Puzzle Hunts

Or, What I Do When I Should Be Doing Research

Solve The Abstract Puzzle? 🍫

- Ever thought "Gee, I don't have enough problems in my life, where can I find some more?"

- XEBEC, OUTRE, and JEJUNE get stuck in your everyday vocabulary from doing crosswords in your sleep?

- Perhaps you want to go from feeling like the stupidest person on Earth to feeling like Einstein within the span of 5 minutes.

- Enthused by none of the above but would like to be bribed with free prizes?

Run, don't walk, to x836 this Friday to learn about (and solve) all kinds of puzzles, experience befuddlement, and potentially win some chocolate*!

*Terms and conditions apply (oh, and by the way, have you noticed this abstract is a puzzle?)

Congratulations, you're an…

- **E**ver thought "Gee, I don't have enough problems in my life, where can I find some more?"

- **X**EBEC, OUTRE, and JEJUNE get stuck in your everyday vocabulary from doing crosswords in your sleep?

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…jk not really

- But reading the first letter of each line is a technique that comes up in puzzles more often than you might think!

What Is a Puzzle Hunt?

- A series of puzzles that you solve, typically in teams
- If you solve the final puzzle first you win!
- The puzzles might be in multiple rounds
- Each round will contain a **metapuzzle**, incorporating the answers to all the puzzles in that round
- It's possible the hunt also has a **metametapuzzle**, incorporating the answers to all the metapuzzles!
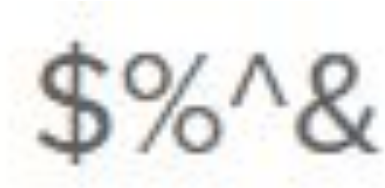
What Is a Hunt Puzzle?

- A puzzle that typically provides no explicit instructions on how to go about solving it
- BUT there need to be enough clues
- The answer will be a word or phrase in the English* language
- No other rules! Can consist of
    - Text
    - Images
    - Music
    - Video
    - etc…

What Isn't A Hunt Puzzle?

Sudoku. You know how to solve it and the answer isn't a single word.

What Isn't A Hunt Puzzle?

$%^&

A random keysmash I decided translates to "WORD". But you have no way of knowing that.

Anatomy of a Hunt Puzzle

THE PUZZLING POEM

Title. You know what this is.

Anatomy of a Hunt Puzzle

Isadora Quagmire was looking for clues she could use to assist her friends the Baudelaires. She pored over a poem she had recovered from the estate of Josephine Anwhistle, a woman who had briefly served as the Baudelaire's legal guardian. The poem seemed cryptic, a word which here means "using its stilted meter and limited vocabulary to convey a hidden message."

Isadora knew that if she worked it out, she could unearth a glimpse into how Josephine felt about her time with the Baudelaires. But the poem was tedious and woeful, and riddled with with errors, even though Isadora knew that Josephine was famously proud of her grammar...

Flavor text. Not usually this long. Typically provides clues.

Anatomy of a Hunt Puzzle 🍫

Staring at the page of wods, long and grey

That measure out the rythm of each day /

Helpless makes me, for shortlee I can see

The swiming sharks that circle hungrily /

You do not know our secrat history

Of whispers beneath wreckage and debri

Making plans to kultivate the free /

And revive the gost of the library /

(Axcept, you know what's next--oh, pity me!)

A kingdon overflowing with decay

Sunny Baudlaire, the youngest of three /

No sweeder could a bouncing baby be

Caunt Olaf came to play /

Lighting natches on the way

Hope yu've got a nice insurance policy!

Witing this, growing tired, stopping, she

Eyes the stainz of bitter tea /

So much for calming potry!

Wiked our world is doomed to stay.

I can't held its weight on bended knee

Withstanting vile acts eternally /

The world, once quiet her, ends noisily /

How did Josephine feel?

— — — — — — — — — — —

Body. The thing you need to solve.

