Treasure:
In search of the Golden Horse

THE MOVIE (VHS/BETA) SOLUTION

Version 1 (2024-10-31)
by J.P. Labonté
@Labgo

I have already published a detailed solution based on the clues found in the book, where more introductory material about TREASURE is covered:

https://jeanpierrelabonte.quebec/2023/05/15/treasure-in-search-of-the-golden-horse-solved/

The full movie is available here:

https://www.youtube.com/watch?v=ymec2dg4O8A

The path followed for this solution is surprising. Whereas my book solution involved text taken from many chapters and organized to interact in a complex way, the present solution is essentially derived from COURTYARD, chapter titles and the map, with specific chapters used to clarify some steps. It is much shorter than the book solution.

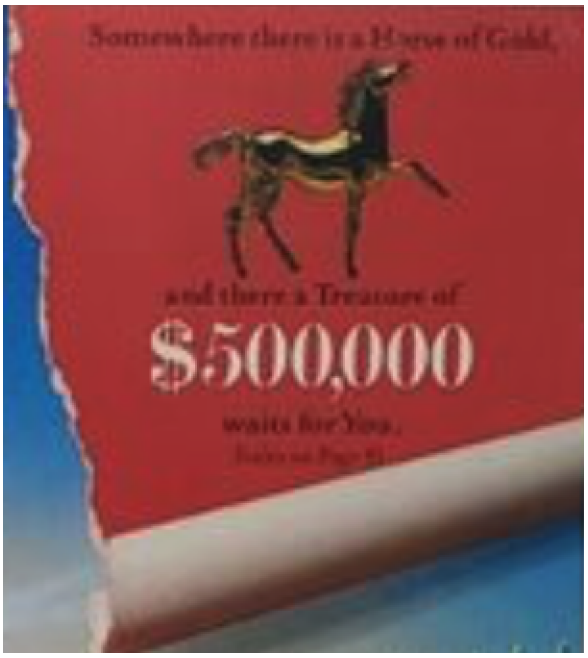
As is the case for the book solution, Mathematica code has been used to automate some operations (which could have been easily made manually). This code is highlighted in yellow. Some output from Mathematica code may be highlighted in green.

THE COVER

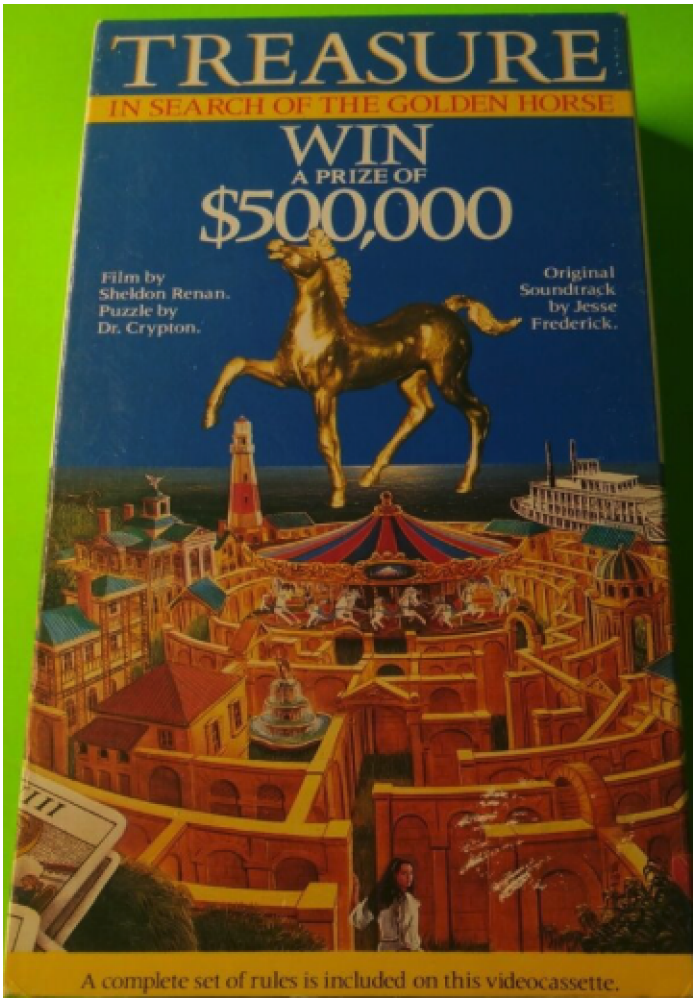
Starting chapter

The starting point of the book solution was Chapter 20, pointed to by the cover image of the book

showing a page curled on itself, also found in COURTYARD. The gold horse appeared in the area revealed by this this curled page.



This curled page does not appear on the cover of the video version. Here is the VHS cover:



Here the gold horse appears to push its head against the $50, while pointing with its leg toward the lighthouse (Chapter 10 - SIGNAL) . S is letter 19 so $ (a S with a bar) may mean remove 19 (from 50). We are left with 31. Again we are pointing to Chapter 10 if we start again at the beginning while counting chapters. Perhaps pointing to 10 twice means 20 (COURTYARD)?

It is also interesting to also look at the laser videodisc cover:

Here the gold horse seems to interact with the letter U, which may have some significance (the laser disc version has letters appearing before each chapter), but another way to look at it is that the neck of the horse intrudes on the title after 19 letters (IN SEARCH OF THE GOLDEN) and just before HORSE (chapter 21). Again, this points to chapter 20 - COURTYARD as the staring point.

7 - 31

The presence of 7 and 31 was also used in the book solution to indicate a 7x31 table.

COURTYARD

Narration

We convert the narration to text. Sentences are arbitrarily numbered in order, for reference purposes in the discussion :

---

1. The night had grown warm, almost tropical, and the rabbit was still there.

2. She followed the line of burning lamps and found a courtyard where she felt strangely at ease.

3. She called to the waiter for tea.

4. He brought her a puzzling platter, certainly more than she had asked for.

5. How nice of him, she thought.

6. Although I can’t use all this.

7. She opened her fortune and the warm wind blew.

8. How little it takes to be happy, she thought.
9. If you know where to look, the path is always clearly marked.
10. In the morning, the book remained in the courtyard.
11. But she had gone. And the black bird would follow her no more.

