🧩 Stanford Puzzle Hunt 2023: Mystery in History 🧩

Hello everyone! Thanks for coming to Mystery in History! This has been our biggest hunt yet, with over 500 participants across 162 teams, solving a total of 14 puzzles (including the intro, mini-metas, meta, and runaround.) We've never attempted a puzzle hunt of this scale before, but it was definitely a fulfilling experience for all of us. We're all touched by the enthusiasm you showed before, during, and after the event – thank you all, and we hope to see you again!

Below are some brief explanations of puzzle solutions and the thought processes our team went through when writing and editing the puzzles! We've included credits for original writing, but keep in mind that most, if not all, of the team had a hand in editing and test-solving each puzzle.

If you've got any comments for any specific puzzles or members of the team (if you appreciated them giving really good personal hints, or really liked their puzzle) the email that contains this doc has a feedback form that you can leave messages for us on! Alternatively, email iyhn8192@stanford.edu or bradmoon@stanford.edu and we'll get your feedback to them!

And one last thing- we're always looking for people to join the team! So if you've got any cool ideas for puzzles, or you just want to help organize, consider joining and let us know at the above emails or on the Google form!

Until next hunt,
-the Puzzle Hunt Team

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Stats

Teams: 162

Participants: 516

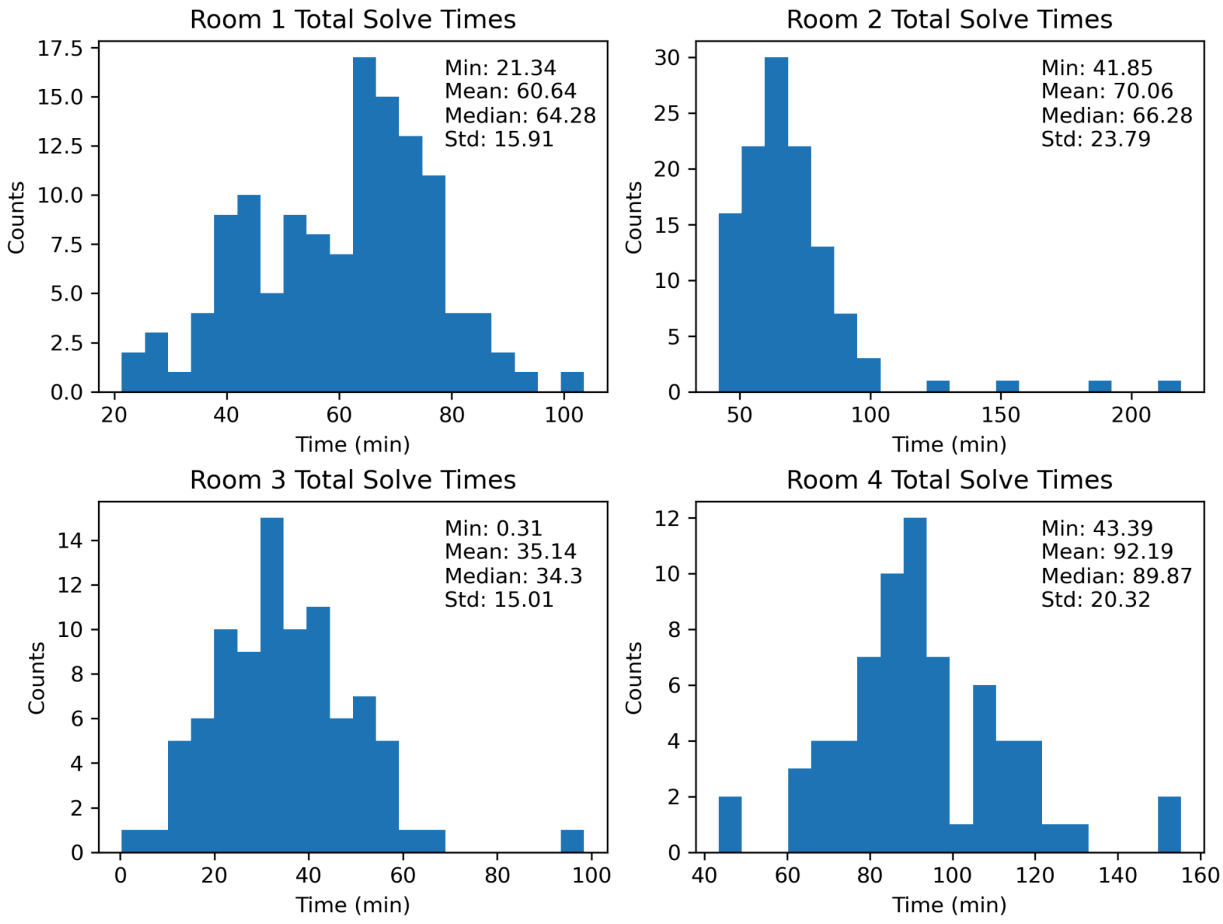
Puzzles: 14

Number of teams that finished the final meta: 68

Fastest teams (rounded to the nearest minute, but some of the finishes were within a minute of each other):

1. **Smite: 2 hrs 48 min**
2. **ColinIzers: 2 hrs 49 min**
3. **turtleemoji: 2hrs 53 min**
4. **JebC: 2 hrs 58 min**
5. **GhostbloodsLite: 3 hrs 9 min**
6. **PawnStars: 3 hrs 10 min**
7. **ThreeAndaHalfGinks: 3 hrs 11 min**

Most difficult puzzle (by average solve time): In the Loop (51:44)



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Hall of Fame

Team Names

- amongus
- RadBromance
- RiceFriedShrimp
- TheSummerITurnedPuzzley
- KristiesKingsAndKween
- NumberOneBradleyMoonFans
- bitlyGordianNot
-

Wrong Answers

- **Virtual Visitations (Puzzle 0.1)**
    - SOLARGRAM (NumberOneBradleyMoonFans)
    - HELPLINE, HOLOLENS, TELEMEET (Moonshot)
    - Na (Cosmic Parrot)
- Cold Weather Natives **(Puzzle 1.1)**
    - HOTTODDY (ForemostPheasants)
    - BRAINIACS (ceers)
- Healthy Snacks **(Puzzle 1-3)**
    - LAGUNITA (TurtlePunters)
    - FROSTY (Rad Bromance)
- Data Board **(Puzzle 1-M)**
    - CARACCIDENT, POISONTEA (RiceFriedShrimp)
    - WIZARD (pogchamps)
- Potassium Pop **(Puzzle 2-2)**
    - GOODGIRL (ceers)
    - COLDPLAY (DUCKLINGS)
    - OBSESSION (QuizzicalQuartet)
    - ANPANMAN (depressed)
- Ransom Note **(Puzzle 2-3)**
    - WESTSIDESTORY (Smite)
    - 10THINGSIHATEABOUTYOU (WeAreWolves)
    - HERBERT, HOOVER (Test)
    - SHESTHEMAN, THRONEOFBLOOD, MAQBOOL (JawsOfTheLion)
    - TAKEALLMYLOVES (FloMore)
    - TISBETTERTOBEVILETHANVILEESTEEMED (TriNu)
    - ABBAABBACDECDE, chalageg, GAHEAGCL (RiceFriedShrimp)

    - WHEREDOICOUNTTHECLOCKTHATTELLSTIME, WEARYWITHTOILIHASTETOMYBED (AcademicWeapons)
    - THECOMEDYOFERRORS (amongus)

- Running Out of Time **(Puzzle 3-R)**
    - MAGICCAPT (ceers)
- don’t POKE the beaR **(Puzzle 4-1)**
    - Dinosaur (RSVP)
- In the Loop (**Puzzle 4-2**)
    - NOPE (O2, pogchamps)
    - POOP (ForemostPheasants)

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Puzzle Solutions

Puzzle 0-1: Virtual Visitations (credit: Ethan Chi, Ryan Chi)

