UNUSUAL Puzzle

by Nick Ballard

This puzzle, originally entitled "An UNUSUAL Problem," was composed in 1990, when OSPD-1 was the North American word source. An expansive analysis of that classic version can be found at https://nackbg.com/scrabble/

The puzzle version described and illustrated below is updated for **NWL-2023** and relatively simplified.

In a 31-round tournament (with no head-to-head playoff), the top four prizes are:

1st = $10,000 2nd = $6000 3rd = $3000 4th = $1000

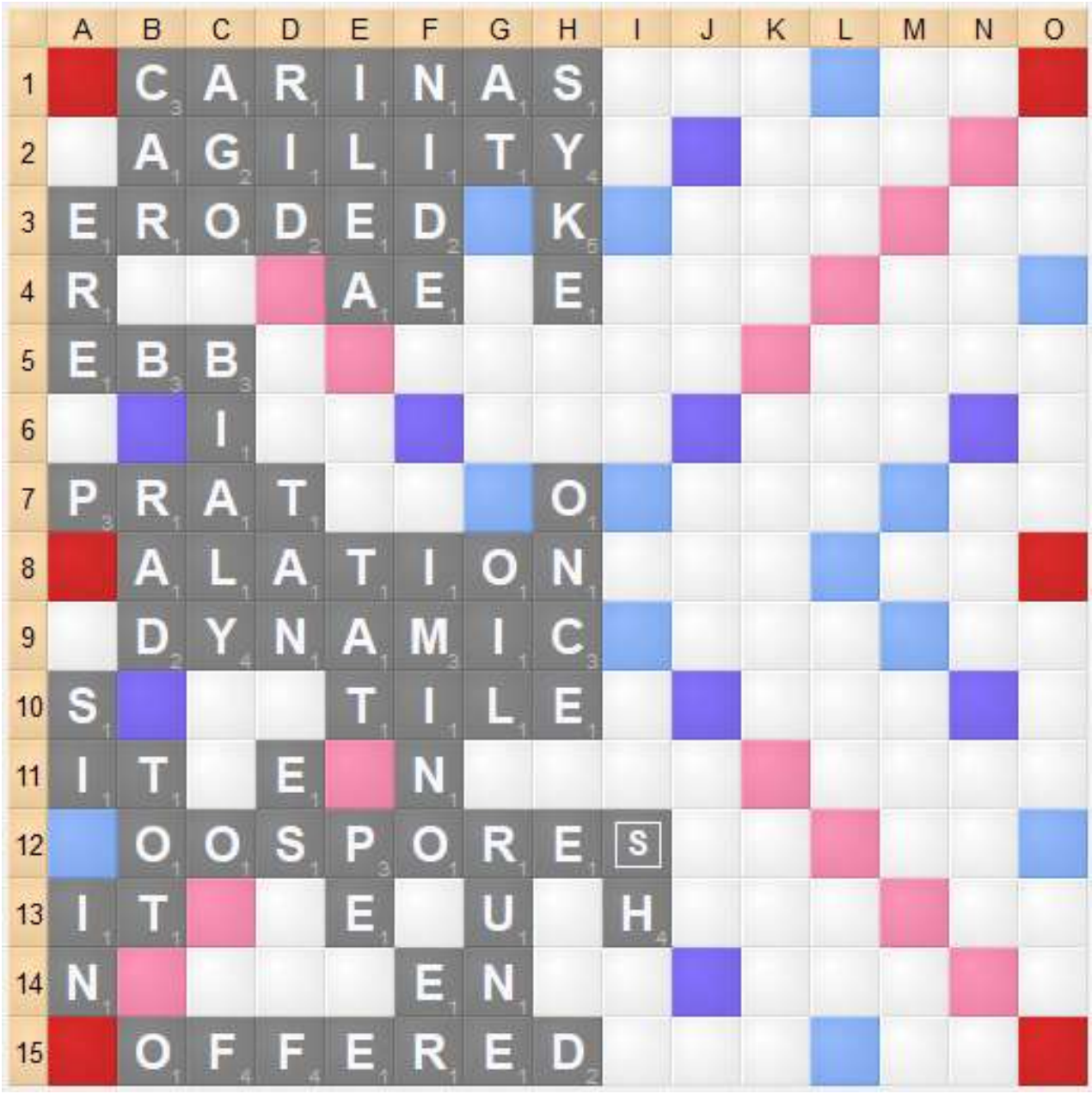
The two leaders have *already finished* the tournament. Here are their final win/losses and point spreads:

Will	24-7,	+2150
Xavier	24-7,	+2074

Through no fault of you or your opponent Zoey, your game started after the top games finished, and you already know Will and Xavier's final spreads. It is expected, though not 100% certain, that you or Zoey will end up in third place and the other in fourth place. (You can do no worse, as no one else started the final round better than 21-9.)

You	23-7,	**+1000**	(final game pending)
Zoey	23-7,	+1000	

Zoey has just bingoed with 15B OFFERED, to take a massive lead of 479 – 144. You are now on turn, trailing in this final game by **335** points! There are six tiles in the bag. Your rack and unseen pool appear below the diagram.
What is your best play in this unusual situation?



Unseen: **GGHJMOQVVWWXZ (13)**

Solution

Origin

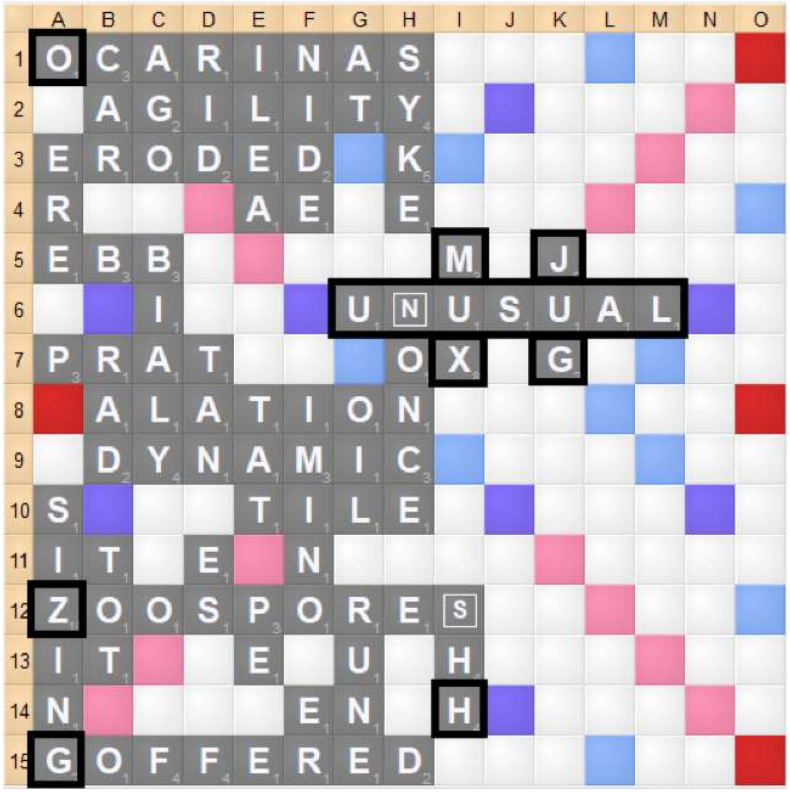
In the autumn of 1990, while traveling to tournaments, I circulated flyers that featured a puzzle—very similar to the one posed above—as a promotion for my Scrabble newsletter, the title of which spelled out my phone number M-E-D-L-E-Y-S (633-5397). The solution was published in the first issue of *Medleys* (January 1991).

One of the first subscribers, Stu Goldman, had a marvelous sense of humor. He mailed me a detailed handwritten chronicle pertaining to this position, upgrading the arcane designations of P (for Player) and O (for Opponent) to stand for the names "Preposterous" and "Opportunistic." Then he reconstructed the entire game as it might be played to reach the position at the stated score, with racks, plays and analysis: the works. We miss you, Stu.

I designed this composition for enjoyment at multiple skill levels. For less experienced players, I wanted the puzzle to seem non-trivial but still easy. The reader could find UnUSUAL and then spot the hook for the blank N above ONCE (possibly needing to check the dictionary for NONCE.) They could then write in to proudly submit their solution and hopefully include with it a $30 subscription check. It worked!

If you play your UnUSUAL bingo (at 6G, for 64 points), your best result is for Zoey's rack (which is *random,* noting that she just bingoed with OFFERED) to be GJQVVWW, which makes your final rack GHMOXZ.

In that case, the best endgame sequence for both sides is shown in the caption of the diagram **below**: Zoey JUG for 22, you MUX (37), and then she repeatedly passes while you play OCARINAS (30), SIZING (155) and SHH (8). You gain 52 from Zoey's rack, and when the smoke clears, despite having outscored her by 324 (!), you still come up short by 11 points: you lose the game 490-501.



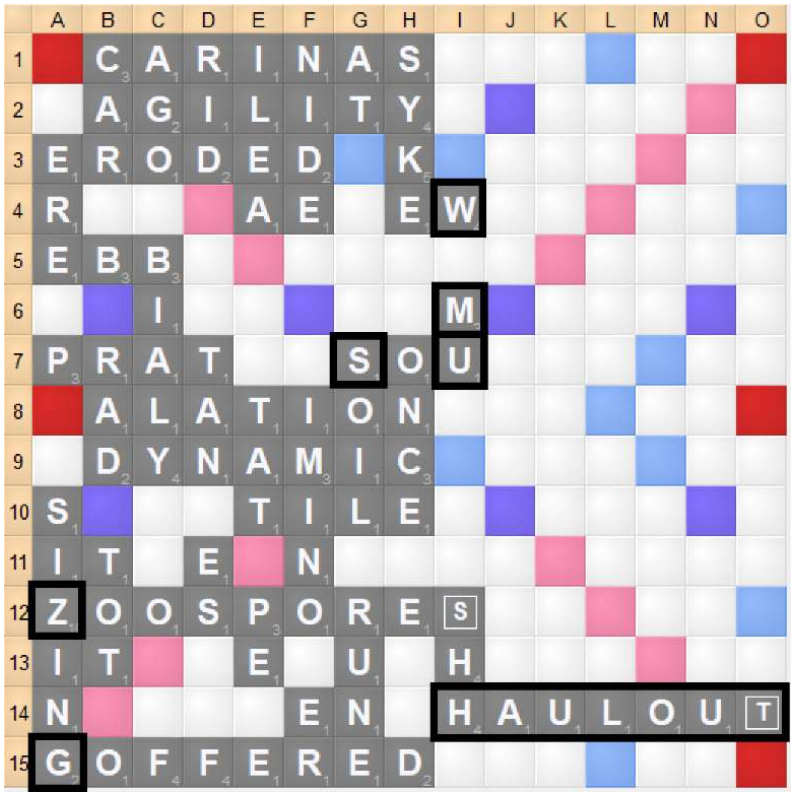
UnUSUAL, JUG, MUX + OCARINAS + SIZING + SHH = –11

Heart of the Puzzle

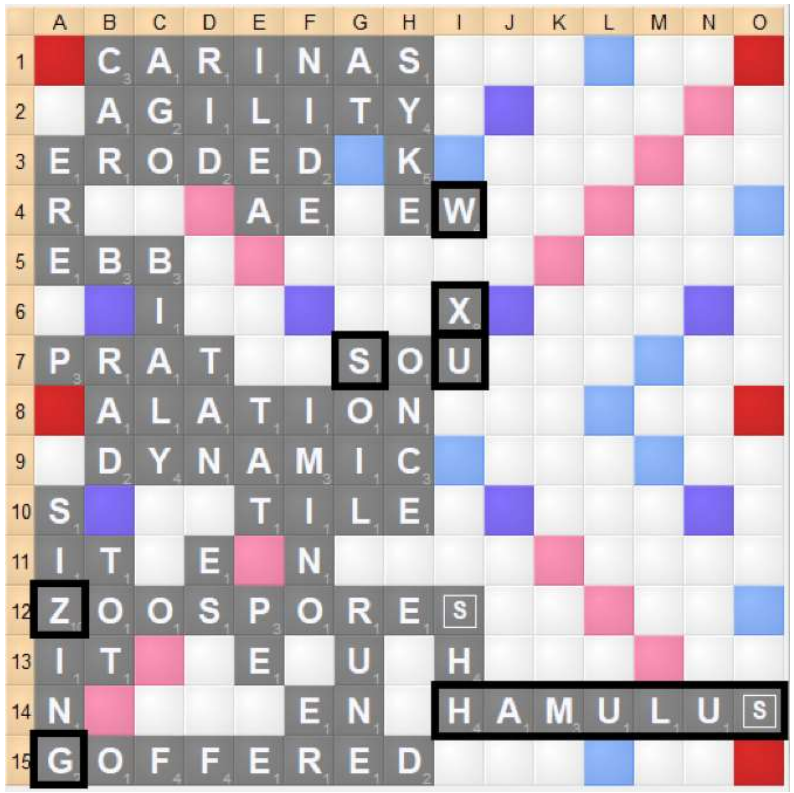
Experts paying attention to the stated problem conditions—realizing that it is a must-win situation—looked beyond UnUSUAL. Examining the 13 unseen tiles, they figured out that if **GHMOVZ** is in the bag and if five or six of these tiles could somehow be combined with the A and/or the blank on their rack, their reward would be to play a word that stretches from top square to bottom square on the far left column!

Notwithstanding, the methods by which these savvy experts sought to piece together this gigantic word varied considerably. A few of them recommended exchanging five tiles, keeping the A and the blank. This is certainly the most direct way. However, either they miscounted the (13) unseen tiles, or they forgot a rule; it is illegal to exchange when there are fewer than seven tiles in the bag.

It may seem as if I am overemphasizing the importance of playing a 15-letter word. Some are better than others. In this situation, though, we are potentially looking at a triple-triple-triple bingo that scores up to 1436 points. If you can land it, you will not only turn around the game; you might win the whole tournament!



SOU, EW, SIZING, MU, HAULOUt = –19



SOU, EW, SIZING, XU, HAMULUs = –34

So, SOU me

You can fish for a different bingo by playing 7G SOU. If Zoey has GJQVVWW, she plays 4H EW, and if you draw GZ for SIZING (155), and if Zoey has drawn the M, and X is the last tile in the bag, she plays MU and you go out with HAULOUt (80). You collect 80 from Zoey's rack but still lose by 19. (See **left-hand** diagram **above**.)

A more likely bingo variation: Zoey has any seven of GJQVVWWX, you draw GZ, and O is the last tile in the bag. She plays EW and XU while you play SIZING and HAMULUs and lose by 34. (See **right-hand** diagram **above**.)

However, when followed up properly, SOU aims its sights much higher than a pedestrian bingo. After Zoey plays EW, you can instead empty the bag with J6 ULU (9)! Typical playouts appear in the diagram pair **below**.

Your grand plan culminates in playing the triple-triple-triple OVEREMPHASIZING (abbreviated "OV" in the chart below) for more than 1300 points, like pulling a rabbit out of a hat. If you succeed, more than half the time you will tie for second place, and you even have a chance to acquire *sole* second place. Poor Xavier!

G-rack playout: SOU and SOUL both take 2nd prize

M-rack playout: SOU ties for 2nd prize, SOUL gets 3rd

The "G-rack" scenario occurs when Zoey has initially drawn GJQVWWX, plays the W and draws the other G. The full G-rack sequence (starting with your SOU and Zoey's EW) is spelled out in the first row of the chart below. The result is a 1097-point win (highlighted in green), which gloriously vaults you into second place for the $6000 prize. The final position is shown in the **left-hand** diagram **above**.

The "M-rack" scenario occurs in seven related rack-draw possibilities. Zoey starts with seven of the eight tiles GJMQVWWX, plays the W, and draws whichever replacement tile gives her the follow-up rack of GJMQVWX. The full M-rack sequence is spelled out in the chart below. The result is a 1074-point win (highlighted in yellow), which earns you a tie for second place ($4500). The final position is shown in the **right-hand** diagram **above**.

The main reason that you outscore Zoey by more in the left-hand diagram (where Zoey gets both G's) is because playing the blank as a G costs you "only" (2 x 27) + (2 x 3) = 60 points relative to playing an actual G tile. By comparison, in the M-rack situation (on the right), replacing the M with a blank costs you 3 x 27 = 81 points.

For the rest of the rack/draw situations (V, H or O), you get 3rd prize. Based on the tournament situation laid out in the intro, you receive the same amount ($3000) whether you win this final game by 1 point or by 1073 points.

