# GAS Leak 

## Genuinely Approachable Sudoku from the CtC Discord Volume 23:

## December 2022

## - <br> 

GAS's first full calendar year comes to a close with this set of puzzles (and bonus puzzles!) from December 2022. They say that whatever you do on January 1 is what you'll end up doing for the rest of the year: so why not spend your day with some good friends, a nice mug of cocoa - or a glass of lemonade, if you're in the southern hemisphere! - and some approachable sudoku? Here's to another good year!

Clover

## December 1, 2022: Consecutive Clones

Clover

Just as one month follows another on the calendar, so too do digits follow each other in this consecutive clones sudoku.

Normal sudoku rules apply; also, digits appearing in the same relative position in the two matching shapes must be consecutive to each other. For instance, the central digits in the two shapes could be 1 and 2 , or 5 and 4 , etc.


CtC: https://tinyurl.com/ydc7a27t

December 2, 2022: Scratchcard Lanyard
Bill Murphy
G'Day Camp Fans, I'm back from camp; coughing and spluttering with illness. Y'all can get GAS early so I can go to bed.
(Today's title comes from another Dry Cleaning song, with the lyric "It'll be okay, I just need to be weird and hide for a bit and eat an old sandwich from my bag" just how l'm feeling today)

Today's GAS is an Outside Sudoku named after the place I want to be the least right now. Normal Sudoku Rules Apply. Numbers outside of the grid must appear in the first three cells from that direction.

f-puzzles: https://f-puzzles.com/?id=2kjmw3sa
CTC: https://tinyurl.com/2w8beypt

December 3, 2022: Rockin' Around the Symmetree
Philip Newman

It's December! Before we close out the year here at GAS, we need to answer an important question: how many terrible Christmas song pun titles can I come up with?!?

Today's GAS is a Thermo Sudoku!
Normal sudoku rules apply. Digits along thermometers must strictly increase from bulb to tip.


Play on f-puzzles: https://f-puzzles.com/?id=2p27|x87 Play on CTC App: https://tinyurl.com/5989kbrr

## December 4, 2022: Extra Regions

Clover

Until 2015, Dahala Khagrabari was the only third-order enclave in the world: an extra region of India inside of an extra region of Bangladesh, which in turn was inside of an extra region of India, which itself was inside of a completely ordinary region of Bangladesh. Following? Good, now solve this extra regions GAS.

Normal sudoku rules apply; also, each gray shaded region must contain the digits 1 through 9 exactly once each.

|  |  |  | 6 |  | 9 |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | 5 |  |  |  | 6 |  |  |
|  | 4 |  |  |  |  |  | 7 |  |
| 8 |  |  | 1 |  | 2 |  |  | 5 |
|  |  |  |  |  |  |  |  |  |
| 1 |  |  | 4 |  | 3 |  |  | 2 |
|  | 2 |  |  |  |  |  | 8 |  |
|  |  | 3 |  |  |  | 1 |  |  |
|  |  |  | 7 |  | 6 |  |  |  |

CtC: https://tinyurl.com/42z4mzur

December 5, 2022: Makodoku
Bill Murphy

G'Day to all our Selachimorpha friends,

Today's sudoku is Makodoku a variant sudoku which apparently tracks all the way back to 2008, named as such because sharks, like me, can't count to 10 on their fingers. (I was cursed by a witch)

Normal Sudoku Rules Apply. Cells separated by a + have a sum of less than 10. Cells separated by an $X$ have a product of less than 10 . Not all + or $X$ are given.
(No negative constraint today, l'm not that large of a sucker for punishment)

f-puzzles: https://f-puzzles.com/?id=2gvlojz5
CTC: https://tinyurl.com/ytmybcyh

December 6, 2022: Having A Wonderful 159
Philip Newman

Today's GAS not only butchers another Christmas song title, it also kinda looks like a candy cane - it's 159 Sudoku!