Everyone loves the Stanford neighborhoods:



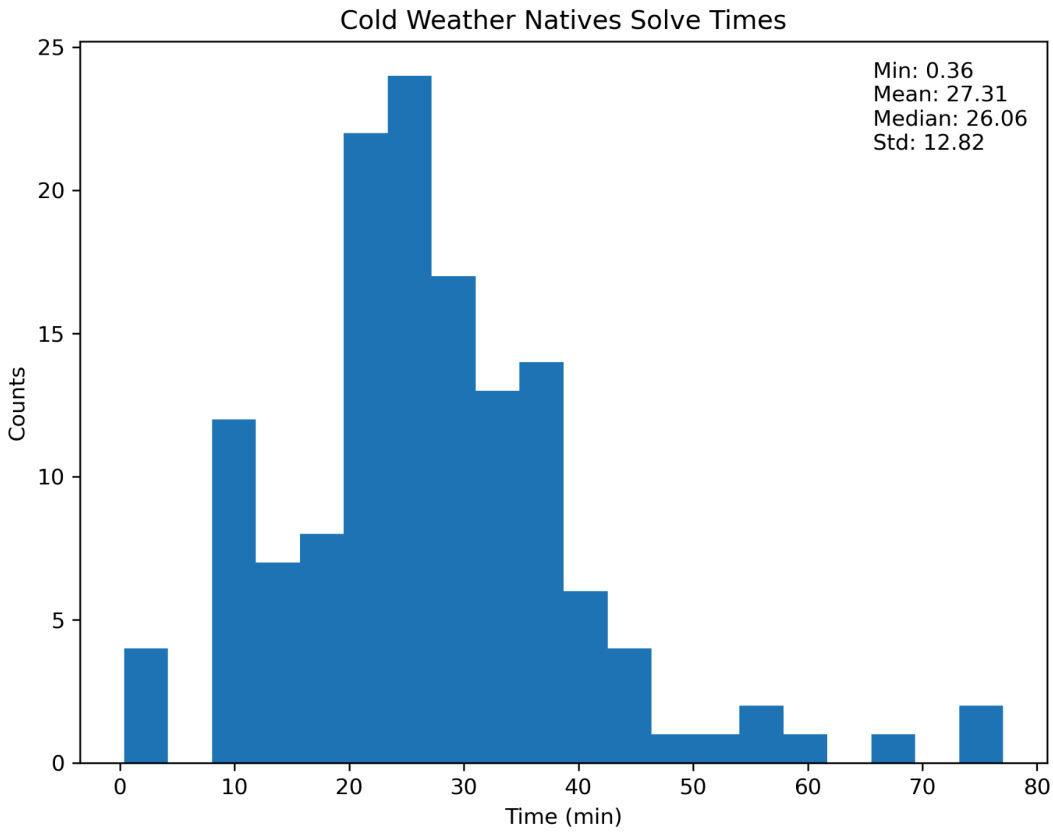
Each color in the puzzle corresponds to one of the 8 ResX neighborhoods. Filling in the first initial:



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Puzzle 1-1: Cold Weather Natives (credit: Kristie Park)

ANSWER: VIKINGS



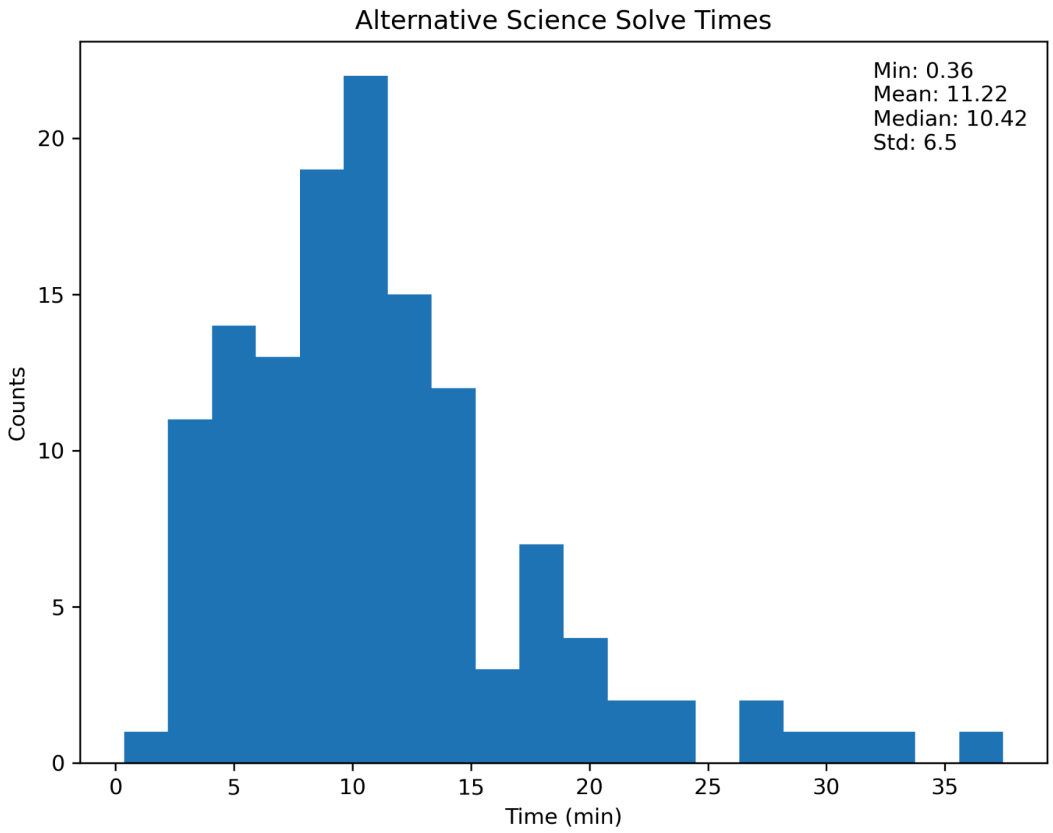
SOLUTION: Find rhyming pairs of words! This puzzle involves identifying two words from each line of clues. Each pair contains a rhyming pair of words, with the first word starting with "BR". (Hint: "Br, it's cold!") Take the letter that's different from the first and second word in each pair to get "**HTTYDOST**". With a quick google search, you'll see that the How to Train Your Dragon OST (god tier soundtrack imo) has a soundtrack written by John Powell called "The **Vikings** Have Their Tea" to answer the question, "Who even likes to have their tea in this weather?"

Behind the Scenes: The original flavor text included "John Powell" instead of just "John", from which Ian instantly guessed the correct answer because he~~'s a big nerd~~ has the entire soundtrack's track titles memorized. We changed it after that in case anyone else had it memorized too.