SOU	Rack Pr /1716	Draw	Draw Pr /6	Prob /10296	Sequence	Gain	Game Margin	
					G-rack sequence		SOU	SOUL
GJQVWWX	4	G	1	4	SOU+10, EW-5, ULU+9, XU-18, OV+1376 + 60	1432	**1097**	1094
GJMQVWW	4	X	1	4	M-rack sequence (as diagrammed above): SOU+10, EW-5, ULU+9, MUX-16, OV+1355 +56	1409	**1074**	1071
GJMQVWX	8	W	1	8				
GJMQWWX	2	V	2	4				
GJMVWWX	4	Q	1	4				
GJQVWWX	4	M	1	4				
GMQVWWX	4	J	1	4				
JMQVWWX	2	G	2	4				
GJQVVWW	2	X	1	2	V-rack sequence: SOU+10, EW-5, ULU+9, XU-18, OV+1324 +64	1384	**1049**	1046
GJQVVWX	4	W	1	4				
GJQVWWX	4	V	1	4				
GJVVWWX	2	Q	1	2				
GQVVWWX	2	J	1	2				
JQVVWWX	1	G	2	2				
GJQVWWX	4	H	1	4	H-rack sequence (just twice): SOU+10, EW-5, ULU+9, XU-18, OV+1316 + 64	1376	**1041**	1038
HJQVWWX	2	G	2	4				
GJQVWWX	4	O	1	4	SOU+10,EW-5,ULU+9,OC-30,pONCE+6,OV+546+72	608	**273**	270
Total winning rack/draw combo = 64/10296 [O-rack sequence is on the row above, one instance]								

The O-sequence is a special case: After playing EW, Zoey draws the O and slips it onto A1 (where you would have put your blank), and your 27-times bingo is diminished to a 9-times non-bingo. Aside from that and a minor twist in the M-sequence (MUX replaces XU), the other sequences are identical. Differences in margin are primarily due to the size of the haircut when the (zero-value) blank substitutes for a real-letter tile.

If Zoey can play two tiles immediately after SOU (e.g., EGG, SOUGH), she pulls two tiles from the bag (when you can afford only one) and you cannot win. Also, if she gets down the 155-point SIZING, her lead is insurmountable even though you can fire back a sizable (five-tile) triple-triple! Thus, no racks listed above contain GG, GH or GZ.

SOUL of the Puzzle

You win the game more often with SOUL (22 rack/draw situations compared to SOU's 17), because if Zoey holds **GH** plus any five of JQVWWX (the five entries in the second chart), she is denied the two-tile reply of SOUGH. Instead, she has to settle for EW, ULU, XU, when you go out with OVEREMPhASIZING and win by 1038.

SOUL (additional)	Rack Pr /1716	Draw	Draw Pr /6	Prob /10296	Sequence	Gain	Game Margin
GHJQVWW	4	X	1	4	H-rack sequence (five more ways): SOUL+11, EW-5, ULU+5, XU-18, OV+1316 + 64	1373	**1038**
GHJQVWX	8	W	1	8			
GHJQWWX	2	V	2	4			
GHJVWWX	4	Q	1	4			
GHQVWWX	4	J	1	4			
Additional winning rack/draw combo = 24/10296 (SOUL wins 88/10296 altogether)							

SOUL's other 17 final margins are squeezed into the far right column of the (previous) SOU chart, where the sequences are identical except SOUL is played instead of SOU. All your final SOUL margins are *3 points lower.* (Without L hooking, SOUL + ULU scores less than SOU + ULU.) Most notably, in the M-rack scenario, played out in the **right-hand** diagram above, SOU wins by 1074, whereas SOUL critically wins the game by only 1071.

The number of possible ways to win may seem dizzying, but there is a lot of transposition. For you to win, Zoey must end up with one of only five different racks on her *second* turn (after playing EW and drawing a tile). She always acquires GJQVWX plus G, M, V, H or O, against which SOUL attains a final margin of 1094, 1071, 1046, 1038 or 270, respectively. SOU gets 3 points extra, but it loses (to SOUGH) in five of the seven H-rack scenarios.

We can quantify in equity dollars the difference between the two plays. With an extra 24 units (the second chart subtotal), SOUL (but not SOU) wins the game, for a gain of $2000. Offsetting that (see the M-rack sequence), with 32 units SOU (but not SOUL) ties for 2nd prize (instead of settling for 3rd); you nab an extra $1500. As 24 x $2000 is equal to 32 x $1500, the difference is zero: SOU and SOUL have identical equities!

In terms of just winning the *game* (ignoring chances to win higher tournament prizes), SOUL is easily better than SOU (by 88 units to 64 units), and *any* legal play you can make other than SOUL or SOU pales by comparison.

Going for the Gold

Some experts noted the merits of SOU and SOUL, though in the lexicon used in 1990 (OSPD-1), ULU and EW were unacceptable words. The only chance to play the 15-letter word as a bingo was if Zoey held GJQVVWW and you drew the X immediately (so as to shed your second and third U via LUX and XU). As a consequence, you were much less likely to win the game by a four-digit margin, and some variations involved struggling with two-U racks and needing specific tile-picking orders just to play OVEREMPHASIZING in two or three stages.

In this modern version of the puzzle (with ULU being good, and despite EW being good), SOU and SOUL give you more ways not only to win the game (for third place) but also more ways to share second/third or win second prize.

From the standpoint of equity, it is possible to aim *even higher* with this four-step plan:

1. "Freeze" Zoey's rack: block all legal moves she can make if she holds **GJQVWWX**.
2. Play off all your other initial tiles except the A in such a way that Zoey cannot make a play and draw a tile.
3. Accumulate the GHMOVZ tiles from the bag onto your rack.
4. Bingo out with (3x3x3) OVEREMPHASIZING for 1436 points (plus twice Zoey's tile values).

How do you pull off step 1? The key is to *burn your blank!* This has two benefits:

- It blocks both the I4 and I7 squares, thereby preventing Zoey from playing a tile. (No *non*-blank play from your rack can achieve this.) Otherwise, the points that Zoey scores in one or two turns along with some reduction in rack penalty, combined with the A-column points elucidated in the second bullet point (below), will likely determine which of the top three prizes ($10,000, $6000 or $3000) you take home.

- You score higher with a *non*-blank tile on the A-column. The difference is substantial, because the score of each tile is multiplied by 27, plus extra for a premium square and/or hooking a cross word. Compared to the blank, the letter value is boosted as follows: O +30, V +112, M +81, H +120, A +28, Z +560 or G +60.

Blank-burning Plays

To start with, allow me to demonstrate that even a *clumsy* blank-burning play offers winning chances.

No move with the blank gives you any hope if Zoey is able to play a tile before you empty the bag. To prevent that, you can place tiles on both squares adjacent to a vowel with I4 **LUSh** (6): see the **left-hand** "close up" diagram below. You are still in a quandary, though, because the two U's on your rack play nowhere on their own, and you cannot afford to combine them with your A or any of the letters that you draw (GHMOVZ)—you need *all seven* of them for the A-column. Meanwhile, the U's occupy valuable space on your rack; you have to operate around them.

Clarification: to succeed after LUSh, GHMOVZ must be in the bag, so that you can combine them with your A and play the coveted 15-letter word. You know that this has a non-trivial chance of success once Zoey has passed.

In order to win, the rest of the parlay you need is that neither G nor Z is the last tile in the bag (the odds being 2:1 in your favor.) Your best initial draw includes GZ (20%) so that you can play SIZING (155); this empties the bag, and with an accumulated rack of AMOVZ (+UU), you can play OVEREMPHASIZING as a (five-tile) triple-triple for 409 points. You're still stuck with unplayable U's, so the game gets passed out and you win by 273.

In the more likely event you do *not* draw GZ, you can start with OCARINAS (30) and if your next tile pairs GZ (otherwise you lose), you play SIZING (155), draw the last tile (H, M or V) and finally play OVEREMPHASIZING as a 4-tile play—a simple triple for 169 points. After the game is passed out, you emerge with a 25-point victory.

LUSh yields no follow-up U play

pUS + pUL is a blunder, allows XU

uPS+pUL safely rids a second U

Fortunately, you don't have to occupy *both* I4 and I7. A three-tile play, either from I4 to I6, or from I5 to I7, suffices to block both squares. Given that, is there a sequence that allows you to shed *two* U's instead of one?

Yes, but care is required. For example, if you play I5 pUS and then 5I pUL, shown in the **center** diagram above, such exposure of a U lets Zoey beat you by playing the X (at the little blue "x") and drawing the last tile in the bag.

The careful way is shown in the **right-hand** diagram: I5 **UpS** (6) + 6I pUL (or I4 SUp + 6I pUL, which also works). There, the presence of a tile to the left of the little "x" protects you from being punished by XU.

After UpS + pUL, with only one U burdening your rack, you are guaranteed to win by either 278 or 290 points. If the O is in the bag, you play SIZING; otherwise, you play OCARINAS. Either way, you collect the last tile in the bag and play the other five or six tiles together onto the A-column. (You eat the U, and Zoey eats GJQVWWX.)

To achieve a meaningful leap in your winning margin, you need to shed the third U. The key is to get all seven tiles slated for the A-column on your rack *at the same time*, so that you can score a 27-times bingo, instead of a 9-times non-bingo. Moreover, you can *go out* and collect double- instead of single-value from Zoey's rack.

Suitable for this purpose is a word that you rarely see played: **SUS**—and there are four different (relevant) ways to play it! The first letter can start at either I4 or I5, and the blank can stand for either the first S or the second S.

In all four SUS cases, you can shed both the second and third U with SULU next turn. However, there are subtle differences between these four candidates, each one deserving its own mini-diagram (mini-1 through mini-4).

Mini-1

Mini-2

As before, let us assume that Zoey holds GJQVWWX, and (therefore) GHMOVZ is in the bag. Otherwise, no blank-burning play can deliver the giant win you crave.

Mini-diagram 1 (**above, left**): You get 3 points for **I5 SUs**, followed by another 8 points for SULU (on a double-word score). After these two plays, you have shed *all three* U's, unburdening your rack.

Wait! Zoey gets to make a play (JUG)—isn't that verboten? No. You still win because you already played your sixth tile: you *emptied the bag*. In the previous central diagram (pUS + pUL), you play only *five* tiles; there, Zoey (plays XU and) draws the last tile in the bag and you fail to acquire all the letters you need for the A-column.

After JUG, you play the 15-letter word, stick Zoey with QVWWX, and win the game by 1150 points. Suddenly, you leapfrog over Xavier and *tie for first place*. This is a much better result than third place after UpS + pUL!

Mini-2 (**above**, **right**) and mini-3 (**below**, **left**): You score 2 fewer points for **I4 sUS** + SULU or **I4 SUs** + sULU than those two words score in mini-1. On the other hand, Zoey's JUG scores 11 fewer points (it misses the double-word score) in mini-2 and mini-3; instead of tying for first place, you win *sole* first place. Step aside, Will!

Mini-4 (**below, right**): As with mini-2, JUG hits you for 11 extra points (22 instead of 11.) However, sUS + sULU scores 12 points, which is 1 more than in mini-1. You win by 1151—just enough to slip you into sole first place!

So, mini-4 captures first place by only 1 point, compared to the 9-point margin attained in mini 2 or mini-3. That difference, though, is immaterial; $10,000 is won with all three choices. (Only mini-1's tie cashes less: $8000.) That stated, due to another aspect yet to be revealed, *all four* SUS options yield a different equity. Read on.

Mini-3

Mini-4

eXiGent circumstances

The unseen pool is GGHJMOQVVWWXZ. For you to burn the blank and have any chances to win, the H or M (playable near I13) cannot be on Zoey's rack. Nor can she have the Z or second G, because at a minimum, you need to play SIZING. You must assume she has a frozen rack of **GJQVVWWX minus one** tile (six possibilities).

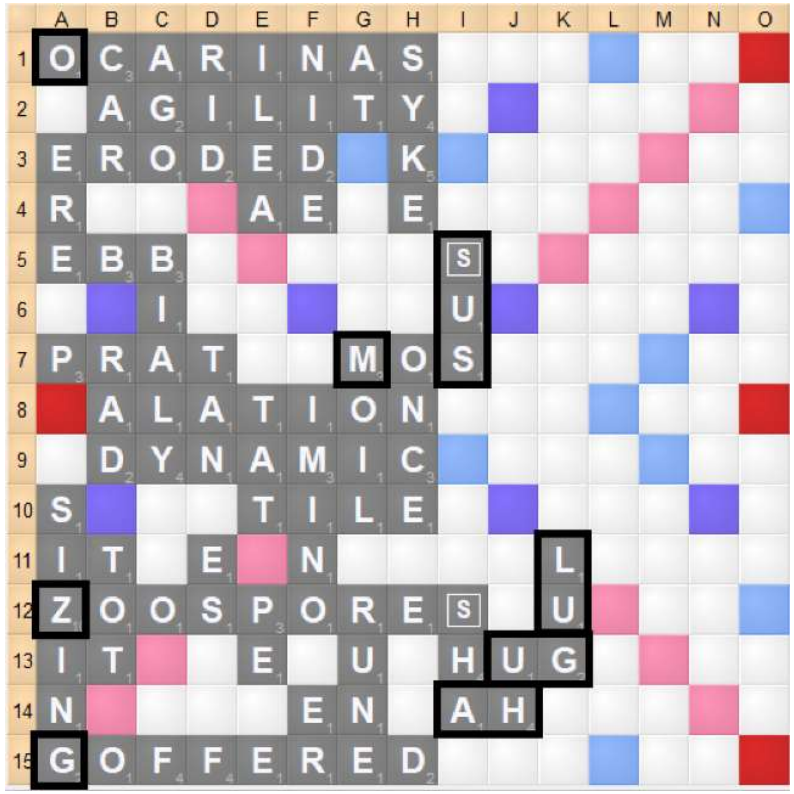
For a crisper explanation, I describe these six racks as –G, –J, –Q, –V, –W and –X. The correlating bag content is GHMOZ +1, described as +G, +J, +Q, +V, +W and +X. Example 1: if Zoey's frozen rack is –J (i.e., GQVVWWX), the bag is **+J** (i.e., GH**J**MOZ). Example 2: if her frozen rack is –V (the "main rack"), the bag is **+V** (the main bag), when you are poised to draw the perfect six tiles and you can win not only the game but also the whole tournament.

Remarkably, with a **+X** bag, you still win the game after any of the four SUS plays. If the X is in your initial draw (a 50% chance), you nimbly switch (from the now hopeless SULU or sULU) to the sequence in the **left-hand** diagram **below**. If your placement is I5, you win by 11 points with sUS or by 10 with SUs). If your SUS is *a line higher* (mini-2 or mini-3), instead play J6 HUM (creating 6I SH or sH) with your last three tiles, for a 3-point win.

Another revelation: I5 sUS (in mini-4) also wins with **+G**. If you immediately draw two G's (a 20% chance)—i.e., GGH, GGM, GGO or GGZ—you abandon sULU and play the sequence in the **right-hand** diagram **below** and win by 3 points! The first two SUS options (from mini-1 and mini-2) fall just short because their SUS + MO (or MOs) combinations each score 4 points less, ending in a 1-point loss. I4 SUs (from mini-3) + MO salvages a tie.

In the SUS chart beneath the diagrams below, the mini-diagram plays are listed in the order in which they appear, which is also in ascending order of equity. All three sources of frozen-rack equity, where applicable, are included.

Mini-4: the X appears immediately: I5 sUS+ ILEAL+AX+XU+OCARINAS+SIZING+SUM+UH= +11

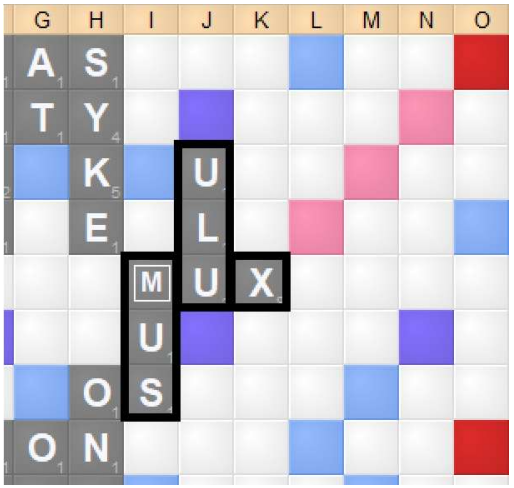


Mini-4: two G's appear immediately: I5 sUS + HUG + LUG + AH + OCARINAS + SIZING + MOS = +3

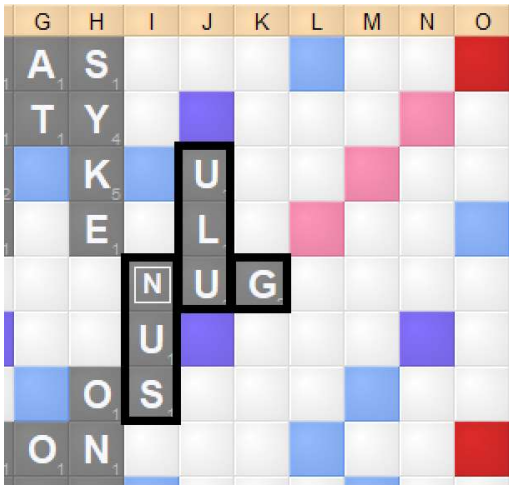
Mini-diagram	Play	Bag	RackPr /1716	Adj	Prob /10296	Prize	$ Prize	Equity over $1000 ($ gain over 4th / 10296)	Total Gain /10296	Games /10296
Mini-1	I5 **SUs**	+V	4		24	1st=	8000	24 x 7000 = 168,000	**I5 SUs** 180,000	30
		+X	2	50%	6	3rd	3000	6 x 2000 = 12,000		
Mini-2	I4 **sUS**	+V	4		24	1st	10000	24 x 9000 = 216,000	**I4 sUS** 228,000	30
		+X	2	50%	6	3rd	3000	6 x 2000 = 12,000		
Mini-3	I4 **SUs**	+V	4		24	1st	10000	24 x 9000 = 216,000	**I4 SUs** 229,200	30.6
		+X	2	50%	6	3rd	3000	6 x 2000 = 12,000		
		+G	1	20%	1.2	3rd=	2000	1.2 x 1000 = 1,200		
Mini-4	I5 **sUS**	+V	4		24	1st	10000	24 x 9000 = 216,000	**I5 sUS** 230,400	31.2
		+X	2	50%	6	3rd	3000	6 x 2000 = 12,000		
		+G	1	20%	1.2	3rd	3000	1.2 x 2000 = 2,400		

[I5 **USe** (not shown) yields the same equity as mini-2, its 1-point +X win employing ILEAL, 6I SH, 4H EM, EMU.]

