## GAS Leak

# Genuinely Approachable Sudoku from the CtC Discord 

Volume 40:<br>May 1 - May 31, 2024

Welcome to May!

We got a full month of GAS puzzles for you, one better than the other. In addition to our regular setters we had James Sinclair as special guest this month. Please welcome him and enjoy his Sudokus.

Have fun solving!

May 1, 2024: Line Sums
by clover!
Good morning, friends! Here's my walkthrough for Philip's "Look Ma, No Braids":
https://youtu.be/x6XGBkGikkg
And here's a bad joke:
What do you call a bee that was born today?
A may-bee.
In today's line sums sudoku, normal sudoku rules apply. Also, along each marked line, one of the digits is the sum of the remaining digits.


SudokuPad: https://sudokupad.app/hjrivcryuv

## May 2, 2024: Dream Big

by Bill Murphy
Walkthrough for Line Sums: https://youtu.be/3baN4xSRY o
Hey! We've got a loose theme to kick off the month of justin timberlake voice me, of we set a stack of puzzles where we've aimed for less than 7:00 two hat times. It was originally only a week, but we made a bunch.

So, yeah, if you're new to GAS, the next lil while is dedicated to you! If you're a veteran, find a buddy and race em! (Or don't, the whole point is that you have fun, enjoy yourself and don't dare measure your progress against anyone else!) (but winning is fun too)

Today's GAS is a Consecutive Pairs Sudoku!
Normal Sudoku Rules Apply. Digits separated by a white dot must be consecutive. Not all white dots are given.

https://sudokupad.app/q2twapdpsm

May 3, 2024: Look Ma No Cages!
by Philip Newman
Walkthrough of "Dream Big" by Bill: https:///youtu.be/gRriOovOls4

It's May! See if you can figure out the theme I'm going for this month (assuming I even stick to it, who knows). And remember, if you want more on the killer theme from last month, check out the Cronch Pack here: https://www.patreon.com/posts/patreon-preview-103346403; probably the last time l'll link it here. :-

Normal sudoku rules apply. And that's it!


Play on f-puzzles: https://f-puzzles.com/?id=2xvrbf8c
Play on SudokuPad: https://sudokupad.app/philip-newman/20240503-look-ma-no-cages

## May 4, 2024: Antiknight

by clover!
Good morning, friends! Here's my walkthrough for Philip's "Look Ma, No Cages": https://youtu.be/RuBk4Acyl0Q

I hope you enjoyed going back to basics with a classic yesterday. You could try to solve today's GAS as a classic, but you'd get exactly zero digits before being forced to guess at random. Take that, everyone who's ever complained that my antiknight puzzles sometimes nearly solve as classics!

In this antiknight sudoku, normal sudoku rules apply. Also, digits separated by a knight's move (as in chess) are never equal.


SudokuPad: https://sudokupad.app/2z2o3kuvg4

May 5, 2024: Wheel of Fortune
by Bill Murphy
Walkthrough for Anti-Knight: https://youtu.be/-f2ZLODoen4
Today's Zone Sudoku was $100 \%$ intended to be a pencilmark sudoku, which is probably the most niche thing that I enjoy setting, but the issue with doing them for GAS is that bug when you refresh or undo, it doesn't do that, so please know that I am sacrificing my absolutely beloved genre for your solving ease, please and thank you.

Normal Sudoku Rules Apply. Digits in the top left of cages must appear in the enclosed cells.

https://sudokupad.app/vswzxo85e4

## May 6, 2024: Rotator

by Philip Newman
Walkthrough of "Wheel of Fortune" by Bill:
https://youtu.be/92AwpXtxoGo
This month I am exploring asymmetry (in addition to some other constraint I have put on myself, which has not yet been identified >_>). It is very common for sudoku in general to exhibit aesthetic symmetry, usually (but not always) with the givens/constraints placed in rotationally symmetric positions. In GAS, we also often have logical symmetry; the same deductions in symmetrically opposite positions on symmetrically "mapped" digits. For example, in several of my puzzles last month we had 3 -cell cages on the low digits at the top of the grid, and 3 -cell cages on the high digits at the bottom of the grid, arranged in such a way that the deductions about 1, say, were mirrored by equivalent deductions about 9 on the other side of the grid. (This is the sort of thing that we are referencing when we toss around the term "GSP"; see here for a bit more detail: \#daily-sudoku-puzzles)

In today's puzzle, the digits are symmetrically placed (every 2 has a corresponding 8 opposite it, for example), and the lines are symmetric in their own way, but the combination of the two means that the entire puzzle taken as a whole is not symmetric. So be careful!

