

<b>Puzzle Answers</b>		✓
Dice Towers		✓
Dual		✓
One Fish, Two Fish		✓
Reanimation		✓
Ring Bearers		✓
Rotten Right to the Core		✓
Scrambled Legs		✓
The Recirculating Aquarium		✓
Tim's F1 Racecar		✓
<b>Meta: Where's Tim?</b>		✓

*After you solve any 5 of the puzzles above, we will give you the metapuzzle.*

## Dice Towers [HINTS]

by Aloysius '27

Current Progress	Hint
Help! I'm completely stuck on this puzzle!	[REDACTED]
I think I know what to do, but I cannot find any of the "?"s.	[REDACTED]
I have found some "?"s, but it is taking too long!	[REDACTED]
It is still taking too long. Are there other tricks?	[REDACTED]
I have found almost all "?"s, but what is the answer?	[REDACTED]

## Dice Towers [SOLUTION]

by Aloysius '27

The dice provided consists of 3 number dice and 1 operator die. When the dice are placed in a tower, each wall of the tower forms an expression that could evaluate to a number on each side. It may be intuitive to try and use all 4 dice in each tower, but if we interpret the 2 consecutive number dice by concatenation, we find that the numbers grow too big.

Hence, one could attempt to use 2 number dice with the operator die sandwiched in the middle. By doing this, one should find that it is possible to form towers such that the 3 given values equal those that 3 walls evaluate to.

One way to speed up the search is using the properties of each number. Negative numbers must use the minus operator, and non-integer numbers must use the division operator. Large integers also must be done by multiplication.

A more advanced way to speed up the search is noticing that opposite numbers remain opposite. Due to this, it is sometimes easier to first make the 2 expressions on opposite walls match the given values. The final value can then be found by rotating the 3 dice appropriately.

Using these methods, the rest is hard work to find the 12 dice towers to find the 12 missing values. These are given in the table below. The dice are abbreviated as N, P, T for the Natural numbers, Prime numbers and Triangular numbers.

No.	Dice used	Top	Left	Bottom	Right
1	T / N	$21 \times 6 = 126$	$6 - 2 = 4$	$1 + 1 = 2$	$10 \div 5 = 2$
2	N / T	$3 \div 15 = 0.2$	$6 + 21 = 27$	$4 - 3 = 1$	$1 \times 1 = 1$
3	P / N	$7 \times 3 = 21$	$2 \div 5 = 0.4$	$5 + 4 = 9$	$13 - 2 = 11$
4	P / N	$2 - 6 = -4$	$5 \times 5 = 25$	$13 \div 1 = 13$	$7 + 2 = 9$
5	T / P	$15 + 13 = 28$	$1 \div 5 = 0.2$	$3 \times 2 = 6$	$21 - 7 = 14$
6	P / T	$2 \times 10 = 20$	$5 - 21 = -16$	$13 + 6 = 19$	$7 \div 1 = 7$

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7	T / P	$15 \times 11 = 165$	$6 - 13 = -7$	$3 + 3 = 6$	$10 \div 2 = \mathbf{5}$
8	T / P	$10 \div 2 = 5$	$3 \times 5 = 15$	$6 - 13 = -7$	$15 + 7 = \mathbf{22}$
9	T / N	$1 + 2 = 3$	$3 - 4 = -1$	$21 \times 5 = 105$	$15 \div 3 = \mathbf{5}$
10	T / P	$10 \div 5 = 2$	$21 \times 2 = 42$	$6 - 7 = -1$	$1 + 13 = \mathbf{14}$
11	T / N	$21 \div 1 = 21$	$6 + 5 = 11$	$1 - 6 = -5$	$10 \times 2 = \mathbf{20}$
12	T / P	$10 \times 3 = 30$	$1 \div 13 = 1/13$	$6 + 11 = 17$	$21 - 2 = \mathbf{19}$

These easily convert by A = 1 to Z = 26 conversion, to give the answer **BAKING EVENTS.**

### **Construction Notes.**

Inspired by a RSI/SPUR talk over the summer by Dr. Tanya Khovanova on Mathematics in Puzzlehunts. Solutions were checked by code to be unique... almost.

In fact, number 10 and 12 have a slightly different alignment that achieves the same value. There was another configuration that found 3 alignments of the dice, unfortunately the missing number was 12, which would not fit in the given answer.

Original ideas included having 2 operator dice, but a quick calculation shows there are many more possibilities, which would likely make it too difficult without code.

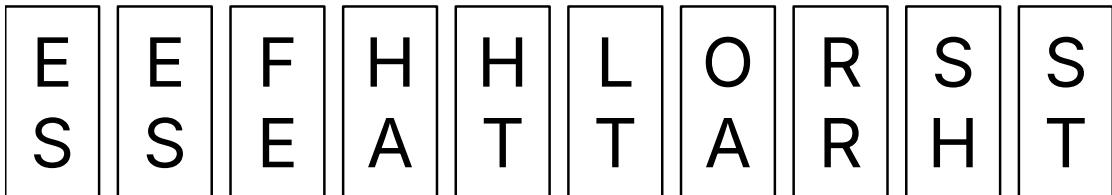
## Dual [HINTS]