Several other plays achieve results similar to I5 sUS (the last and best candidate in the above chart). We'll start with I5 **mUS** and I5 **nUS**, played in the same spot for the same score (6 points).



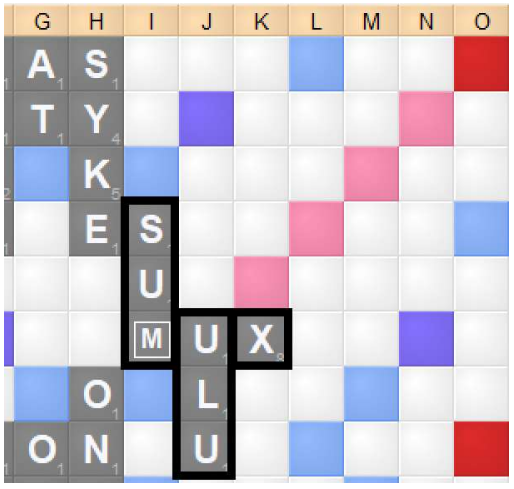
I5 mUS + ULU, MUX, OV- = +1157



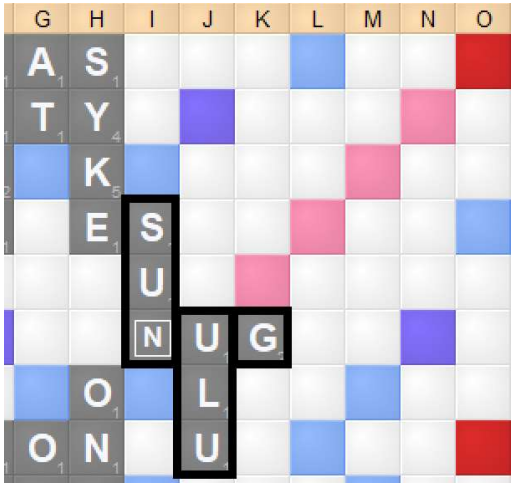
I5 nUS + ULU, NUG, OV- = +1181

Having designated the blank an M or N (instead of S), you can't follow with sULU. However, you can instead shed your U's with J3 ULU (see diagrams **above**). After emptying the bag, you still have to tolerate Zoey playing a tile (with MUx or NUg), but after bingoing out you win the game by 1157 or 1181 (respectively), securing first place.

I4 SUm and **I4 SUn** (4 points) is a sort of inverse to the previous pair: the S is played next to the other vowel and the words are relatively spelled upside-down. The pair of follow-ups (see **below**) is thematically the same.



I4 SUm + ULU, mUX, OV- = +1168

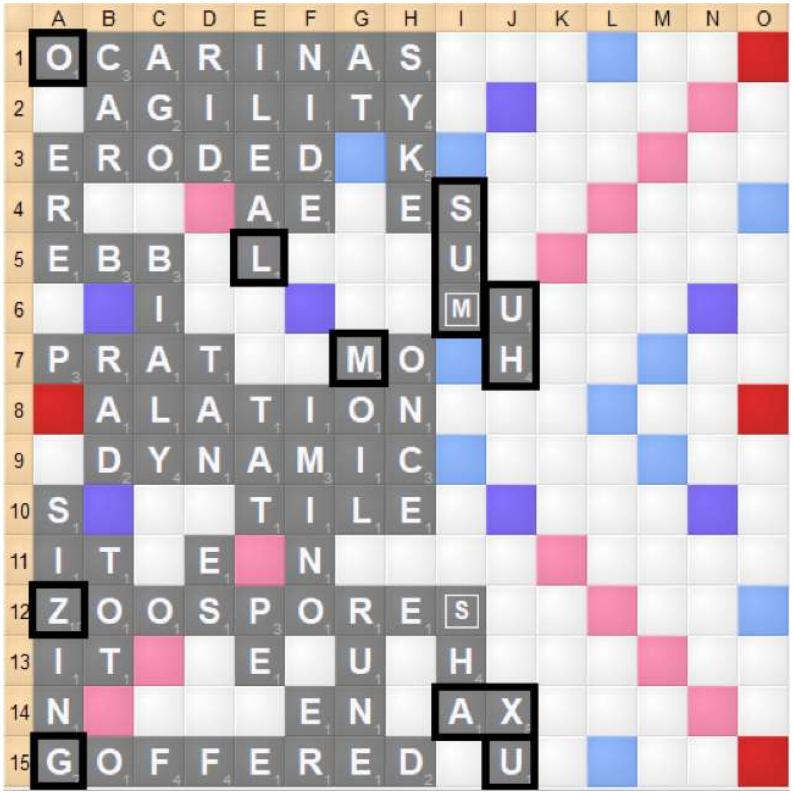


I4 SUn + ULU, nUG, OV- = +1186

With +X and +G bags, I5 mUS or nUS are able to win, and by bigger margins than against I5 sUS, because the blank-M or -N can be hooked with a U (the blank-S cannot), allowing J5 UH for a good score. (Refer to the Index of Positions at the end of the article.) I4 SUm manages a small win not only with +X (see **below**) but also with +G (unlike the I4 SUS's in mini-2 and mini-3) because at least a U can be dumped to the right of the blank.

I4 SUn can also win with +G, but it stumbles into a catch-22 with the +X bag. The parallel sequence with I4 SUm is shown in the diagram **below**, where UH is your out-play and you win by 1 point. The catch is this: when the blank is changed from M to N, you cannot play MO before UH due to SUnG/MOG. It's a heartbreaker, but the best you can do is play UH first and let Zoey play 6I nUG (3); then you go out with MO and lose by 6.

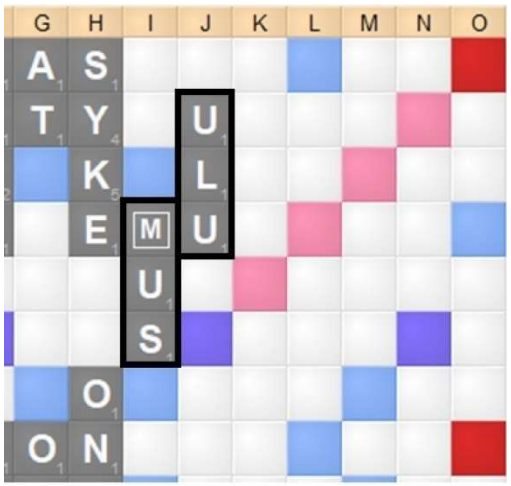
That SUn conflict does not manifest with +G, because Zoey has no G to play. Without the risk of SUN/g or nU/G, I4 SUn therefore wins by the same 5-point margin that I4 SUm does with +G. Refer to the Index of Positions.



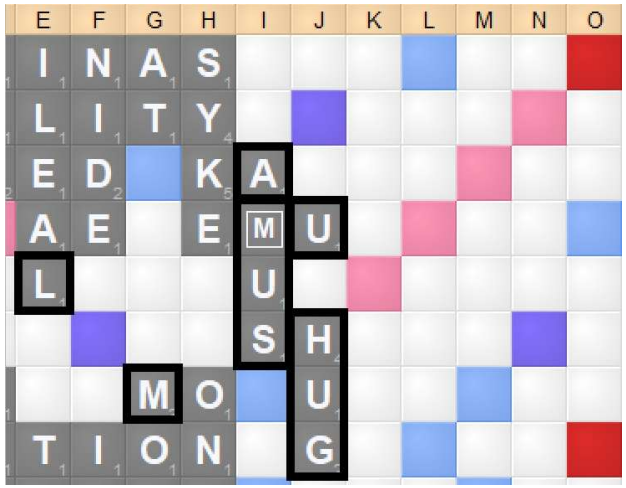
The X appears immediately: I4 SUm + AX + XU + ILEAL + OCARINAS + SIZING + MO + UH (last) = +1

Beware nUS at I4; Zoey plays En/G and draws a tile. However, **mUS** at I4 works (and more smoothly than does sUS at I4). This clever 3-point play is the *only* way to prevent Zoey from playing a tile *after* you shed your third U.

As shown in the **left-hand** diagram **below**, your follow-up is J2 ULU (7), hooking Em/U. The upshot of this invulnerable placement is that you are able to win the game by 1191 and cinch first place by 41 points, leaving Will in the dust. The extra points are not worth any extra money (all finishing margins above 1150 pay the same), but you *can* boast that you snagged the highest winning margin that is attainable in the position.



I4 mUS + ULU + OV- = +1191
(highest winning margin)



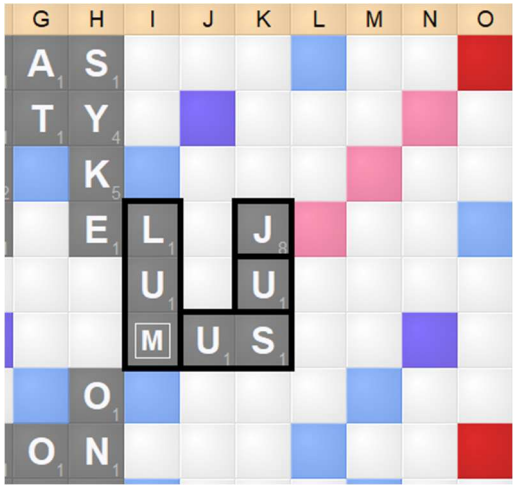
Two G's appear immediately: I4 mUS +
ILEAL+MO+OC-+SIZ-+HUG+AmUS+EmU= +4

I4 mUS also wins with +X and +G bags. With +X, apply the I4 SUm solution, except replace UH with SH + EmU (wins by 5). With +G, you can pull off a dazzling 4-point win with a sequence involving the front-hook of A/mUS followed by the back hook of Em/U (a key U dump), as shown in the **right-hand** diagram **above**.

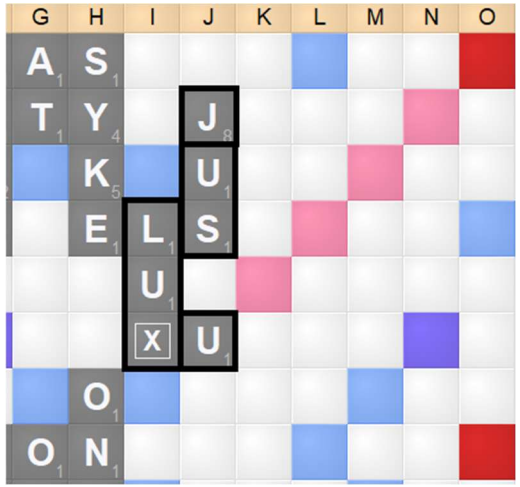
All the candidate plays we've examined up to this point that burn the blank also burn the typically valuable S. Instead, it is possible to save the S and initially play off the L. Resourcefulness is required, though, because without the L you are then unable to harness either of the convenient two-U-dump words SULU and ULU.

One such L-solution is **LUm** or **LUn** at **I4**, followed by mUS (or nUS) and then playing your last U (atop the S) with K5 US (which empties the bag); see the **left-hand** diagram **below**. After Zoey plays JUS, you go out with OVEREMPHASIZING and win the game by 1167, thereby procuring first place in the tournament.

It is critical to play the S with the *second* U, not the third. If, after LUm, you play mU (or after LUn, you play nU), Zoey can play her G or X with mUG or mUX (or nUG) and ruin your glorious victory by drawing a tile.



I4 LUm +mUS (or LUn +nUS) +US, JUS, OV- = +1167



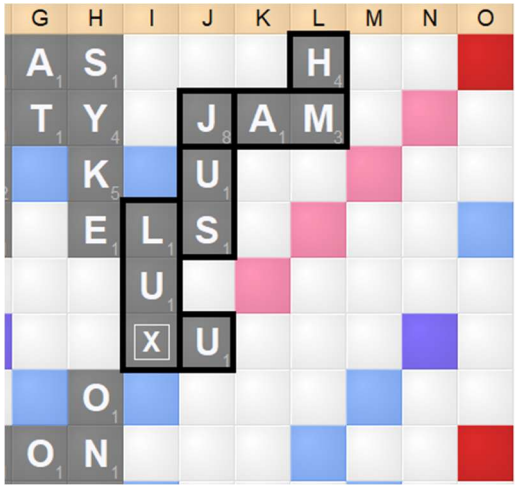
LUx + xU + US, JUS, OV- = +1151, (barely) first place

Another L-solution (same spot) is **I4 LUx**, followed by xU—see **right-hand** diagram **above**. As xU takes no hook (not even S), you instead finish off with J2 US. This sequence lets Zoey score an extra 16 points for her J (on J2), but you still go out with the 1436-point bingo and win the game by 1151, for a tournament spread of +2151. While this finale rates only 1 point better than Will's spread of +2150, it's all you need to take top honors in the big event.

I4 LUm (or LUn) and I4 LUx are also able to win with +X and +G bags. More context on that soon. First…

Juicing the J

J appears immediately: LUm/LUn/LUx + US + JAM + UM + AH + OC- + SIZ- = Tie

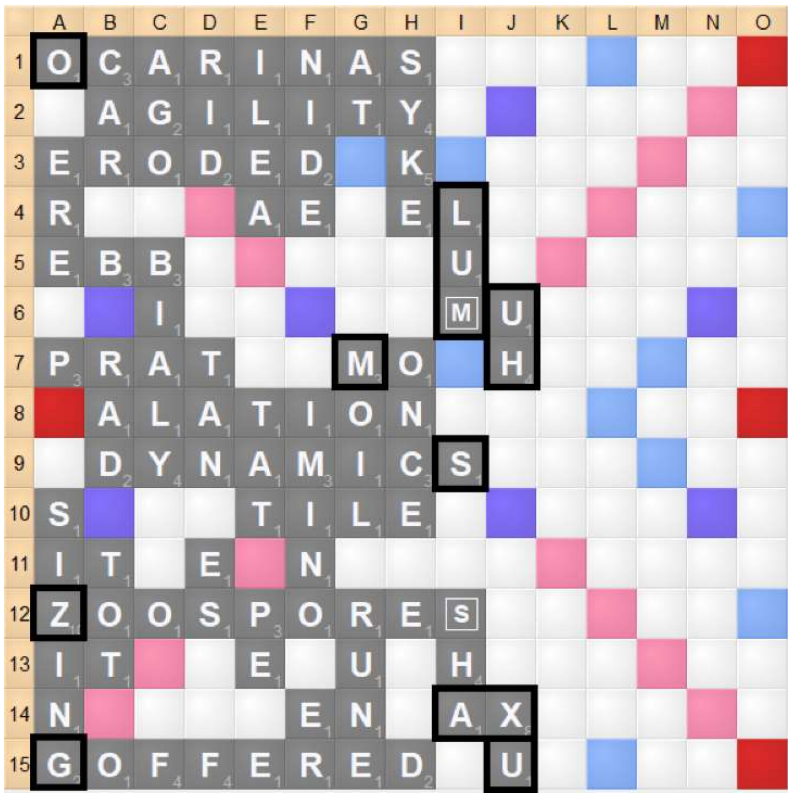


J appears as the fourth tile: LUx + xU + US + JAM + OC- + SIZ- + HM = you lose by 1

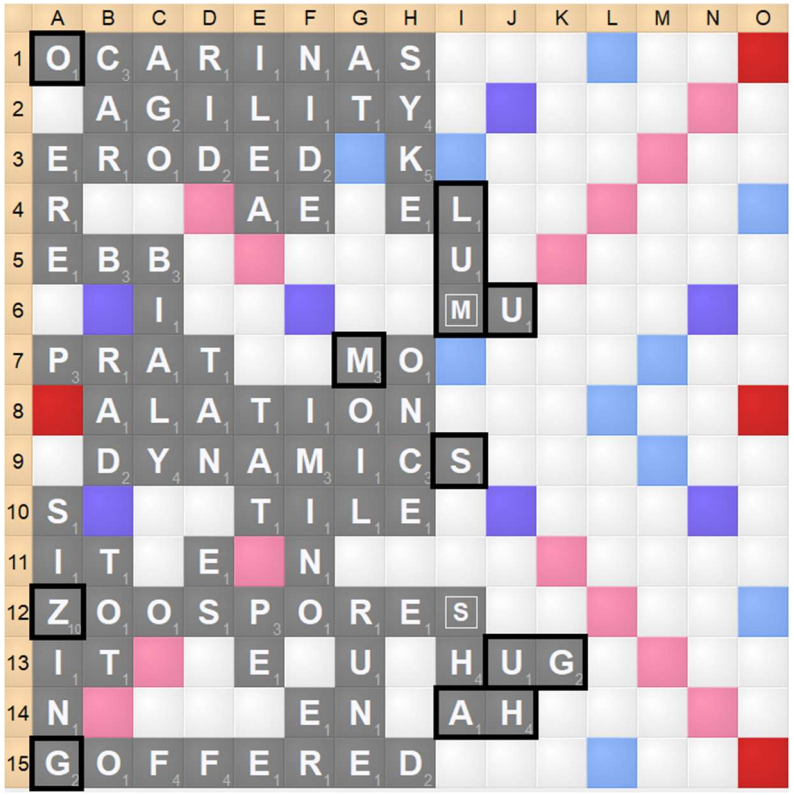
Amazingly, when your word at I4 is any of **LUm** or **LUn** or **LUx**, you can save the game with yet another bag: **+J**. If the J is one of the three tiles in your initial draw (50% chance), you switch (from nUS, mUS or xU) to J3 US (!), setting up a six-times J-spot. With the sequence captioned under the **left-hand** diagram **above**, you eke out a **tie**. (OC- and SIZ- are abbreviations for OCARINAS and SIZING, played on the A-column.)