Normal sudoku rules apply.
Palindrome: Digits along a line must form a palindrome (read the same from either direction).


Play on SudokuPad: https://sudokupad.app/philip-newman/20240506-rotator

## May 7, 2024: Mathrax

by clover!
Good morning, my friends! Here's a walkthrough for Philip's palindromic "ROTATOR": https://youtu.be/y5fe zWfjdc

I know we've been spending the last week or so on some more conventional variants, but I just couldn't resist slipping in a bit of arithmetic to round things out. Today's GAS is a mathrax sudoku! I haven't used all of the rules of traditional mathrax, though - just my favorite one, addition.

Normal sudoku rules apply. If a circle containing ' $\mathrm{N}+$ ' appears in the grid, then consider the two pairs of diagonally opposite digits surrounding that circle. Each of those two pairs of digits has a sum of N . For instance, in this puzzle, r1c2+r2c3 $=\mathrm{r} 1 \mathrm{c} 3+\mathrm{r} 2 \mathrm{c} 2=11$.


SudokuPad: https://sudokupad.app/sfrwihth0b

## May 8, 2024: Cupid Sudoku (ILYSM)

by Bill Murphy
Walkthrough for Mathrax: https://youtu.be/P73V-nWj-kk
gf took me for a spa day yesterday, so sorry, but you're getting another cupid sudoku, i'm still madly in love

Normal Sudoku rules apply. If a digit is placed on an arrow then it must repeat somewhere else in the cells pointed at by the arrow. (eg. the r3c7 arrow must contain either 8 or 9)

https://sudokupad.app/dcb7atzdbv

May 9, 2024: 129 Spiral
by Philip Newman
Walkthrough of "Cupid Sudoku (ILYSM)" by Bill:
https://youtu.be/d69 YIVsh4I
What are the last parts of your body to stop working when you die?
[see spoilered text at the end of this document]
Today's GAS is an Irregular Sudoku!
Normal irregular sudoku rules apply: Place a digit in each cell such that each row, column, and outlined region contains each digit from 1-9 exactly once.


Play on f-puzzles: https://f-puzzles.com/?id=298dc9od
Play on SudokuPad: https://sudokupad.app/philip-newman/20240509-129-spiral

May 10, 2024: Mathrax Again! by clover!

Walkthrough for Philip's "129 Spiral": https://youtu.be/M67PT7hUDKU
And what's that, you say?
More mathrax, you say?
Well, if you insist...
Normal sudoku rules apply. If a circle containing ' $\mathrm{N}+$ ' appears in the grid, then consider the two pairs of diagonally opposite digits surrounding that circle. Each of those two pairs of digits has a sum of $N$. For instance, in this puzzle, r1c1+r2c2 = r1c2+r2c1 = 5. If a circle contains an ' $E$ ', then all four surrounding digits must be even.


SudokuPad: https://sudokupad.app/w2ecu0ca7k

## May 11, 2024: Everything is Free

 by Bill MurphyWalkthrough for Mathrax Again: https://youtu.be/h43CF-JBukA
I would say that more than any other setter for GAS, I get gently roasted for my love and we'll say, slight overuse of GSP aka Rotational Symmetry.
The thing that I hope y'all understand is aesthetics and symmetry should always come second to just straight up making a good puzzle. It's also a little bit of a self-fulfilling prophecy in the sense that you solve enough GAS, we can get you looking in places for more digits and the next step. (GSP is explained very well by Philip here: \#daily-sudoku-puzzles)

Just clarifying, I do it for y'all not for me. I do not need GSP to set approachable puzzles, like today's Arrow Sudoku!