The Actinides and the Lanthanides

In sentence #1, it is not immediately clear what "warm, almost tropical" refers to. Almost tropical may mean TOPICAL (which may indicate chapters and their titles, as "topics"). The key is to understand that this chapter is about a table. We see the classical elements of nature: burning lamps (FIRE), trees in the wind, fans on the ceiling (AIR), and fountains (WATER). We also have tables, round, and the fountains are recirculating water, hinting at a periodic movement. We must start with the PERIODIC TABLE OF ELEMENTS.

COURTYARD starts with Amanda (not identified by name in the video) sitting on ALICE. She is elevated and then comes down (the book talks about "slid down to the ground"). The sum of letter numbers (i..e. position in the alphabet) in ALICE is 30.

```
Total@LetterNumber["ALICE"]
```

```
30
```

At one point in the history of the periodic table, 30 elements were removed from the main block of elements to be represented as two distinct rows of 15 elements below the main block.

Here are these two rows:

```
Grid[{{"La", "Ce", "Pr", "Nd", "Pm", "Sm", "Eu", "Gd",
    "Tb", "Dy", "Ho", "Er", "Th", "Yb", "Lu"}, {"Ac", "Th", "Pa", "U",
    "Np", "Pu", "Am", "Cm", "Bk", "Cf", "Es", "Fm", "Md", "No", "Lr"}},
  Frame → All, Background → {None, 2 → Orange}]
```

La	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Th	Yb	Lu
Ac	Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No	Lr

The top row of 15 elements represents the **LA**NTHANIDES. It starts with element with symbol **La** and also contains the two elements **Pm S**m, forming all the letters of **LAMPS**. The Lanthanides are located right above the row of elements called the Actinides (starting with element with symbol Ac). The Actinides include elements like Uranium and Plutonium. Indeed, all actinides are radioactive. This also matches the "warm, almost tropical" applied to the Lanthanides, in close contact with the

actinides. This row of Lanthanides, made up of 15 elements represented by symbols totalling 30 letters, will be our focus.

The clue card

In sentence #1, the rabbit is there. This is a reference to the clue card.

In the book solution, the clue card described a permutation of 16 elements of the periodic table. In the movie, we only have 15 elements being permuted, which matches the 15 elements of the periodic table identified above. Both in the book and in the movie, applying the same permutation repeatedly (i.e. 10 times) brings us back to the starting order.

```
permute15[list_] := Module[{fullList, master, current, newList},
  i = 1;
  fullList = {Join[{i++}, list]};
  master = AssociationThread[Range[15],
    {10, 13, 12, 5, 14, 2, 9, 11, 3, 6, 15, 4, 1, 8, 7}];

  current = list;
  While[Length[fullList] < 10,
   newList = Table[0, 15];
   (newList[[#]] = current[[master[[#]]]]) & /@ Range[15];
   AppendTo[fullList, Join[{i++}, newList]];
   current = newList;
  ];
  Grid[fullList, Frame → All,
   ItemSize → {1.2, 1}, Background → {1 → LightGray, None}]
 ]
```

```
permute15[{"LA", "CE", "PR", "ND", "PM", "SM",
  "EU", "GD", "TB", "DY", "HO", "ER", "TM", "YB", "LU"}]
```

1	LA	CE	PR	ND	PM	SM	EU	GD	TB	DY	HO	ER	TM	YB	LU
2	DY	TM	ER	PM	YB	CE	TB	HO	PR	SM	LU	ND	LA	GD	EU
3	SM	LA	ND	YB	GD	TM	PR	LU	ER	CE	EU	PM	DY	HO	TB
4	CE	DY	PM	GD	HO	LA	ER	EU	ND	TM	TB	YB	SM	LU	PR
5	TM	SM	YB	HO	LU	DY	ND	TB	PM	LA	PR	GD	CE	EU	ER
6	LA	CE	GD	LU	EU	SM	PM	PR	YB	DY	ER	HO	TM	TB	ND
7	DY	TM	HO	EU	TB	CE	YB	ER	GD	SM	ND	LU	LA	PR	PM
8	SM	LA	LU	TB	PR	TM	GD	ND	HO	CE	PM	EU	DY	ER	YB
9	CE	DY	EU	PR	ER	LA	HO	PM	LU	TM	YB	TB	SM	ND	GD
10	TM	SM	TB	ER	ND	DY	LU	YB	EU	LA	GD	PR	CE	PM	HO

In the book solution, we were looking for the row where two symbols are combined to form the word GEAR. In the movie, an obvious word is LAND in row #3. Given that she woke up on Alice (in Wonder-

land), this would make sense. Also, the following image, where she follows a line of lamps, actually depicts the view of a runway on **land**ing (look closely at the floor!). There are also two rows clearly visible on the floor, continuing as windows on the door.

We now have the following sequence (line #3 of the rabbit's card).

```
Grid[{{"SM", "LA", "ND", "YB", "GD", "TM", "PR",
    "LU", "ER", "CE", "EU", "PM", "DY", "HO", "TB"}}, Frame → All]
```