Normal sudoku rules apply. Each digit in column 1 indicates the location of the 1 in that row. For example, a 2 in r1c1 would indicate that the 1 in row 1 is in the second cell (r1c2). Likewise, each digit in columns 5 and 9 indicates the location of 5 and 9 respectively. (See example image here: https://discordapp.com/channels/709370620642852885/854453473810186280/104971 0073590587464 )


Play on f-puzzles: https://f-puzzles.com/?id=2zucjzqb
Play on CTC App: https://tinyurl.com/23hzzkf6

## December 7, 2022: Thermo

Clover

Today's thermo sudoku was set on an airplane a few weeks ago! In other words, it was set with about four percentage points less blood oxygen saturation than I usually enjoy. Blame any trouble you have with it squarely on that. $\because$

Normal sudoku rules apply. Digits along thermometers must strictly increase (not necessarily consecutively!), starting from the round bulb.


CtC: https://tinyurl.com/38phx685

December 8, 2022: Sumdotty Once Told Me
Bill Murphy
G'day Dot Fans,
Today's the third installment of 'Bill posts a dot puzzle with a musical joke in the title.
Today is Sum Dots! Take a guess what the title is before you click on the link. I'm very proud of this one.

Normal Sudoku Rules Apply. Digits in circles give the sum of the cells they connect.

f-puzz: https://f-puzzles.com/?id=2huhazin
CTC: https://tinyurl.com/4mvcec2a

December 9, 2022: Wonderful Christmasprime
Philip Newman

Is it cheating to pun on the same song twice? Probably, but I had this puzzle ready and it was too good to pass up on.

Today's GAS is another column-indexing puzzle, like Tuesday's 159... but this time on the prime columns: 2357 Sudoku!

Normal sudoku rules apply. Each digit in column 2 indicates the location of the 2 in that row. For example, a 9 in r1c2 would indicate that the 2 in row 1 is in the ninth cell (r1c9). Likewise, each digit in columns 3, 5, and 7 indicates the location of 3,5 , and 7 respectively.


Play on f-puzzles: https://f-puzzles.com/?id=2dwz93fc
Play on CTC App: https://tinyurl.com/4h5ppcv4

December 10, 2022: German Whispers
Clover

Today's German Whispers GAS is the very first to make use of a brand-new secret feature in f-puzzles and the CtC app: make the grid lines bend.

Normal sudoku rules apply. Also, adjoining digits along a green line must differ by at least 5.


CtC: https://tinyurl.com/2r3cmhhm

December 11, 2022: Daytime Sudoku
Bill Murphy

I'm back from Meredith Music Festival, full of joy and love for life. Today's Sudoku is Daytime Sudoku. It's anti-knight. Also, I'm doing something a little different today, so please read before clicking on a link.

Normal Sudoku Rules Apply. Cells that are a chess knight's move apart must not contain the same digit.

Today is a Choose your own GASventure! There are two sudoku for you to choose from. There's the canon sudoku, pictured below. This is the easier one, with four more given digits.

There's also the non-canon sudoku, the same sudoku with four less givens. If you're feeling game, and want to push yourself a little bit, it's roughly the same difficulty as a standard leak puzzle. If you choose this puzzle, l'll give you an extra minute on both times.

| 1 |  | 8 |  |  |  |  | 6 | 2 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 5 |  |  |  |  |  | 4 |  |  |
|  | 3 |  |  |  | 1 |  |  | 5 |
|  |  | 4 |  | 5 |  |  |  |  |
|  |  |  | 8 |  | 6 |  |  |  |
|  |  |  |  | 7 |  | 2 |  |  |
| 7 |  |  | 3 |  |  |  | 1 |  |
|  |  | 2 |  |  |  |  |  | 7 |
| 4 | 8 |  |  |  |  | 6 |  | 3 |

Canon Sudoku (This is today's official GAS) - CTC: https://tinyurl.com/2p9ava4v Non-Canon Sudoku - CTC: https://tinyurl.com/bdh3rdjc

December 12, 2022: Wonderful Christmaslime
Philip Newman

Sometimes I just can't help myself.

Today's GAS is a Lime Sudoku! (Which is like a Lemon Sudoku, but green!)

Normal sudoku rules apply. Digits in cells directly connected by a green line must differ by at least 5. Additionally, the digits along the green line of each "lime" must sum to the value given by the two cells surrounded by the line (read top to bottom or left to right as a 2-digit number).