If J is the *fourth, fifth or sixth* tile drawn, does LUx gain an advantage over LUm and LUn? After all, you play xU and US in any case, seemingly keeping both +V and +J bags alive. The flaw in that logic is that xU + HM in the **right-hand** diagram **above** scores 1 point less than UM + UH on the left, a difference that turns a tie into a 1-point loss. In a nutshell, xU (correctly prioritizing the +V bag) burns the +J bridge just as surely as does mUS or nUS. Therefore, accounting for all elements covered so far, I4 LUm, LUn and LUx at I4 (equally) share best-play status.

When you play I4 LUm, if you draw the X or two G's among the first three tiles (causing you to redirect your efforts to beating the +X or +G bag, respectively), the game-winning sequences are illustrated **below**.



X appears in the initial draw: I4 LUm +
DYNAMICS + AX + XU + OC- + SIZ- + MO + UH (last) = +8



Two G's appear in the initial draw: I4 LUm +
DYNAMICS + HUG + AH + OC- + SIZ- + MO + mU (last) = +12

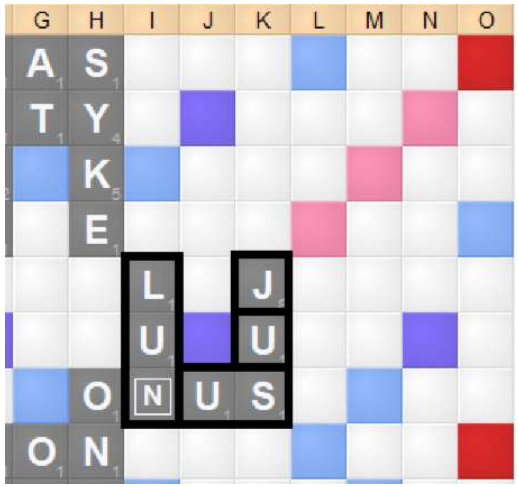
When you play I4 LUn (making the blank an N), the +X sequence is slightly different. If you play MO before UH, you get hit with LUn**G**/MOG; or if you play UH before MO, you get hit with mU**G**. Either way, you are prevented from drawing the last tile. The solution is to switch to J2 HUM with the last three tiles and win by 3 (instead of 8), hooking EL/M. [This HUM resource is unavailable when the initial play is I4 SUn, as "ESM" is not a word.]

When you get both G's, Zoey has no G for LUnG; the LUm result (**right-hand** diagram **above**) is the same for LUn.

Fourth-tile Fortune

Nevertheless, **LUx** has a subtle advantage over LUm and LUn above. With +V, your first-prize follow-up (see the last small diagram above the "Juicing the J" header) includes 6I xU, which *also* dovetails with the +X and +G bags. The same plays (albeit in a different order) apply after LUx as after LUm (see above diagrams, replacing blank-M with blank-X). The only difference is that on the left, U and H play separately (for 2 fewer points; not meaningful).

The point is this: as long as your (valuable) S is not yet committed to J4, xU can be part of a winning sequence with *all three bags* (+V, +X, +G). After LUx, if the key tile (the X or second G) is the fourth tile drawn, you can *still* win the game! On the fourth tile, your chance of drawing the X is an extra 1/6, and your chance of drawing the second G is an extra 20%. This fourth-tile subtlety for +X and +G elevates LUx above I4 LUm and LUn.

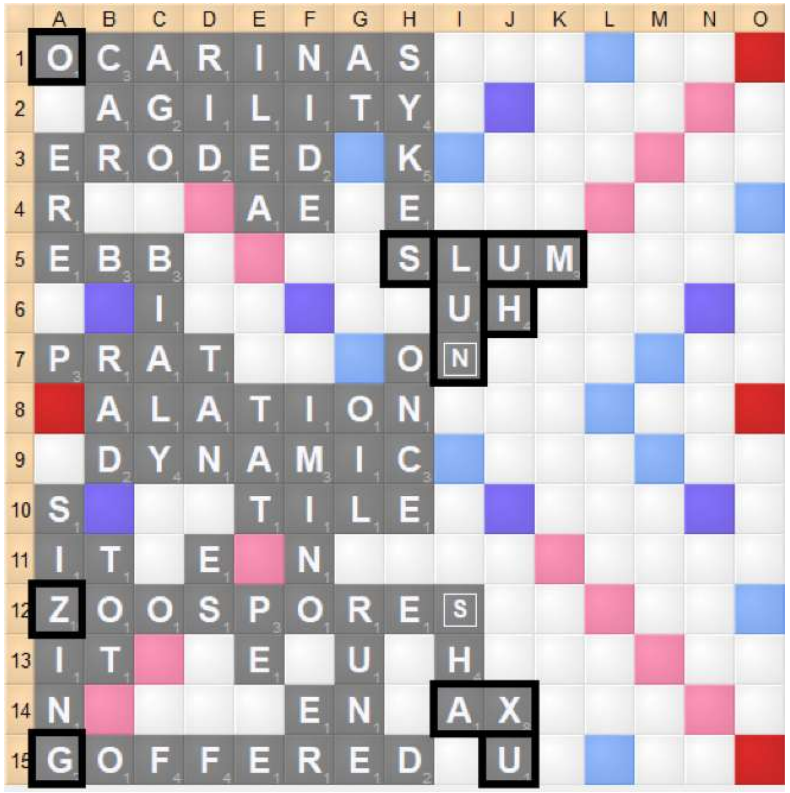


I5 LUn+ONUS+US,JUS,OV- = +1153

Finally, we arrive at the exquisite **LUn** at **I5** (one square lower). Conquering the +V bag (method illustrated **above**) is slightly trickier. You add US to your On to make OnUS, followed by playing the third U atop the S, emptying the bag. Zoey is able to play the J for 20, but you bingo out for 1436 points and leapfrog into first place (by 3 points).

I5 LUn also navigates wins with +X and +G; the optimal sequences are shown in the diagram pair **below**.

The third U is a nuisance, but the extra 4 points from L12 US (on the **right**) succeeds where K11 LUG fails when the initial play is I5 SUn (or SUs). [Even more dramatic demonstrations of the benefit of keeping the S instead of the L are: DYNAMIC**S** and the SYKE**S**/**S**LUM two-way hook outscore ILEA**L** by 7 and 8 points, respectively.]



X appears in the initial draw: I5 LUn +
AX + XU + OC- + SIZ- + LUM + SLUM + UH = +18

Two G's appear in the initial draw: I5 LUn +
HUG+AH+OCARINAS+SIZING+MOn+US (last) = +3

The sum of the information conveyed so far indicates that I5 LUN is in fourth place behind I4 LUm, LUn and LUx (due to their chance of tying with +J), with I4 LUx in sole first due to its fourth-tile-drawn equity with +X and +G.

Wielding the W

My calling **I5 LUn** "exquisite" is based on an asset that I originally failed to notice: I5 LUn is the only principal first candidate play that can also win when the bag is +W (exploitable when W is one of the first three tiles drawn).

The key sequence appears in the **left-hand** diagram **below**. As the bag +W is twice as likely to occur as +X or +J (and the plays that work with +J only tie the game), and two G's are less likely to be drawn, the +W sequence has an outsized share of the equity teased out from all the various (non +V) bags. We have a new leader: **I5 LUn**.

The W appears immediately: I5 LUn +
LAW + SLAW + OC- + SIZ- + AH + HUM + UM = +2

The Q appears immediately: I5 LUn +
DYNAMICS + OC- + SIZ- + UH + LUM + QUA = –4

No play can win with bag +Q. For reference, the nearest-miss sequence is shown in the **right-hand** diagram.

Summary table: When you judiciously burn your blank and Zoey passes, you encounter six possible bag situations. With five of the six, you can win or tie the game with the candidate plays listed in the table below. (Table is limited to plays that can win or tie for first prize with the +V bag.)

Blank-burners: Success with Various Bags	
Bag	Game-winning (or tying) candidate plays and percentage
+G	I4 LUx (40%). I4 LUm, I4 or I5 LUn, I4 or I5 mUS, I5 nUS, I5 sUS, I4 SUm, I4 SUn and I4 SUs (tie) all 20%
+J	I4 LUx, I4 LUm and I4 LUn are all 50% ties
+Q	None
+V	All plays appearing in this table
+W	I5 LUn (50%)—very weighty
+X	I4 LUx (2/3). I4 LUm, I4/I5 LUn, I4/I5 mUS, I5 nUS, I4/I5 sUS, I4/I5 SUs, I5 USe and I5 SUm are all 50%

Wrap-up

The question posed at the outset was "**What is your best play in this unusual situation**?" By searching popular songs and literature, some interesting clues and conjectures can be found. I acknowledge Jerry Lerman, perhaps the only person whose puns are as cringeworthy as mine, for getting me started on this sidebar.

"It's not UnUSUAL..." –*Tom Jones*
"Everything I do at one speed, I go HAULOUt. – *Apolo Ohno*
"You can indict a HAMULUs." – *Judge Sol Wachtler*
"You can SOU a ham sandwich." – *John Fetterman*
"SOUL is about authenticity." – *John Legend*
"...a little sUS with a side of drama." – *ArtofPoets.com*
"USe what you have. " – *Arthur Ashe*
"Tell me, o MUs..." – *Homer*
"Fake NUs is cheap..." – *Toomas Hendrik*
"The SUm of all fears." – *Tom Clancy*
"Here comes the SUn." – *The Beatles*
"Life is a LUm, weaving illusion." – *Vachel Lindsay*
"You make your own LUx." – *Seneca*
"Let's do LUn..." – *slightly truncated quote*

By cogent analysis, though, your best play is I5 **LUn**. It wins the tournament 100% of the time with the +V bag, it wins the game 50% of the time with +W and +X, and it wins 20% of the time with +G. It is I5 LUn's +W equity that separates itself from the extra +X and +G (fourth tile) vig earned by the second-best play I4 LUx.

(Levers built into the structure of the puzzle have given me a lot of control over the relative value of plays. One example is this: if Will's final spread were increased just 1 point from 2150 to 2151, LUx could only *tie* for first prize, and its ranking would drop from second place down to fourth-to-last place.)

If the question is altered to "What play is most likely to win the game?" SOUL stands out; it wins more than twice as often as I5 LUn, which is in distant third behind SOU. However, with the puzzle conditions as stated, several blank-burning plays, which are in close rivalry for the top equity spot, outrank SOUL. Below is a summary chart.

I5 LUn has the highest $ Gain / 10296. To calculate prize equity, add the $1000.00 (fourth prize) you're guaranteed to win as a minimum at the start of the game. Your average prize money when playing I5 LUn is $1024.71.

UNUSUAL Puzzle: Ranking of Plays			
Candidate	Live Bags	$ Gain /10296	Games / 10296
I5 LUn	+V+X+G+W	254,400	43.2
I4 LUx	+V+X+G+J	242,800	37.4
I4 LUm or LUn	+V+X+G+J	236,400	34.2
I4 SUm mUS, I5 mUS nUS sUS	+V+X+G	230,400	31.2
I4 SUs	+V+X+G	229,200	30.6
I4 sUS, I5 USe	+V+X	228,000	30
I4 SUn	+V+G	218,400	25.2
SOUL	n/a	188,000	88
SOU	n/a	188,000	64
I5 SUs (or SUe, SUk, SUm, SUn, SUp)	+V+X	180,000	30

I5 LUn is not the first play that an expert typically ponders. It scores only 3 points while burning the blank!

A detailed chart starts on the next page, followed (finally) by the Index of Positions.

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NICK BALLARD, also known as "Nack," is an expert of many games, including Chess, Go, Color Lines and Scrabble (rated 2026). He is currently writing a seven-volume series: *Backgammon Openings: Early Doubles.*

Nick Ballard's puzzles, papers and articles on Scrabble can be found at

https://nackbg.com/scrabble/

On that website, you can also navigate to Nick (Nack) Ballard's puzzles, analysis, etc. on other popular games.

UNUSUAL Puzzle: Detailed Play Ranking

Play	Rack	Bag	Rack Pr /1716	Draw	Draw Pr /6	Adj	Prob /10296	Prize	$ Prize	Equity over $1000 ($ gain over 4th / 10296)	Total Gain /10296	Games /10296
I5 **LUn**	GJQVWWX	+V	4	pass	6		24	1st	10000	24 x 9000 = 216,000	**I5 LUn** 254,400	43.2
	GJQVVWW	+X	2	pass	6	50%	6	3rd	3000	6 x 2000 = 12,000		
	JQVVWWX	+G	1	pass	6	20%	1.2	3rd	3000	1.2 x 2000 = 2,400		
	GJQVVWX	+W	4	pass	6	50%	12	3rd	3000	12 x 2000 = 24,000		
I4 **LUx**	GJQVWWX	+V	4	pass	6		24	1st	10000	24 x 9000 = 216,000	**I4 LUx** 242,800	37.4
	GJQVVWW	+X	2	pass	6	2/3	8	3rd	3000	8 x 2000 = 16,000		
	JQVVWWX	+G	1	pass	6	40%	2.4	3rd	3000	2.4 x 2000 = 4,800		
	GQVVWWX	+J	2	pass	6	50%	6	3rd=	2000	6 x 1000 = 6,000		
I4 **LUm** or **LUn**	GJQVWWX	+V	4	pass	6		24	1st	10000	24 x 9000 = 216,000	**I4 LUm** **I4 LUn** 236,400	34.2
	GJQVVWW	+X	2	pass	6	50%	6	3rd	3000	6 x 2000 = 12,000		
	JQVVWWX	+G	1	pass	6	20%	1.2	3rd	3000	1.2 x 2000 = 2,400		
	GQVVWWX	+J	2	pass	6	50%	6	3rd=	2000	6 x 1000 = 6,000		
I4 **mUS**	GJQVWWX	+V	4	pass	6		24	1st	10000	24 x 9000 = 216,000	**I4 mUS** 230,400	31.2
	GJQVVWW	+X	2	pass	6	50%	6	3rd	3000	6 x 2000 = 12,000		
	JQVVWWX	+G	1	pass	6	20%	1.2	3rd	3000	1.2 x 2000 = 2,400		
I5 **mUS** or **nUS**	GJQVWWX	+V	4	pass	6		24	1st	10000	24 x 9000 = 216,000	**I5 mUS** **I5 nUS** 230,400	31.2
	GJQVVWW	+X	2	pass	6	50%	6	3rd	3000	6 x 2000 = 12,000		
	JQVVWWX	+G	1	pass	6	20%	1.2	3rd	3000	1.2 x 2000 = 2,400		
I5 **sUS**	GJQVWWX	+V	4	pass	6		24	1st	10000	24 x 9000 = 216,000	**I5 sUS** 230,400	31.2
	GJQVVWW	+X	2	pass	6	50%	6	3rd	3000	6 x 2000 = 12,000		
	JQVVWWX	+G	1	pass	6	20%	1.2	3rd	3000	1.2 x 2000 = 2,400		
I4 **SUm**	GJQVWWX	+V	4	pass	6		24	1st	10000	24 x 9000 = 216,000	**I4 SUm** 230,400	31.2
	GJQVVWW	+X	2	pass	6	50%	6	3rd	3000	6 x 2000 = 12,000		
	JQVVWWX	+G	1	pass	6	20%	1.2	3rd	3000	1.2 x 2000 = 2,400		
I4 **SUs**	GJQVWWX	+V	4	pass	6		24	1st	10000	24 x 9000 = 216,000	**I4 SUs** 229,200	30.6
	GJQVVWW	+X	2	pass	6	50%	6	3rd	3000	6 x 2000 = 12,000		
	JQVVWWX	+G	1	pass	6	20%	1.2	3rd=	2000	1.2 x 1000 = 1,200		
I4 **sUS** I5 **USe**	GJQVWWX	+V	4	pass	6		24	1st	10000	24 x 9000 = 216,000	**I4 sUS** 228,000	30
	GJQVVWW	+X	2	pass	6	50%	6	3rd	3000	6 x 2000 = 12,000		
I4 **SUn**	GJQVWWX	+V	4	pass	6		24	1st	10000	24 x 9000 = 216,000	**I4 SUn** 218,400	25.2
	GJQVVWW	+G	1	pass	6	20%	1.2	3rd	3000	1.2 x 2000 = 2,400		