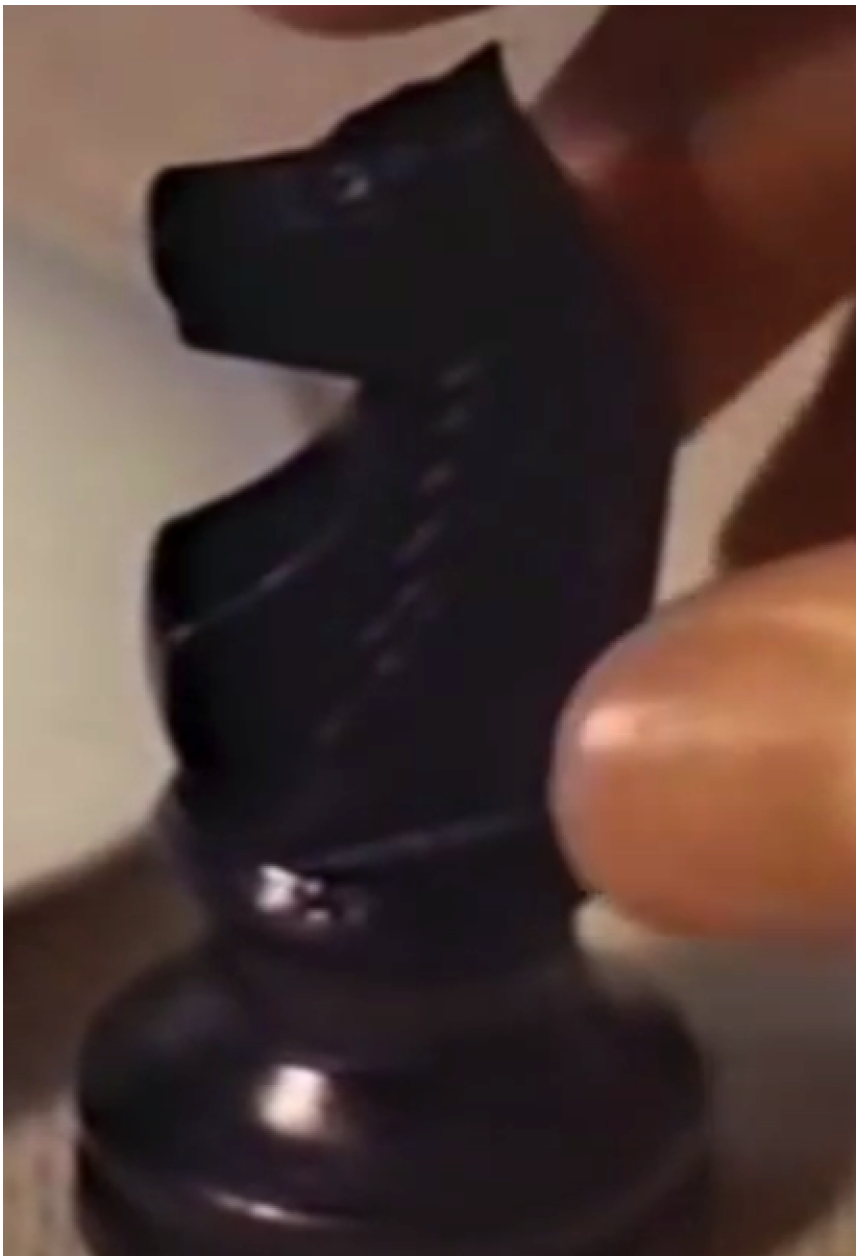
SM	LA	ND	YB	GD	TM	PR	LU	ER	CE	EU	PM	DY	HO	TB

Reordering

Amanda is now sitting at a table and we get to sentence #3, where "she called to the waiter for tea" . She is ORDERING. We can therefore expect that what will follow has to do with reordering these elements.

" Calling for tea" should be read CALLING 40, as in telephone call. Country code +40 calls Romania. And HORSE in Romanian is CAL. Indeed, the first thing the waiter does when asked this is to move the

black knight.



The knight is the head of a horse, which corresponds to element with symbol HO. Where should it be moved?

If HO is moved +40 (starting again at the beginning after TB), it ends up between ER and CE.

This is our new sequence:

```
Grid[{{"SM", "LA", "ND", "YB", "GD", "TM", "PR", "LU", "ER", "HO", "CE",
   "EU", "PM", "DY", "TB"}}, Frame → All, Background → {None, 2 → Orange}]
```

SM	LA	ND	YB	GD	TM	PR	LU	ER	HO	CE	EU	PM	DY	TB

The next step has to do with the red beret. This is a tricky one.
Berets originated in France (we also appear to be in a courtyard in New Orleans French Quarter). The color red is important.
It turns out that LU is French for READ, in the sense of a text that has been read. This is particularly interesting since she carries a red book with her and at one point she writes “completion” and leaves the book behind (when the book has been READ).

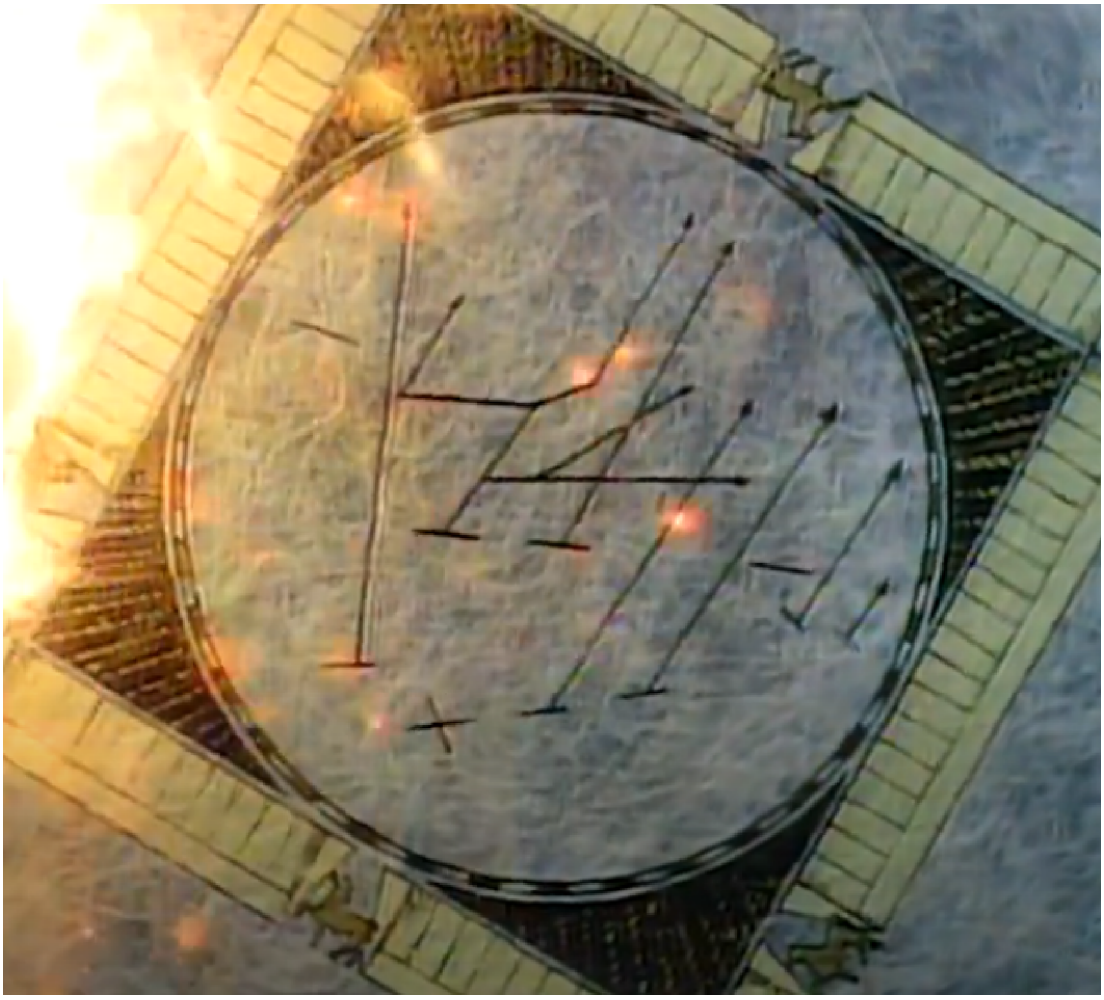
So LU represent RED. What about the beret? What follows LU is ER. If we bring the last element (TB) after LU, we have the sequence LU-TB-ER. Note that TB-ER contains all the letters in beret. She is adjusting the circular beret on her head. This is a rotation of TBER counterclockwise by one, giving BERT, closer to the desired pronunciation. In doing so, we form the word LUBE, which surprisingly explains sentence #8.

```
Grid[{{"SM", "LA", "ND", "YB", "GD", "TM", "PR", "LU", "BE", "RT", "HO",
   "CE", "EU", "PM", "DY"}}, Frame → All, Background → {None, 2 → Orange}]
```