by Arul '27

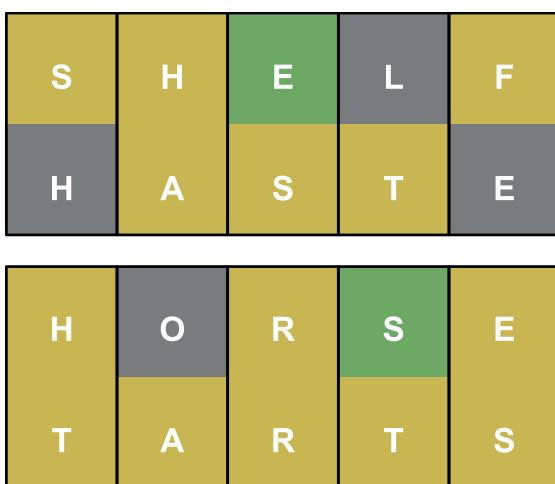
Current Progress	Hint
Help! I'm completely stuck on this puzzle!	[REDACTED] [REDACTED]
I think I know what to do, but I don't know how to do it.	[REDACTED]
I have found some letter placements, but am missing some.	[REDACTED]
I have placed all the tiles, but don't know the answer.	[REDACTED]

## Dual [SOLUTION]

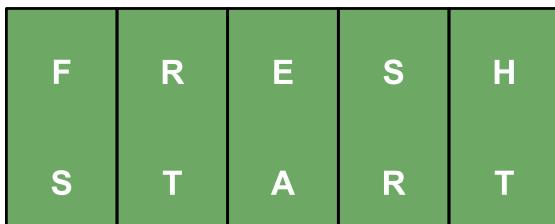
by Arul '27



The ten tiles can be placed into the Wordle like so, to form four valid words. A good break-in is the letter F, which combined with these letters can only make a few words which come to mind, e.g. SHELF, FRESH, FLESH. Quickly checking a few of these yields the only possibly correct combination, SHELF and TASTE/HASTE. Checking the other word, your only options are SHORE/HORSE, and HORSE yields TARTS as desired.



ANSWER



Performing the two Wordles simultaneously (the top row and the bottom row) yields the answer: **FRESH START**.

## One Fish, Two Fish [HINTS]

by Aloysius '27, Becca '26

Current Progress	Hint
Help! I'm completely stuck on this puzzle!	
I've answered some clues, but don't know what to do next.	
I've noticed the lengths, but don't know what to do next.	
I've noticed the letters, but don't know what to do next.	

## One Fish, Two Fish [SOLUTION]

by Aloysius '27, Becca '26

Each pair of answers has the same length and has one or two matching letters:

**GIR**

**GRA**

[6]

MINECRAFT

ALCHEMIST

[3]

NEXTHOUSE

NEWWASSAR

[9, 5]

BAKERHOUSE

PHILOSOPHY

[8]

DEWEYLIBRARY

ARCHITECTURE

[2]

HARVARDBRIDGE

SAMBERGCENTER

[1, 4]

PIRATECERTIFICATE

LINCOLNLABORATORY

[7]

— — — — —  
1 2 3 4 5 6 7 8 9

Take the common letters within each pair, putting them into the position(s) indicated. This should yield the answer **ART REGION**.

## Reanimation [HINTS]

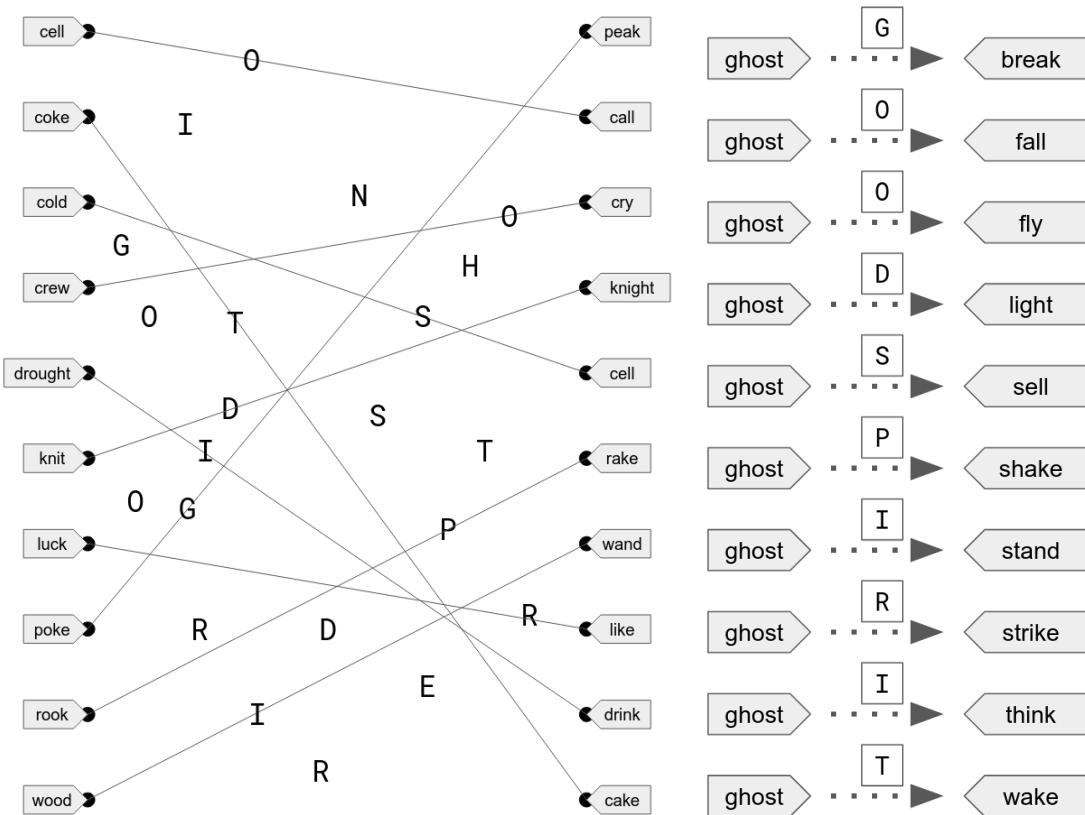
Page 1 of 2  
by Marvin '28

Current Progress	Hint
Help! I'm completely stuck on this puzzle!	[REDACTED]
	[REDACTED]
Any clues on identifying the words?	[REDACTED]
I've identified some ghosts, but don't know what to do next.	[REDACTED]

