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Two Thrilling Treks (solution)

The main thing to figure out here is that the first letters in the locations spell out the abbreviations for elements in the periodic table (a rotated periodic table). Begin at Ca (Castle Apartments) and simply follow the directions given, noting the element at each "selfie." Then unscramble.

Day 1: K Al Al Ne I   Day 2: Y At Te B

<table>
<thead>
<tr>
<th></th>
<th>Al</th>
<th>K</th>
<th>Al</th>
<th>I</th>
<th>Ne</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Po</td>
<td>Te</td>
<td>O</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>At</td>
<td>I</td>
<td>F</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Xe</td>
<td>Ne</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Rainbow Road

You squint your eyes as you turn towards the light of the infamous Rainbow Gate Bridge...

penalty RED CARD
visa GREEN CARD
vip RED CARPET
mold BLUE CHEESE
industrial BLUE COLLAR
aid RED CROSS
country music BLUEGRASS
market GREEN GROCER
bad clue RED HERRING
clothing BLUE JEANS
raccoon mammal RED PANDA
orb RED PLANET
plan BLUE PRINT
movie magic GREEN SCREEN
large mammal BLUE WHALE

spells LASER and they're blue
so the answer is BLUENAME

The colors are light addition; that's why there is red card and green card to make yellow :)
Rock around the Clock

First Part:

These clocks aren’t normal - the hour and minute hands are both pointed directly at numbers.

But how to interpret these number pairs? Consider the puzzle description. Googling “1812,” “Friedrich,” and “Gernrode” directs you to Friedrich Mohs, creator of the Mohs hardness scale (below).

<table>
<thead>
<tr>
<th>Mineral</th>
<th>Hardness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talc</td>
<td>1</td>
</tr>
<tr>
<td>Gypsum</td>
<td>2</td>
</tr>
<tr>
<td>Calcite</td>
<td>3</td>
</tr>
<tr>
<td>Fluorite</td>
<td>4</td>
</tr>
<tr>
<td>Mineral</td>
<td>Number</td>
</tr>
<tr>
<td>-----------</td>
<td>--------</td>
</tr>
<tr>
<td>Apatite</td>
<td>5</td>
</tr>
<tr>
<td>Orthoclase</td>
<td>6</td>
</tr>
<tr>
<td>Quartz</td>
<td>7</td>
</tr>
<tr>
<td>Topaz</td>
<td>8</td>
</tr>
<tr>
<td>Corundum</td>
<td>9</td>
</tr>
<tr>
<td>Diamond</td>
<td>10</td>
</tr>
</tbody>
</table>

We can use this scale to decipher the number pairs. Each hour hand identifies a mineral on the scale, while each minute hand indexes to a particular letter within that mineral’s name. For instance, (2,4) points to the fourth letter in the second mineral: gypsum (S).

S - 2,4  
E - 6,10  
E - 4,8  

Y - 2,2  
O - 10, 5  
U - 9,4  

L - 1,3  
A - 5,1  
T - 6,3  
E - 5,7  
R - 7,4  

A - 1,2  
L - 3,3  
L - 6,7  
I - 4,6  
G - 2,1  
A - 5,3  
T - 7,5  
O - 4,4  
R - 9,3  

The coded phrase is therefore “**See You Later, Alligator**” - which, like “Rock Around the Clock” itself, is a song performed by Bill Haley and the Comets.

**Second Part:**

The capitalization of Genius clues us in that the next step uses the Genius page for “See You Later, Alligator.”
Looking closer, we can see that the words in Part 2 are all contained in the lyrics of “See You Later, Alligator.” The words don’t seem to have a lot in common semantically, but the [first use], etc. indicates that their positioning in the lyrics may be important. "...there’s no need to reverse things. Every word is in its proper position" suggests that, for each word, we should take its verse and its position within that verse. “Not that you need braininess” implies that you should take the song to have nine verses (i.e., consider the first isolated line to be a verse).