SM	LA	ND	YB	GD	TM	PR	LU	BE	RT	HO	CE	EU	PM	DY

Map and arrows

Before tackling the fortune cookie message, we have to explain the presence of arrows on the map



There are 10 arrows (counting arrowheads). Six arrows are by themselves and twice we have two arrows joining at one point.
Arrows are vectors. They have a direction and a magnitude.
In this case they represent the letters RO or OR (depending on the direction of occurrence) found in a chapter title.
The magnitude is the distance (i.e. number of letters) separating the R and the O.
The combination of direction and magnitude tells us the direction and the number of steps to rotate the letters in the title.

Before rotating the affected chapters, we need to modify the title of one chapter. This will give us the required pattern of 6 chapters being rotated once and two chapters being each rotated twice, resulting in 10 rotations being applied. This chapter is FORTUNE. The TUNE is changed to TONE. This is clearly expressed in DIXIELAND, where she follows the music (a recorded tune) and ends up with the pure notes of the black musician. The book version is even more explicit: "...the record's song gave way to a truer current in the air." Doing this introduces a second O (FORTONE). We now have one OR (-1 magnitude) and one RO (+2 magnitude), giving a final value of +1 for the chapter (rotation clock-

wise by one = EFORTON).

Here are the modified chapter titles. These are the ones that will appear on the map (note that FORTUNE is further modified in the next section) :

```
Grid[{{" Initial Title ", " RO/OR distance ", " Map Title "},
   {"CREATION", "+5", "ATIONCRE"}, {"FORTONE", "-1\n+2", "EFORTON"} ,
   {"ROAD", "+1", "DROA"}, {"CAROUSEL", "+1", "LCAROUSE"},
   {"MEMORY", "-1", "EMORYM"}, {"FOREST", "-1", "ORESTF"},
   {"COURTYARD", "-2\n-6", "DCOURTYAR"}, {"HORSE", "-1", "ORSEH"}},
  Frame → All, Background → {None, {LightGray}}]
```

Initial Title	RO/OR distance	Map Title
CREATION	+5	ATIONCRE
FORTONE	−1 +2	EFORTON
ROAD	+1	DROA
CAROUSEL	+1	LCAROUSE
MEMORY	−1	EMORYM
FOREST	−1	ORESTF
COURTYARD	−2 −6	DCOURTYAR
HORSE	−1	ORSEH

The fortune cookie

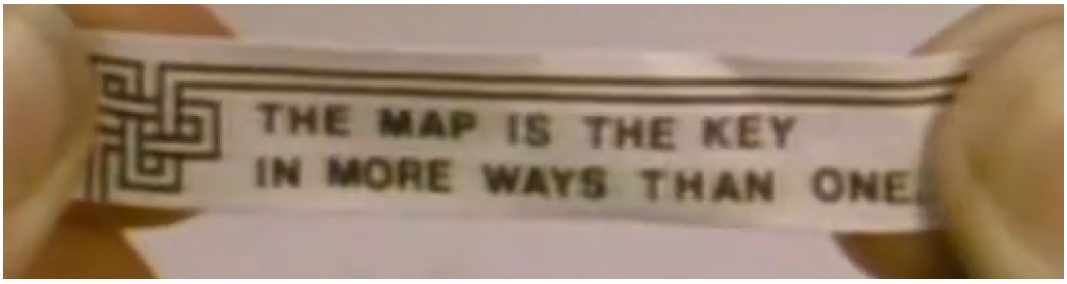
Before cracking open the FORTUNE cookie, Amanda wears a blue bracelet:

However, as “she opened her fortune” (sentence #7), the bracelet switches to orange:

This is another modification to FORTUNE (now EFORTON). The circular bracelets (like the letter O) show two different colors, or **two** hues. We could have replaced the O’s with U, but given what is

coming, it appears that the correct interpretation would be to replace O with W (double hue). EFORTON ends up being EFWRTWN. As we will see later, only the second W has a significant effect on the result.

We are now ready for the fortune cookie message:



Since the message has 31 letters and our string of lanthanides has 30 letters, it would seem that if the message is to be applied to our 30 letters, we need to remove a letter.

A critical piece of information is provided by the waiter when sentence #9 is uttered: he is bowing and is wearing a bow tie.
A bow tie is a KNOT, and a knot is shown on the left of the fortune message. KNOT should be read K-NOT, meaning the the letter K is to be removed, leaving 30 letters to the message.