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Puzzle 1-2: Alternative Science (credit: Kristie Park)

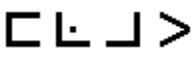
ANSWER: EARTH



SOLUTION: Each clue was themed, being literature, dollar bill values, group words, and Star Wars episode numbers. The number at the end of each line specified the number of clues you were supposed to find! Here are the numbers:

Clue 1: Slaughterhouse **5**, Ready Player **1**, Catch **22**, Fahrenheit **451**
Clue 2: Jefferson $**2**, Hamilton $**10**, Franklin $**100**, Grant $**50**
Clue 3: quartet **4**, hat trick **3**, baker's dozen **13**
Clue 4: The Force Awakens - Episode **7**, The Rise of Skywalker - Episode **9**, Return of the Jedi - Episode **6**

Then, find the numbers in the grid, and connect the dots to reveal the word "**FLAT**" written in pigpen cipher (Charlie Brown's dust magnet friend is also conveniently named Pigpen):

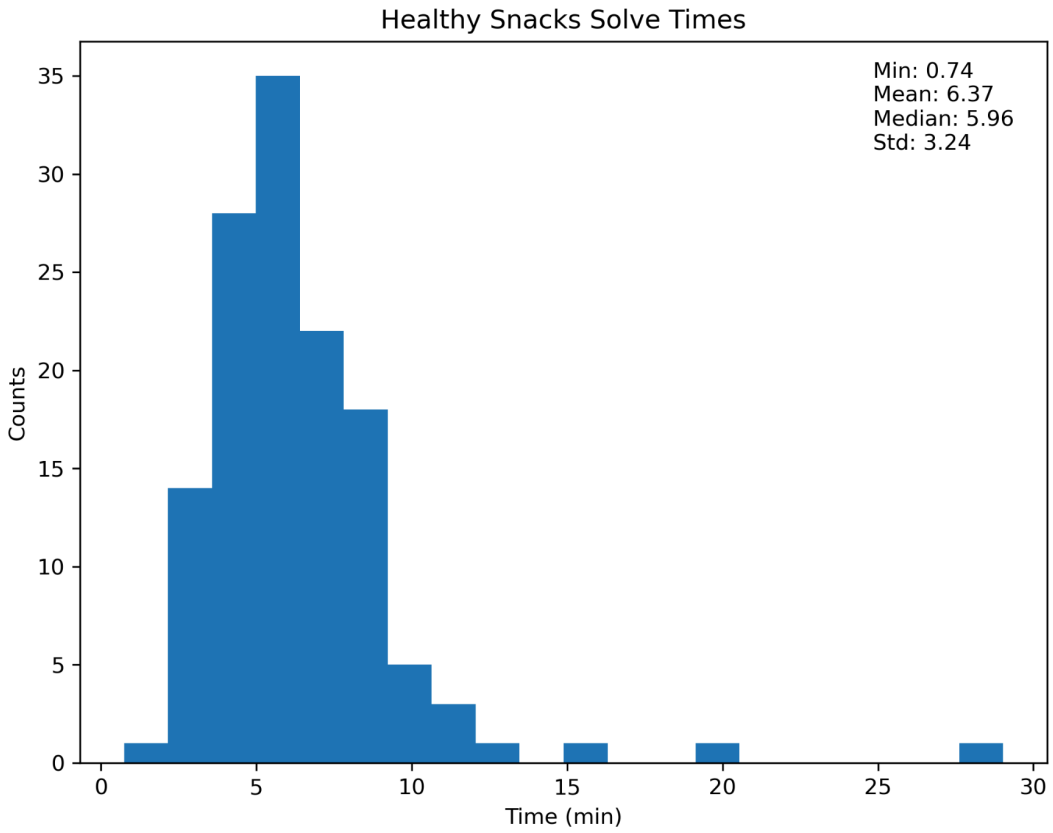


F L A T

From there, use the title “Alternative Science”, flavor text “interesting theories” and/or the five lines at the bottom to get **EARTH**.

Puzzle 1-3: Healthy Snacks (credit: Katherine Li)

ANSWER: GROOM



SOLUTION: The "healthy snacks" in the puzzle title referred to fruits, so each clue yielded a different fruit. From there, take either a prefix or a suffix of the fruit word depending on the mouth on either side of the clue. The length of the prefix or suffix was determined by the number in the mouth.

Here are the correct fruits, with the prefixes/suffixes underlined:

A group of two: pe<u>ar</u>

Company that makes cell phones: appl<u>e</u>

Scarf color in a Carly Simon song: <u>a</u>pricot

Diagram in a textbook, abbr.: <u>fig</u>

Branch used as a symbol of peace: ol<u>ive</u>

Key guac ingredient: avocad<u>o</u>

Oh my darling, oh my darling: clementi<u>ne</u>

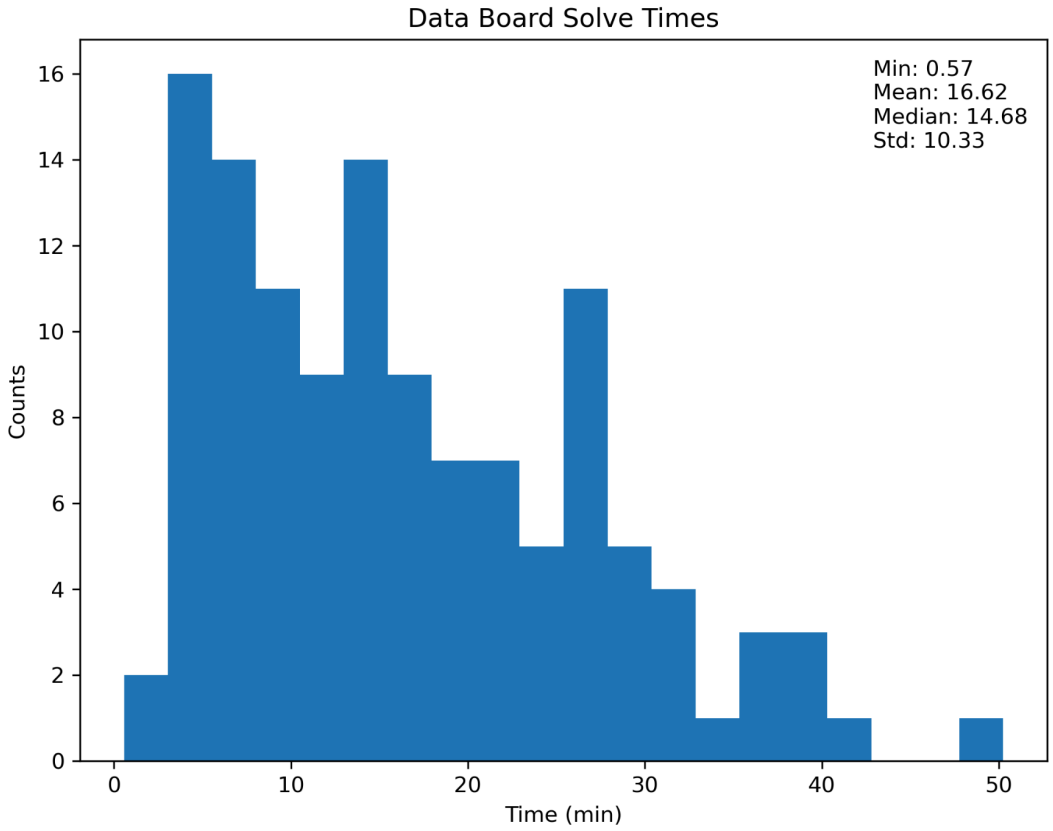
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Combining the underlined letters we get AREAFIVEONE. The official name of Area 51 is Groom Lake, so the answer to this puzzle was **GROOM.**