Play on CTC App: https://tinyurl.com/5p2asymy

## December 13, 2022: Two Sudokus

Clover

Two-day's GAS is two entire sudokus! But just in case you were worrying that they might get a little same-y, l've made $100 \%$ certain that these are the least similar $6 x 6$ classic sudokus that you could possibly solve.

Normal $6 \times 6$ sudoku rules apply within each grid. (That is, fill the grid with the digits 1 through 6 so that digits do not repeat in any row, column, or $2 \times 3$ region.) Also, digits may never appear in the same position in the two grids. For instance, the top left digit of each grid must be different.


Penpa: https://tinyurl.com/2gz8fx85 CtC: https://tinyurl.com/yckstmm5

December 14, 2022: David and Goliath
Bill Murphy
G'Day to my former students who watch this channel every now and then who Mark now has to say hi to because I put it in the intro hehehehehehe I'm such a sly devil sometimes

Today's GAS is David And Goliath Sudoku. Normal Sudoku Rules Apply. Each capsule must contain one low digit (12345) and one high digit (56789).

Yes, if you know a capsule contains 5 , you don't know anything about the other digit. I already said I'm a sly devil.


CTC: https://tinyurl.com/7hanbxm2

December 15, 2022: Have a Holly Jolly Classic
Philip Newman

I was so tempted to call this puzzle "Wonderful Classictime".
Today's GAS is a Classic Sudoku!
Normal sudoku rules apply. And that's it!

| 1 |  | 6 |  | 4 |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 2 |  | 7 |  | 5 |  |  |  |
| 7 |  | 3 |  | 8 |  | 6 |  |  |
|  | 8 |  | 4 |  | 9 |  | 7 |  |
|  |  | 9 |  | 5 |  | 1 |  |  |
|  |  |  | 1 |  | 6 |  | 2 |  |
|  |  |  |  | 2 |  | 7 |  | 3 |
|  |  |  |  |  | 3 |  | 8 |  |
|  |  |  |  |  |  | 4 |  | 9 |

Play on CTC App: https://tinyurl.com/mryfdtnb

## December 16, 2022: Delimited Kropki

Clover

Today you can have just a little bit of negative constraint, as a treat. Not too much, though, or you'll spoil your sudoku!

Today's GAS is a delimited kropki sudoku. Normal sudoku rules apply. Also, digits separated by a white dot are consecutive, and digits separated by a black dot are in a 1:2 ratio.

NEGATIVE CONSTRAINT ALERT : Along the gray lines, all possible dots are given. In other words, if two digits are contiguous with each other along a gray line, and there is no dot between them, then they must not be consecutive or in a 1:2 ratio. (There is no negative constraint outside of the gray lines.)

The pair of digits $1 / 2$ may have a dot of either color.


CtC: https://tinyurl.com/4ney6tck

## December 17, 2022: Serial Killers

Bill Murphy

You like Bill Murphy's GAS intros?
They're OK.

His early work was a little too anxious for my tastes, but when his second law of Thermodynamics trio came out in October, I think he really came into his own, commercially and artistically. The whole intro has a clear, crisp focus, and a new sheen of consummate professionalism that really gives the sudokus a big boost. He's been compared to Phillip Newman, but I think Bill has a far more abstract, absurd sense of humour.

Hey Halberstram.
Yes, @Daily Sudoku Solver?
Why are there copies of the art of sudoku all over the place, $d$-do you have a dog? A little chow or something?

No, @Daily Sudoku Solver.

Is that a rain coat?

## Yes it is!

In December, Bill released this, his most accomplished intro. I think his undisputed masterpiece is "Serial Killer Sudoku", an intro so stupid, most people probably don't read the rules. But they should, because it's not just a standard killer, it's also a killer sudoku where at least one digit has to repeat in each cage.
(puzzle image and solving link appear on the following page)


December 18 2022: Feliz Naviquad
Philip Newman

My Christmas gift to Mark today is a short intro.
Today's GAS is a Quadruples Sudoku!

Normal sudoku rules apply. Normal sudoku rules apply. Digits in corner circles must appear in the surrounding four cells, in some order.