We now split the message in groups of two letters to match our lanthanides:

```
Grid[{{"SM", "LA", "ND", "YB", "GD", "TM", "PR", "LU", "BE", "RT", "HO", "CE", "EU",
    "PM", "DY"}, StringPartition["THEMAPISTHEEYINMOREWAYSTHANONE", 2]},
  Frame → All, Background → {{{LightOrange, LightYellow}}, None}]
```

SM	LA	ND	YB	GD	TM	PR	LU	BE	RT	HO	CE	EU	PM	DY
TH	EM	AP	IS	TH	EE	YI	NM	OR	EW	AY	ST	HA	NO	NE

The next step is to duplicate the movement of closing the red (READ) book. LU will form the edge of the book and the right part of the book will fold to face the left part. Two rows of 14 letters each on one side will match two rows of 14 letters each on the other side. Each of the 14 positions now contains 4 letters. We add the letters. Note that the edge letters LU and the matching NM are not used.

```
Total@LetterNumber[#] & /@ {"STYE", "MHDN", "LEMO", "AMPN", "NAUA",
  "DPEH", "YIET", "BSCS", "GTOY", "DHHA", "TWTE", "MERE", "PYRE", "RIBO"}
```

```
{69, 39, 45, 44, 37, 33, 59, 43, 67, 21, 68, 41, 64, 44}
```

These numbers can be converted to chapter numbers by starting again with chapter 1 after chapter 21:

```
6, 18, 3, 2, 16, 12, 17, 1, 4, 21, 5, 20, 1, 2
```

Now we need our chapter titles (rotated if necessary) for each of the above chapters. But before proceeding we need to figure out THE MAN WITH BLACK GLOVES. Chapter 2 appears twice in the

above list. This title does not contain OR or RO, but interestingly the map shows two short lines like the ones at the start of an arrow, but with no arrows attached to these. Is this a clue that the title should contain an RO? Indeed, the man who is also a bird is a ROBIN.
This makes sense since ROBIN HOOD stole gold from the rich (those who can afford a gold horse) and gave to the poor (us). ROBIN has a rotation of +1 and is modified to NROBI.

Here is the final text to enter on the map:

FISH – REHEARSAL – KITES – NROBI – DIXIELAND – MOUNTAIN – ORESTF –
ATIONCRE – CEMETERY – ORSEH – EFWRTWN – DCOURTYAR – ATIONCRE – NROBI

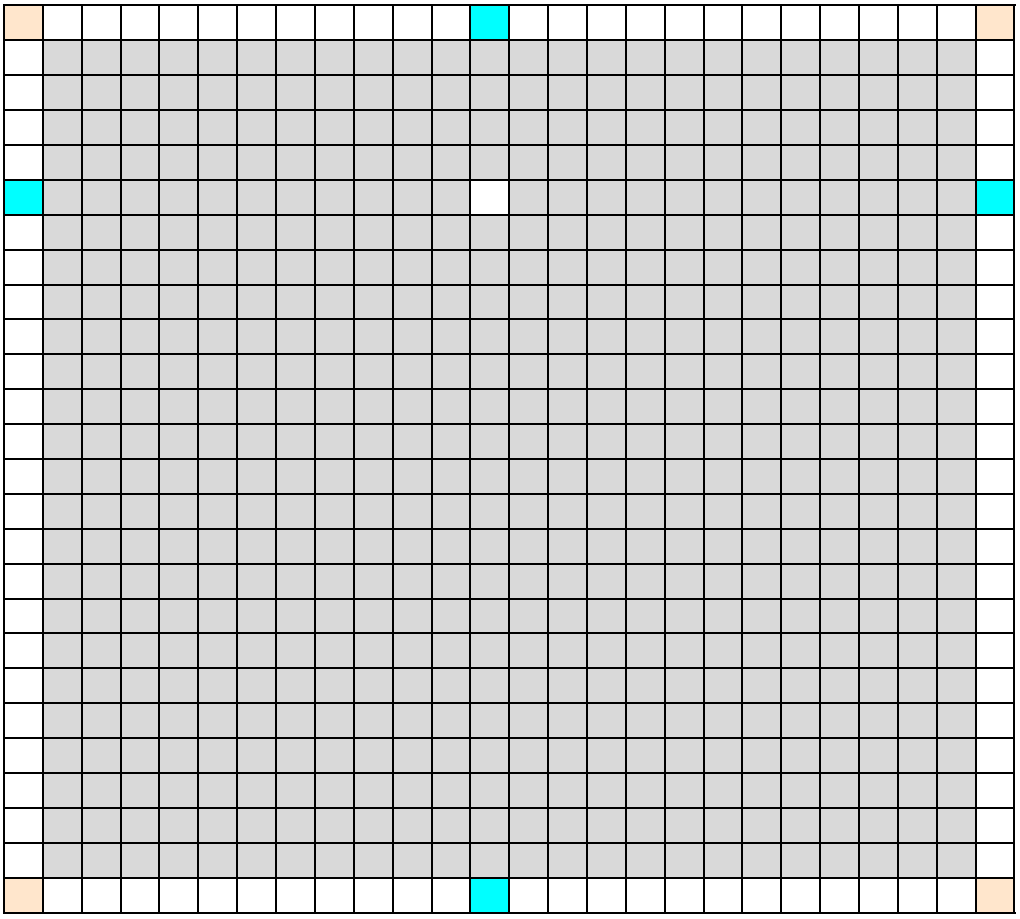
```
StringLength[
 "FISHREHEARSALKITESNROBIDIXIELANDMOUNTAINORESTFATIONCRECEMETERYORSEHEFWRTWNDC
    OURTYARATIONCRENROBI"]
```

```
96
```