Chart Continued *Rack*

SOUL	GJQVWWX	G	4	G	1		4	2nd	6000	4 x 5000 = 20,000	**SOUL** 188,000	88
	GJQVWWX	M	4	M	1		4					
	GJMQVWW	M	4	X	1		4					
	GJMQVWX	M	8	W	1		8					
	GJMQWWX	M	2	V	2		4					
	GJMVWWX	M	4	Q	1		4					
	GMQVWWX	M	4	J	1		4					
	JMQVWWX	M	2	G	2		4					
	GJQVWWX	V	4	V	1		4					
	GJQVVWW	V	2	X	1		2					
	GJQVVWX	V	4	W	1		4	3rd	3000	84 x 2000 = 168,000		
	GJVVWWX	V	2	Q	1		2					
	GQVVWWX	V	2	J	1		2					
	JQVVWWX	V	1	G	2		2					
	GHJQVWW	H	4	X	1		4					
	GHJQVWX	H	8	W	1		8					
	GHJQWWX	H	2	V	2		4					
	GHJVWWX	H	4	Q	1		4					
	GHQVWWX	H	4	J	1		4					
	GJQVWWX	H	4	H	1		4					
	HJQVWWX	H	2	G	2		4					
	GJQVWWX	O	4	O	1		4					

SOU	GJQVWWX	G	4	G	1		4	2nd	6000	4 x 5000 = 20,000	**SOU** 188,000	64
	GJQVWWX	M	4	M	1		4					
	GJMQVWW	M	4	X	1		4					
	GJMQVWX	M	8	W	1		8					
	GJMQWWX	M	2	V	2		4	2nd=	4500	32 x 3500 = 112,000		
	GJMVWWX	M	4	Q	1		4					
	GMQVWWX	M	4	J	1		4					
	JMQVWWX	M	2	G	2		4					

	GJQVWWX	V	4	V	1		4					
	GJQVVWW	V	2	X	1		2					
	GJQVVWX	V	4	W	1		4					
SOU	GJVVWWX	V	2	Q	1		2					
(cont.)	GQVVWWX	V	2	J	1		2	3rd	3000	28 x 2000 = 56,000		
	JQVVWWX	V	1	G	2		2					
	GJQVWWX	H	4	H	1		4					
	HJQVWWX	H	2	G	2		4					
	GJQVWWX	O	4	O	1		4					
I5	GJQVWWX	+V	4	pass	6		24	1st=	8000	24 x 7000 = 168,000	**I5 SUs**	30
SUs *	GJQVVWW	+X	2	pass	6	50%	6	3rd	3000	6 x 2000 = 12,000	180,000	

* For the final entry, I5 SUs, the following substitutions for the blank yield the same equity: SUe, SUk, SUm, SUn, SUp.

Note: Column 3 has a +Bag designation for the blank-burning plays, but it denotes a rack/draw designation for SOUL and SOU.

Index of Positions

This index covers the 14 distinct candidate plays that give you a chance to win or share first prize.

Summary of Indexed Positions						
Play	+V	+X	+G	+J	+W	Equity
I5 LUn	+1153	+18	+3		+2	$254,400
I4 LUx	+1151	+6[4]	+12[4]	tie		242,800
I4 LUm	+1167	+8	+12	tie		236,400
I4 LUn	+1167	+3	+12	tie		236,400
I5 mUS	+1157	+21	+9			230,400
I5 nUS	+1181	+21	+9			230,400
I5 sUS	+1151	+11	+3			230,400
I4 SUm	+1168	+1	+5			230,400
I4 mUS	+1191	+5	+4			230,400
I4 SUs	+1159	+3	tie			229,200
I4 sUS	+1159	+3				228,000
I5 USe	+1159	+1				228,000
I4 SUn	+1186		+5			218,400
I5 SUs*	+1150=	+10				180,000

* For I5 SUs: I5 SUe, SUk, SUm, SUn and SUp yield identical results for all bags.

[4] You can still win when the key tile is drawn fourth (i.e., a higher winning probability).

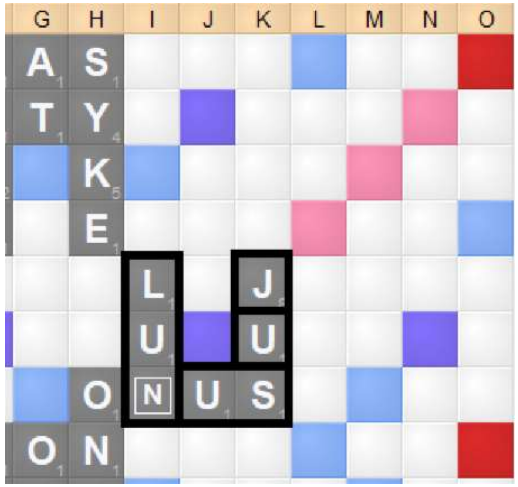
= You share 1st/2nd prize

A plus number shows the margin by which you win the game. If a cell is blank, you cannot win or tie the game (with the indicated candidate play listed in the row and the bag listed in the column).

Below, one page (with up to four final positions) is dedicated to each of the 14 candidate plays—in chart order. Abbreviations: OV- means OVEREMPHASIZING, OC- means OCARINAS, and SIZ- means SIZING.

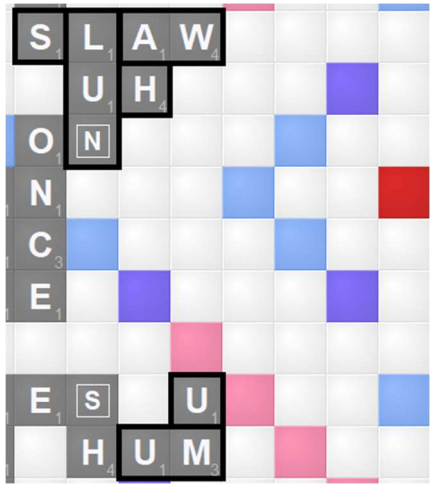
I5 LUn

+V



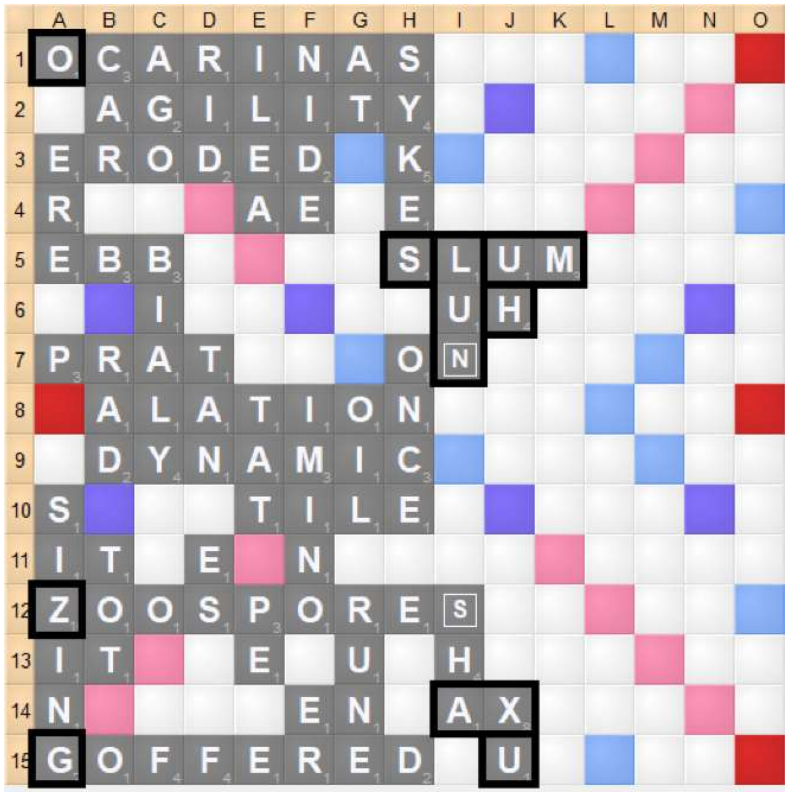
I5 LUn + OnUS + US, JUS, OV- = +1153 (1st prize)

+W



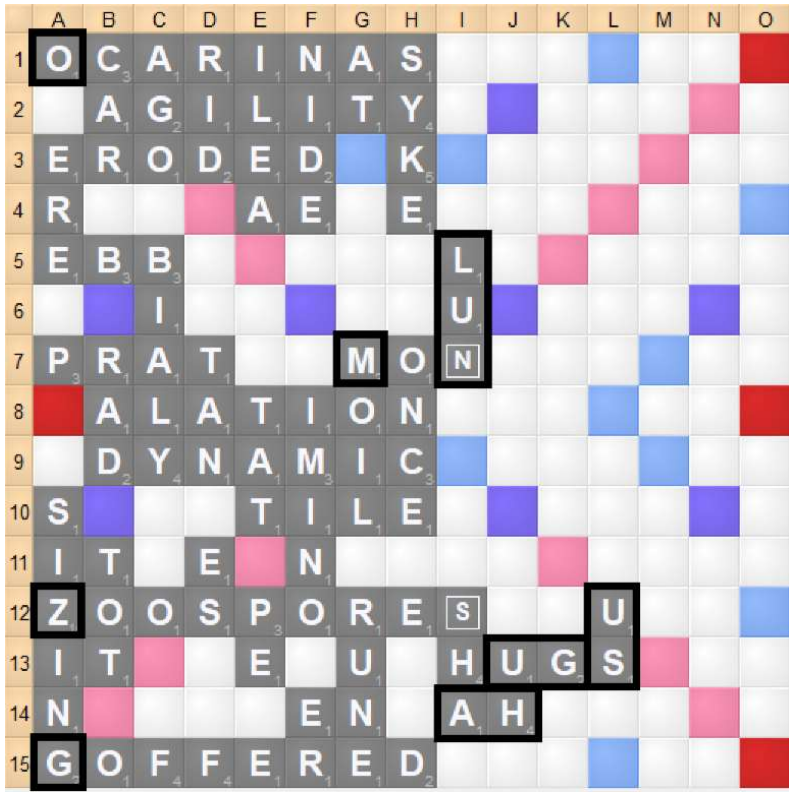
I5 LUn + LAW + SLAW + OC- + SIZ- + AH + HUM + UM = +2

+X



X appears in the initial draw: I5 LUn +
AX + XU + OC- + SIZ- + LUM + SLUM + UH = +18

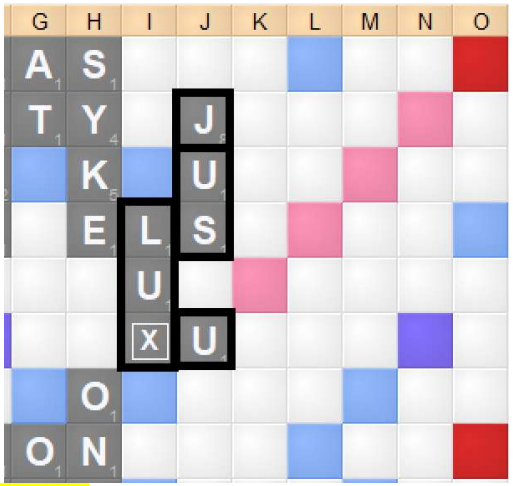
+G



Two G's appear in the initial draw: I5 LUn +
HUG + AH + OCARINAS + SIZING + MOn + US (last) = +3

I4 LUx

+V

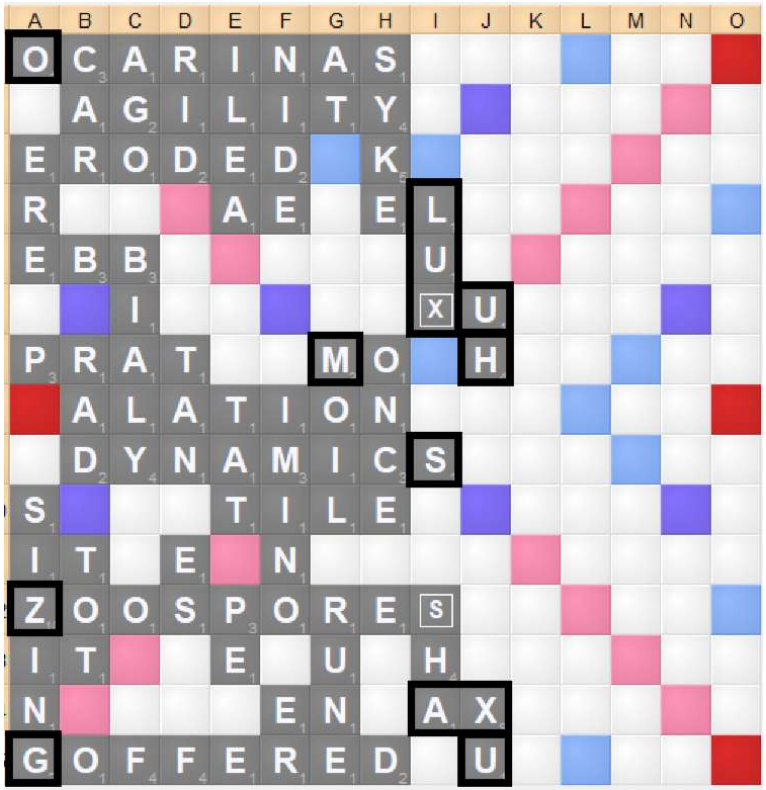


I4 LUx + xU + US, JUS, OV- = +1151 (1st prize)

+J

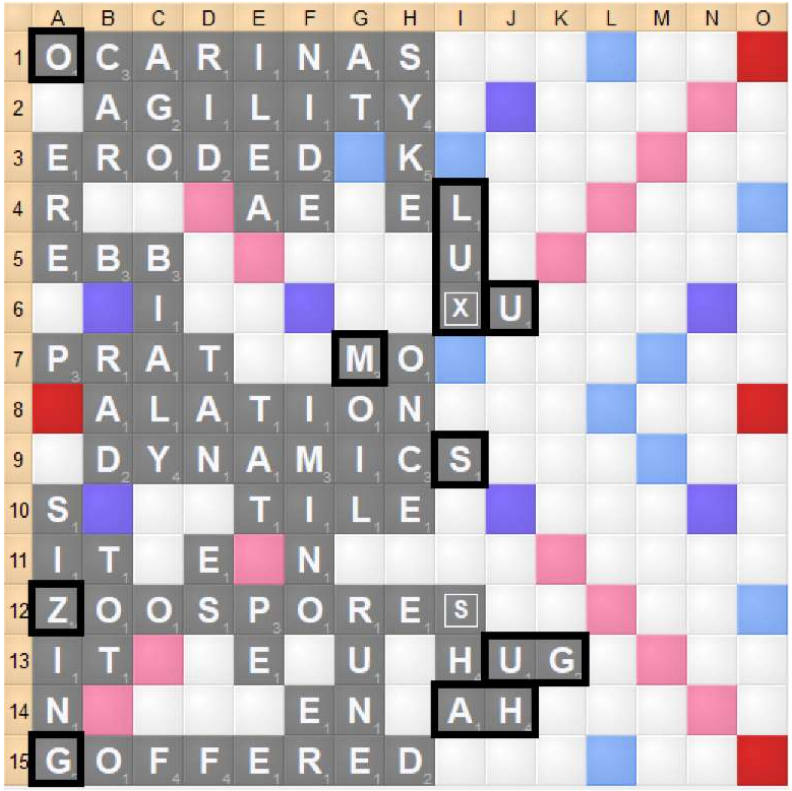
I4 LUx + US + JAM + AH + UM + OC- + SIZ- = tie

