS**.