saw [first use] - 2,3
what [second use] - 4,5
After [first use] - 3,5
After [seventh use] - 9,5
See [first use] - 1,1
After [first use] - 3,5
After [seventh use] - 9,5
Well [first use] - 2,1

later [sixth use] - 8,3
what [second use] - 4,5
love [first use] - 6,10
my [ninth use] - 6,9
what [second use] - 4,5

This lets us return to our Mohs hardness scale indexing (“give Friedrich this message”):

\begin{align*}
P & : 2,3 \\
R & : 4,5 \\
I & : 3,5 \\
N & : 9,5 \\
T & : 1,1 \\
I & : 3,5 \\
N & : 9,5 \\
G & : 2,1 \\
P & : 8,3 \\
R & : 4,5 \\
E & : 6,10 \\
S & : 6,9 \\
S & : 6,9
\end{align*}

So the final answer to the puzzle is PRINTING PRESS.
Lost at Sea

First, find the colors missing from these flags:

New Mexico = Yellow
Essex = Red
South Carolina = Blue
Washington = Green

Next, fill in the compass accordingly:
Including diagonal directions as combinations of colors!
Finally, use the compass to draw a path between the numbers on the left and where they end up on the right. For example, for zero, start at the top-left purple square, then go southeast two spaces, then east 1, south 1, southwest 1, southeast 1, east 3, south 1, east 1, and northeast 1, as shown below. Only 5 numbers make it through:

Use the numbers 1, 4, 10, and 7, to index into LUXEMBOURG, as hinted by the final flag:

LUXEMBOURG

1 = L
4 = E
10 = G
7 = O
Final answer: LEGO
A JAB in the Dark

Each part of the jab (16 parts) is assigned to one word. Rearrange to get the right JAB!
The order of the parts is the order in which each word first appears in the poem Jabberwocky.

brillig
slithy
gyre
mimsy
borogoves
mome
outgrabe
Jubjub
frumious
vorpal
manxome
uffish
tulgey
burbled
galumphing
frabjous

Start with the image labelled brillig on top and stack them in the above order. This gives us a JAB code (see jabcode.org). Plugging it into that website gives you the following:

---------
CSKLVRPRPVRXGAM XXCRXLGCNLQEWG CZNLHOMGMAZXW

She gave me a letter in Vigenere
But, first, the key was not there
I looked and I looked everywhere,
For a second I thought
Surely, the key was spared. Then my 3rd cousin came by,
And he shouted, “NOT TO HIDE!”
I think it is so epic...
The message before my eyes…
---------

=> First line just tell it’s Vigenere cipher.
=> There are 3 keys hidden in the poem. Order like this:
   1. nothere
   2. spared
   3. NOTTOHIDE
Use the different keys for each of the 3 chunks of text to end up getting the phrase

PERSONALIDENTIFICATIONNUMBER PLUSTHEHEDINLED

Your Personal Identification Number is your PIN, and then you add the D in LED, or Diode. The phrase is therefore PinDiode.
A Subatomic Hop:

Each of the statements relate to an episode of Quantum Leap where a common phrase has had one word replaced.

Henry Fonda’s great settler epic, but with a character from *The Last of Us* added

= How the West Was Won + Tess = How the Tess Was Won

James Dean’s classic of teen angst, but missing any hint of a popular murder solving game

= Rebel Without A Cause + Clue = Rebel Without a Clue

Charles Dicken’s “It was the best of candies, it was the worst of candies”

= A Tale of Two Cities + Sweeties = A Tale of Two Sweeties

A humorous magazine’s portrayal of college, but that more accurately describes the organization

= Animal House + Frat = Animal Frat

A classic misquoted line, but with a nerdy florist on piano instead.