# Reanimation [SOLUTION]

Page 1 of 2  
by Marvin '28

Each revived ghost is a verb with an irregular past tense, and has the same ending as the corresponding word on the right side of the matchmaker (e.g. the first ones are BREAK and PEAK). Applying the past tense transformation yields a word on the left (BREAK : BROKE :: PEAK : POKE), so we connect those pairs. Here are the corresponding puzzle pairs:



The letters not on any lines read “IN GHOST ORDER”. Each line goes through one letter, and reading them in the order of the ghosts (verbs) yields the answer, **GOOD SPIRIT.**

## Ring Bearers [HINTS]

Page 1 of 2  
by Alex (G)

Current Progress	Hint
Help! I'm completely stuck on this puzzle!	
I have most clues on both sides.	
I see the addition of two Os, have some pairs, not sure how to extract	

## Ring Bearers [SOLUTION]

Page 1 of 2  
by Alex (G)

We notice there are 11 items on the registry and 11 images representing gifts received, so we should consider finding a relationship/matching pattern between them. The flavor text also directly references a word transformation gimmick, specifically after the wedding couple "sealed the deal."

We can first organize the information in the registry, taking note of the order of the registry list, the number of the item requested, and answering the crossword-style clue in bold:

Registry Order	Gift Count	Registry Clue	Gift
1	2	a Ph.D. holder, for short	DR
2	2	running total at the bar	TAB
3	4	the band behind "Dynamite" and "Butter"	BTS
4	3	tick off, with "up"	RILE
5	3	a possibly scented light fixture	CANDL E
6	6	privately chatting with each other, briefly	DMING
7	5	preceder to "Thx"	PLS
8	5	to stick or hold tightly (to)	CLING
9	6	a Boston NBA player, for short	CELT
10	3	bird whose name sounds like a dance move paired with the "whip"	NENE
11	4	the artist behind "Gangham Style"	PSY

We then identify the words clued by the images representing gifts at the reception, which are provided in alphabetical order.

Gifts at the Reception:

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BOOTS



CANOODLE



COOLING



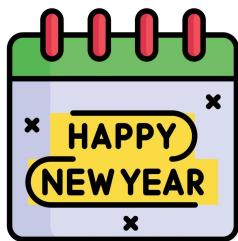
DOMINGO



OCELOT



ODOR



ONE/ONE



OOPSY



ORIOLE



POLOS



TABOO

Hopefully, with adequate answers in both halves of the puzzle, we notice that the gifts requested in the registry have been “transformed” by adding two Os—or two “rings,” now becoming “ring bearers,” since the couple “sealed the deal” during the wedding by exchanging rings.

There were a few pairs intentionally made relatively straightforward to help with this “aha”:

## MIT Aquarium Puzzle Hunt 2025

- BTS → BOOTS
- TAB → TABOO
- to dissuade the idea that the Os have to be adjacent, PLS → POLOS

We can then match up all 11 pairs of gifts before and after this ring exchange, keeping the order of the registry. The final piece of information left unused in the puzzle is the gift counts, which we can notice are:

- potentially larger than the length of the shorter/registry gift (e.g., 4 for BTS, 6 for DMING/CELT)
- always less than or equal to the length of the longer/received gift

This suggests that the gift counts can be used as indices to "count" into the received gift, pulling out the Nth letter to get our answer.

Registry Order	Gift Count	Registry Gift	Received Gift	Extracted Letter
1	2	DR	ODOR	D
2	2	TAB	TABOO	A
3	4	BTS	BOOTS	T
4	3	RILE	ORIOLE	I
5	3	CANDLE	CANOODLE	N
6	6	DMING	DOMINGO	G
7	5	PLS	POLOS	S
8	5	CLING	COOLING	I
9	6	CELT	OCELOT	T
10	3	NENE	ONE ONE	E
11	4	PSY	OOPSY	S

This yields the answer **DATING SITES**.

## Rotten Right to the Core [HINTS]

By Alex (G), Annie '28, Riley '25

Current Progress	Hint
don't know where to start	[REDACTED]
have most of the clues, don't know what to do next	[REDACTED]
get the brat reference, but still not sure what to do to extract	[REDACTED]

## Rotten Right to the Core [SOLUTION]

By Alex (G), Annie '28, Riley '25

The title and flavor text both reference songs ("Apple" and "Girl, so confusing") from Charli XCX's album "Brat," which made last summer "Brat summer." The format/style of the puzzle as a playlist with green album colors and black text further confirms this is a reference to Brat.