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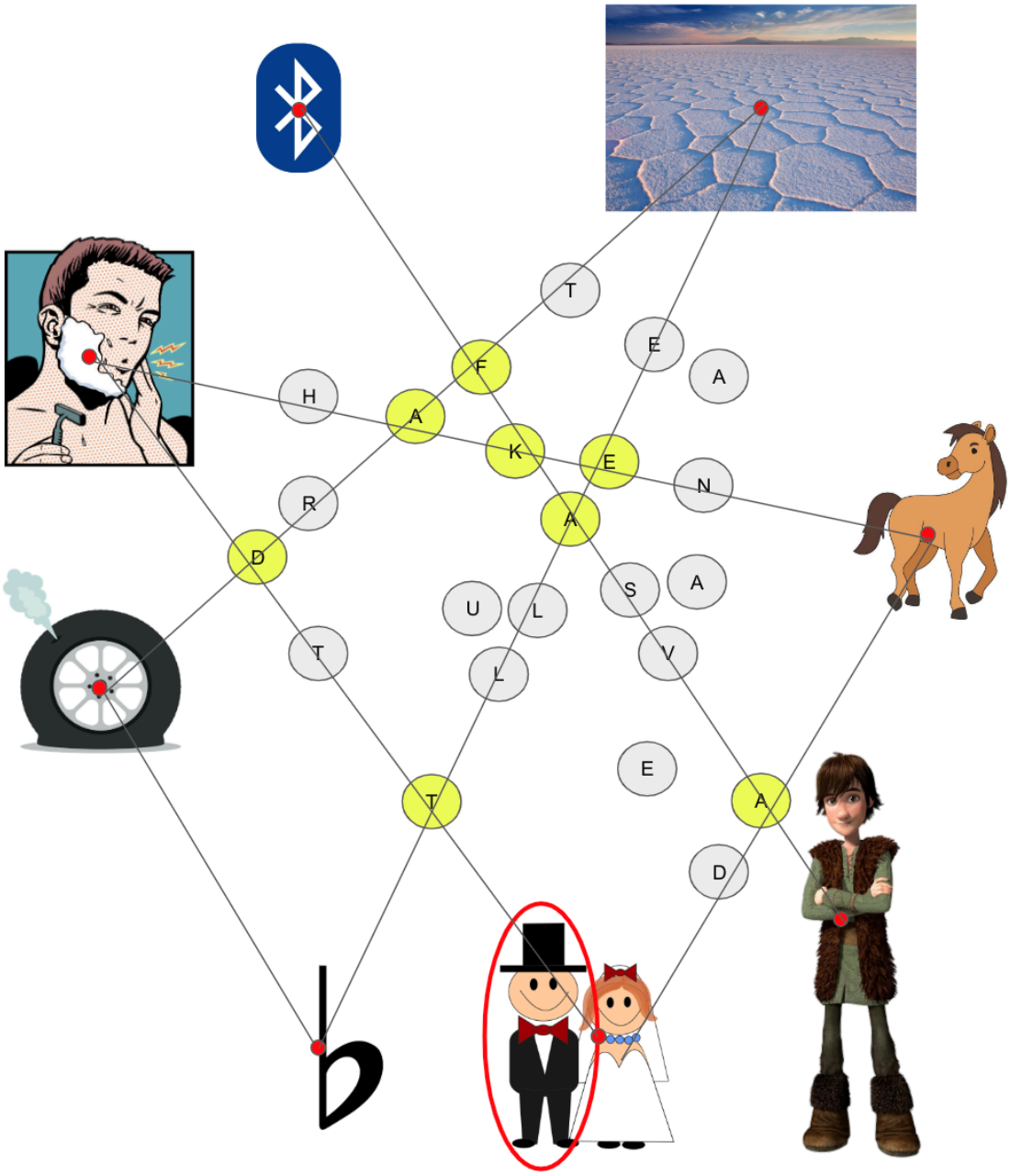
Puzzle 1-M: Data Board (credit: Ian Ng, Kristie Park, Bradley Moon)

ANSWER: FAKE DATA



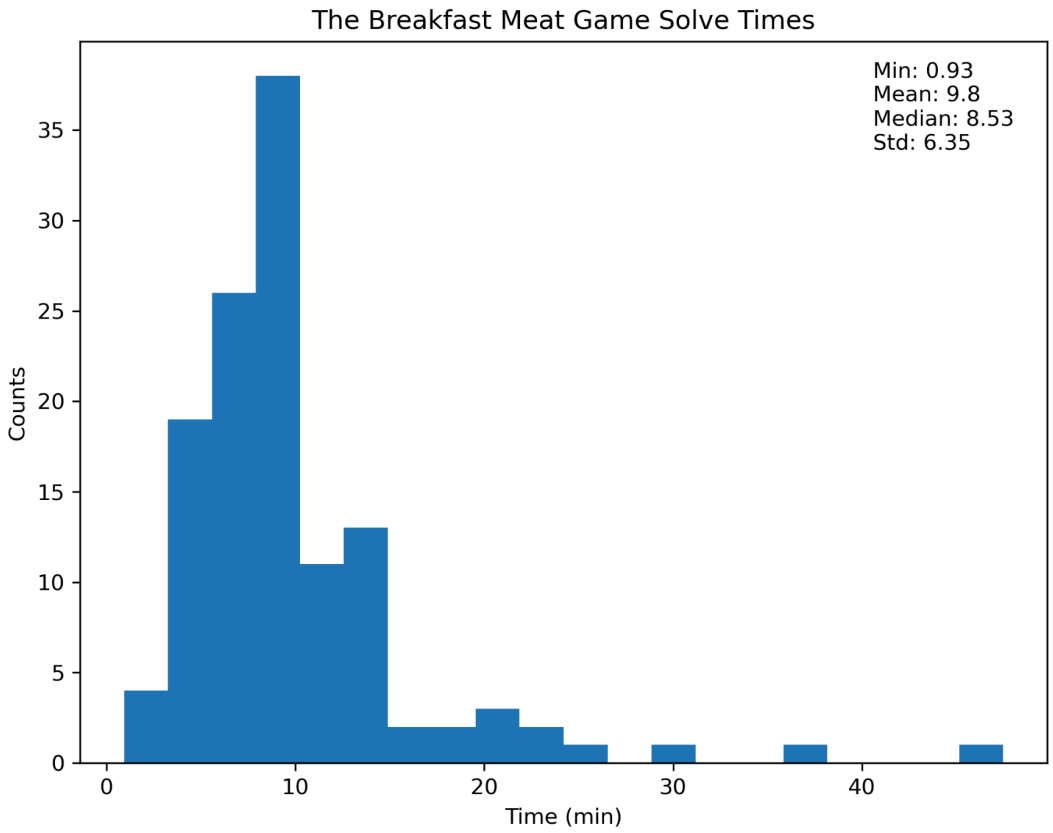
Use the answers from the previous three puzzles to categorize the images. Connect the dots, take the letters that lie at the intersections of the lines, then read them in reading order (left to right, top to bottom) to get **FAKE DATA**.

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Puzzle 2-1: The Breakfast Meat Game (credit: Katherine Li)