Solution 🍫

Staring at the page of wods, long and grey ... **R**

That measure out the rythm of each day / ... **H**

Helpless makes me, for shortlee I can see ... **Y**

The swiming sharks that circle hungrily / ... **M**

You do not know our secrat history ... **E**

Of whispers beneath wreckage and debri ... **S**

Making plans to kultivate the free / ... **C**

And revive the gost of the library / ... **H**

(Axcept, you know what's next--oh, pity me!) ... **E**

A kingdon overflowing with decay ... **M**

Sunny Baudlaire, the youngest of three /

No sweeder could a bouncing baby be ... **E**

Caunt Olaf came to play / ... **T**

Lighting natches on the way ... **O**

Hope yu've got a nice insurance policy! ... **M**

Witing this, growing tired, stopping, she ... **O**

Eyes the stainz of bitter tea / ... **R**

So much for calming potry! ... **S**

Wiked our world is doomed to stay. ... **E**

I can't held its weight on bended knee ... **C**

Withstanting vile acts eternally / ... **O**

The world, once quiet her, ends noisily / ... **D** ... **E**

Not the answer! Puzzles often have multiple intermediate steps.

Solution

Corrected typos read
RHYME SCHEME TO MORSE CODE
"ay" lines are long = dash
"ee" lines are short = dot
/ indicates new letter

How did Josephine feel?

MISERABLE
__ __ __ __ __ __ __ __ __

Final answer :)

Metapuzzle Example

The Baudelaires have managed to escape Count Olaf, but they're still following the thread of a conspiracy marked by a trio of mysterious initials: V.F.D. What these letters stand for is anyone's guess, but it's clear that a host of friends and foes are involved, and that much of the secrets concern the Baudelaire fortune. If you can follow the clues from V to F to D and see what patterns emerge, you may learn more!

iolet
red
eer
iddle
ole
enmark

reya

aphne

ietnam

enus

iana

oxglove

inland

elma
rum
aisy
ish
iola

reya
aphne
enus
oxglove
inland

What will the Baudelaires find when they discover their family fortune?

We'd lo
feedbac
puzzle se
take
minute

___ __ ___ __

Metapuzzle Example
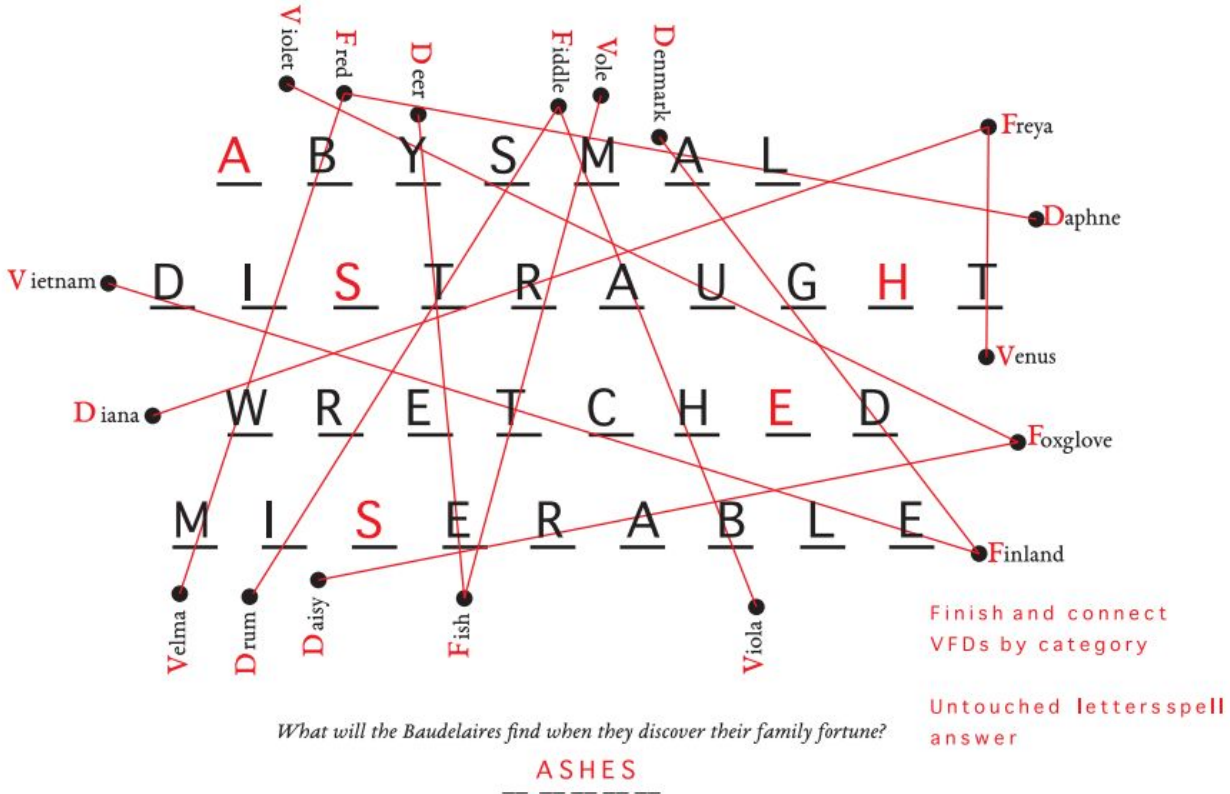
What Puzzle Hunts Are Out There?