By answering all of the clues, matching the provided enumerations, we notice that

#	Clue	Enum.	Answer
1	hindu creator god	6	BRAHMA
2	not in time with the rhythm	7	OFFBEAT
3	something run in boston on patriot's day	8	MARATHON
4	atlanta baseball team	6	BRAVES
5	at least \$16, for a urop	6, 6	HOURLY RATE
6	singer of "that's so true" and "risk"	6, 6	GRACIE ABRAMS
7	text or book for an opera	8	LIBRETTO
8	skill used in chess and risk	8	STRATEGY
9	mongolia's capital	11	ULAANBAATAR
10	brainy?	8	CEREBRAL

We then look for "what changed from last summer," as referenced in the flavor text. All of the answers contain substrings of exactly 3 of the 4 letters in "BRAT," in order. We extract by taking the letter that is different from BRAT, and reading off in the provided order.

#	Answer	BRAT-like Substring	Changed/Extracted Letter
1	<u>BRAHMA</u>	<u>BRAH</u>	<u>H</u>
2	<u>OFFBEAT</u>	<u>BEAT</u>	<u>E</u>

## MIT Aquarium Puzzle Hunt 2025

3	<u>MARATHON</u>	ARAT	A
4	<u>BRAVES</u>	BRAV	V
5	<u>HOURLY RATE</u>	YRAT	Y
6	<u>GRACIE ABRAMS</u>	BRAM	M
7	<u>LIBRETTO</u>	BRET	E
8	<u>STRATEGY</u>	TRAT	T
9	<u>ULAANBAATAR</u>	BAAT	A
10	<u>CEREBRAL</u>	BRAL	L

This gives the solution **HEAVY METAL.**

## Scrambled Legs [SOLUTION]

By Alex (G), Atul '27

The flavor text references “square one” and we are given lists of Across and Down clues, which suggests a crossword puzzle. However, we don’t have a grid to fill, and the flavor text says we don’t know the order of the stops, which makes this a diagramless puzzle.

We start by filling out the clues, with guidance from the fact they are in alphabetical order by list and all answers are 5 letters. (Full list of clues and answers in appendix.)

Noticing there are 10 Across and 10 Down answers in each of the legs, this suggests we will need to make two 5x5 grids for each leg.

We then place the answers for the clues marked as “START” by the red map icon as “1-Across” and “1-Down”---pairing them appropriately given a shared 1st letter.

We can then complete the rest of the grids.

Leg 1:

M	E	R	C	H
A	M	O	R	E
Y	O	U	I	N
O	T	T	E	R
R	E	E	D	Y

S	L	I	C	K
M	O	C	H	I
A	T	E	I	T
S	T	I	L	T
H	O	N	E	Y

Leg 2:

A	M	B	E	R
D	I	A	N	E
A	C	T	E	D
P	I	E	C	E
T	O	N	Y	S

I	M	O	F	F
N	A	D	A	L
A	N	D	R	E
P	R	O	M	O
P	A	R	E	S

To extract, the flavor text says to “check where your paths overlap.” For each leg, we can look at each pair of grids to see what squares contain the same letter in both grids.

# MIT Aquarium Puzzle Hunt 2025

Leg 1:

M	E	R	C	H
A	M	O	R	E
Y	O	U	I	N
O	T	T	E	R
R	E	E	D	Y

S	L	I	C	K
M	O	C	H	I
A	T	E	I	T
S	T	I	L	T
H	O	N	E	Y

Leg 2:

A	M	B	E	R
D	I	A	N	E
A	C	T	E	D
P	I	E	C	E
T	O	N	Y	S

I	M	O	F	F
N	A	D	A	L
A	N	D	R	E
P	R	O	M	O
P	A	R	E	S

Reading through each grid, putting Leg 1 before Leg 2, gives the solution **CITY MAPS**.

Appendix with all answers:

Leg 1:

Across	Answer
Love, in Rome	AMORE
Took a trip?	ATEIT
Winnie-the-Pooh's jarful	HONEY
T-shirts and vinyls, at a concert	MERCH
Delectable Japanese rice cake	MOCHI
Animal that can form a "raft" by holding hands with groupmates	OTTER
Like a clarinet... or an oboe, doubly	REEDY
Smooth or slippery	SLICK
Tall circus prop	STILT

# MIT Aquarium Puzzle Hunt 2025

"Wanna join us?"	YOUIN
<b>Down</b>	
Nation with a capital in Santiago	CHILE
Wept	CRIED
Show your feelings on stage	EMOTE
Actor Cavill of "The Tudors," or a Tudor king	HENRY
Entrap during a winter storm	ICEIN
"Hello ____," whose first product was a coin purse	KITTY
Powerball, e.g.	LOTTO
Michelle Wu, in Boston	MAYOR
Way to go!	ROUTE
Break into pieces	SMASH

Leg 2:

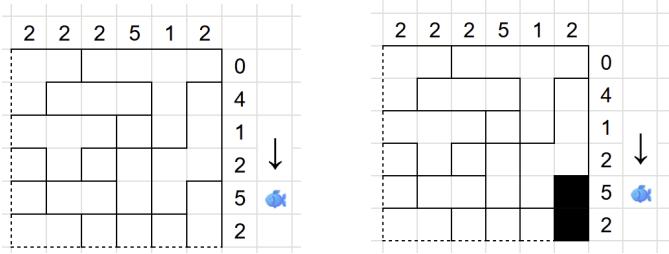
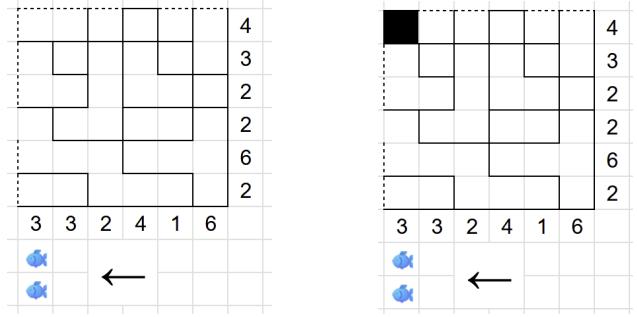
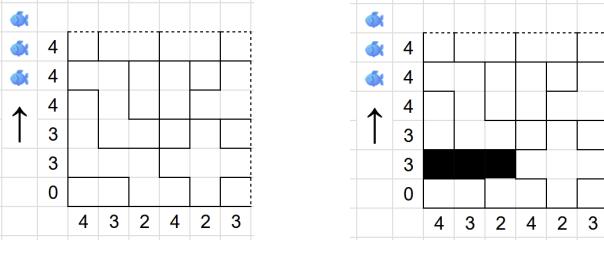
<b>Across</b>	
Made a scene?	ACTED
Shade of yellow, or a female name	AMBER
Preceder of "3000" or "the Giant" (a male name)	ANDRE
Steak _____, or a female name	DIANE
"See ya!"	IMOFF
Rafael with 14 French Open wins	NADAL
Trims	PARES
Word after jigsaw or mouth	PIECE
Ad	PROMO
Theater awards, or multiple male names	TONYS
<b>Down</b>	
Modify to fit, like a movie from a book	ADAPT
Relay stick	BATON
One to keep not close, but closer	ENEMY
Mockery	FARCE

## MIT Aquarium Puzzle Hunt 2025

Runs	
Like some mobile purchases	FLEES
It's all the rage	INAPP
Prefix with economics or phone	MANIA
More unusual	MICRO
Second tries	ODDER
	REDOS

# The Recirculating Aquarium [HINTS]

By Becca '26, Benson '27

Current Progress	Hint
don't know where to start	[REDACTED]
unsure about how faces correspond to grids	[REDACTED]
stuck on aquarium solves	<p style="text-align: center;"><b>Grid 1 Regions and Hint</b></p>  <p style="text-align: center;"><b>Grid 2 Regions and Hint</b></p>  <p style="text-align: center;"><b>Grid 3 Regions and Hint</b></p> 
correct aquarium solutions, not sure how to extract	[REDACTED]

## The Recirculating Aquarium [SOLUTION]

By Becca '26, Benson '27

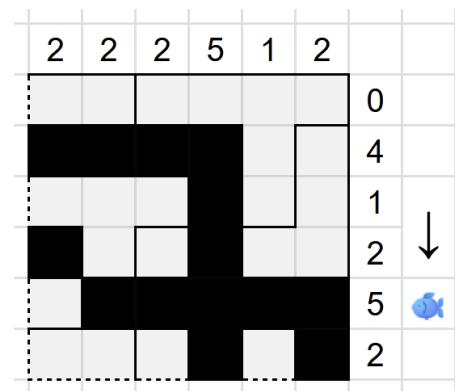
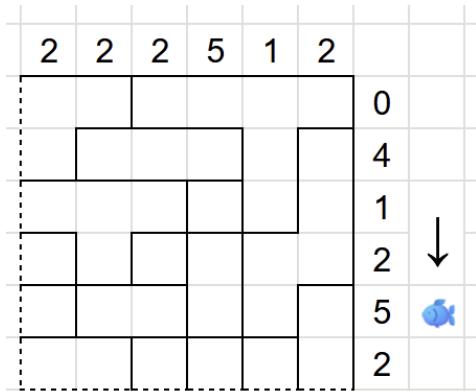
The flavor text indicates that you should “*understand the aquarium from various perspectives and see how depth plays a big role partitioning the aquarium*”.

To obtain the regions of each of the  $6 \times 6$  aquarium puzzles, you will need to observe the map from one of the 3 axial (x-y-z) directions. Each contiguous section that you **can see to be at the same depth** belongs to the same region.

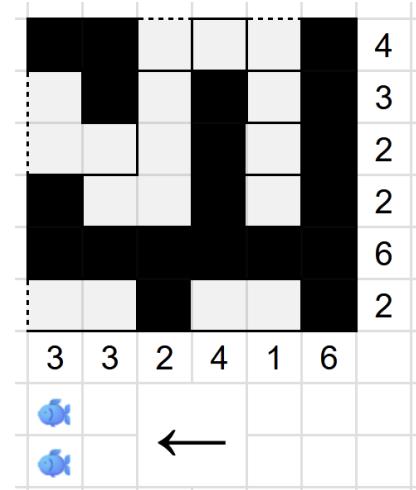
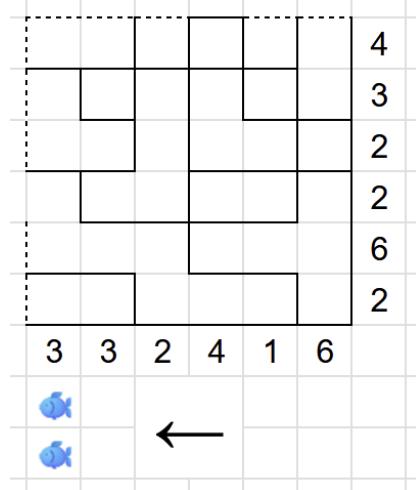
To match each of the grids with the perspectives, locate the fish and arrow engravings on the side of the map. These will match the number of fish and gravity direction on the grids that you have been given.

