

Chelsea pushed her way through the heavy entrance door and began to scan the evening's scene. *Must be another tournament night*, she thought as she looked over the rows of rectangular tables crammed full with pairs of card collectors playing matches. Her gaze proceeded along a few larger tables covered in crafted villages and miniature troops, along with the usual contingent of military buffs intensely measuring distances with their pocket-sized tape measures. Finally her eyeline connected across the large room with the short twentysomething in a flamboyant tropical shirt who was waving frantically to catch her attention.

As she approached their round table, she was greeted by her game crew. George and David both said, "Hey Chels," nearly in unison, while Ansel (the floral shirt owner) lunged to give her a quick hug. Ben seemed distracted by something on his phone but still managed a basic "hi."

"How is everyone tonight? Ready for some tabletop show-and-tell?" Chelsea asked, as she set down her bag and took a seat. Although George was the oldest by far and had already been a long-time fixture of the shop when she started visiting, Chelsea had somehow become the de facto leader of this particular group. She didn't mind. She was just happy to have a semi-consistent gaming meetup with pleasant folks.

"You know, the usual. Work, play, repeat," said George, while everyone else nodded and mumbled affirmatives.

"I'm almost surprised you're not over there," Chelsea said as she gestured in the direction of the mini players.

"Ohhh, I'd never give up our monthly board games for that. Unless it was a tournament. Or a league night. But funny you should mention, 'cause I brought something with a martial theme."

Chelsea smirked at him. "Before we get into that, I have a new icebreaker for tonight. I've been thinking recently about what makes us tick." She shot a glance and sharply asked, "Ansel! What is the meaning of life?"

Ansel nearly choked, then cleared their throat and replied, "Uhm. You know, I think it's real cool how we're all made of the same stuff, like, stardust, right? I think that means we are all connected in a way. Thanks for putting me on the spot though," playfully raising a middle finger at Chelsea. "David, you go."

David said, "Hmm, I'm not sure about meaning per se, but I can tell you what I mess with: retro consoles, speedruns, *anything* sports-related, fighting games. And I *love* showing off a huge play. If I could do e-sports professionally and make a living, bet. How about you, George? What's the *meaning of life*?"

"To crush your enemies, see them driven before you."

Ben's attention bolted upward, "Conan!!" George nodded knowingly.

Chelsea looked annoyed. "Come on, George. Earnest answers, please."

George replied, "Au contraire. You know how important my battles are to me. And I *have* to win. I wish I could be in here wiping out armies twenty-four seven. Just give me a little bunk in the corner. I'll be good to go."

"Fair enough. That just leaves you, Ben. What is the meaning of life?"

(Note: The first four puzzles may be solved in any order, but the final puzzle requires all four to be solved.)

Light Up My Life (part 1/2)

The Photographer

Ben looked a little uncomfortable as he concentrated. “Would it be cheating if I answered like David did? I mean, I have *really* been getting into my photography. To the point that I’m thinking about going full-time with it. People have been paying me for sessions! I even rented a studio space set up for boudoir shoots.”

“*Candid* photographs, he asked him knowingly?” quipped George, in an underwhelming Eric Idle impression.