ANSWER: HOLMES

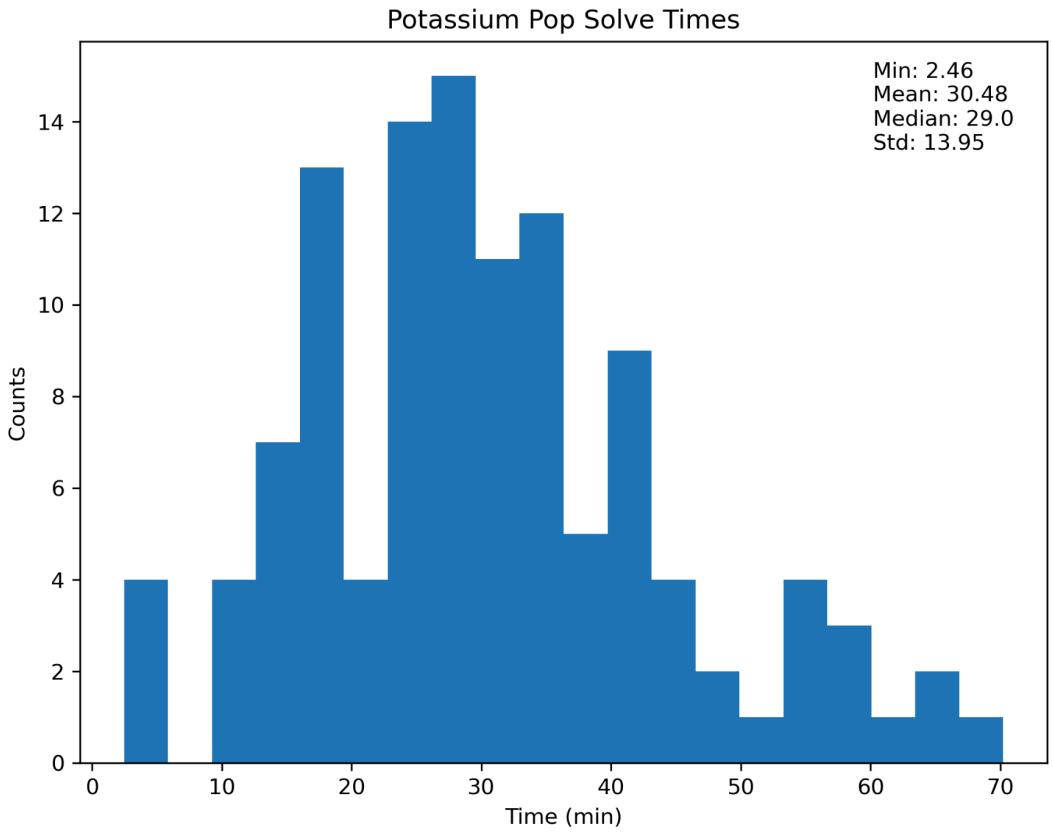


SOLUTION: This puzzle is based on the game "Six Degrees of Kevin Bacon," where people in Hollywood are linked to each other by being in a movie together, and you have to find the shortest number of links that takes you from any actor to Kevin Bacon.
As such, Kevin Bacon is the root of this tree, represented by a piece of bacon, and you have to find the movies and actors represented by the initials along edges and vertices of the tree (where edges are movies and vertices are actors).
The names of the movies were, respectively, Black Mass, Tour de Pharmacy, Anchorman 2: The Legend Continues, X-Men, JFK, Dr. Terror's House of Horrors, End of the Line, and Batman v Superman: Dawn of Justice. The names of the actors, with the actors at the leaves in bold, were **Benedict Cumberbatch**, James Marsden, **Will Ferrell**, **Ian McKellen**, Donald Sutherland, **Christopher Lee**, Holly Hunter, and **Henry Cavill**.

All of the actors at the leaves have played Sherlock Holmes, a "role" that could be very helpful for solving conspiracies! This leads to the answer of the puzzle, HOLMES.

Puzzle 2-2: Potassium Pop (credit: Bradley Moon)

ANSWER: SUPERSHY



SOLUTION: Each image in this puzzle corresponds to a different kpop group, and the written clues correspond to songs written by the group. The groups are as follows:

1. The letters are asking the C to stay : **STAYC**
2. The letter T is splitting the BS: **BTS**
3. The the phone depicts a text message chat: **TXT (Tomorrow X Together)**
4. Mike Wazowksi has been x-ed out: **MONSTA X**
5. The net is catching the man's dreams: **DREAMCATCHER**
6. This is a red velvet cupcake: **RED VELVET**
7. This is an "n - high pen" : **ENHYPEN**
8. These baby goats (kids) are lost: **STRAY KIDS**

The songs are as follows:

1. I'm different, I'm **N**OT LIKE YOU
2. A 2019 HBO show is **E**UPHORIA

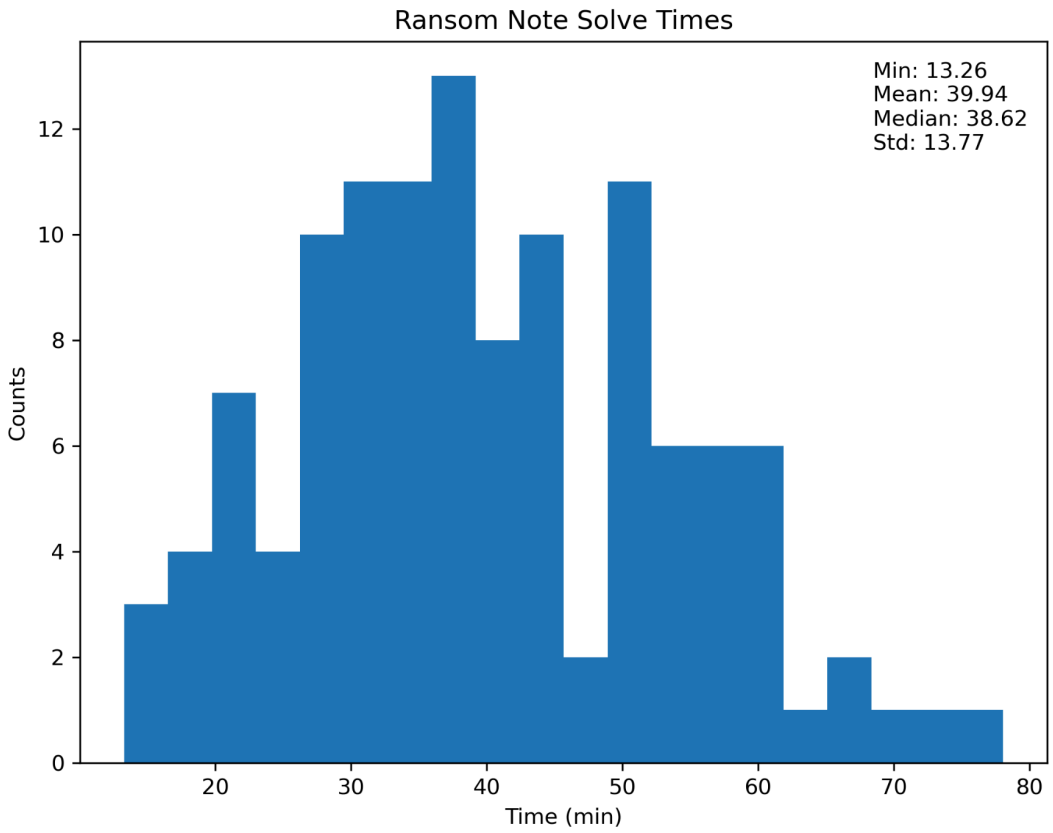
3. An enumerated list of desires is a **W**ISHLIST
4. Mike Wazowski is a green monster clues envy: **J**EALOUSY
5. Movement starting with a vowel is **E**MOTION
6. A 2015 Annie Sorenson novel is “A Boy Named Love” and is **A**BOUT LOVE
7. If something is already sold it is **N**OT FOR SALE
8. A sob with no noise is a **S**ILENT CRY

The first letters of these songs spell NEWJEANS. The final clue, “like an introverted hero”, hints at the answer **SUPERSHY**.

Behind the Scenes: This puzzle was based on a mechanic I initially used in a puzzle I made for my younger sister’s birthday. The puzzle used to have 11 lines of text. In each line there would be a comma. The first part of the line clued a kpop group and the second part clued a song by that kpop group, the first letters of which spelled out BIASWRECKER.

Puzzle 2-3: Ransom Note (credit: Andy Tang)