Normal Sudoku Rules Apply. Digits along arrows must sum to the digit in the bulb.

https://sudokupad.app/6s51sqwlo6

May 12, 2024: Treat Her Right
by Philip Newman
Walkthrough of "Everything is Free" by Bill:
https://youtu.be/-QaXfkTOIJ8
It's Mother's Day today in a lot of places, so enjoy the following special presentation:
https://www.youtube.com/watch?v=7_rBidCkJxo [typesetter: Video „Mr. T Treat your mother right"]

Today's GAS is an Antiking Sudoku!
Normal sudoku rules apply.
Antiking: Cells separated by a (chess) king's move cannot contain the same digit.


Play on f-puzzles: https://f-puzzles.com/?id=2274qmfc
Play on SudokuPad: https://sudokupad.app/philip-newman/20240512-treat-her-right

## May 13, 2024: Quad Sums

by clover!
Good morning! Here's a walkthrough for Philip's "Treat Her Right": https://youtu.be/QjkVfy rodc
Speaking of Philip, he's taking a little time away this week (he's okay!), and so Bill and I will be joined by the illustrious @James Sinclair. Solvers, say hi to James, I heard he really likes getting lots of pings on a Monday morning $\because$

Today's GAS is a quad sums sudoku. Normal sudoku rules apply. Around each black dot, one of the four surrounding digits is equal to the sum of the other three.


SudokuPad: https://sudokupad.app/rpl5o0g9q2

May 14, 2024: Science Fiction / Double Feature [two puzzles] by Bill Murphy

Walkthrough for Quad Sums: https://youtu.be/6WsKTC53iio
I was gonna do a J Jonah Jamieson bit of "Who'll bring me cool GAS" but since Clover spoiled James coming through tomorrow, oh well, I gotta run

Pretty proud of the titling for these.
Today's GAS is Two Classic Sudoku!
Put the digits 1-9 in each box, row and column.

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

Science Fiction: https://sudokupad.app/ugbib7fe05
$\downarrow \downarrow$ (The second puzzle is on the next page) $\downarrow \downarrow$

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

## May 15, 2024: Gasparilla

 by James SinclairWalkthrough for Science Fiction/Double Feature:
https://www.youtube.com/watch?v=2YI5sHmnJsE
Thanks so much to the GAS crew for handing me the reins for the day, l'll do my best not to break anything while I'm here (but no promises!). For my first-ever entry into the GAS canon,* I thought I'd stay comfortably within my wheelhouse with this killer/thermo sudoku.

Normal sudoku rules apply. The sum of the digits inside each cage is equal to the small number in the top left corner, and digits cannot repeat within a cage. Digits on thermometers increase from the bulb.

https://sudokupad.app/james-sinclair/gasparilla
*Well, second. My initial appearance was a sneaky one.

May 16, 2024: Arrow
by clover!
Good morning, friends! Walkthrough for James's "Gasparilla": https://youtu.be/YVGX-BcUigc
Did you enjoy the visit from James? Good, because he's coming back in a couple days. In the meantime, subscribe to his newsletter at https://artisanalsudoku.substack.com/!

I'm a very busy lady today and today's GAS, accordingly, is a very busy arrow sudoku! Normal sudoku rules apply. Also, the digits on each arrow sum to the values in their attached circles.


SudokuPad: https://sudokupad.app/0wrpqtb08|

May 17, 2024: Five Is A Little Bit Alive
by Bill Murphy
Walkthrough for Arrow: https://youtu.be/poE1CbOioUM

## Hello and welcome to Taskmaster Corner

I like this season, it's not one of my favourites, but there's genuinely no bit funnier this season than freaking John Robins out that he's missed something that he hasn't because that would absolutely ruin me, but because it's not me, that's fine
This has been Taskmaster Corner
Today's GAS is a Difference 5 (-) Sudoku!
OH BABY, BEEN A MINUTE SINCE I COULD BREAK OUT THE NEGATIVE CONSTRAINT ALARM

Normal Sudoku Rules Apply. Digits separated by a white dot have a difference of 5. All dots are given.
You will need it the alarm! Don't forget it!

https://sudokupad.app/55tm8zuuwb

May 18, 2024: Mariner
by James Sinclair
Walkthrough for Five is a Little Bit Alive: https://www.youtube.com/watch?v=GsJnuSjeqy4
Thanks again to the GAS team for letting me be their weird houseguest this week, and thanks to you all for being so welcoming!