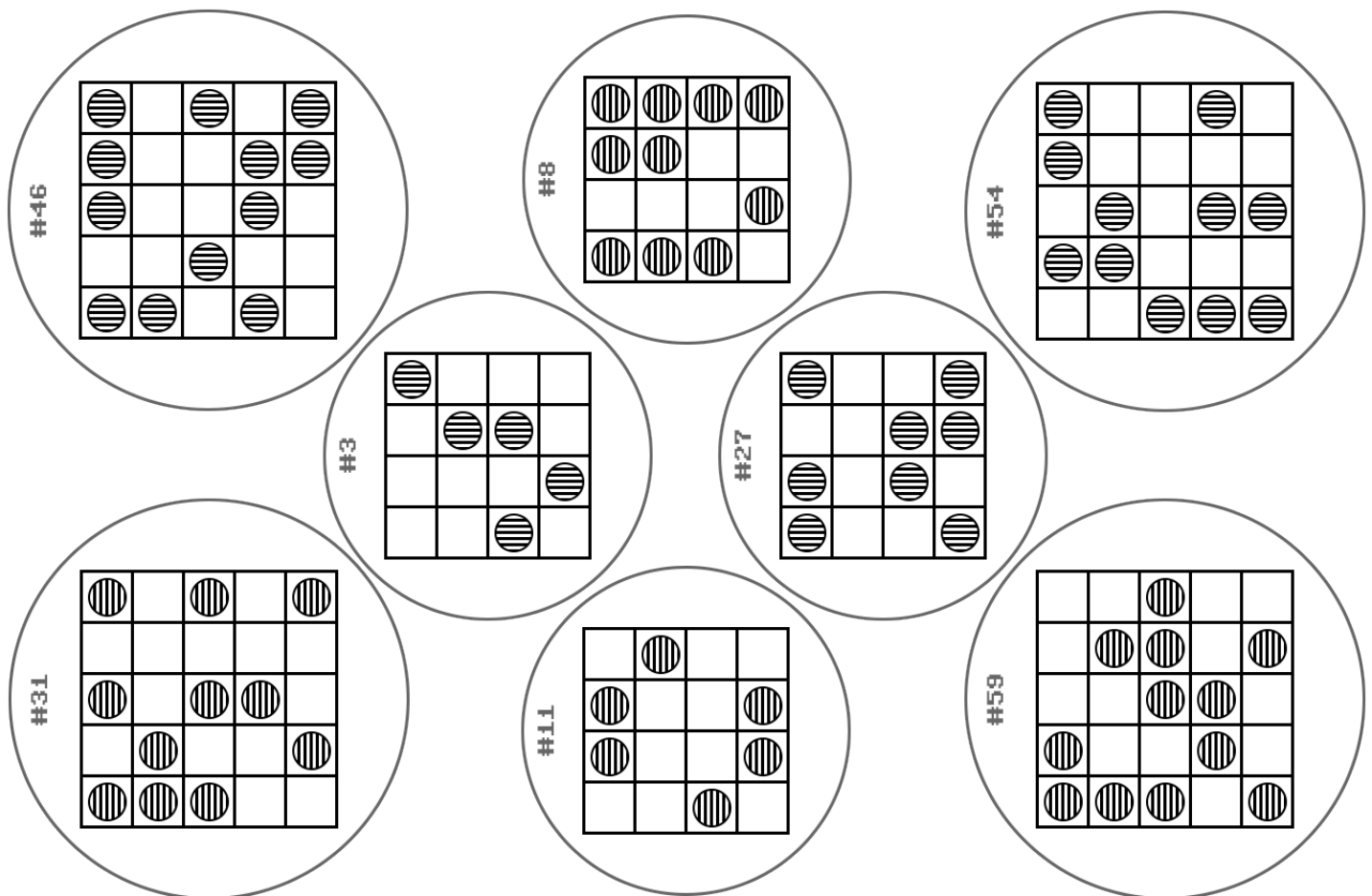
Ben smiled at George. “But I guess when I think a little more deeply about the question and what I like about it, what it comes down to is a craving for connection. I think the meaning of life is about us forming bonds and experiences with each other. And maybe photo shoots are a real easy way for me to do that?”

Chelsea responded, “Thoughtful. Perhaps creepy,” and Ben winced slightly. “What have you brought to play?”

“Hey, aren’t you gonna answer the icebreaker too, Chels?” asked Ansel.

“Maybe later,” Chelsea smirked. “We need to get started with the gaming. What do you have, Ben?”

Ben shrunk in his seat. “I don’t have a game tonight,” he said sheepishly.



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Light Up My Life (part 2/2)

“Whaddya mean?” asked George. “What’s with the luggage by your feet then?”

“It’s my camera equipment. I’m actually headed to a shoot after this. That’s who I was texting earlier.”

“Well... then show us that,” said Chelsea contemplatively.

With an excited expression, Ben quickly hauled the rigid black bag up from the floor to the table and unzipped the top. Out came an array of numbered filters and several lenses of various sizes. He proudly explained why and when he would use each lens, and everyone had a sensible chuckle trying to decipher the poorly translated instruction sheets packaged with them. David held up a filter and asked, “So these modify the light that comes through the lens to the camera?”