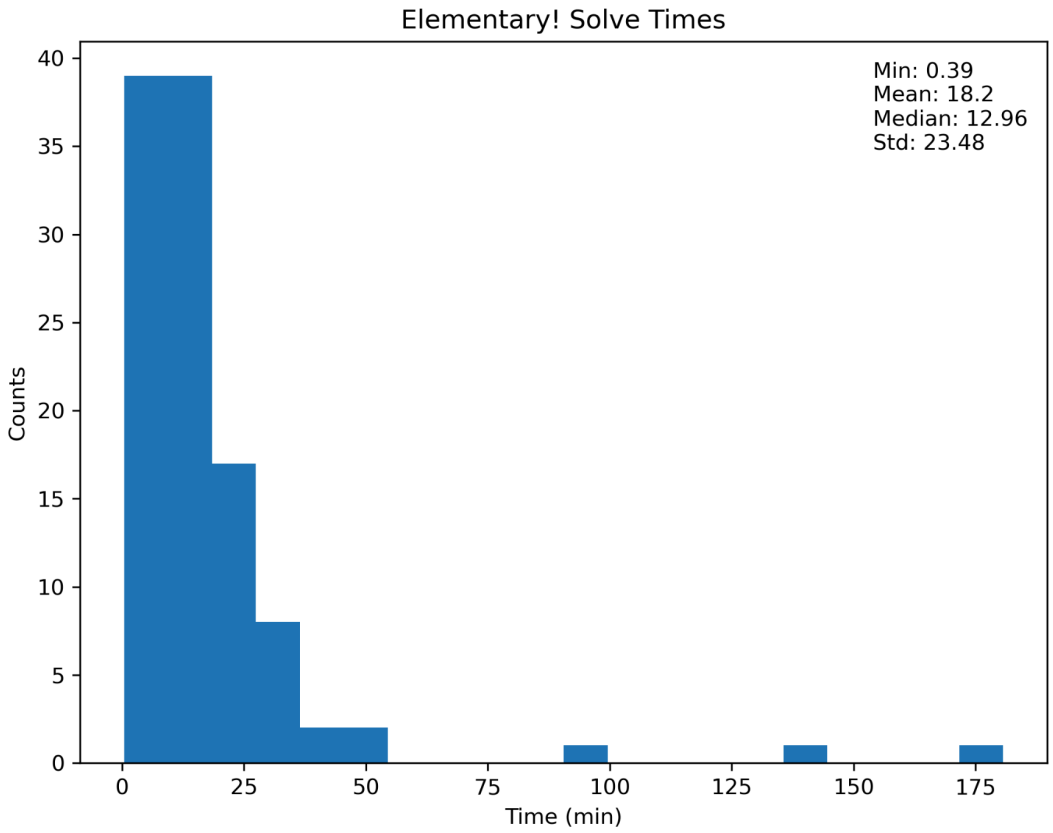
Answer: EARLPEMBROKE



SOLUTION: First, use Morse code (treating anything in **bold** as a dash, and anything else as a dot, as per the flavortext); this gives you the phrase “SONNETNUMBERDIFFERENCE”. Then, if you look up any of the highlighted words, you’ll see that each phrase comes specifically from one Shakespearean sonnet (we made sure that there weren’t any that showed up in more than one!) This gives you a series of numbers which we can then alphabetically convert into the phrase “EARLPEMBROKE”.

Puzzle 2-M: Elementary! (credit: Karolyn Cheng, Bradley Moon, Ian Ng, Andy Tang, Sonny Young)

Answer: BERKELIUM



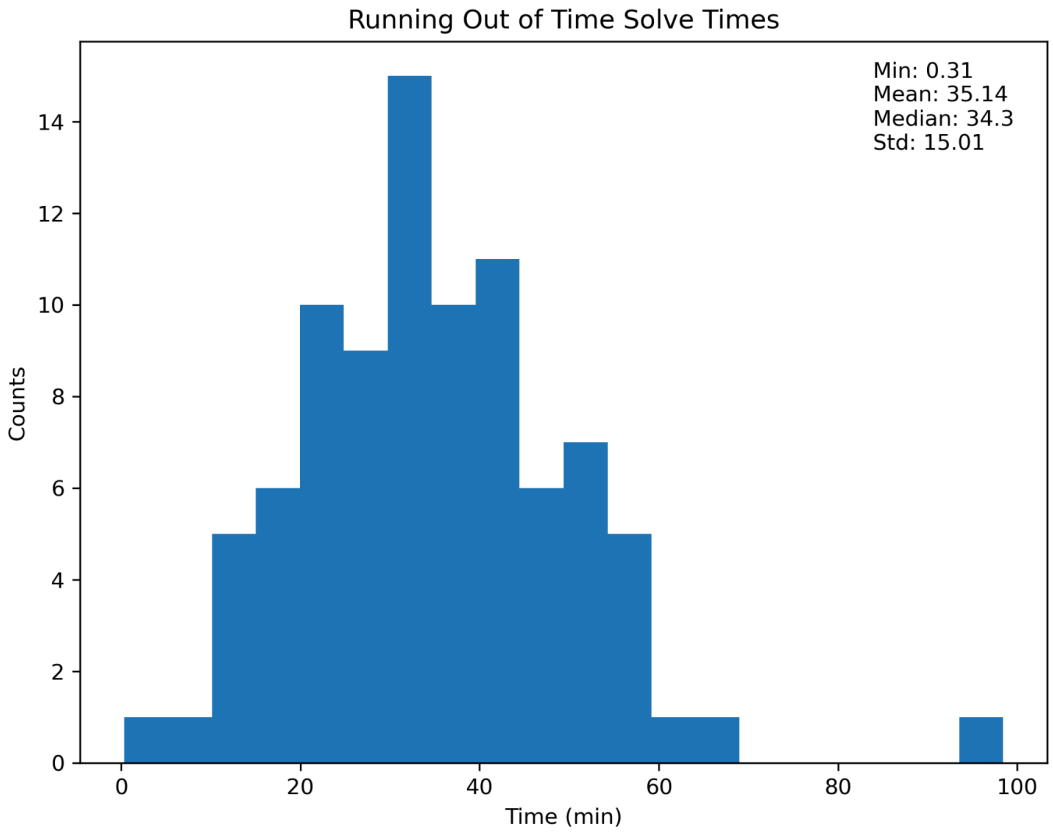
SOLUTION: Follow the path delineated by choices directly related to the puzzles from the room! For the first jump, it's between Baskervilles, Orient, and Romanovs (the only one related to Sherlock Holmes is Baskervilles, from *Hound Of the Baskervilles*). For the second jump, it's between Medea, Antigone, and Coriolanus (the only one written by Shakespeare is Coriolanus.) For the last choice, the only lyric from Super Shy is "find a lil' spot…" Then, fuse the elements among that path- as per how fusion works, add the atomic numbers together to get 99, the atomic number for Berkelium.

Behind the Scenes: The mechanic for this puzzle (traversing the maze) was taken from another puzzle (written by Andy Tang), which didn't end up making it into the hunt, but we tried to preserve the mechanic as much as we could! In that initial puzzle, the element symbols spell out a word instead of having to fuse the atomic numbers (which a lot of teams

actually tried during the hunt), but we thought this would make the maze really visually convoluted since we would need to include a lot more paths to form the word “BERKELIUM”.

Puzzle 3-R: Running Out of Time (credit: Bradley Moon, Daniel Sun)

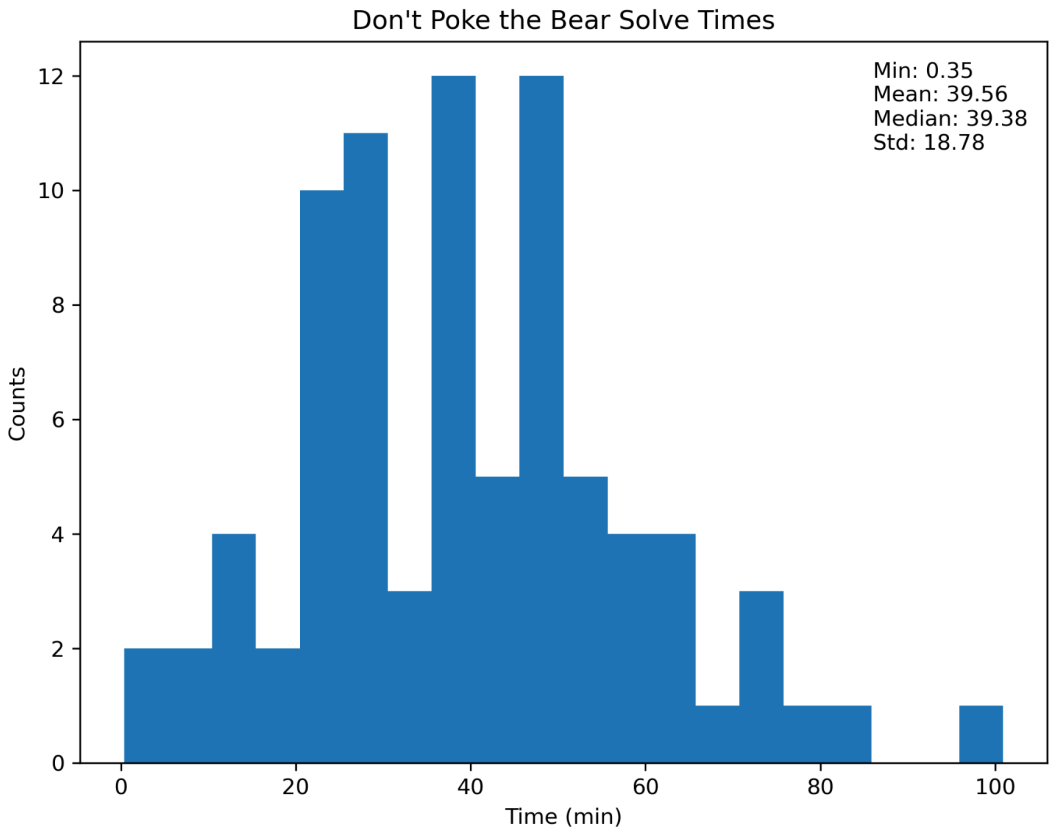
Answer: JANESTREET



Behind the Scenes: Daniel rickrolled not only the participants but also the team oops
Rickroll count: 170