- Puzzled Pint (newbie level!)
    - free!
- MIT Mystery Hunt (gigachad level!)
    - also free!
- And so many more in between with varying
    - Cost
    - Number of puzzles/expected duration
    - Difficulty level
    - Puzzle types
    - Team sizes
- My personal favorite - Puzzle Boat
- Typically archives of hunts are still available/solvable after the hunt is over
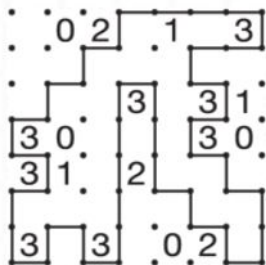
How to Get Good™ At Puzzle Hunts

- Doing puzzle hunts
- Solving with people who are more experienced/know things you don't
- Reading through solutions if you're entirely stumped
- Knowing how to Google - the CS way
    - All online tools are okay to use!
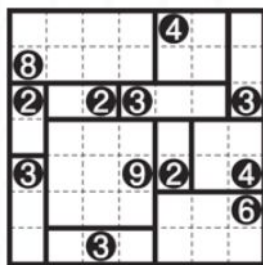- Listening to the rest of this talk 😎

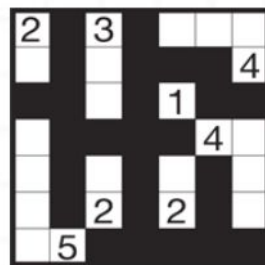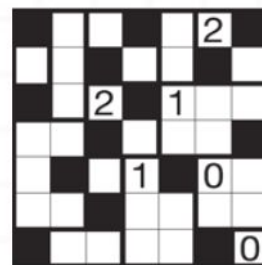# Nikoli Puzzles

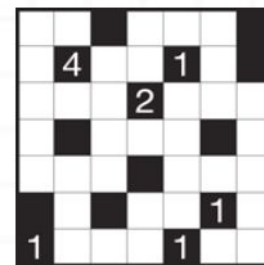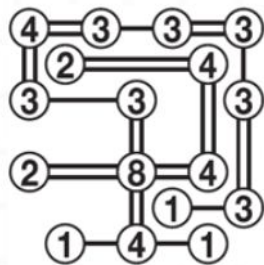- Pop up from time to time as a sub-step of a hunt puzzle
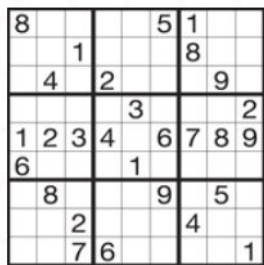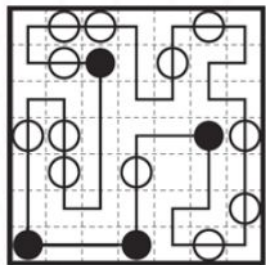

Sudoku

Slitherlink
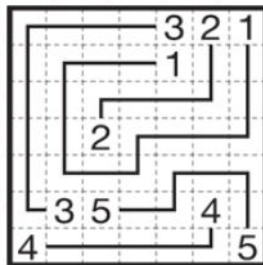

Shikaku

Nurikabe

Heyawake

Akari
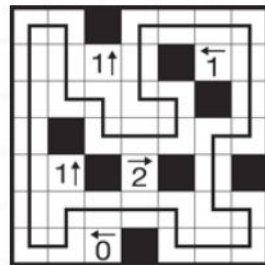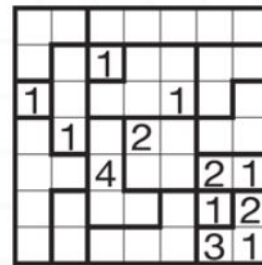