Ben replied, “Yeah, basically. They can block or polarize wavelengths. I like to use certain filters with certain lenses. And lately I’ve been combining pairs of filters to get very specific results.”

“Oh, you’re like a light alchemist!” shouted Ansel, and Ben beamed.

35mm lens instructions

1. Throne thief spills guts for manipulator (4)
2. House that holds Rogen (4)
3. Rock partner announced part (4)
4. Early Clooney vehicle is oddly early without year (2)
5. Moon inside of lion (2)
6. Endless food for Steve Carrell role (3)
7. Half-liters ablaze (3)
8. TV's Dr. captured by paraphilias (4)
9. Roman trio sounds unanimous, perhaps? (3)

85mm lens instructions

1. Seas roiled after head of Oman made desert pit stops (5)
2. Theatre chain Gremlin maker (3)
3. South Korean president's here, looking disheveled (4)
4. CDC's enemy's beginning (4)
5. CDC's stats org's recesses without vowels (4)
6. CDC's first announced view (3)
7. Do-you go-between from fun torah (4)
7. Great Basin tribe whittled flutes (3)
8. Reg. symbol starts to monetize (2)
9. Energized inside of Star Trek's McCoy... (2)
10. ...or returning TNG ensign (2)
11. Inside retro DNA, I revise (5)
12. Doctor decapitated insects for medicine (5)

105mm lens instructions

1. Seal reports oak skins (5)
1. Slam knight in the bag (4)
2. One pound half-used for Dumbledore (5)
3. Steal the French white oak (5)
4. Broken brakes without a cycle namesake (5)
5. Weird musician from Los Angeles returns (2)
6. Morbius has a ball (3)
7. Novel stream without river (4)
8. Extra bitter beer heads recede (3)
9. Carry tailless seabird back (3)
10. Derek's boyfriend announced (2)
11. Non-zero qtys. for Nintendo handhelds (4)

14mm lens instructions

1. Also, a pod contains detergent (4)
2. Arthur confused for Shinzo (3)
3. Barnum's physical therapy (2)
4. Without me, debit what is owed (4)
5. Among reefer, nice leafy green (4)
6. Leonidas evenly comes to a stop (4)
7. Heartless Romeo destroyed sandwich cookie (4)
8. Milkmaker's oral outburst starts! (3)



Life Coach

The Statistician

“So this is, you know, like a simulation. Kinda like fantasy football.” David continued uncertainly, “There’s a lot of rules I guess, or... well there’s a lot of tallying and cross-referencing, at least. Like a manual video game.”

“Hmm,” replied Ben.

“I think the main thing to understand is the field layout rules. You know how football diagrams use *Xs and Os* to represent players? This uses those too, but they have to follow certain rules. The field will have an equal number of each, three each, in every row and column. And there can never be a three-in-a-row anywhere.”

“Even diagonally?” asked Chelsea.

“No, diagonal is ok. Just not *three consecutive same symbols* in any row or column. OH! Also no two rows can be identical. Or columns either. So we fill up the field, and there’s a table to mark the actions we take on each turn. And from there, we total up our action values to determine which score card to use.”

“And that’s cross-referenced against the field, got it,” said George as he thumbed through the rules. “Let’s go.”

ACTIONS

	FLAT	SHORT	LONG	KICK
1			✓	
2		✓		
3			✓	
4		✓		
5		✓		
6	✓			
7				✓
8		✓		

FIELD

X				X	
					X
	X	X			X
X			X		
X	X			X	
		X	X		X

SCORE CARD 4

18	0	20	20	11	8
1	18	10	20	0	4
13	18	26	23	1	26
9	0	26	0	20	13
1	21	20	0	1	16
26	26	13	0	0	1

SCORE CARD 5

12	2	2	5	5	21
9	20	14	0	26	0
0	23	5	15	0	22
12	15	2	24	17	17
13	0	21	6	7	22
1	5	26	23	6	3