The next step is to solve all 3 aquarium puzzles. Grid 1 and 2 are the more straightforward puzzles as the 0s and 6s heavily constrain the grid. Grid 3 is more challenging and takes some extra reasoning generally focused on the 3 on row 5. All grids have unique solutions corresponding to the clues given and the gravity direction.

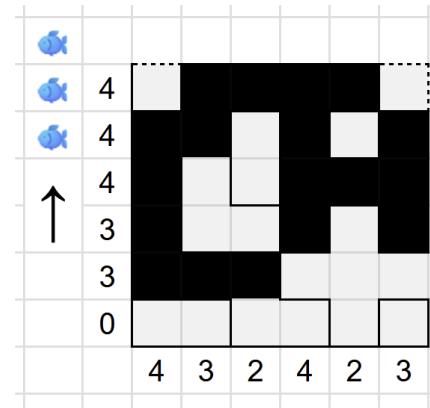
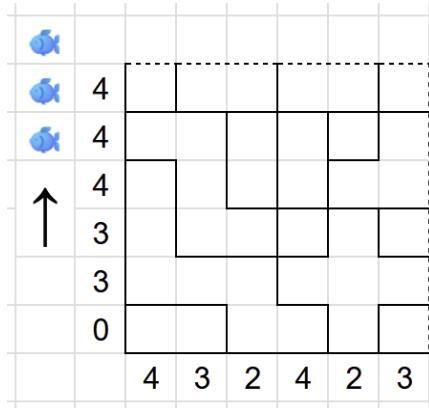
### Grid 1 Regions and Solution



## Grid 2 Regions and Solution



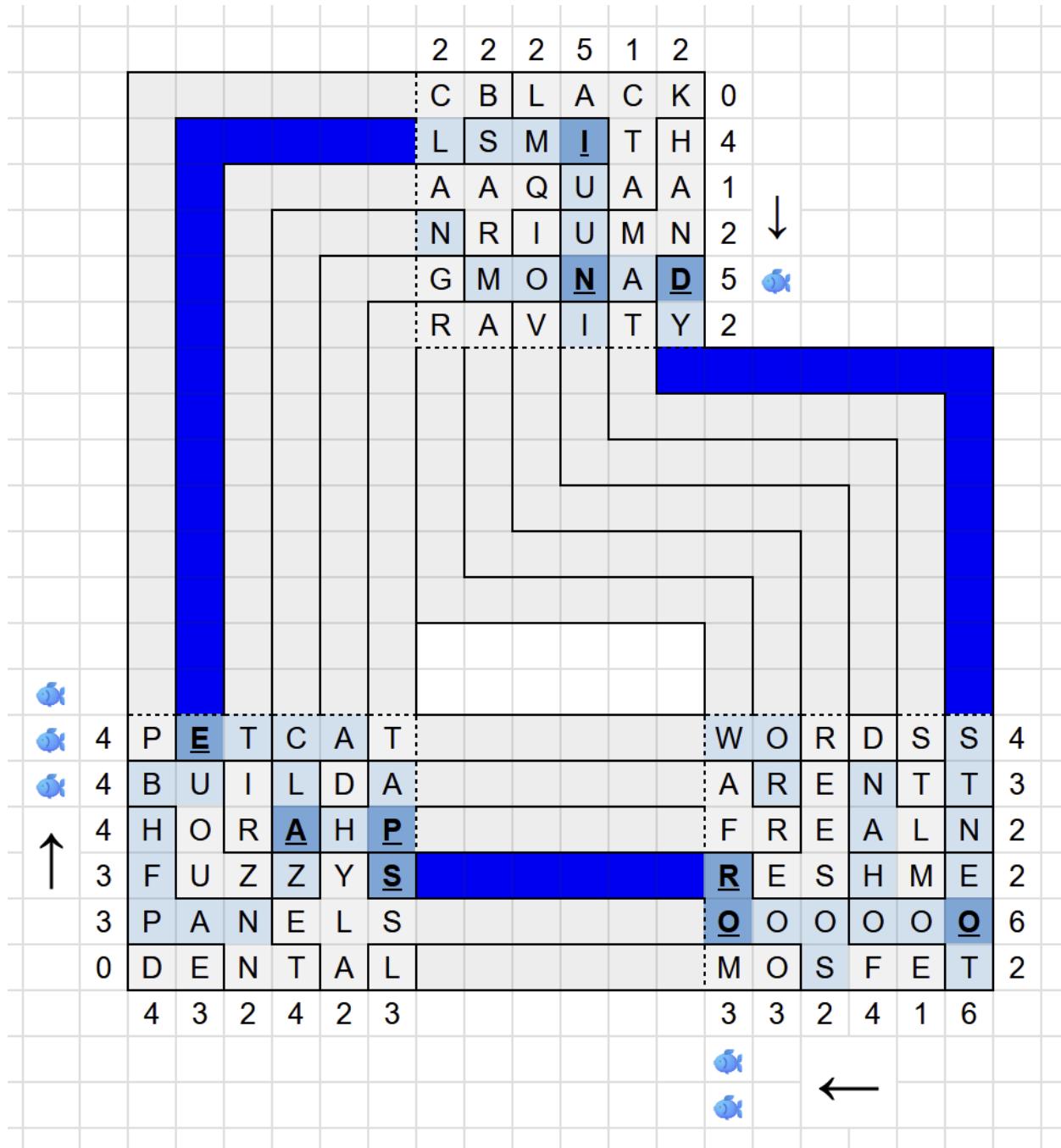
## Grid 3 Regions and Solution



After solving all aquariums, one might notice that the shaded sections (i.e. those filled with "water") are connected by the "pipes" connecting the different grids. The title "Recirculating" indicates that water is somehow flowing between different grids, and this is also reinforced by how gravity (aka flow direction) changes on each grid.