+X



The X is the *fourth* tile drawn: LUx + xU + DYNAMICS + AX + XU + OC- + SIZ- + MO + UH = +6

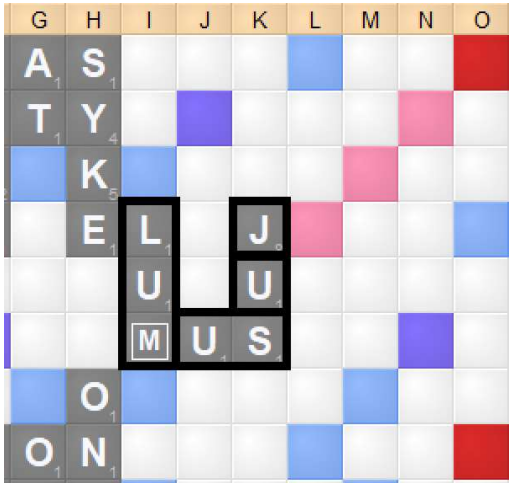
+G



The second G is the *fourth* tile drawn: LUx + xU + DYNAMICS + HUG + AH- + OC- + SIZ- + MO = +12

I4 LUm

+V

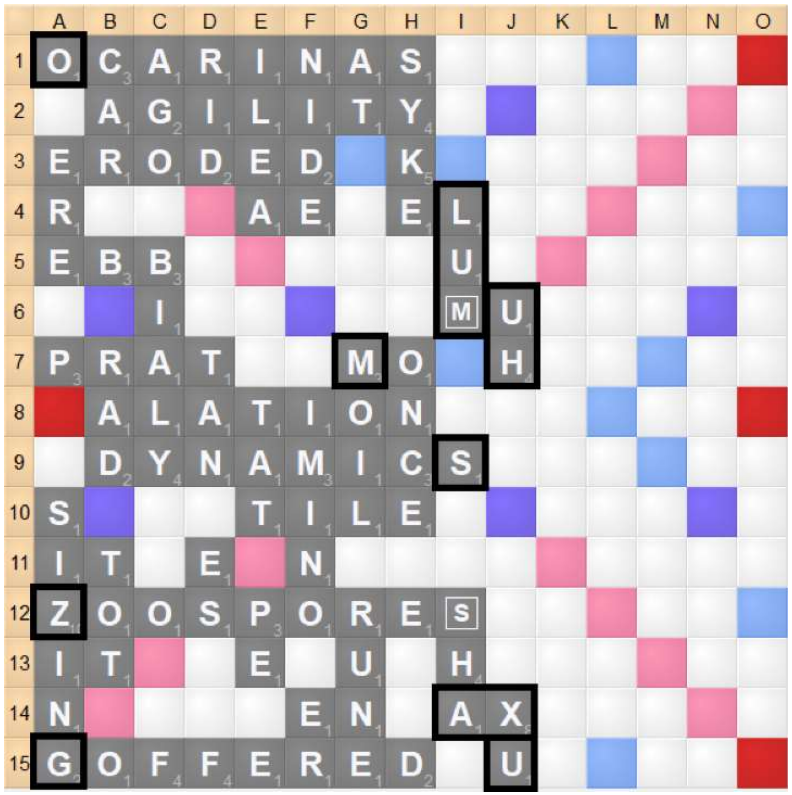


I4 LUm +mUS +US, JUS, OV- = +1167 (1st prize)

+J

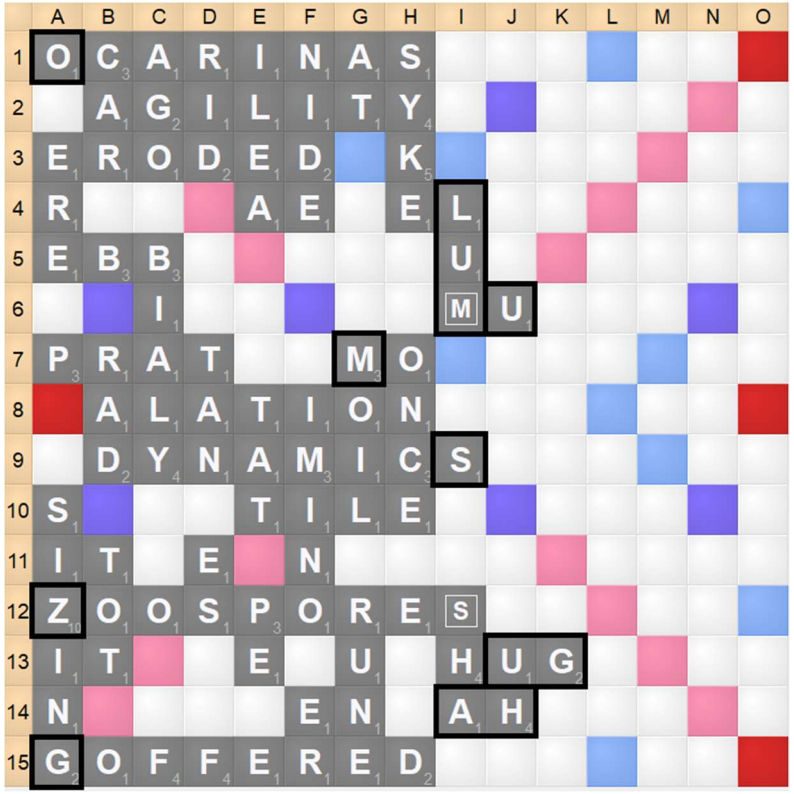
I4 LUm +US + JAM +AH +UM +OC- +SIZ- = tie

+X



X appears in the initial draw: I4 LUm + DYNAMICS + AX + XU + OC- + SIZ- + MO + UH (last) = +8

+G

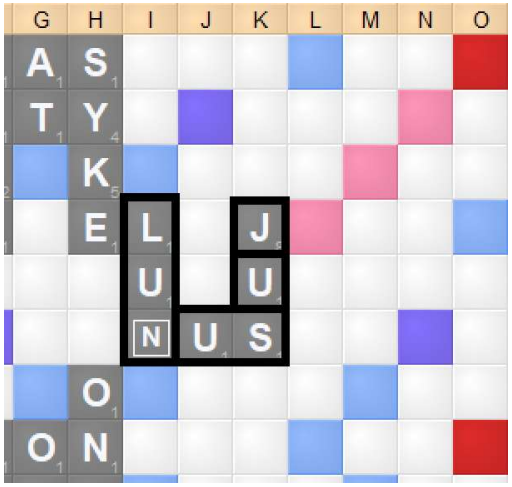


Two G's appear in the initial draw: I4 LUm + DYNAMICS + HUG + AH + OC- + SIZ- + MO + mU (last) = +12

(or MO + mU can be replaced by J6 MU)

I4 LUn

+V

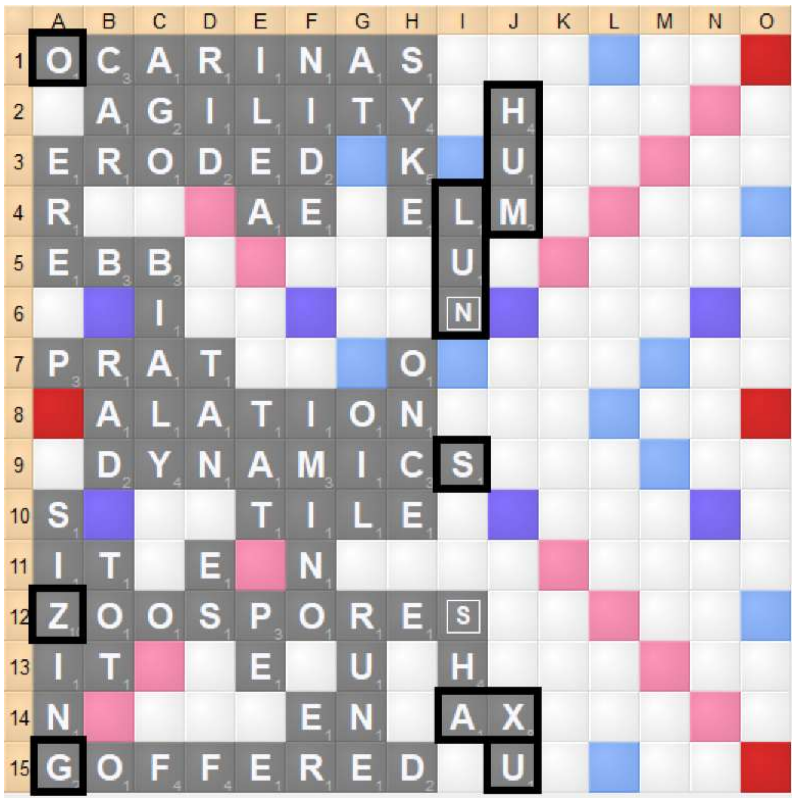


I4 LUn + NUS + US, JUS, OV- = +1167 (1st prize)

+J

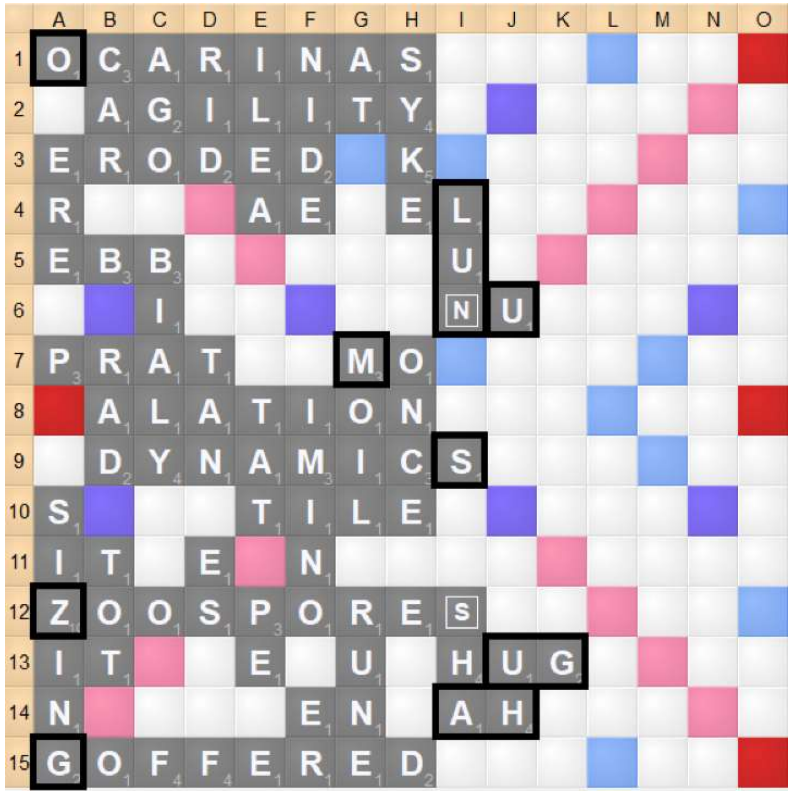
I4 LUn + US + JAM + AH + UM + OC- + SIZ- = tie

+X



X appears in the initial draw: I4 LUn + DYNAMICS + AX + XU + OCARINAS + SIZING + HUM = +3

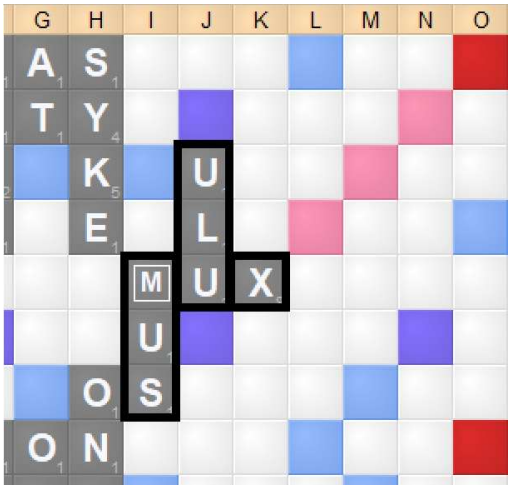
+G



Two G's appear in the initial draw: I4 LUn + DYNAMICS + HUG + AH + OC- + SIZ- + MO + nU = +12

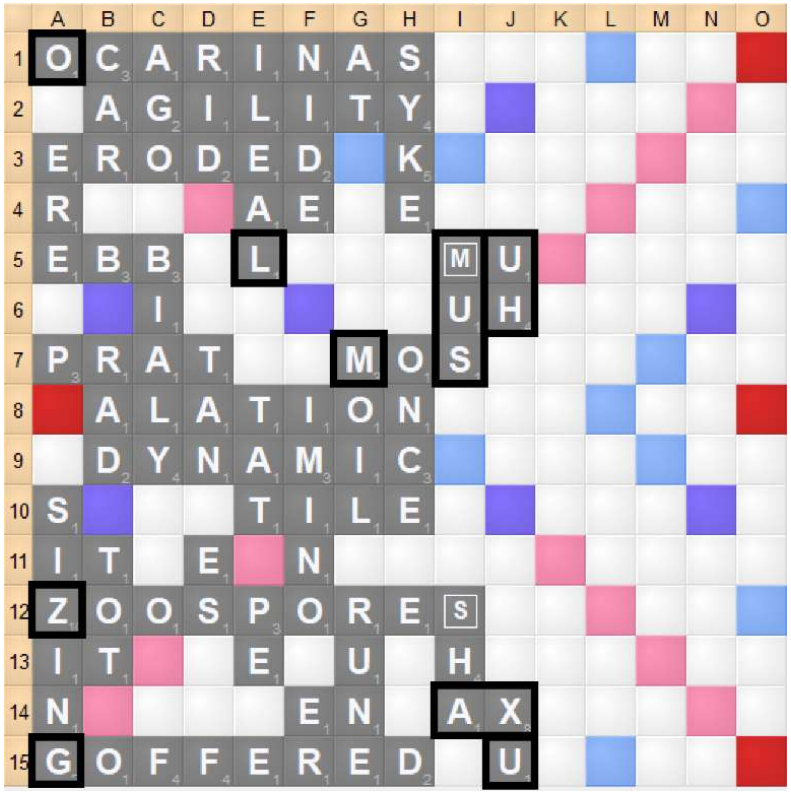
I5 mUS

+V



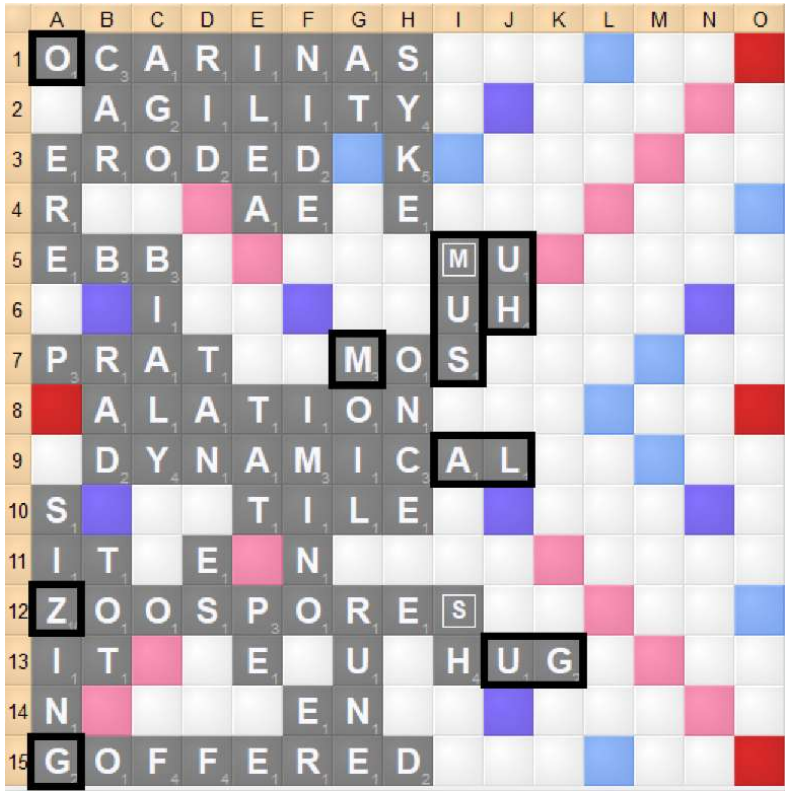
I5 mUS + ULU, MUX, OV- = +1157 (1st prize)

+X



The X appears immediately: I5 mUS + ILEAL+AX+XU+OC-+ SIZ- + MOS + UH (last) = + 21