Filling the map

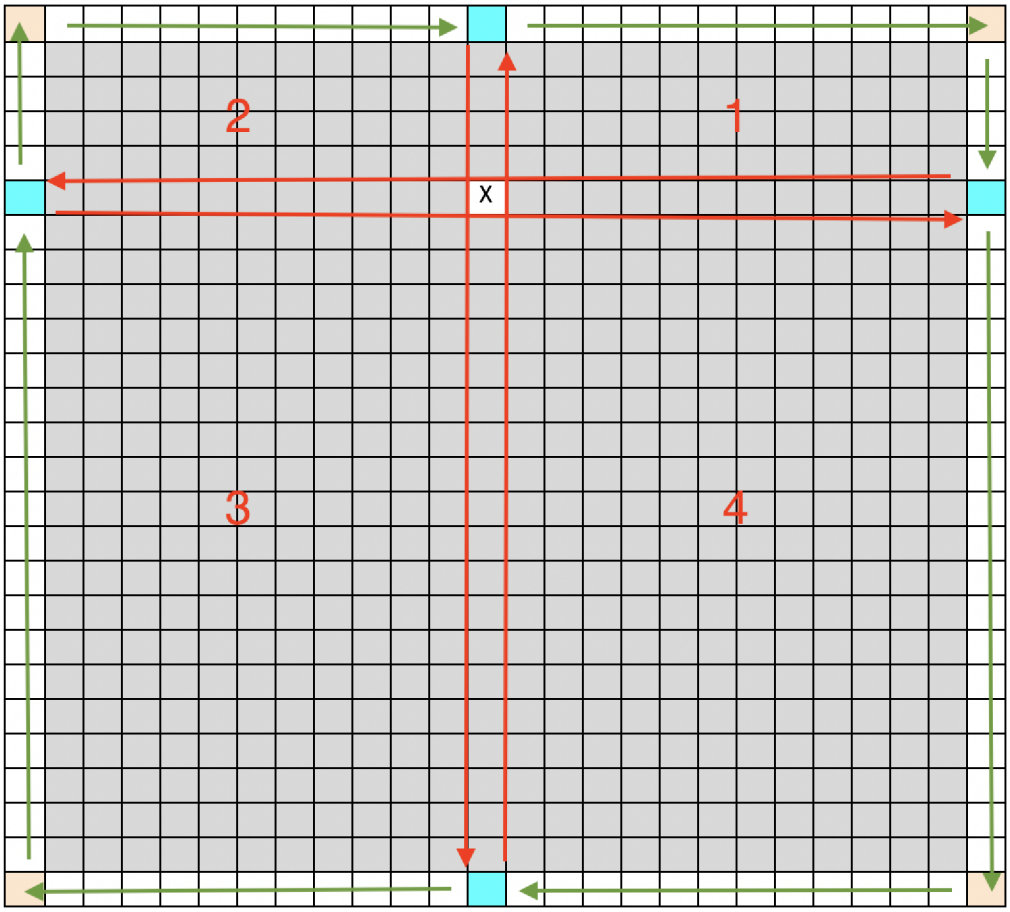
This string has exactly 96 letters, which is exactly what we need to fill the track around the map. Horses divide the map into four sections where letters can be entered. Note that letters are not entered on the horses square (in blue) at this point. Number of letters in each section:

- Top-Right: 17
- Bottom-Right: 32
- Bottom-Left: 31
- Top-Left: 16



The top-right section (17 letters) is where we must start. This is given by the following image in SIGNAL (17 in the shadow), which is accompanied by the narration “it seems to offer an end and a new beginning”.

The order of filling the four sections is given by the knot on the cookie message. When a section is filled (green arrows), we must jump on the other side of the map (red arrows) to continue on the next section, always following the direction of the horses.



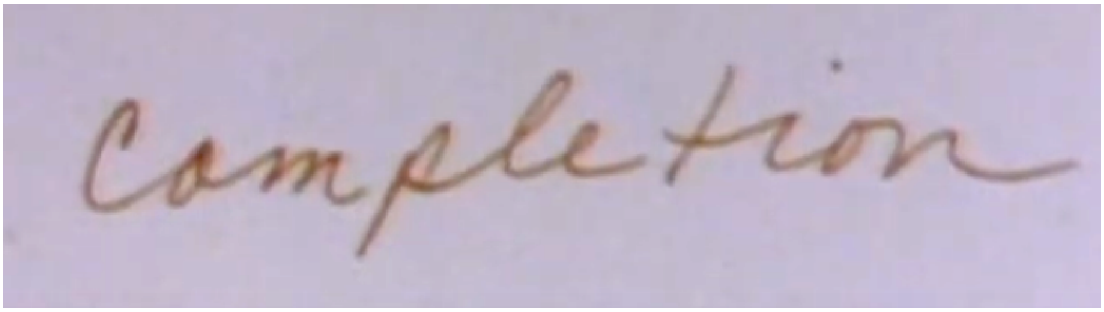
This fills the map while making a knot (or bow) around the horses. Here is an image from chapter 2.

```
fullText = {"BIDIXIELANDM FISHREHEARSAL", "O                          K",
   "R                        I", "N                        T",
   "S                        E", "                          ",
   "R                        S", "O                        E",
   "Y                        H", "R                        E",
   "E                        F", "T                        W",
   "E                        R", "M                        T",
   "E                        W", "C                        N",
   "E                        D", "R                        C",
   "C                        O", "N                        U",
   "O                        R", "I                        T",
   "T                        Y", "A                        A",
   "F                        R", "TSERONIATNUO IBORNERCNOITA"};
Grid[Characters@fullText, Frame → All, ItemSize → {1, 1},
 Background → {None, None, {{6, 1} → Cyan, {6, 26} → Cyan, {1, 13} → Cyan,
    {26, 13} → Cyan, {1, 1} → LightOrange, {1, 26} → LightOrange,
    {26, 1} → LightOrange, {26, 26} → LightOrange, {{2, 25}, {2, 25}} → LightGray,
    {5 + 1, 12 + 1} → White, {22 + 1, 9 + 1} → LightGray}}]
```

B	I	D	I	X	I	E	L	A	N	D	M		F	I	S	H	R	E	H	E	A	R	S	A	L
O																									K
R																									I
N																									T
S																									E
R																									S
O																									E
Y																									H
R																									E
E																									F
T																									W
E																									R
M																									T
E																									W
C																									N
E																									D
R																									C
C																									O
N																									U
O																									R
I																									T
T																									Y
A																									A
F																									R
T	S	E	R	O	N	I	A	T	N	U	O		I	B	O	R	N	E	R	C	N	O	I	T	A