Hashiwokakero
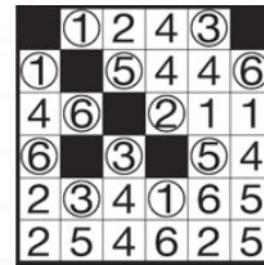

Masyu

Numberlink

Yajilin

Ripple Effect

Hitori

Common Codes

NATO	Letter	Decimal (base 10)	Binary (base 2)	Ternary (base 3)	Hex (base 16)	Letter	Morse	Braille	Semaphore	Pigpen
Alfa	A	1	00001	001	01	A	•—			
Bravo	B	2	00010	002	02	B	—•••			
Charlie	C	3	00011	010	03	C	—•—•			
Delta	D	4	00100	011	04	D	—••			
Echo	E	5	00101	012	05	E	•			
Foxtrot	F	6	00110	020	06	F	••—•			
Golf	G	7	00111	021	07	G	——•			
Hotel	H	8	01000	022	08	H	••••			
India	I	9	01001	100	09	I	••			
Juliett	J	10	01010	101	0A	J	•———			
Kilo	K	11	01011	102	0B	K	—•—			
Lima	L	12	01100	110	0C	L	•—••			

Codes Can Be Hinted At Using Flavor Text 🍫

AWARDS SHOW

Miley: "This awards show is so chaotic! Ruthie and Dolly keep fighting with each other and I can't even see anyone in the audience with how blinding these spotlights are. Well, we'll get through it one way or the other…"

Codes Can Be Hinted At Using Flavor Text 🍫

Rover's Escape Plans

Rover's done a **bit** of work to logic out getaway routes all across town, and he's ready to take the crew in straight lines from start to finish.

Indexing

- You know what this is already!
- MUTT 2, BASKETBALL 7, CHINA 1 ➡ UBC
- Just remember - indexing is 1-based and not 0-based in hunts :)
- And spaces don't count when indexing into multi-word phrases

If You See A Number...

- ...often it's one of two things
- an **index** into a word/phrase that you need to find
- the **length** of a word/phrase that you need to find
- sometimes, a puzzle will give you both numbers, sometimes just the index as the length isn't crucial for solving
- sometimes the numbers aren't obvious and you need to figure them out in other ways!

ISIS

- A now unfortunate puzzle acronym
- Identify
    - What is the content? Usually some media that you have to track down
- Sort
    - Is there a natural sort order for the content? If so, that's probably it
    - This step is not always required for all puzzles of this general type
- Index
    - Are there numbers or hints towards numbers that you can use to index?
- Solve
    - Put all the letters you've indexed together to get the answer

ISIS - Identify

ISIS - Sort

The Hidden Staircase

The Bungalow Mystery

The Secret of the Old Clock

ISIS - Index

The Secret of the Old Clock - 1

The Hidden Staircase - 2

The Bungalow Mystery - 3

ISIS - Solve

The Secret of the Old Clock - 1

E

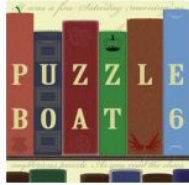The Hidden Staircase - 2

A

The Bungalow Mystery - 3

T

Count Everything

- The number of things there are can give you a clue towards what steps you should take
- 26 things? Maybe they correspond to the alphabet
- Same number of things in two sets? Maybe they should be paired

Let's Solve Together (kind of - this actually has 14 clues)

Arrowsmith

In a modern-day update, Martin prefers audiobooks to medical texts.

Leo Tolstoy's depiction of the Napoleonic invasion of Russia, but just a portion of it. [3/5]

William Makepeace Thackerey's novel about two young women travelling the world after graduating and the money they pay for passage. [2/4]
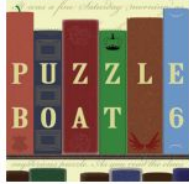
Antoine de Saint-Exupery's illustrated masterpiece of a young boy travelling from planet to planet seeing tiny, tiny text. [5/6]

Tom Wolfe's biography of those involved with penning articles about the space program. [4/5]

Madeleine L'Engle's mind-bending story about Meg, Charles, and Calvin who must travel to Camazotz to get some herbs. [2/5]

John Buchan's classic (and later a Hitchcock movie) about close to 40 tundras. [3/7]

1. What are the clues referring to? 🍫

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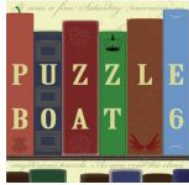
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2. What do the numbers mean? 🍫

PUZZLE BOAT 6

Arrowsmith

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3. What is the final answer? 🍫
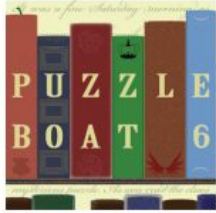
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EAT THE RICH BAND

The End!

- UDLS Puzzle Hunt Part 3?
- jk…
- unless… 👀