SCORE CARD 10

0	26	20	8	1	19
24	18	1	16	5	5
0	19	8	16	15	0
2	4	9	14	25	20
0	16	3	5	12	20
0	1	25	12	6	0

SCORE CARD 14

6	0	19	12	6	9
24	16	20	5	0	13
5	24	11	14	0	13
7	2	1	3	9	20
7	6	0	7	23	1
13	5	6	7	0	2

SCORE CARD 21

13	2	1	2	1	0
12	2	18	7	19	19
13	24	7	10	2	9
26	19	14	20	0	12
13	20	25	3	19	13
6	12	0	13	4	20

Action Value Reference

- Flat Pass... +3
- Short Pass... +4
- Long Pass... -2
- Kick... -1

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Life on Mars (part 1/3)

The Stargazer

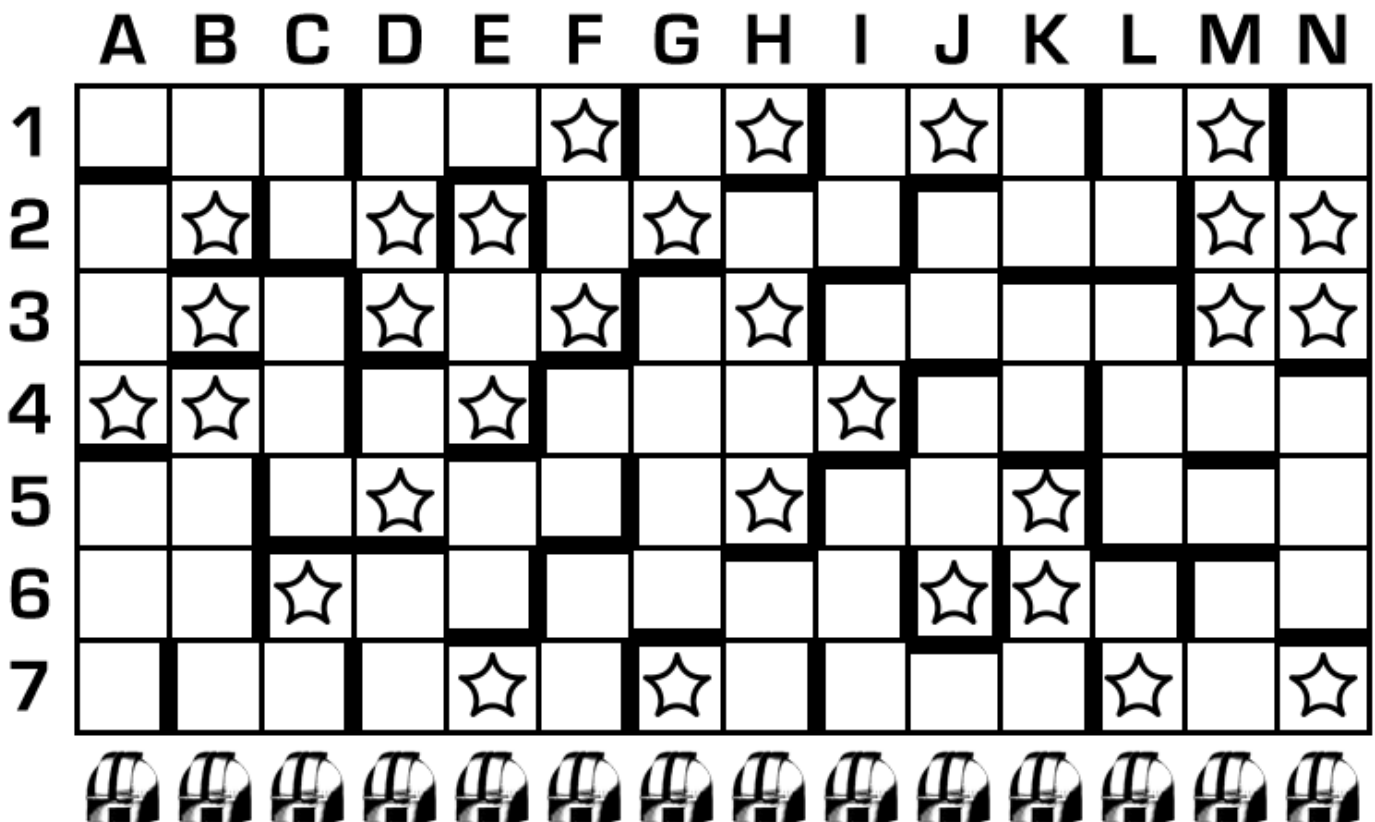
“Okay,” said Ansel. “Okay okay okay. As you all know, I really love anything astronomical.”