I keep thinking l'll have to learn how to use given digits one of these days, but today is that that day, because today's GAS is a quad/renban sudoku where the only digits in the grid are the ones in the little circles.

Normal sudoku rules apply. Purple lines contain a non-repeating set of consecutive digits in any order. The digits inside a white circle must appear in the four cells surrounding that circle (if a digit repeats in the circle, it must appear twice).

https://sudokupad.app/james-sinclair/mariner

## May 19, 2024: Killer

 by clover!Good morning, friends! The internet is having some... quirks this morning, so you may have to wait until tonight or tomorrow for my walkthrough of James's lovely "Mariner". I'm sorry! I'll edit it in ASAP.

Anyways, I had an interesting idea that I wanted to share with you all. I've been thinking about doing some deep dives in GAS into specific variants - that is, posting sudoku with the same variant(s) on each of my turns for a week or two at a time, to give both me and you a chance to explore it a little more deeply than usual. Thoughts? If that sounds good, you're going to see some killer sudoku in my next few rounds, and I hope you enjoy them as much as I do ©

Normal sudoku rules apply. Also, digits in cages do not repeat, and must sum to the indicated totals.


SudokuPad: https://sudokupad.app/f485hucbjx

May 20, 2024: Diagonal Outside Sudoku by Bill Murphy

Missed two very important days since my last post.
Happy 11th Birthday to the iconic and immortal Denny's Circle Pit! also
Happy IDAHOBIT day! Trans rights are human rights!
Today's GAS is a Diagonal Outside Sudoku! (Sorry, I looked in my backlog and went "Oh these are actually all a lil tricky", this was the least gross I think)

Normal Sudoku Rules Apply. Clues outside the grid give digits that must appear in the first three cells in that direction.

https://sudokupad.app/91v0zxm6a4

May 21, 2024: I'm Baaaaack
by Philip Newman
Walkthrough of "Diagonal Outside Sudoku" by Bill:
https://youtu.be/BfkXIJyDOAA
I'm sure you're all wondering where l've been the last week*. Let the wild speculation commence!

Today's GAS is a Diagonal Sudoku!
Normal sudoku rules apply.
Diagonal: Digits along the indicated diagonals cannot repeat.


Play on f-puzzles: https://f-puzzles.com/?id=26hbmren
Play on SudokuPad: https://sudokupad.app/philip-newman/20240521-im-baaaaack

* Or not, if you've seen me posting on discord, I didn't actually go anywhere.

May 22, 2024: Deeper Dive
by clover!
Good morning, friends! Two walkthroughs for you today, one a bit delayed -
Mariner by James: https://youtu.be/zBUnT1IJI2Q
I'm BaaaaAAAAACK by Philip: https://youtu.be/fbwVrFonjNo
Are you ready, now, to join me on a mysterious adventure into the depths of the Marianas Trean killer sudoku? Imagine, if you will, a world where digits appear in a $9 x 9$ grid...

Normal sudoku rules apply. Also, digits do not repeat in cages and must sum to the indicated totals.


SudokuPad: https://sudokupad.app/flg6sf2e9t

## May 23, 2024: Cosmic Dancer

by Bill Murphy
Walkthrough for Deeper Dive: https://youtu.be/v3wCn Oq-XA
This week at work, I taught myself to use the green screen! Whilst l've only used it to record student work and to send my girlfriend a very lovely "Have a nice day bb" video (yeah i'm a cheesy romantic, what you gonna do about it), I do fully intend to do a straight up crazy walkthrough for the GAS channel before the year is out. (Today's isn't it, but I do fanboy over Clover Killers)

Today's GAS isn't a Killer (l've been cooking a bunch of them, they've all been slightly too cooked, maybe l'll drop one on you when Clover hits the end of her series), it's my absolutely beloved Extra Regions Sudoku!!