Completion

The next step is the handwritten word:



There are 3 parts to this word, separated with blanks: COM PLE TION

Part 1: TION (or XION)

Given how the T is written, it could also be interpreted as an X. Note also that the pen stroke is not continuous. This part has two meanings:

- By putting T at the X location on the map, we can complete the alphabet in the four directions to label all 26 rows and columns with a letter.
- We are required to “X ion”. The triplet ION, in order, appears twice on the map and must be removed. Although we did remove these two triplets below, a possible interpretation could be that only the letters before the X are important and we should simply ignore ION. More on this later.

```
fullText = {"BIDIXIELANDMOFISHREHEARSAL", "O           P            K",
   "R           Q            I", "N           R            T",
   "S           S            E", "HIJKLMNOPQRSTUVWXYZABCDEFG",
   "R           U            S", "O           V            E",
   "Y           W            H", "R           X            E",
   "E           Y            F", "T           Z            W",
   "E           A            R", "M           B            T",
   "E           C            W", "C           D            N",
   "E           E            D", "R           F            C",
   "C           G            O", "            H            U",
   "            I            R", "            J            T",
   "T           K            Y", "A           L            A",
   "F           M            R", "TSERONIATNUONIBORNERC   TA"};
Grid[Characters@fullText, Frame → All, ItemSize → {1, 1},
 Background → {None, None, {{6, 1} → Cyan, {6, 26} → Cyan, {1, 13} → Cyan,
    {26, 13} → Cyan, {1, 1} → LightOrange, {1, 26} → LightOrange,
    {26, 1} → LightOrange, {26, 26} → LightOrange, {{2, 25}, {2, 25}} → LightGray,
    {5 + 1, 12 + 1} → White, {22 + 1, 9 + 1} → LightGray}}]
```

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

Part 2: PLE (latitude)

These three letters correspond to degrees-minutes-seconds of latitude.They determine the columns to use. Letters in these columns are added. Rearranging the letters from left to right we have:

- **L:** X + O = 24 + 15 = **39 degrees**
- **P:** A + T = 1 + 20 = **21 minutes**
- **E**: **40 seconds**

  THe S is part of REHEARSAL. Rehearsal is a special case where a group of people practice a performance before the real performance. Contrary to the real performance where a letter would be matched with a partner letter on the opposite side of the map, here the partner must be found within REHEARSAL itself. We see in the video that couples must be formed. so we group the letters in pairs: RE-HE-AR-**S**A-L . The last letter (L) has no partner, unless we accept that we could start again at the beginning of this first row to form LB. Given that B is part of ROBIN, this last partner would actually be THE MAN WITH BLACK GLOVES, which matches what is depicted on in the movie. But we are interested in the couple containing the S, that is SA, which corresponds to 20. But the

rehearsal is done in front of a mirror, so what we need is SAAS, or **40**.

Part 2: COM (longitude)

The three letters correspond to degrees-minutes-seconds of longitude.They determine the rows to use. Interpretation is not as straightforward as with latitude. Rearranging the letters from top to bottom we have:

- **O:** **106 degrees**

  Here we must consider that the O is on a horse. Adding the corner letters B and L (2+12=14) will not do it. Also, the B is part of ROBIN (The man with black gloves).

  CAROUSEL provides a strong clue about the correct way to handle a horse: “She looked for all the half-remembered horses and the single horse that was open minded yet two-faces”.

There are two ways to interpret this and both give the same answer:

- B and L (2 and 12) are two faces of a single number (212). But 212 is half-remembered, so it is **106**.
- We could instead add **all** the letters on one side of the horse. We choose the B side (the B belongs to ROBIN, who has the gold horse):

```
Total@LetterNumber["BIDIXIELANDM"]
```

```
106
```

Given that we are dealing with ROBIN, the chapter THE MAN WITH BLACK GLOVES has an interesting text: “He opened its HEART, for there he had made a secret place to hide a secret key”. At the heart (i.e. center) of the word HEART is the letter A, which happens to be a musical key. This letter is hidden in TREASURE. We end up with TRESURE, which corresponds to 106:

```
Total@LetterNumber["TRESURE"]
```

```
106
```

Before we continue, it is worth pointing out that an image in the book version may be interpreted in a way that is consistent with our first interpretation (B and L forming the number 212). As pointed out in the book solution, the image in the monolith looks like an elephant head with its trunk. The glove in the forefront looks also like a trunk. Is this saying that what has been “truncated” (B and L or 2 and 12) actually belong in a monolith (212)? And the mirror is telling us that we are seeing double “images” so the answer is 106? And to top this, this is the page appearing to fuse two page numbers (13-14) on the