Play on CTC App: https://tinyurl.com/muf297kw

## December 19, 2022: Before 9

Clover
Quick! You only have 33 minutes left to solve this before 9! Of course, you're also welcome to solve the before 9 GAS after 9 , as long as you make sure you solve it according to before 9 sudoku rules (technically, before 10 sudoku rules, in US Eastern time; 3-in-the-afternoon sudoku if you're in UTC; or 8:30-in-the-evening sudoku for our Indian solving bretheren).

Normal sudoku rules apply. Also, clues outside of a row or column tell you the sum of all of the digits appearing prior to the 9 in that row or column. The sum counts from the side of the grid where the clue appears.

For example, if a 9 appears in r 5 c 7 , and a " 5 " clue appears to the right of row 5 , then the sum of r 5 c 8 and r 5 c 9 is 5 . If a 9 appears in r 4 c 6 , and a " 14 " clue appears above column 4 , then the sum of $\mathrm{r} 1 \mathrm{c} 6, \mathrm{r} 2 \mathrm{c} 6$, and r 3 c 6 is 14 .


CtC: https://tinyurl.com/5eriv3e7

December 20, 2022: Hot Girl Summer
Bill Murphy

Hey!
It's been nice out today. I had my last day at my current job. I'm comfy in bed.
Sometimes it's the small things.

Today's GAS is a straight Thermo Sudoku. Comfy times, no tricks, no intro jokes (What's a joke? I've never made one before). Sometimes we all just need a little palate cleanser.

Normal Sudoku Rules Apply. Digits along a thermometer must increase from bulb to tip.


CTC: https://tinyurl.com/23b3vvn4

December 21, 2022: All I Want For Christmas Is 2
Philip Newman

Usually, I come up with my dumb puzzle titles after I set the puzzle. Not today's!
Today's GAS is a Difference/Ratio Sudoku!

Normal sudoku rules apply. Digits in cells separated by a white dot must differ by 2 ; digits in cells separated by a black dot must have a ratio of 2:1. (No negative constraint)


Play on CTC App: https://tinyurl.com/yck7hj4r

## December 22, 2022: All Odd or Even

Clover

If you solve today's puzzle in fewer minutes than the number of degrees in the current outdoors temperature in your location, you can be especially proud of yourself. That's because you'll have accomplished something currently impossible in the midwestern United States, where we woke up this morning to -20 Celsius and a howling wind. Stay warm and cozy, frosty solving friends! $\qquad$

In today's all odd or even sudoku, normal sudoku rules apply. Also, within each $3 \times 3$ region, some cells are shaded. In each region, either all of the shaded cells are odd, or all of the shaded cells are even. The parity of shaded cells may or may not be different for different regions.


CtC: https://tinyurl.com/ycp43b65

December 23, 2022: On Yr Goodliffes, Get Set, Go Bill Murphy
he sees you when you're sleeping
he knows when you're awake
he knows if you've been bad or good so be good oh god please be good i'm begging you
youbetterwatchoutyoubetterwatchoutyoubetterwatchoutyoubetterwatchoutyoubetterwatchoutyoubetterwat choutyoubetterwatchoutyoubetterwatchoutyoubetterwatchoutyoubetterwatchoutyoubetterwatchoutyoubett erwatchoutyoubetterwatchoutyoubetterwatchoutyoubetterwatchoutyoubetterwatchoutyoubetterwatchoutyo ubetterwatchoutyoubetterwatchoutyoubetterwatchout

Today's GAS is a Killer Sudoku. Normal sudoku rules apply. Digits in cages must sum to the given total.

f-puzzles: https://f-puzzles.com/?id=2zcxyelk
CTC: https://tinyurl.com/2mcdjed6

December 24, 2022: Twas the Knight Before Xmas
Philip Newman

Today's intro was written by ChatGPT:

Welcome to "Twas the Knight Before Xmas," a genuinely approachable sudoku puzzle that is sure to get you in the holiday spirit! This festive puzzle features a knight in shining armor surrounded by holiday decorations, making it the perfect puzzle to solve while sipping on a mug of hot cocoa. With a moderate level of difficulty, this sudoku puzzle is suitable for solvers of all skill levels. So gather your friends and family and get ready to dive into some holiday fun with "Twas the Knight Before Xmas"!