Put the digits 1-9 in each box, row, column and shaded region.

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

https://sudokupad.app/b7pyy4praf

May 24, 2024: GG
by Philip Newman
Walkthrough of "Cosmic Dancer" by Bill: https://youtu.be/fMHkQ0ZwYKs

I'm going too slow today. Maybe I'll edit in an intro later. Or maybe you can write one for me...

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


Play on f-puzzles: https://f-puzzles.com/?id=22y9wz9h
Play on SudokuPad: https://sudokupad.app/philip-newman/20240524-gg

## May 25, 2024: Killed It

 by clover!Walkthrough for Philip's "GG": https://www.youtube.com/watch?v=Y2Gu3FN5xwM
Good morning! At risk of, erm, killing a dead horse, here's another killer sudoku. Have I ever mentioned this is my favorite variant?

By the way, if you're looking for something to watch today with less Clover in it, why not check out this very interesting intro setting video by friend of the channel @Memeristor (purpl)? https://youtu.be/dOvZc3PnZpw?si=1F6gw2MN-0HGQyuc

Normal sudoku rules apply. Digits in cages do not repeat and must sum to the indicated totals.


SudokuPad: https://sudokupad.app/nywq0q10i1

May 26, 2024: Gold Chain Punk
by Bill Murphy
Walkthrough for Killed It: https://youtu.be/oukzGqeQiJA
Saw a thing on twitter with Americans posting that Australians call it a chicken burger and not a chicken sandwich and a lot of people were having a bit of an aneurysm about it. My official take is: "l've seen what Americans call cheese, y'all need to calm down."
https://www.pedestrian.tv/online/chicken-burger-name-americans/
Today's GAS is a Renban Sudoku!
Normal Sudoku Rules Apply. Digits along purple lines must be a consecutive set of digits, but may be in any order.

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

https://sudokupad.app/39u3r4rz1u

May 27, 2024: Fortress of Similitude by Philip Newman

Walkthrough of "Gold Chain Punk" by Bill: https://youtu.be/9R33cuklIDo

As we continue to celebrate Australian Appreciation week here at GAS, I thought I would share a fun fact about Australians:

Despite the common and completely rational depiction of Australians in the American consciousness, Australians do not, in fact, walk upside down on their ceilings. They actually build their houses upside down so that they can walk upside down on their floors.

Today's GAS is a Fortress Sudoku!
Normal sudoku rules apply.
Fortress: Digits in grey cells must be greater than digits in orthogonally adjacent white cells.


Play on f-puzzles: https://f-puzzles.com/?id=2yu8yev3
(with greater than symbols) https://f-puzzles.com/?id=2bgwtgrb
Play on SudokuPad: https://sudokupad.app/philip-newman/20240527-fortress-of-similitude
(with greater than symbols)
https://sudokupad.app/philip-newman/20240527-fortress-of-similitude-v2

## May 28, 2024: HHSC

by clover! (the puzzle, this post is by Bill Murphy)
Walkthrough for Fortress of Similitude: https://youtu.be/RGNs7eDgzn0
Here's the thing. Look. We could talk all day about who's better, USA or AUS or we could just shake on the one true fact of "We're at least better than the english"

But, while Clover handed me the car keys, a Killer Sudoku and told me she'd be back in three days and to "not burn the place down while she's away" and I had to format a title for it, I thought, there's no better time to tell you all about my absolute favourite place in Australia.

There's a meme that goes round every couple of years of "Weird fates of country leaders" and I mean, I knew a couple of them, Alberto Fujimori resigning by fax (we had that too), Johan De Witt getting cannibalised and like 5 different Presidents in a week for Argentina, but there's always the story of Harold Holt, the time an Australian Prime Minister just straight up walked into the ocean and disappeared and we all just collectively shrugged.

That story is always wild, but that's not my favourite part. My favourite part is the memorial we created in his name, the Harold Holt Swim Centre.