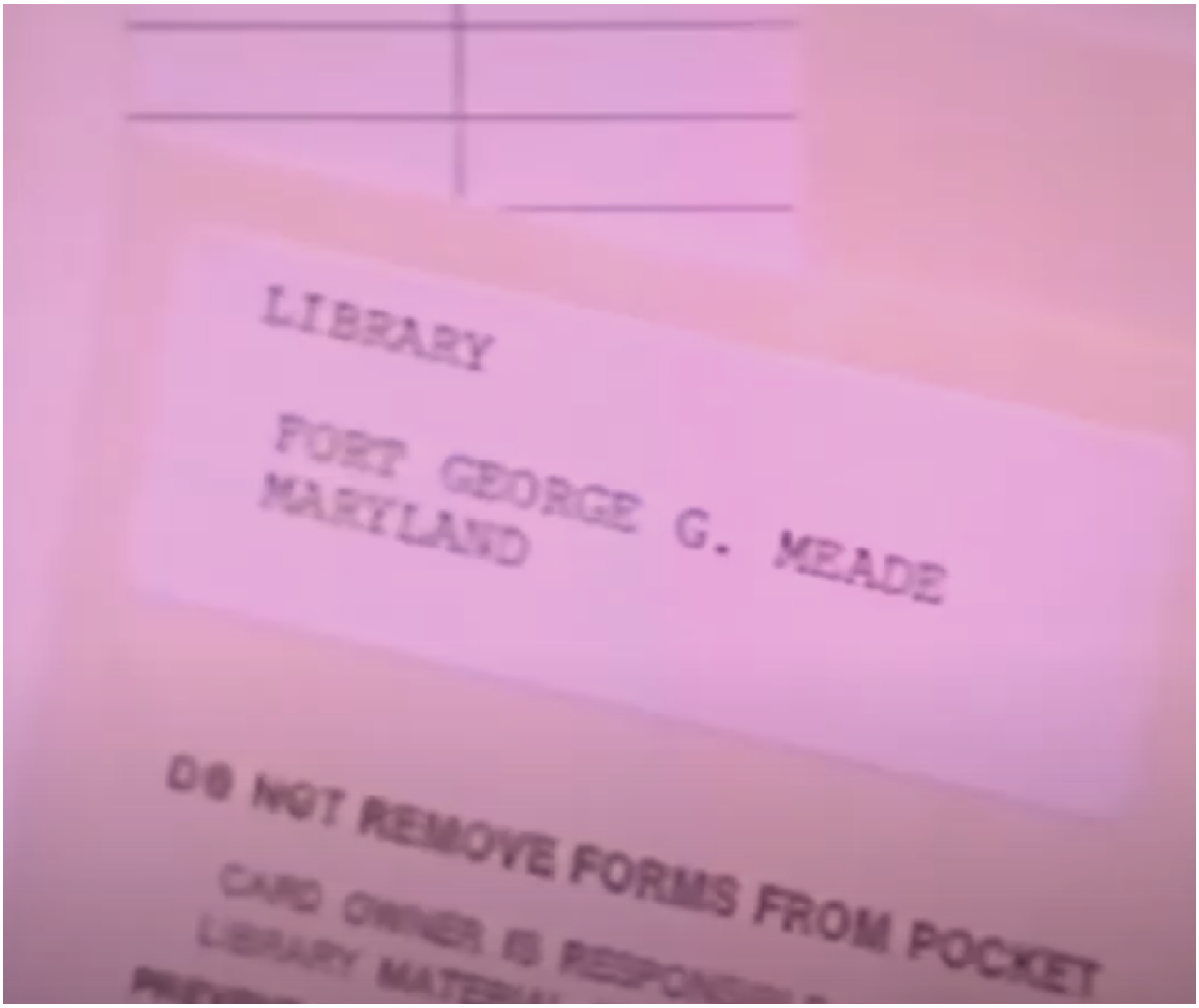
same page.

- **C:** **18 minutes**

  C is associated with W (23) and E (5). But E is part of CEMETERY, representing values that have "died". We need to do 23 - 5 = **18**.

- **M**: **32 seconds**

This one took a while to crack. Simply adding the letters F + R = 24 made no sense, as it moves us far away from the vicinity of Tennessee Pass, the area where the Treasure was actually buried. The F comes from the chapter FOREST, where the narrator says "She understood less and less", as a thick white fog obstructs the view. This becomes clearer when we see this image:



Fort Meade Maryland is the location of the National Security Agency (NSA), which may explain the fog and the lack of understanding of what is going on.
A role of the NSA is to collect radio frequency signal. In the book, Amanda says: “I have become a collector of strange things”.
Radio frequency is abbreviated RF, precisely the two letters we are given. This actually means the frequency (or number) of letters RADIO.

We will count these letters around the map. Here the image provides additional information: “DO NOT REMOVE FORMS FROM POCKET”.
Note that on the image the white card is placed at an angle with the tan pocket, making some sort of triangular shape.
This reproduces what happens with the map at the position of horses (on a white background) versus the map itself with a tan background.
We will interpret this as DO NOT COLLECT THE FORMS (i..e letters) on a horse square.
(Another possible interpretation is DO NOT REMOVE THESE FORMS FROM COLLECTION, which would add one second to the coordinate due to the letter O being counted).

We are not yet done. As usual when asked to collect something, there are exceptions.
The first part of the chapter insists on living things, in particular animals. We also see an obelisk, said to represent rebirth and eternal life.
The following image is the most revealing:

It shows the strange base of the animals moving around on a track, “dancing a mechanical minuet”.
The focus on the complex machinery moving along a track depicts the process of TRANSCRIPTION.
DNA is being split open by an enzymatic complex, separating BASE pairs and making RNA that will end up coding for proteins to build living things.
TRANSCRIPTION is also the name given to the transliteration of Egyptian hieroglyphs, which are also shown in this chapter.

We also see a reflected castle in the water and Amanda climbs rocks between the castle and its reflection.
The two strands of DNA are held together by complementary (i.e. reflection) base pairs on each strand (A-T and C-G), forming a “DNA ladder”.

DNA is our exception. In our context, it means **D-Not Applicable**. We should count letters R-A-I-O, but not D.
There are **32** such letters around the map.
(Note that our previous removal of ION in two places makes an important impact here. If we were

wrong, the correct result is 36)

FINAL RESULT

LONGITUDE: 106°18'32"

LATITUDE: 39°21'40"

Given that these coordinates are the same as the ones arrived my book solution, the same image and information is presented here.

As discussed earlier, if the two ION triplets are not removed from the map, the seconds of longitude would end up being 36. This would move the yellow rectangle to the left by more than half the distance separating it from the vertical white line, making the location much closer to the actual memorial. With 32 seconds the distance is greater but there appear to be a trail leading to the area. (It would certainly be helpful to know exactly where the horse was buried).

These images from Google Earth give us an approximate view.
The top right corner image is a view of the Tennessee Pass Memorial from road 24 in Colorado. In a triangular area we see a flag pole, the big monument, and the small monument (father's grave).
On the aerial view, we see clearly the flag pole and the large monument, but the small monument is hidden behind trees.
The yellow rectangle delimits the area falling within our longitude and latitude.

The red line has a length of 156 meters, starting at the small monument (guessing the exact position) at an angle of 64 degrees East of South and ending in the yellow rectangle, likely the treasure location.

(**NOTE: data for this line was derived in the book solution in an attempt to pinpoint the location inside the yellow rectangle. No such attempt was made in the video solution**).