Puzzle 4-1: Don’t Poke the Bear (credit: Ian Ng, Kristie Park, Grace Zhou, Daniel Sun, Karolyn Cheng)

Answer: CARDSHARK



How to Solve:

First, note that there are 9 groups of 4 cards, and 9 lone cards, suggesting that each lone card gets put with a group to form 9 groups of 5 cards. Read the title (don’t POKE the beaR) to note that we are dealing with poker hands, and that there are 9 significant poker hands in Texas Hold ‘Em (not counting the high card hand.)

Then, match the lone cards to the groups so that you have 1 of each hand, from Royal Flush to One Pair (we made it easier by putting them in order from highest to lowest).

Next, find what’s different about the escapees! You’ll notice each animal has 3 attributes (color, type of animal, and emotion), each of which has 3 variants (orange, pink, white / dinosaur, cat, bear / happy, sad, sleeping). The impostor in each hand will have one different attribute than the rest (for instance, a happy **pink** bear instead of a happy orange bear).

This gives you some attribute that is different from the rest. Now, you can index into that word using the rank of the card (A = 1 -> K = 13), and the result should give you CARDSHARK!

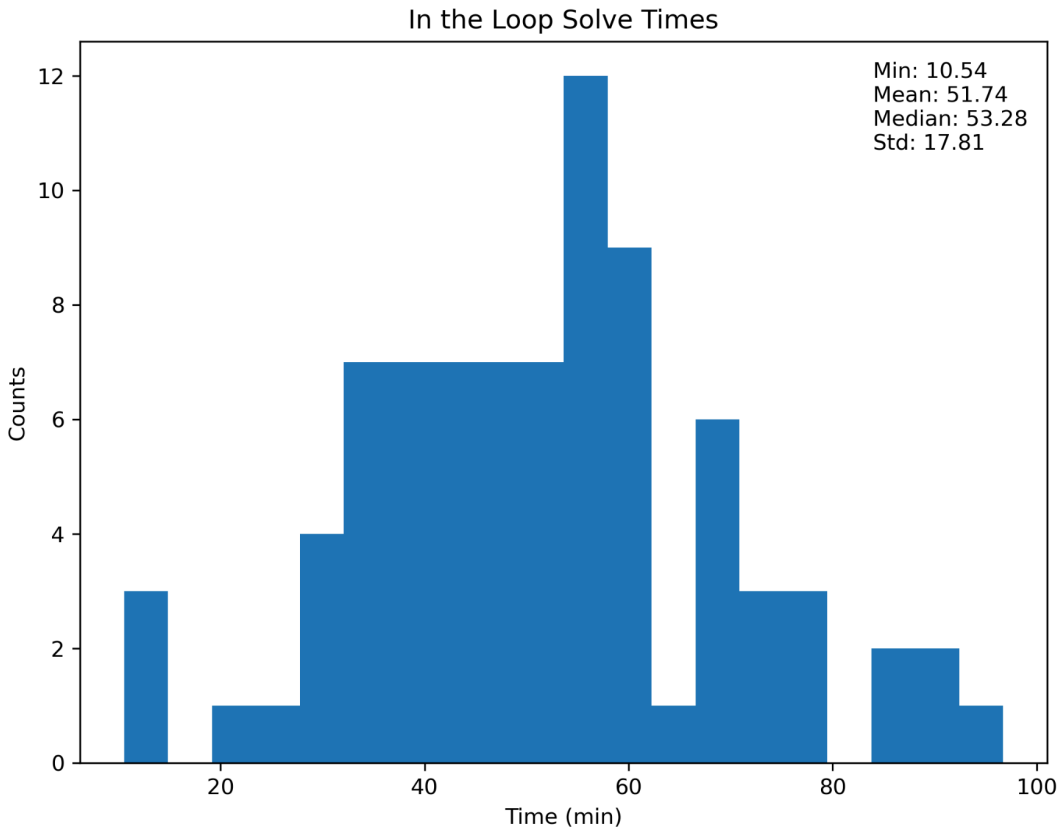
Behind the Scenes: We initially had two versions (one for advanced, one for novice). The Advanced version didn't have the hands in order, which actually makes matching lone cards to groups significantly more challenging.

I actually wrote this puzzle from the solution up – I wanted the answer to be CARDSHARK first, since I'd recently heard the term for the first time in a Taylor Swift song (*Magnolia Street,* not to be confused with Jane Street) and thought it was a cool word. Then, "CARD" inspired a card game, and "SHARK" inspired the animal theme.

If you've ever played the game SET, the mechanic was partly inspired by that!

Puzzle 4-2: In the Loop (credit: Daniel Sun)

ANSWER: CULT



SOLUTION: The initial grid uses a game called Slitherlink (hinted in flavortext), where you draw a path through the grid such that each box's number corresponds to how many sides of the box are highlighted by the line. Once this is done, you fold the grid according to the dashes (as is standard in origami notation, dashes means a valley fold, the dots and dashes is a mountain fold), to form the word **CULT.**

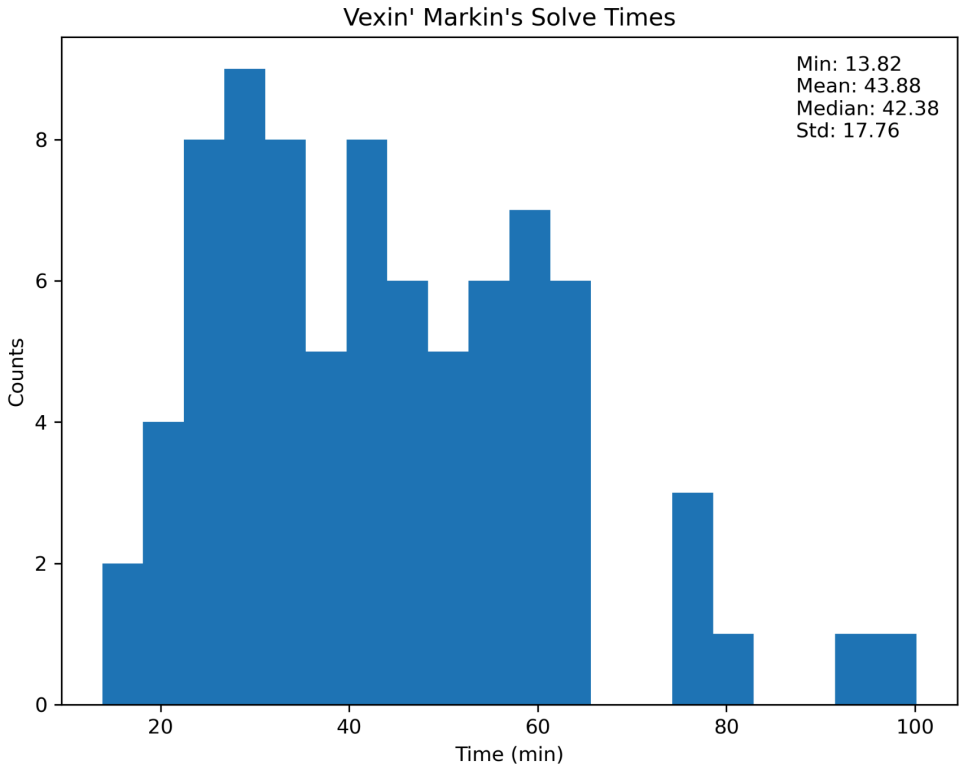
Behind the scenes: This puzzle was initially *even harder*, because Daniel is *really* good at Slitherlink. He was convinced to reduce the size and difficulty of the puzzle when multiple members of the team took more hours to complete just the grid part.