Anyway, where was I
$\downarrow \downarrow$ (The puzzle is on the next page) $\downarrow \downarrow$

Normal Sudoku Rules Apply. Digits in cages must not repeat and must sum to the small corner total.

https://sudokupad.app/h58dp35w5z

## May 29, 2024: An Egg In This Trying Time

 by Bill MurphyWalkthrough for HHSC: https://youtu.be/trmtfwYOK-s
As someone who didn't really start to create things until his late 20's, the (un)fairly intrusive though of "Wow everything I make is trash" is new to me, but I'm also aware that it's a pretty common feeling. About every three weeks I look at the backlog and go "Wow what was I thinking Imao".

Every single time though, even with the self-doubt, I find a banger. Anyway, I hope Clover's got y'all trained well, because this is a Extra Regions Killer Sudoku!

Put the digits 1-9 in each box, row, column and shaded region. Digits in cages must sum to the given total.

https://sudokupad.app/ija8xzzi2x

## May 30, 2024: The Naked Truth / Come Out and Play [two puzzles]

 by Philip NewmanWalkthrough of "An Egg In This Trying Time" by Bill: https:///youtu.be/Ed4ZnPoPX6o

We've reached the end of May! I've been enjoying making puzzles which look like they could be symmetric but aren't... but for the finale, we're going to do something a little different...

Today's GAS is a Classic Sudoku... and also a Disjoint Groups Sudoku!
If you look at the screenshots, you might wonder how these are at all thematic. They are asymmetric, sure, but they don't look symmetric in the first place. For today's puzzles, we have something of an inversion of the theme: these are puzzles which look asymmetric, but are actually hiding some interesting symmetry property. So, for a bonus hat: why are these actually symmetric?

And a small hint for the Classic: [see hints page at the end of this document]. Ok fine, actual hint. [see hints page at the end of this document]
[Note from typesetter: The times in the table at the end are for both puzzles combined]

$$
\downarrow \downarrow \text { (The first puzzle is on the next page) } \downarrow \downarrow \downarrow
$$

The Naked Truth
Normal sudoku rules apply. And that's it!


Play on f-puzzles: https://f-puzzles.com/?id=2dfhwcxv
Play on SudokuPad: https://sudokupad.app/philip-newman/20240530-the-naked-truth
$\downarrow \downarrow$ (The second puzzle is on the next page) $\downarrow \downarrow$

## Come Out and Play

Normal sudoku rules apply.
Disjoint Groups: A digit cannot appear in the same relative position in different boxes.


Play on f-puzzles: https://f-puzzles.com/?id=2y7g77b7
Play on SudokuPad: https://sudokupad.app/philip-newman/20240530-come-out-and-play

## May 31, 2024: Odd Sudoku

by clover!
Good morning, friends! I'm back! And here's my walkthrough for Philip's "The Naked Truth" and "Come Out and Play": https://youtu.be/uUedOmttSYE

Also, one quick note: you may be interested in this SudokuCon stream tomorrow! \#event-announcements

I'm also a little tired of killer sudoku, so I thought we might enjoy something a bit different today. A bit... odd, if you would. That's right, today's GAS is an odd sudoku!

Normal sudoku rules apply. Also, digits in gray circles must be odd.

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

SudokuPad: https://sudokupad.app/h3xqyt8zkx

## Bonus 1: The Slab

## Bill Murphy

Normal Sudoku Rules Apply. Digits in cages must sum to the given total and must not repeat.


## Bonus 2: Shark Fin Blues

Bill Murphy
Normal Sudoku Rules Apply. Digits along thermometers must increase from bulb to tip.

https://sudokupad.app/ajyiq7eryh

Bonus 3: Classic Sudoku
Philip Newman
Normal sudoku rules apply... and that's it!

| 2 |  | 4 |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 3 |  | 5 |  | 7 |  |  |  |
|  |  | 7 |  | 6 |  | 8 |  |  |
|  | 8 |  | 6 |  |  |  | 9 |  |
| 9 |  |  |  | 5 |  |  |  | 1 |
|  | 1 |  |  |  | 4 |  | 2 |  |
|  |  | 2 |  | 4 |  | 3 |  |  |
|  |  |  | 3 |  | 5 |  | 7 |  |
|  |  |  |  |  |  | 6 |  | 8 |
| hittos://sudokupad.apo/3hbd23h14b |  |  |  |  |  |  |  |  |