“The constellation sleeve was a giveaway,” Chelsea said, nodding her head toward Ansel’s tattooed arm.

Ansel glanced down at their own shoulder almost confused for a moment, then looked back. “Yep. I love the idea of visiting other planets. My dream would be to like, voyage to another solar system entirely, like Barnard’s Star or something. So my partner got me this telescope game thing, but I haven’t tried it yet. Actually I’m not even certain it’s a *gaaaaame*? I didn’t read all the rules.”

A collective “uhh...” formed around the table.

“No look look, okay! So here’s the idea. There are a bunch of different observation bases all around the world, and each one has a bunch of supercomputers and an array of huge telescopes. And we’re going to be *operating in one of those bases*. And each one of our telescopes will be pointing up at a slice of the sky, and...” Ansel trailed off while staring at the written materials, causing Ben to chuckle. “AH! Okay. There’s like, each star has a luminosity value, okay? And the telescope will read the *total* of all the luminosities it sees. But... the telescope readout only has *one digit* so the overflow gets *modulated* away, or something. Is this making any sense? And there’s also like two huge cards with computer data readouts that we’re supposed to do something with. I guess those will tell us the luminosities somehow? Should we just get started and see what happens?”



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Life on Mars *(part 2/3)*

Across

- A1: K3-down plus J7-down, times A5-across
D1: Tape machine?
G1: A fifth power
I1: F6-down plus I5-across, times the square root of G7-down
L1: Twice D6-down, plus E2-across
N1: Mean of E2-across, A1-down, J1-down, and N7-down
A2: E2-across cubed plus L6-down
C2: Not bad?
E2: Cube root of a single-digit number
F2: AWBN times E2-across
J2: C3-down plus E2-down, plus J1-down, minus M2-across
M2: L1-down plus L6-down
A3: Robotic narration?
D3: K1-down times J4-across, minus E2-across
G3: *__-Gi-Oh!?*
I3: E2-down minus M3-across, plus A5-across, plus L7-across, times G7-down
M3: Year of Halley's Comet appearance depicted in *Bayeux Tapestry*
A4: I7-across minus H1-down, minus J1-down, doubled
D4: Atomic no. 1F?
F4: Hugs and kisses?
J4: Base used in this puzzle
L4: EXth super-prime
A5: Twice E7-down
C5: Sum of I3-across, A2-down, L1-down, and J1-down
G5: Half of F4-across??
I5: *Pi* release year
L5: Sum of G3-across, A7-across, I7-across, E5-down, and J7-down
A6: Cell speed?
C6: A square
F6: 9QPth prime
J6: An isolated prime
K6: Mean of G7-across, M3-across, M6-across, and F4-down
M6: Mean of K6-across and D4-down
A7: The loneliest number
B7: ZZ minus half of K3-down
D7: A super-prime
G7: Area of a unit circle?
I7: E2-across to the fourth, plus N1-down
L7: 3, from a Roman?

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Life on Mars (part 3/3)