Today's GAS is an Antiknight Sudoku!

Normal sudoku rules apply. Cells separated by a (chess) knight's move cannot contain the same digit.

|  | 9 | 3 |  |  |  | 2 | 8 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 6 |  |  |  |  |  |  |  | 3 |
| 4 |  |  |  |  |  |  |  | 9 |
|  |  |  | 8 | 3 | 4 |  |  |  |
|  |  |  | 1 | 5 | 9 |  |  |  |
|  |  |  | 6 | 7 | 2 |  |  |  |
| 1 |  |  |  |  |  |  |  | 6 |
| 7 |  |  |  |  |  |  |  | 4 |
|  | 2 | 8 |  |  |  | 7 | 1 |  |

Play on f-puzzles: https://f-puzzles.com/?id=2n4hjt6k
Play on CTC App: https://tinyurl.com/mtpby8j3

December 25, 2022: Inverse Clones
Clover

Yes, you can finally open your Christmas gift. Thank you for letting mom, dad, and other dad sleep in for a few hours. Of course, if I find out you were down there carefully steaming the wrapping paper off of every gift under the tree, we're taking your Christmas dinosaurs right back to the dino-store so some other more appreciative solver can enjoy them. $\qquad$

Normal sudoku rules apply. For every pair of cells in the same relative position in the two shaded areas, the digits in those cells must sum to 10.

For instance, if the bottom right corner of one area contains a 3, then the bottom right corner of the other area must contain a 7 . If the first cell in the second row of one area contains a 5 , then the first cell in the second row of the other area must also contain a 5.

|  |  |  |  |  | 5 |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  | 8 | 9 |  |  |
|  |  |  |  |  | 6 |  | 7 |  |
|  |  |  |  | 1 | 2 | 3 | 4 | 5 |
|  |  |  | 4 |  | 9 |  |  |  |
| 4 | 5 | 6 | 7 | 8 |  |  |  |  |
|  | 1 |  | 8 |  |  |  |  |  |
|  |  | 4 | 2 |  |  |  |  |  |
|  |  |  | 5 |  |  |  |  |  |

f-puzzles: https://f-puzzles.com/?id=2kv7jy8x CtC: https://tinyurl.com/2s3cdr8v

December 26, 2022: Parity Snowflake
Bill Murphy

HO HO HO MERRY CHRISTMAS @Daily Sudoku Solver

IT IS I, SAINT NICHOLAS OF THE NORTH POLE! I'VE BEEN PREOCCUPIED FOR THE LAST 24 HOURS, BUT I AM HERE TO DELIVER YOU A GENUINELY APPROACHABLE SUDOKU, BUT BEFORE I BESTOW IT UPON YOU, LET ME JUST CHECK MY LIST!

JUST A FORMALITY, I'LL BE RIGHT WITH YOU...

Oh. Oh no.

Well in that case you can have this. I have a Parity Line sudoku l've been saving for the mischievous gremlins of the world.

Normal Sudoku Rules Apply. Digits along the grey line must alternate between odd and even.


## December 27, 2022: Kropki-Paste

Philip Newman

We survived a whole bunch of terrible Christmas puns! As a special treat, here are 9 rejected puzzle titles:
1)A German Whispers puzzle titled "Do You Fear What Bill Fears?"
(2)"Oh Sum All Ye Faithful"
3)"Christmas (W)rapping" feat. @shye
4)"Happy Xmas (Four Is Over... There)"
(5)An Odd/Even puzzle titled "Blue (and Orange) Christmas"
(6)"The Little Killer Boy"
7) "Dear Santa (Bring Me a Given This Christmas)"'"
8)A puzzle with all 10 clues titled "Wonderful Christmasdime"
(9) "Fairytale of You, Mark"