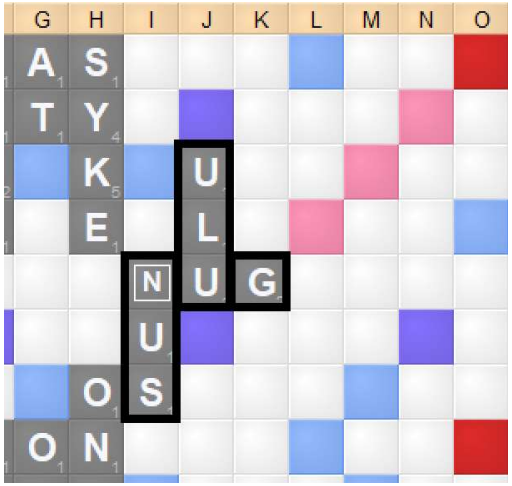
+G



Two G's appear in the initial draw: I5 mUS + DYNAMICAL+HUG+OC-+SIZ- +MOS+UH (last) = +9

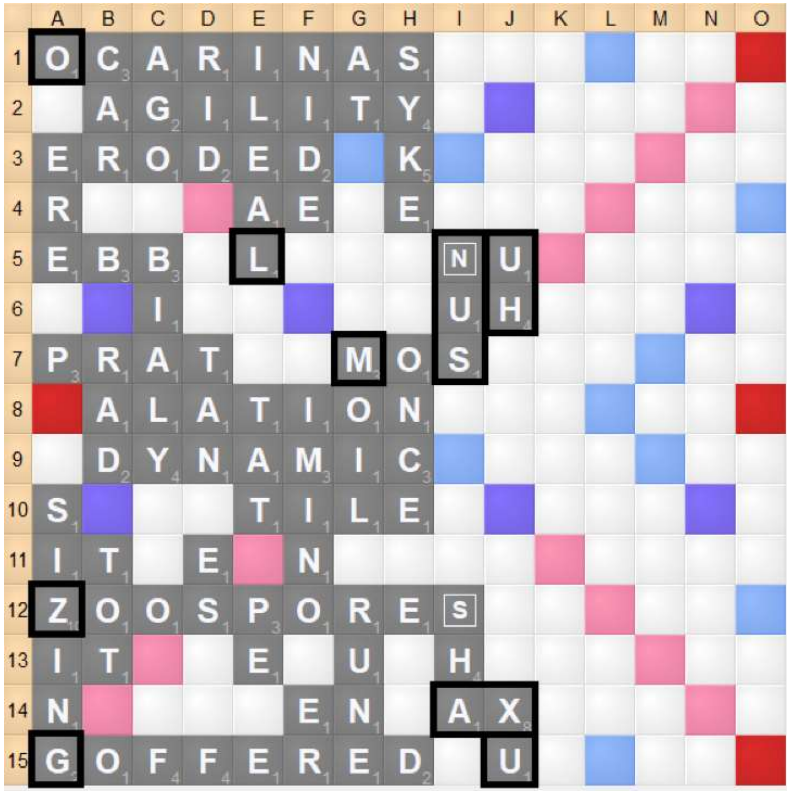
I5 nUS

+V



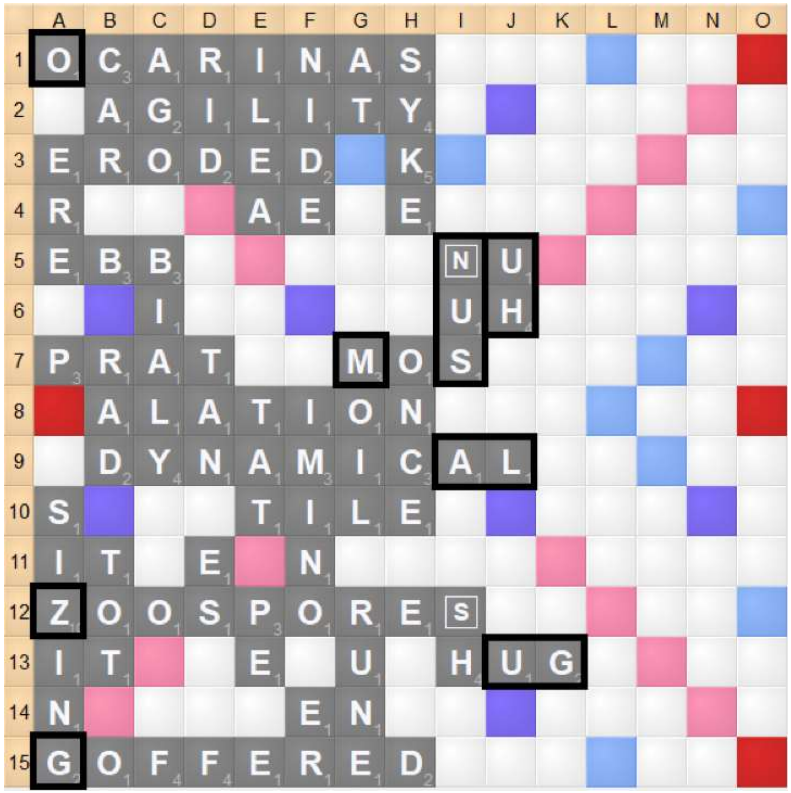
I5 nUS + ULU, nUG, OV- = +1181 (1st prize)

+X



The X appears immediately: I5 nUS + ILEAL+AX+XU+OC-+ SIZ-+ MOS + UH (last) = + 21

+G



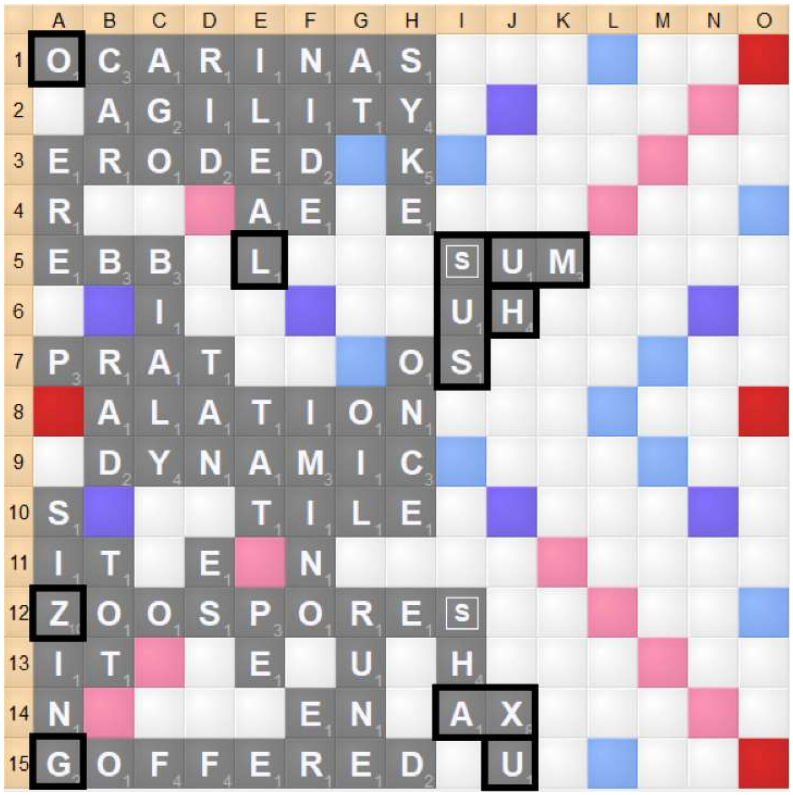
Two G's appear in the initial draw: I5 nUS + DYNAMICAL + HUG + OC- + SIZ- + MOS + UH = +9

I5 sUS

+V

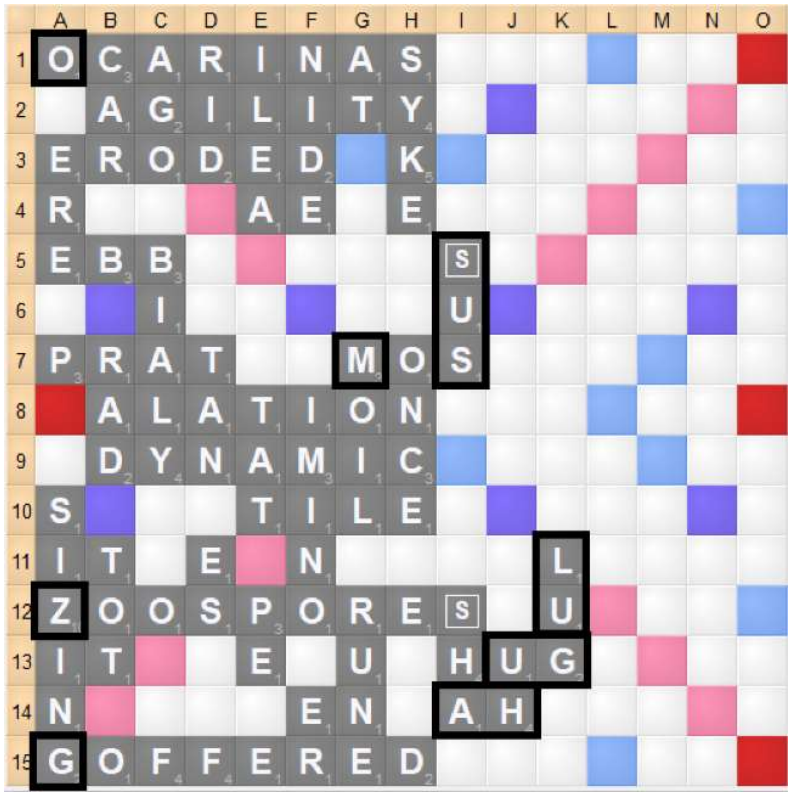
I5 sUS + ULU, JUG, OV- = +1151 (1st prize)

+X



The X appears immediately: I5 sUS +
ILEAL + AX + XU + OC- + SIZ- + SUM + UH = +11

+G



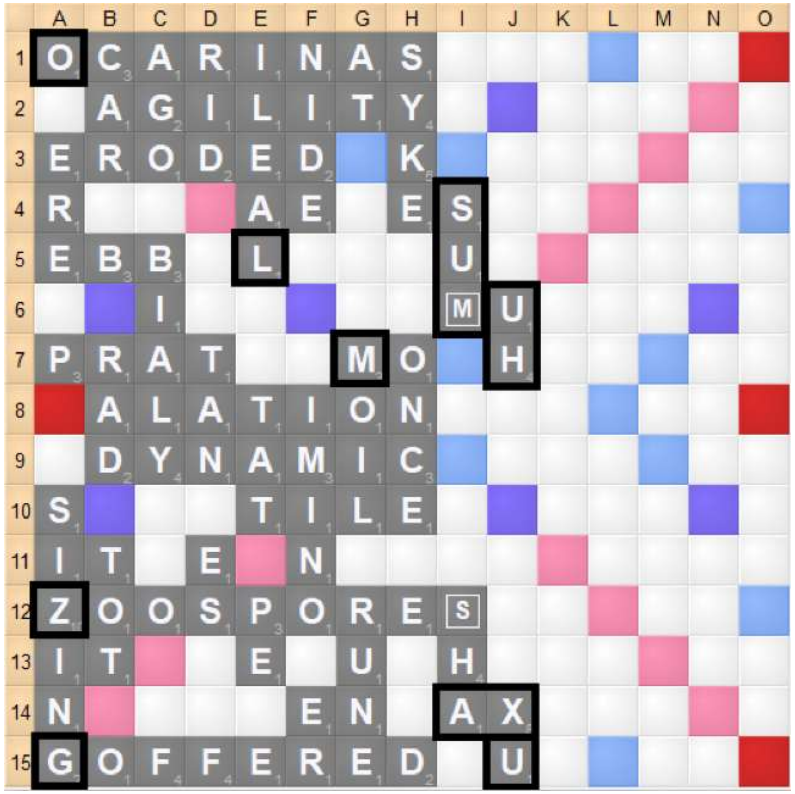
Two G's appear in the initial draw: I5 sUS +
HUG + LUG + AH + OCARINAS + SIZING + MOS = +3

I4 SUm

+V

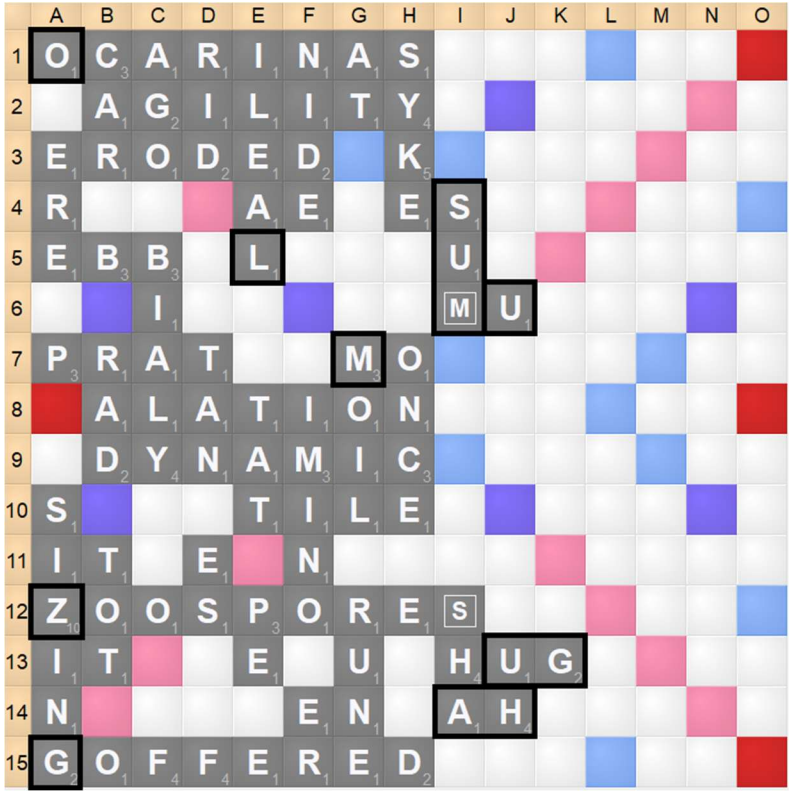
I4 SUm + ULU, mUX, OV- = +1168 (1st prize)

+X



The X appears immediately: I4 SUm +
ILEAL + AX + XU + OC- + SIZ- + MO + UH (last) = +1

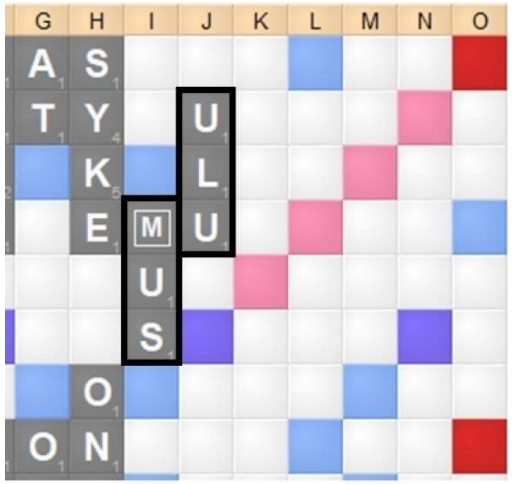
+G



Two G's appear immediately: I4 SUm +
ILEAL + HUG + AH+ OC- + SIZ- + MU (last) = +5
(or MO + mU can be replaced by J6 MU)