Down

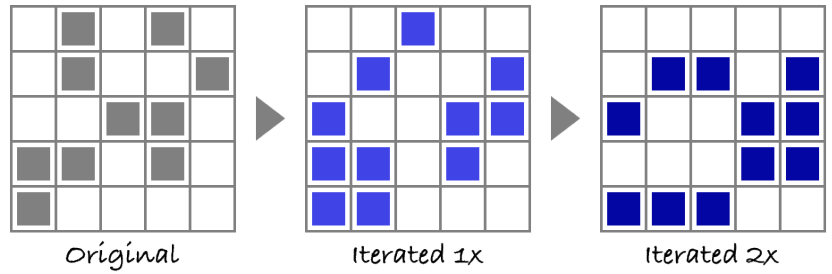
- A1: Maximum number of fourth powers needed to sum up to any natural number
- B1: C6-down minus J7-down
- C1: J1-down times L1-down
- D1: E2-down minus H6-down, minus L6-down, times N1-across
- E1: E2-across times J1-down
- F1: C3-down minus G7-across
- G1: A needle pulling thread??
- H1: A square
- I1: A central Delannoy number
- J1: H1-down minus E1-down
- K1: D, to a Roman
- L1: A5-across?
- M1: Sum of C5-across, E2-down, B1-down, and A7-across
- N1: Magic number, perhaps?
- A2: P0th harmonic prime
- E2: D4-across minus H1-down, times 1% of K1-down
- H2: F6-across times E1-down
- J2: A7-across plus B7-across
- B3: N1-across plus N7-down
- C3: NorCal int'l airport?
- G3: Permutation of F2-across?
- I3: J4-across plus N1-across, times E1-down
- K3: J4-across times A
- L3: Proprietary ext. for image files?
- B4: Half of F4-across
- D4: M6-down minus A7-across
- F4: Sat. radio?
- J4: Mars Express launch year
- N4: E2-across times A6-across, plus A4-across
- A5: Palindrome? A base-A palindrome
- E5: TV break?
- I5: Flash drive size, perhaps?
- K5: British Channel 3?
- M5: "My hero", according to *Schoolhouse Rock!*
- C6: AUS neighbor?
- D6: Base used in this puzzle?
- F6: A prime
- H6: J4-across squared, minus L6-down
- L6: J4-across squared, minus H6-down
- M6: G1-across plus the square root of J1-down
- E7: N1-across times E2-across
- G7: A square
- J7: Letters in the alphabet
- N7: Half of 10



One Life to Live

The Computer Scientist

Chelsea rummaged through her bag for a moment then abruptly slapped a sheet of paper onto the table. “I may be going a little outside the box with my pick. I present to you: *Conway’s Game of Life*. Technically this is a zero-player game that functions algorithmically, but we can act as the computers that run it.”



“Chels,” George began to protest, “we’re not here for a programming lesson.”

“I don’t know, it looks kinda fun,” said Ansel.

“Please, just bear with me a moment. This is something very meaningful to me, and I think you’ll all enjoy it if you give it a chance. Here you’ll see a set of five-by-five example grids. You can tell they’re examples because I colored them specially. You’re not going to touch them at all — they just demonstrate the rules of the game. We’ll start at the gray grid with some cells already filled in. Those represent the titular *Life*. Each subsequent grid represents a new generation, but we have to populate it ourselves by applying the rules of the game. Each time we do that is called an iteration. In the example you can see that I’ve iterated twice. There are really just two rules to know. First, a living cell only survives if it has exactly two or three neighbors. Second, a living cell is born in an empty space if it has exactly three neighbors. Neighbors are living cells in the eight positions immediately around, just like *Minesweeper*.”

“I get it. They’re like, reproducing. Or starving,” said Ben.

“Or getting overcrowded, right,” Chelsea quickly added.

“Ok. So what do you want us to do?” asked David.

Chelsea’s eyes lit up as she pulled out a handful of pencils and a second sheet of paper with a pair of much longer grids, one filled and one empty. “I thought, as a group exercise, we would run this one together. I’ve assigned each of the columns to one of you to fill in, and I’ll oversee.”

“Great, let’s get to it,” said George, seemingly unimpressed, as he grabbed a pencil and started writing.

Undeterred, Chelsea continued, “I find it almost meditative. To me it represents the endless cycle of refinement we go through as we develop ourselves, always in a state of becoming. It brings to mind the Japanese *kaizen* philosophy, continuous improvement. At each step I get closer to my truest form, but I never quite reach an end. Zeno’s paradox.”

“Wow,” was all George said in response.

Chelsea continued, “So. As you fill it out together, I ask you once again to contemplate for yourselves: *what is the meaning of life?*”