< ----- the decision we gave Daniel

Puzzle 4-3: Vexin' Markins (credit: Karolyn Cheng, Daniel Sun)

Answer: JOLLY ROGER



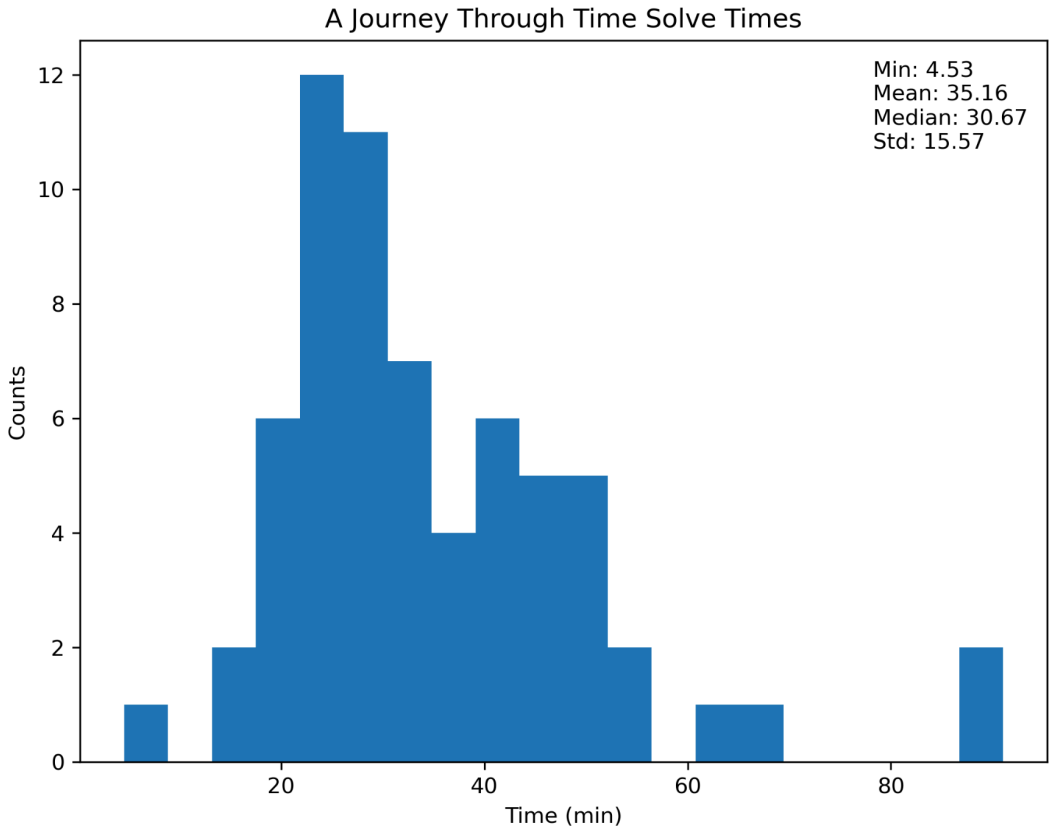
SOLUTION: First, decipher the semaphore to get USAGE FIAV. Searching that up, you will find pages describing vexillological and usage symbols for flags, where you specifically want the usage symbols. If you follow the clue about the Instant Gram, you should find an Instagram account called vexin_markins. There, you will find all the flags on the puzzle, where each post tells you what the flag is, links you to the Wikipedia page, and provides some more hints about usage. Then, you need the 2x3 grid describing the usage for each flag, which you can find on the Wikipedia info box. Then, the clue about "the world be spinn' like north be west and south be east" becomes important. You need to rotate each usage symbol counter-clockwise (put north to the west), and read off the letters as Braille. You should get BLACK FLAG, and using the pirate theme of the puzzle, get JOLLY ROGER as the pirates' black skull and crossbones flag.

Behind the Scenes: Daniel spends too much time on Wikipedia. Image searching was too tedious, so the Instagram was born.

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Puzzle 4-M: A Journey Through Time (credit: Kristie Park, Bradley Moon, Daniel Sun, Karolyn Cheng, Ian Ng)

ANSWER: MARCO TESLA L'VAIN



Part 1:

Each clue requires one answer from a Room 4 puzzle, and the other blank requires you to fill it in yourself.

A viral *Brittany* Broski **video** features Kombucha.

Exquisite Torture: Life in a Christian *Cult* (looking up this exact syntax will get you the title of a book)

Reuters [Nigeria, 2007] reports that a ship (which may be flying the *Jolly Roger*) has attacked another ship from **Exxon**. (You need to figure out a ship flying the Jolly Roger is a pirate ship, and Googling some form of pirate Nigeria 2007 reuters should lead you the the Reuters article titled "Pirates attack Exxon vessel in Nigeria")

In the video game *Card Shark*, the player takes on the role of a mute boy serving in a **tavern** in the south of France.

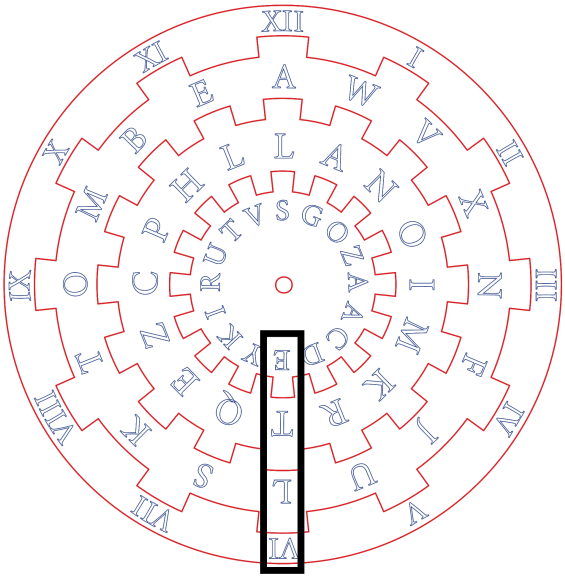
Using the flavor text about Romans, you need to get a Roman numeral from each answer. Using the clue about shaving, you need to get rid of all letters that are not Roman numerals.

Video ⇒ vi = 6

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Exquisite ⇒ xii = 12
Exxon ⇒ xx = 20
Tavern ⇒ v = 5

Part 2:
The answer to our meta puzzle last year was "CLOCK", so that combined with our time traveling theme inspired us to make a clock design! Shout out to Kristie and Bradley for laser cutting and assembling 180 puzzles the week before the hunt at the PRL.



Each clue in the first part of the meta gives a number that gives how to align your puzzle pieces from outer to inner ring. Index into the alphabet for the latter 3 numbers.

6 ⇒ 6:00
12 ⇒ L
20 ⇒ T
5 ⇒ E

Then, recall your journey through time—three of the preambles included the times: **3:45, 6:00, 11:15**.

Turn your clock hands to these hands and read out-to-in on the hour hand, then in-to-out on the minute hand to answer the question: WHO killed Jane Stanford?

MARCO TESLA LVAIN.

(haha.)