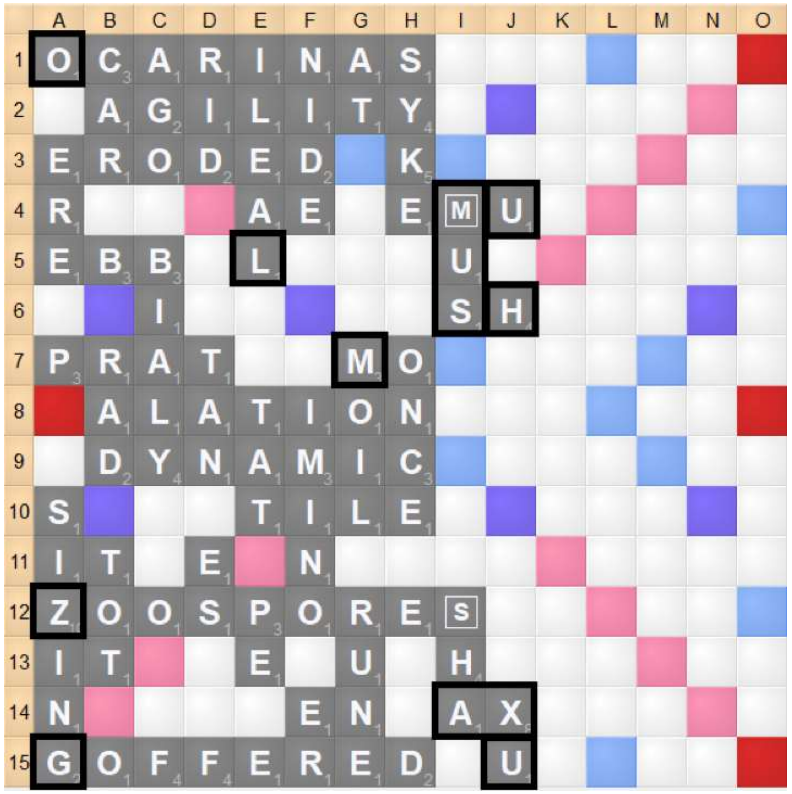
I4 mUS

+V



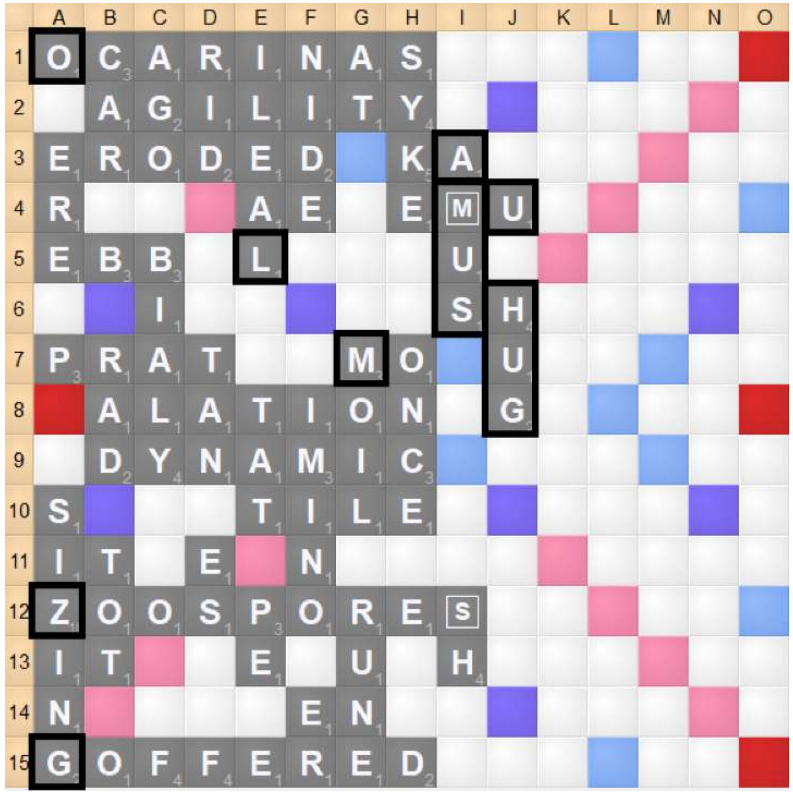
I4 mUS + ULU, OV- = +1191 (largest margin, 1st prize)

+X



The X appears immediately: I4 mUS +
ILEAL + AX + XU + OC- + SIZ- + MO + SH + EmU = +5

+G



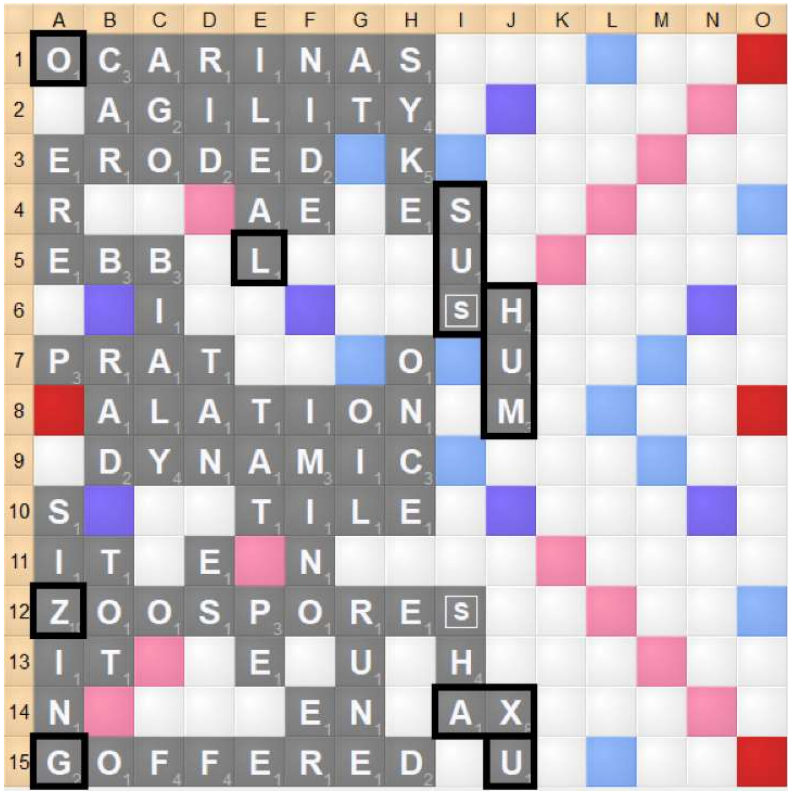
Two G's appear immediately: I4 mUS +
ILEAL + MO + OC- + SIZ- + HUG + AmUS + EmU = +4

I4 SUs

+V

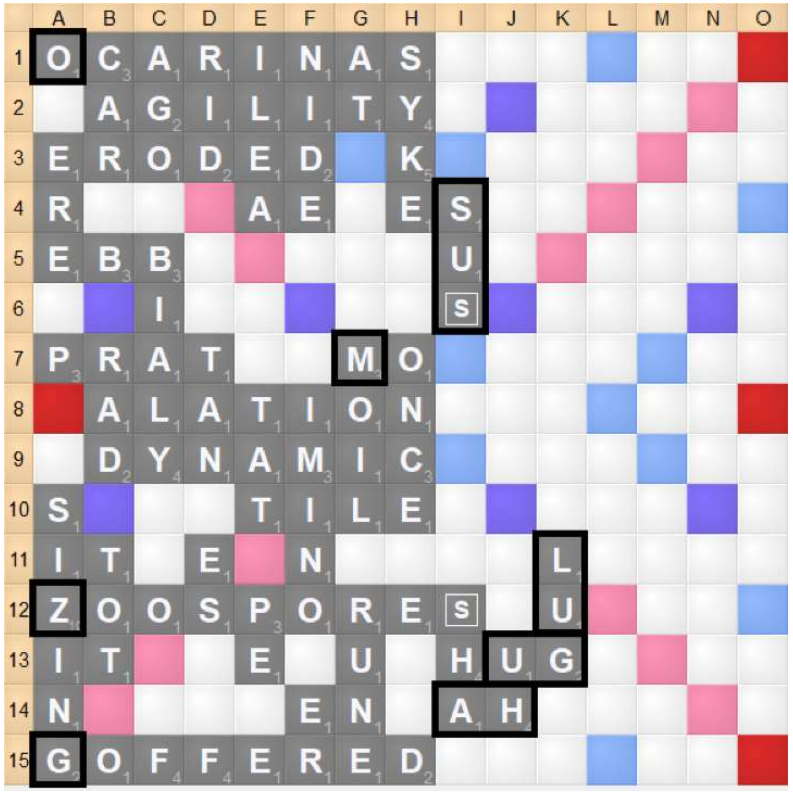
I4 SUs +sULU, JUG, OV- = +1159 (1st prize)

+X



The X appears immediately: I4 SUs + ILEAL + AX + XU + OCARINAS + SIZING + HUM = +3

+G



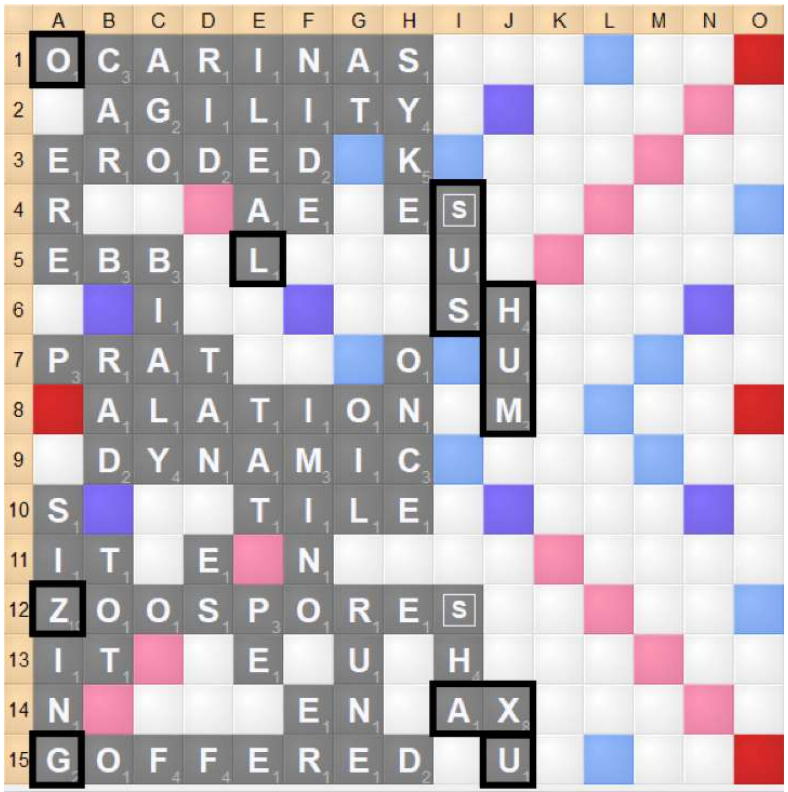
Two G's appear in the initial draw: I4 SUs + HUG + LUG + AH + OCARINAS + SIZING + MO = tie

I4 sUS

+V

I4 sUS+SULU,JUG,OV-= +1159 (1st prize)

+X



The X appears immediately: I4 sUS +
ILEAL + AX + XU + OCARINAS + SIZING + HUM = +3

I5 USe

+V

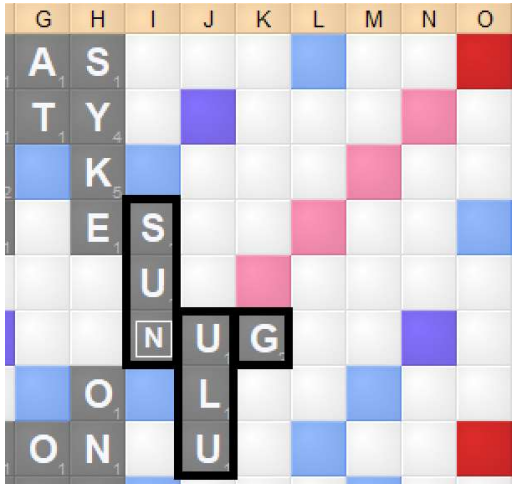
I5 USe +SULU, JUG, OV-= +1159 (1st prize)

+X

The X appears immediately: I5 USe +
ILEAL + AX + XU + OCARINAS + SIZING + SH + EM + EMU = +1

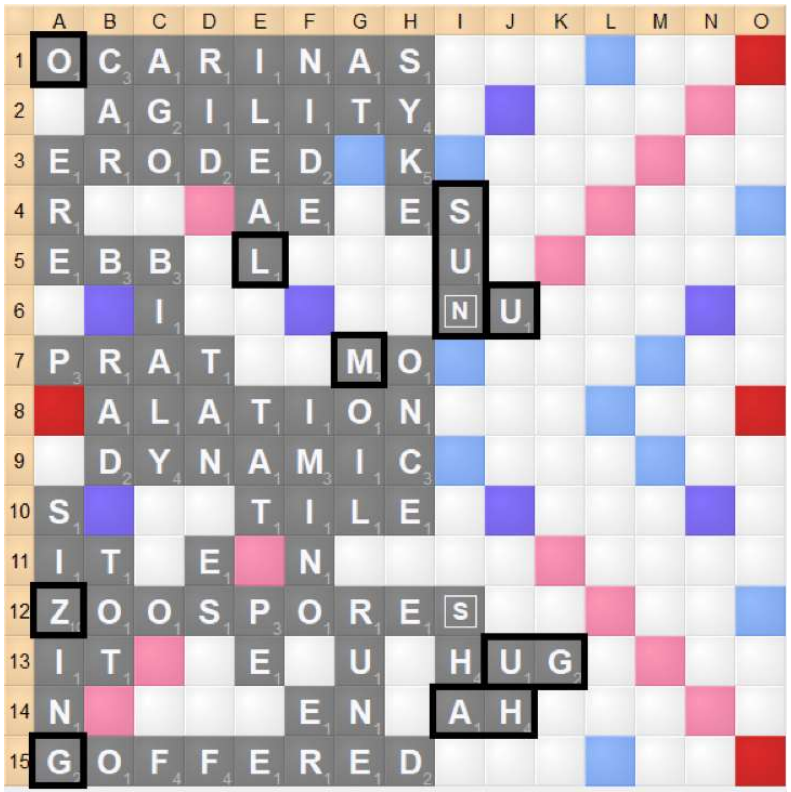
I4 SUn

+V



I4 SUn + ULU, nUG, OV- = +1186 (1st prize)

+G



Two G's appear immediately: I4 SUn +
ILEAL + HUG + AH + OC- + SIZ- + MO + nU = +5

+V

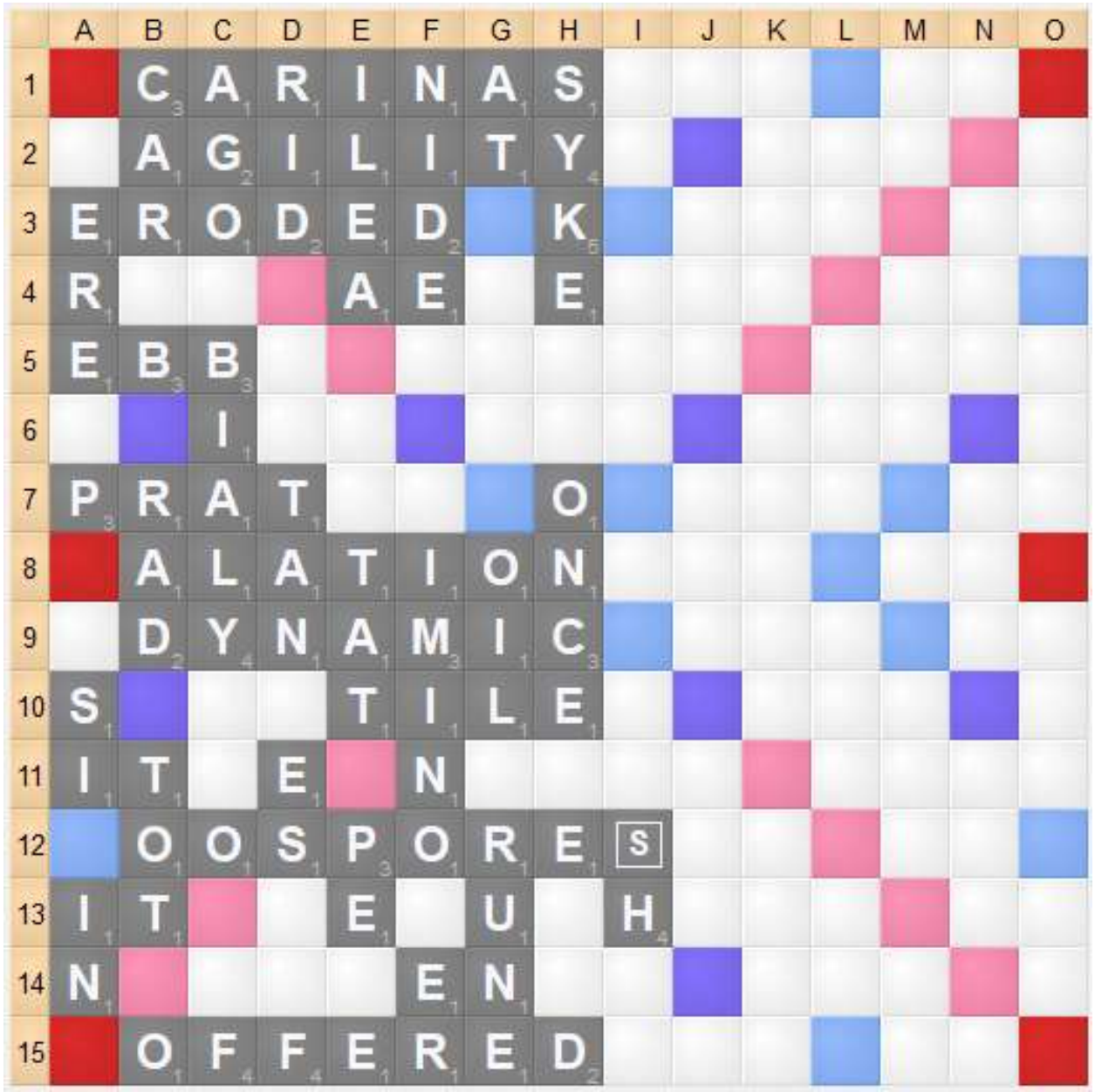
I5 SUs (or Sue, Suk, SUm, SUn or SUp)

I5 SUs + SULU, JUG, OV-= +1150 (share 1st/2nd prize)

+X

The X appears immediately: I5 SUs +
ILEAL + AX + XU + OC- + SIZ- + SUM + UH = +10

Convenience diagram—Initial position:



? A1 L1 S1 U1 U1 U1

Unseen: **GGHJMOQVVWWXZ (13)**