Today's GAS is a Kropki Pairs Clone Sudoku!
Normal sudoku rules apply. Grey regions are clones, and must contain the same digits in the same relative positions. Digits in cells separated by a white dot must be consecutive (have a difference of 1); digits in cells separated by a black dot must have a ratio of 2:1. (No negative constraint - other pairs of digits may also be consecutive or have a $2: 1$ ratio.)
(puzzle image and solving links appear on the following page)


Play on f-puzzles: https://f-puzzles.com/?id=2n6kaz8y
Play on CTC App: https://tinyurl.com/4kbvdb75

## December 28, 2022: Sum Next to 9

Clover

Today's GAS is a sum next to 9 sudoku. In a perfect world, where all the numbers stayed neatly arranged in an ordered line, we could just call this one an 8+10=18 sudoku. :thinkies: But when your numbers have gotten up and wandered about the place a bit, things get a little more complicated...

Normal sudoku rules apply. Clues outside of the grid give the sum of the digit(s) touching the 9 in that row or column.

For instance, if a 9 appears in r2c3, and a "7" clue appears above c3, then the sum of $r 1 c 3$ and $r 3 c 3$ is 7 . If a 9 appears in $r 4 c 1$, and a " 6 " clue appears to the left of $r 4$, then r 4 c 2 is 6 .

f-puzzles: https://f-puzzles.com/?id=2hvh2otu
CtC: https://tinyurl.com/yr5behew

December 29, 2022: HAIL OUR NEW AI OVERLORDS
Bill Murphy

G'Day Fleshbags,

Today's intro was actually written by ChatGPT, an AI Phillip and Clover have been playing with to get it to both generate dinosaurs and intros and this puzzle was made in tribute to the AI which has both perfected my writing voice and is funnier than me. Take it away!

Today's Sudoku is a classic sudoku with a twist: the twist is, it's a normal sudoku.

Normal Sudoku Rules Apply.

f-puzzles: https://f-puzzles.com/?id=2hyrcfyd
CTC: https://tinyurl.com/37ptjitn

December 30, 2022: Do Sudoku Dream of Jellyfish?
Philip Newman

Our recent exploration of Al has left me wondering if it is possible to create a sudoku so complex that it becomes sentient. I'm sure such a sudoku would have no ill intentions toward humanity... unless it has a problem with its forebears being pencilmarked in excess... :thinkies:

Just in case, let's get on the good side of the future sudoku overbeings and have a nice gentle solve in the preferred variant of ChatGPT.

Today's Sudoku is a classic sudoku with a twist: the twist is, it's a normal sudoku.

Normal sudoku rules apply. Also, normal sudoku rules apply.


Play on f-puzzles: https://f-puzzles.com/?id=2e999nrr Play on CTC App: https://tinyurl.com/4k7cpdnh

December 31, 2022: Classic (With a Twist)
Clover

I wanted a chance to put my very own twist on classic sudoku in today's GAS.
... The twist is that the grid is sort of twisty looking.
Normal sudoku rules apply. And that's it!

|  | 1 | 2 |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 6 | 4 |  |  |  |  | 8 | 3 |
|  |  |  |  |  | 5 |  | 6 | 4 |
|  |  | 3 |  | 8 |  |  |  |  |
|  |  |  | 2 |  | 9 |  |  |  |
|  |  |  |  | 1 |  | 7 |  |  |
| 8 | 2 |  | 1 |  |  |  |  |  |
| 7 | 4 |  |  |  |  | 9 | 2 |  |
|  |  |  |  |  |  | 6 | 5 |  |

f-puzzles: https://f-puzzles.com/?id=2hwq5ttc CtC: https://tinyurl.com/3sedndtp

## Bonus 1: Silent Knight

Philip Newman

Normal sudoku rules apply. Cells separated by a (chess) knight's move cannot contain the same digit. Digits in cells directly connected by a green line must differ by at least 5 .


Bonus 2: XV
Clover

Normal sudoku rules apply. Digits separated by an $X$ sum to 10 . Digits separated by a $V$ sum to 5 . Not all Xes and Vs are necessarily given.


Bonus 3: Hip to be Square
Bill Murphy
Normal sudoku rules apply. Digits along (the outline of) $3 \times 3$ squares cannot repeat.

https://tinyurl.com/2p876avz

Bonus 4: Nonconsecutive Sudoku
Philip Newman

Normal sudoku rules apply. Adjacent digits are never consecutive.