The flavor text states "*taking a loop around the aquarium's twists and turns*". Using the shaded cells and the pipes, there exists a unique loop around the 3 grids. Read off the letters located at each corner of the loop (the twists and turns) starting from grid 1 in the flow direction to obtain the letters

# INDOORSPACE



**Author's Notes (Benson):** This puzzle was created very soon after I learnt what the Aquarium logic puzzle type was. I wanted to make a logic puzzle with a physical aspect so that was how the 3D model and the 3 6×6 aquarium puzzles came about. The surprising fact is that while the existence of the loop is an additional constraint that can be used to solve the puzzle, the solution is unique without using this information.

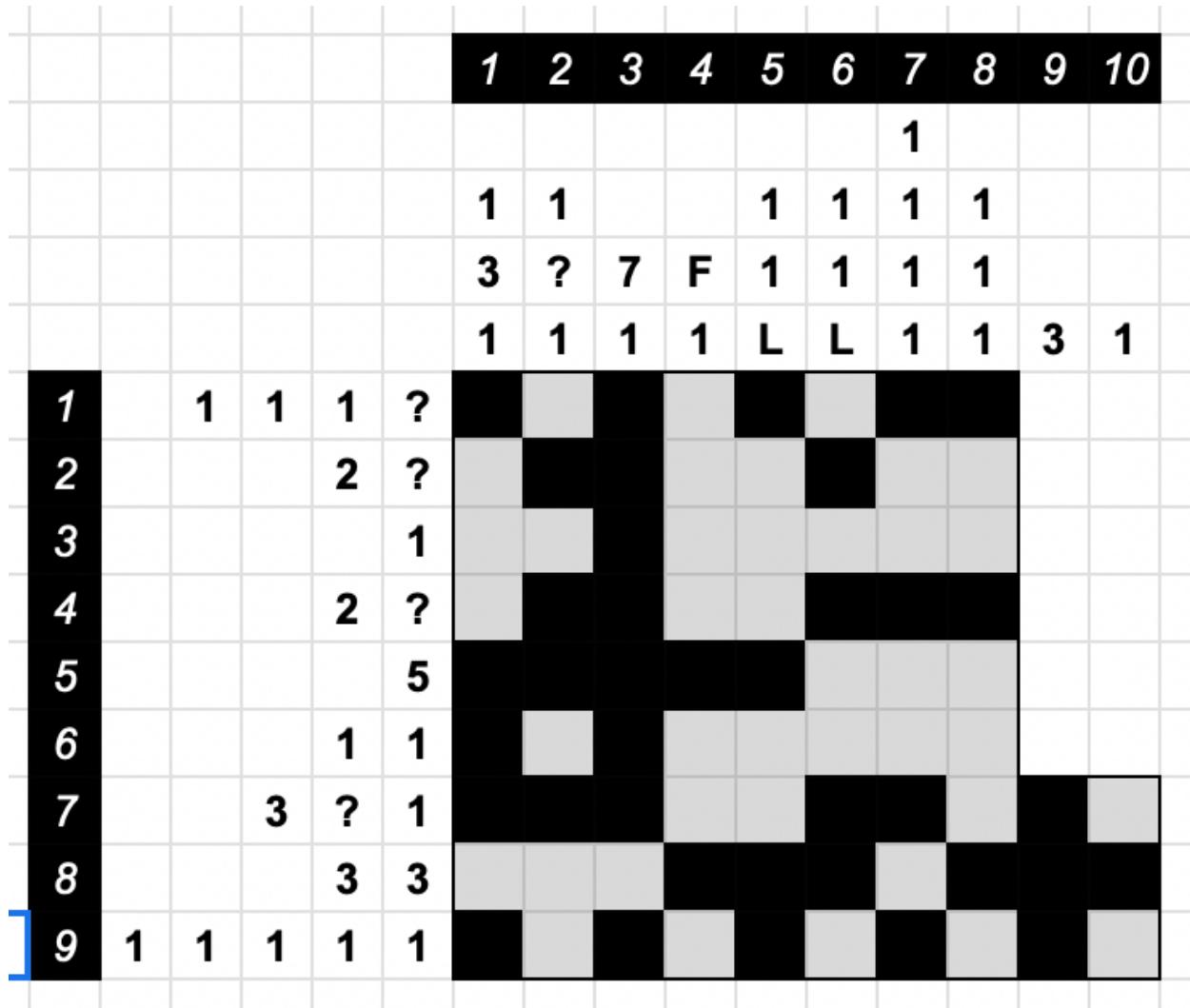
## Tim's F1 Racecar [SOLUTION]

by Benson '27

Solvers can use the given rules in order to solve the nonogram puzzle. Some helpful hints to get through the logic:

- Rows 1 and 10 are quite constrained
- The letter H appears a lot
- [If solvers have not found U yet] Look at column 8, U cannot be very big
- [If solvers have not found N yet] Look at row 8 and figure out where the shaded blocks are