= Play it Again, Sam + Seymour = Play it Again, Seymour

In each of these episodes, the initialed character is the one that Dr. Sam Beckett leaps into, played by Scott Bakula. The actor who played all these characters is Scott Bakula then

To break spacetime then, replace spacetime in the URL with the word scottbakula

---

Scott’s Bringing Home the Bacon

Directs you to Oracle of Bacon and the Bacon Number between Scott Bakula and the Doctors from Doctor Who. Find who connects Peter Cushing (Doctor in 1965 Movie) to Scott Bakula, which ends up being Carrie Fisher
**Only Connect**

Find the 3 Groups (1 extra,) Then Find the actor

<table>
<thead>
<tr>
<th>Heart</th>
<th>Magic</th>
<th>Hole</th>
<th>Diamond</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hump</td>
<td>Club</td>
<td>Spell</td>
<td>Hello</td>
</tr>
<tr>
<td>Hack</td>
<td>Humble</td>
<td>Death</td>
<td>Humor</td>
</tr>
<tr>
<td>Spade</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SOLUTION**

Death, Hole, Magic, Humor -> Black
Heart, Club, Spade, Diamond -> Suits
Hello, Hack, Hump, Humble-> J
Spell
Black Suits J refers to Agent J from the Men in Black Franchise, or Will Smith

---

**Setting it Right**

Taking the tagline of Quantum Leap literally, we need to take the word that was replaced in each title and replace it with the one from the actual quote. Plugging that in to the spaces show the red lines spell out STETHOS

What’s missing is then the word COPE, found as the one extra word in Only Connect.
The final answer is STETHOSCOPE
Moving? In a virtual hunt?

These are the songs in *Moving Pictures*. Each song has cowbells and cymbals added to it, except for YYZ. All of the files are approximately named with their song titles, except for YYZ, which is titled "its_in_the_name," indicating that the name of the song is what we want to extract. In this case, YYZ is the airport code (hence *catching a flight*) of Toronto. Considering the percussion at the beginning of YYZ, we see that it spells "YYZ" in Morse code, by turning 1-beat hits into dots and 2-beat hits into dashes. The added cymbals in the other songs do the same, demarcated by cowbells. Converting the airport codes to cities and ordering as they are in the album yields the result. Then take the letters in red to spell the answer, ARTIFICIALCELL.

YVR VANCOUVER
MMK MURMANSK
YYZ TORONTO
YHZ HALIFAX
YYJ VICTORIA
LKO LUCKNOW
WLG WELLINGTON
A Star is Born

We first briefly inspect the puzzle to get a general sense of how to solve the puzzle: from the puzzle description and blanks in the final column that we’re probably going to need to fill in each blank with the coordinates for the stars. Given that the answer has 13 letters and that there are 13 rows in the table, each blank probably corresponds to a character. This suspicion is further supported by the fact that our “coordinate scale” is a circle with radius 26 (the number of letters in the alphabet). Therefore, we probably need to fill in coordinate values for all of the stars, each of which will correspond to a letter and therefore our answer. So, where do we start?

We should probably start by looking at the other two columns. It seems like we need to figure out the names for each of the “new stars.” We can do this by examining the elemental compositions, which already look strange, especially given that some compounds have repeated elements (such as in row 7, where we see Einsteinium listed twice). There are a lot of ways to interpret this list of elements. One such way would be to get the atomic numbers of each. However, this doesn’t seem too plausible, given that many of them are over 26, but more importantly (since modular arithmetic does exist), there are multiple “elements” that are simply one letter. This is reminiscent of atomic symbols, and as we can see, there is no element with atomic symbols solely consisting of those lone letters. When we replace each element with its atomic symbol, we can see words starting to form:

BAYWATCH, SNITCH
TIMBER
FINDING DORY, HEADS UP
STAR WARS, ATLA
SO WHAT
NACHO LIBRE, KUNG FU PANDA
SUE SYLVESTER
NERDLAND, ANT MAN
DRAG RACE
THA DOGGFATHER
FENCES, PRISONERS
MIRACLE WORKERS, HARRY POTTER
ARRIVAL, HER

Through both Google and observation, we can see that each row is referring to the work(s) of a celebrity:

DWAYNE JOHNSON
PITBULL
ELLEN DEGENERES
MARK HAMILL
P!NK
JACK BLACK
These are our star names! So now, how do we relate these names with the coordinates for these stars in our universe? We refer back to the description. Clicking on the star map tool, we also see that we need to specify both a date/time and location. So we need to somehow find those two pieces of information for each celebrity. We now read the description again: “I've always enjoyed getting as close as I can the moment new stars are established. See if you can find where in the sky I found some already-existing stars when these new ones were just being created.” This might first appear to imply the celebrities’ birth dates and birth cities. Yet two problems arise. First, the star-mapping tool requires a time, and it seems quite unlikely that the exact birth-times of these celebrities is publicly available online. Secondly, the language of the description makes this seem strange: when people are born are they “established” and “created?” Those words seem oddly inhuman. So what could these words, relating these famous names to the establishment of stars, be referring to? The Hollywood walk of fame! We can now see if this resolves our first issue with specific times:

and it sure enough does. After compiling the date and time each celebrity received their star (all of them were in Los Angeles and also at 11:30 am), it is now time to get each star map. Below is an example for Dwayne Johnson (12/13/2017, 11:30 am => 19:30:00 UTC):
As we can see, Spica, the requested star is on this map. We can now superimpose this star map on the provided coordinate system:

And can see that its coordinates are (15.5, -9). This is consistent with the third column of the table, which means that 9 fills the blank. We continue in this manner for each celebrity, getting the numbers: 9, 14, 4, 21, 3, 20, 9, 15, 14, 3, 15, 9, 12. Converting these into letters yields us our answer: **inductioncoil**
FRANKENWAREZ

Looking at the grid, we note that there’s a paucity of nice words (esp. vowels), particularly around the red cells. The one of note is presumably the “N”: to its left is *ucchini* and to its right, shifted over one, is *zengurt*. Hopefully, extending to *ucchinin*, we see that frozen yogurt -> froyo, which leaves zengurt; similarly, zucchini + noodles -> zoodles, with leftover letters ucchinin.

From here, we see that the grid includes some inverse portmanteaus: namely, it has all the discarded letters from common portmanteaus. Also including the “N” we note chemical + contrail -> chemtrail, leaving icalcon; also, more inspection (possibly searching promising strings on the Wikipedia list of portmanteaus) renders insinuate + innuendo -> insinuendo, leaving uateinn.

Thus, highlighting the involved letters gives the following arrow shape:

```
K VI O D X D K J D I O H Z I O V G D O
J N Z C I Z V M Q V D N C H M T M N
J Z V J A N I M Z D Z V O D Z U Z X J
A J M O O L D Z P I Z M I A V V O S D C
G V Z O I P C I M Z I N Y J N O C D I B
V Y M J D O N O V Z N Z O J Z A V D X N
S U C C H I N I N H Z E N G U R T I J O
G Z V Q Z I V N D V I H K Z D E B M P M
Z G D H V V I J V O M Y V Y N N V A M J
J X F W T D C O O V H G I B M K J R I E
H O G A P G I V D M V O D S Z G A I E O
K M U O J K F N I Q O N V K Z M M C P C
V D W Z I M J W D I Z B B C A K V F I J
I X B I J D N M M I I D J H Z V O O F M
T V M I D X C O O A P I F U M S O V D M
V G F Z I Z N C C N M Z F T E V T N Z D
B Z D X J T J M Z I V V I E R A R E V N
E V I F I U G R A O B T Y M D Z Y K Z
V V D J Z N V X M Z Y P O I J X D V J Q
N V Y Y Z I U Z O V D T M J O N M Z C Z
X D I Z K G Z S J M Z N Z N Z N Y H V I
```

Trying a similar thing on zengurt, we see that *anat* comes from banana + toffee = bananoffee and *onet* comes from phone + tablet -> phablet. Then, looking in the same section of the grid, we see the classic plum + apricot -> pluot gives us *mapric*, so the colored grid looks like:
Continuing in this manner, and checking as we go, we get the following portmanteaus (some are short/difficult to get, but only the middle ones are truly required for the puzzle):

- back + acne -> bacne gives `kac`
- three + couple -> throuple gives `eec`
- grandiose + eloquent -> grandiloquent gives `osee`
- parachute + trooper -> paratrooper gives `chute`
- camera + recorder -> camcorder gives `erare`
- keyboard + guitar -> keytar gives `boardgui`
- lion + tiger -> liger gives `onti`
- Linus + Unix -> Linux gives `suni`