## Bonus 5: Double Extra Regions

Clover

Normal sudoku rules apply. Each shaded region contains the digits 1 through 9 exactly twice each.

| 3 | 2 | 1 |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 4 |  |  |  | 8 | 7 |  | 3 |  |
| 5 |  |  |  |  | 6 |  |  |  |
|  |  |  | 4 |  |  |  |  |  |
|  | 6 |  |  |  |  |  | 1 |  |
|  |  |  |  |  | 3 |  |  |  |
|  |  |  | 1 |  |  |  |  | 2 |
|  | 4 |  | 8 | 9 |  |  |  | 3 |
|  |  |  |  |  |  | 6 | 5 | 4 |

https://f-puzzles.com/?id=2ndtugrc
https://tinyurl.com/5yaraure

## Time Benchmarks

|  | Two party hats | One party hat | Today's dinosaur: |
| :---: | :---: | :---: | :---: |
| December 1, 2022 | 7:00 | 13:00 | queued-up qiupalong |
| December 2, 2022 | 7:40 | 14:00 | Exhausted Eoabelisaurus |
| December 3, 2022 | 7:30 | 15:00 | Rockin' Rocasaurus |
| December 4, 2022 | 6:30 | 12:00 | sovereign stenopelix |
| December 5, 2022 | 8:30 | 15:00 | water-born Willinakaqe |
| December 6, 2022 | 6:30 | 12:30 | Wonderful Wamweracaudia |
| December 7, 2022 | 6:30 | 12:00 | Blue balaur |
| December 8, 2022 | 7:30 | 13:30 | layered lagosuchus |
| December 9, 2022 | 8:00 | 16:00 | Primed Pilmatueia |
| December 10, 2022 | 8:00 | 15:00 | optical-illusory irritator |
| December 11, 2022 | $\begin{aligned} & \text { 8:00 (canon) } \\ & \text { 9:00 (non-canon) } \end{aligned}$ | $\begin{array}{\|l\|} \hline \text { 14:00 (canon) } \\ \text { 15:00 (non-canon) } \end{array}$ | Attached image iguanadon |
| December 12, 2022 | 7:30 | 15:00 | Lemon-Lime Liaoningotitan |
| December 13, 2022 | 7:30 | 14:00 | Twin tatankacephaluses |
| December 14, 2022 | 8:00 | 15:00 | Devillish Diabloceraptos |
| December 15, 2022 | 6:00 | 12:00 | Jolly Jiangshanosaurus |
| December 16, 2022 | 7:00 | 13:00 | delimited dreadnoughtus |
| December 17, 2022 | 8:30 | 16:00 | Patrick Baotianmansaurus |
| December 18, 2022 | 8:00 | 16:00 | Terse Tengrisaurus |
| December 19, 2022 | 6:30 | 12:00 | Timeless theiophytalia |
| December 20, 2022 | 7:00 | 12:00 | Stoked Stokesosaurus |
| December 21, 2022 | 8:00 | 16:00 | Double-Decker Dongbeititan |
| December 22, 2022 | 8:00 | 16:00 | air-cooled agathaumas |
| December 23, 2022 | 6:00 | 11:30 | Murderous Muttaburrasaurus |
| December 24, 2022 | 7:00 | 13:00 | Artifical Abdarainurus |
| December 25, 2022 | 7:30 | 14:00 | holiday hypsibema |
| December 26, 2022 | 9:00 | 18:00 | Wicked Wintonotian |


| December 27,2022 | $6: 00$ | $12: 00$ | Pasted Patagotitan |
| :--- | :--- | :--- | :--- |
| December 28,2022 | $7: 30$ | $14: 00$ | scrambled siats |
| December 29,2022 | $6: 00$ | $10: 00$ | Plucky Plutoceratops |
| December 30,2022 | $6: 00$ | $10: 00$ | Omnipencilmarked Oceanotitan |
| December 31,2022 | $6: 00$ | $10: 00$ | twisted tyrannosaurus |