## Bonus 4: Entropic/Thermo Sudoku

Clover
Normal sudoku rules apply. Digits along thermometers must increase, starting from the round bulb. Digits along orange 'entropic lines' form a repeating sequence of low (123), medium (456), and high (789) digits, such as LMHLMH or MLHMLH.

https://sudokupad.app/63r6k1x4y7

## Bonus 5: Up/Down Lines Sudoku

Normal sudoku rules apply. Along each line, digits always alternate between increasing and decreasing: for example, 241879 is a valid line, because $2<4>1<8>7<9$.

https://sudokupad.app/o91vt0j2u0

## Time Benchmarks

|  | P - | V-0 |  |
| :---: | :---: | :---: | :---: |
|  | Two party hats | One party hat | Todays dinosaur: |
| May 1, 2024 | 7:30 | 14:00 | May Mahakala |
| May 2, 2024 | 6:30 | 11:00 | Dotted Dreadnoughtus |
| May 3, 2024 | 6:30 | 13:00 | European Eucnemesaurus |
| May 4, 2024 | 6:30 | 12:00 | classic Corythosaurus |
| May 5, 2024 | 5:30 | 10:00 | Beautiful Bothriolepis |
| May 6, 2024 | 5:30 | 11:00 | Massopod Masseuse |
| May 7, 2024 | 6:00 | 11:00 | mathy Mahakala |
| May 8, 2024 | 6:30 | 12:00 | Cold Plunge Polacanthus |
| May 9, 2024 | 8:00 | 20:00 | Peckish Panphagia |
| May 10, 2024 | 7:30 | 13:00 | much more mathier Mahakala |
| May 11, 2024 | 7:30 | 14:00 | Symmetrical Siats |
| May 12, 2024 | 7:00 | 15:00 | Mothering Meroktenos |
| May 13, 2024 | 8:30 | 16:00 | special-guest Spinostropheus |
| May 14, 2024 | 10:30 | 19:00 | Late Night, Double Feature, Picture Shaochilong |
| May 15, 2024 | 7:00 | 13:00 | Artisanal Archaeopteryx |
| May 16, 2024 | 7:00 | 13:00 | frazzled Fruitadens |
| May 17, 2024 | 9:00 | 17:00 | Comfort Colepiocephale |
| May 18, 2024 | 6:00 | 11:00 | Degree-Seeking Dilophosaur |
| May 19, 2024 | 6:00 | 11:00 | self-taught Sahaliyania |
| May 20, 2024 | 8:00 | 14:00 | Pride Paralititan |
| May 21, 2024 | 7:00 | 15:00 | Unflappable Udelartitan |
| May 22, 2024 | 6:30 | 11:00 | twilight Tawa |
| May 23, 2024 | 7:00 | 13:00 | Irreplaceable Irranosaurus |
| May 24, 2024 | 6:30 | 13:00 | Titanium Titanomachya |
| May 25, 2024 | 6:30 | 12:00 | setting Stenopelix |
| May 26, 2024 | 7:00 | 13:00 | Sandwiched Similicaudipteryx |
| May 27, 2024 | 9:30 | 20:00 | Tip-top Tiamat |
| May 28, 2024 | 6:30 | 12:00 | Prime Minotaurasaurus |
| May 29, 2024 | 7:30 | 14:00 | Resolute Rebbachisaurus |
| May 30, 2024 | 10:00 | 25:00 | Plushy Plateosaurid |
| May 31, 2024 | 6:00 | 11:00 | parity Propanoplosaurus |

## Hints and Spoilers

## Spoiler for May 9, 2024

What are the last parts of your body to stop working when you die?
Your pupils. They dilate.

## Hints for May 30, 2024:

And a small hint for the Classic: It's not a Tatooine puzzle, despite appearances. Ok fine, actual hint. The title is the hint. This puzzle is all about naked singles! As a reminder, you have a naked single if you have a cell which can only contain one digit (because it "sees" the other digits in its row, column, or box); this is in contrast to a hidden single, which is when a digit can only be placed in one cell of a row, column, or box (because the other cells see that digit).