Hence, the grid looks like:
Reading what the arrows point to gives SHIFT FIVE, suggesting that we Caesar cipher the grid by 5. This gives:

```
| P | A | N | T | I | C | I | P | O | I | N | T | M | E | N | T | A | L | I | T |
| O | S | E | H | H | N | E | A | R | V | A | I | S | H | M | R | Y | R | R | S |
| O | E | A | O | F | S | N | R | E | I | E | E | A | T | I | E | Z | E | C | O |
| F | O | R | T | T | Q | I | E | U | N | E | R | N | F | A | A | T | X | I | H |
| L | A | E | T | N | U | H | N | R | E | N | S | D | O | S | T | H | I | N | G |
| A | D | R | O | I | T | S | T | A | E | S | T | O | E | F | A | I | C | S |
| X | Z | H | H | M | N | S | N | S | M | E | J | S | L | Z | W | Y | N | O | T |
| L | E | A | V | E | N | A | S | I | A | N | M | P | E | I | J | G | R | U | R |
| E | L | I | M | A | A | N | O | A | T | R | D | A | D | S | S | A | F | R | O |
| C | E | A | R | B | J | L | O | Y | E | O | O | I | T | E | H | T | U | H | J |
| O | C | K | B | Y | I | H | T | T | A | M | L | N | G | R | P | O | W | N | J |
| M | T | L | F | U | L | N | A | I | R | A | T | I | X | E | L | F | N | J | T |
| P | R | Z | T | O | P | K | S | N | V | T | S | A | P | E | R | R | H | U | H |
| A | I | B | E | N | R | O | B | I | N | E | G | G | H | F | P | A | K | N | O |
| N | C | U | N | O | I | S | R | R | N | N | I | O | M | E | A | T | T | K | R |
| Y | A | R | N | I | C | H | T | T | F | U | N | K | Z | R | X | T | A | I | R |
| A | L | K | E | N | E | S | H | H | S | R | E | K | Y | J | A | Y | S | E | I |
| G | E | I | C | O | Y | O | R | E | N | A | A | N | J | W | F | W | J | A | S |
| J | A | N | K | N | Z | L | I | W | F | T | G | Y | D | R | I | E | D | P | E |
| A | A | I | O | E | S | A | C | R | E | D | U | T | N | O | C | I | A | O | V |
| S | A | D | D | E | N | Z | E | T | A | I | Y | R | O | T | S | R | E | H | E |
| C | I | N | E | P | L | E | X | O | R | E | S | E | S | E | S | D | M | A | N |
```
Redirecting our attention now to the red squares, which have thus far been mostly untouched, we immediately notice anticipointment, a portmanteau of anticipation and disappointment. Sticking with the theme (further clued by the franken- in the title), there’s a unique portmanteau for each red square:

anticipointment
euraSia
jOrts
fLexitarrian
insInuendo
digerAti
bUrkini
kNork
gAstropub
hersTory
cinepLex

Rearranging these by first letter in alphabetical order gives

anticipointment
bUrkini
cinepLex
digerAti
euraSia
fLexitarrian
gAstropub
hersTory
insInuendo
jOrts
kNork,

From which we get the letters MULASLATION. Finally, note that these are the discarded letters from formula + translation -> fortran.
These little pixelated images are the answers to the previous puzzles!

Seeing William Painter, and the letter A inside the Bottle Opener which he invented, we see that we have to fill in these items with their inventors' last names:

- artificial cell
- printing press
- blue laser
- stethoscope
- induction coil
- lego
- bottle opener (free)

letter A: B A
NAKAMURA
lego

alkaline battery
pin diode

Bottle Opener

Fortran
2. Solve the crossword
2. fill in the shapes
3. Read the filled line, and turn the amino acid sets to letters

```
C A C G C U A A U G A U
```

CAC = Histidine = H  (simply google "amino acids to letters")
GCU = Alanine = A
AAU = Asparagine = N
GAU = Aspartic Acid = D

Answer HAND

(The hour HAND turns back the clock to return the missing items! :) )