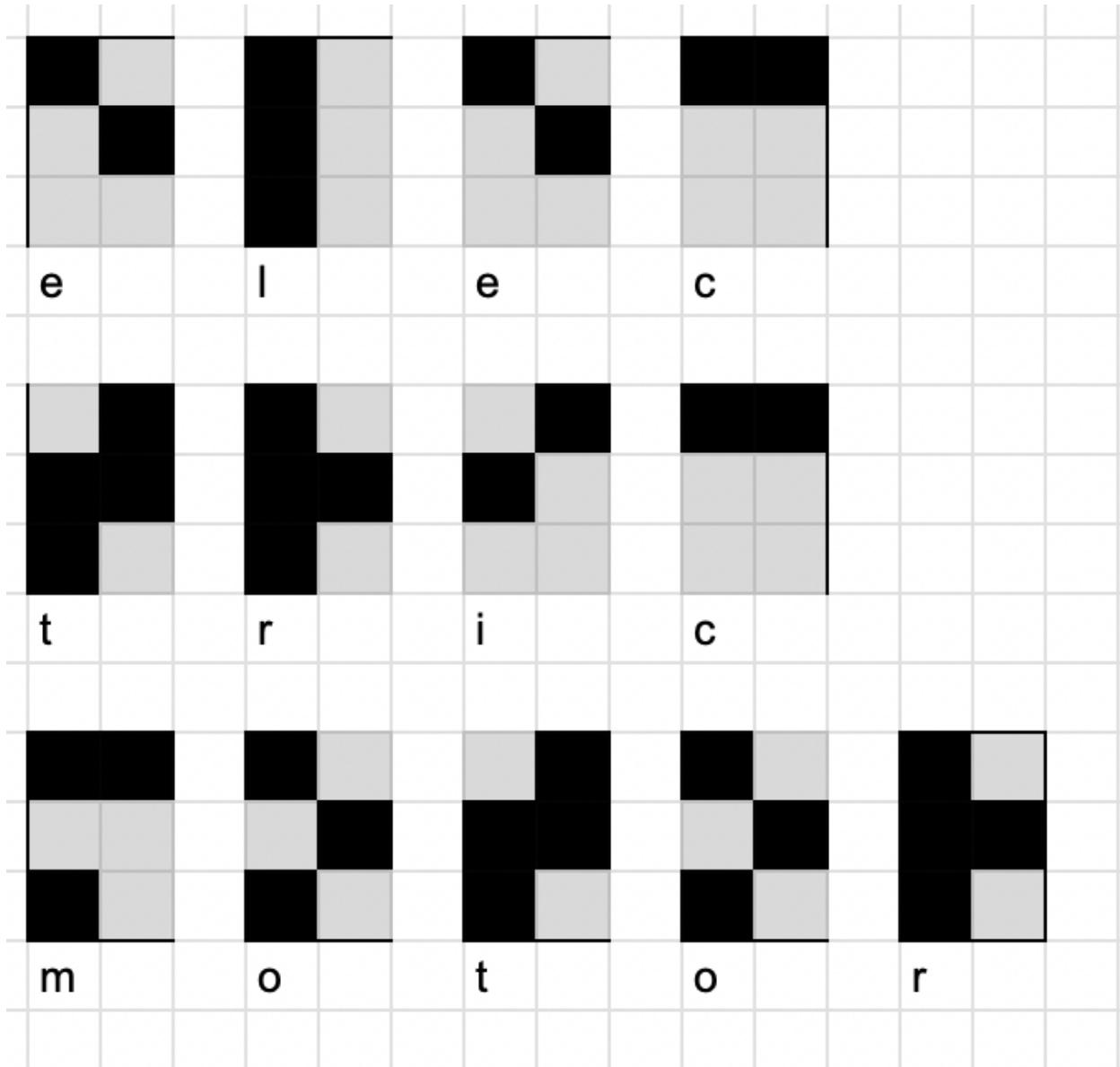
The solved grid is as follows:



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After the logic puzzle is solved, solvers may notice the  $3 \times 2$  grid jutting out at the bottom of the grid. This, coupled with the flavor text saying “struggling to *feel* for what’s missing” indicates that the extraction is through Braille.

The grid can be split into  $3 \times 2$  blocks, each of which extract to a letter, as shown below.



When taken in reading order, these spell out the answer - **ELECTRIC MOTOR**

# [META] Where's Tim? [SOLUTION]

by Atul '27

These are the feeder puzzle answers (in no particular order)

1. INDOOR SPACE
2. BAKING EVENTS
3. DATING SITES
4. ART REGION
5. ELECTRIC MOTOR
6. GOOD SPIRIT
7. CITY MAPS
8. FRESH START
9. HEAVY METAL

The puzzle is inspired by TIM and MIT being reverses of each other. As clued by the capitalized TIM/MIT, as well as “look back on your adventures”, solvers must reverse their puzzle answers and “search for the missing items”.

The second word of each puzzle answer, when reversed, contains an answer to one of the missing items clues (which are sorted alphabetically by answer) as well as an extra letter. The first words start with distinct letters A through I, providing an ordering. The extra letters in this order, spell out the answer **ON MIT TIME**, which is an example of the mechanic (with TIME being MIT reversed + a letter) as well as an answer to the question (MIT time is traditionally 5 minutes after the event time).

First Word	Clue	Clue Answer	Letter
ART	An African country	NIGER	O
BAKING	Someone who shouted “Chicken Jockey!”	STEVE	N
CITY	Somewhere to relax	SPA	M
DATING	Complete collections	SETS	I
ELECTRIC	A hotel unit	ROOM	T
FRESH	Snitches	RATS	T
GOOD	Vacations	TRIPS	I
HEAVY	What Tim is, for this event	LATE	M
INDOOR	Headwear articles	CAPS	E