Open Access Escape Room

Instructions
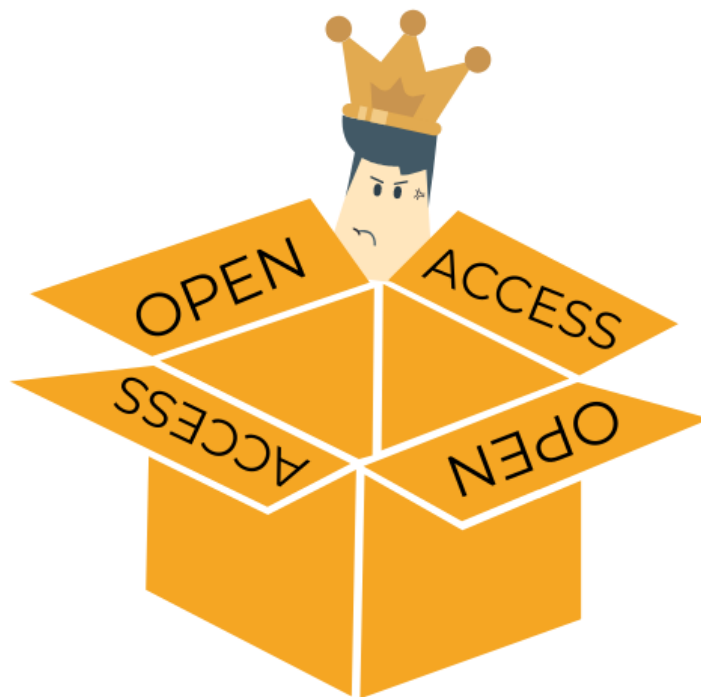
Contents

What is an Escape Room?

An escape room is a physical, interactive adventure game where players use hints, clues and strategy to solve a series of puzzles to "escape" a room.

Escape rooms are themed, and the layout of the room and the puzzles are usually set to match the theme. Common themes include zombies, murder mysteries, treasure hunts, pirates, prisons and haunted houses. Escape rooms have a time limit for the players to solve the room, and this usually ranges from 40 minutes to 60 minutes. In most escape rooms players can ask for hints or clues if they get stuck. Some escape rooms include a time-penalty when players ask for additional hints.

Though escape rooms are mostly used as a fun and engaging social activity or as a team building exercise, many are using escape rooms in educational settings as a way of teaching others about a specific topic.

Instructions

This Open Access themed escape room consists of 7 puzzles, each puzzle is described in detail below. To get a better overview of the puzzles and how they connect it might be good to read this along with the Open Access Escape Room - Layout. This escape room follows a linear path. However, players are able to stumble upon some clues designed for later in the game – don't worry about this as players will need to complete all puzzles in order to complete the game. This is explained further below in the relevant sections.

Each puzzle in this instruction manual consists of a list of props (each with a prop ID and an indication of whether the prop can be downloaded), a layout section (indicating how the props in the puzzle are arranged in the room) and a "how it works" section. Appendix A contains a full list of all props and items used for this escape room with links to all downloadable items. Each item and every prop used for the escape room has an ID, which will be indicated throughout the document. In addition, if the prop is downloadable there will be a link to it, e.g. *Clue – best hiding places (1.15)*. Appendix B illustrates additional props used in the game that aren't specific to any of the puzzles, but help to make the theme come to life.

A *PowerPoint presentation (0.33)* is available to download, and can be used as a timer and as a way for the host to give players hints if they are stuck. You can find instructions for the presentations in Appendix C.

A *script (0.35)* is available to download, which can be good to read before reading the "Setting the tone" section. This will also be used in the start and end of the game.

This escape room is recommended for 2-6 players with a time limit of 60 minutes. There is no time-penalty if players request or get hints during the game and there is no limit to how many hints they get. This can be adjusted if you want to make the game more difficult (for example, if you have a larger group).

Setting the tone...

Load the [PowerPoint presentation (0.33)](#) before players arrive and leave it on the opening slide. There is a downloadable ["Please wait here" sign (0.31)](#) that you can put outside the room you're using to keep players from entering the room before you're ready to start. When players arrive it's good to get an idea of what knowledge they have of Open Access and whether they have done an escape room before. This chat is very informal and is improvised depending on what players say. A downloadable [script (0.35)](#) can be used to help the host set the tone for the game. The villain is active in this escape room, and was played by a colleague from the Albert Sloman Library (University of Essex). The villain doesn't have to be a part of the game, as both the script and the escape room can be adapted to having a villain who is not present. However, having a villain is highly recommended as the whole experience becomes a lot richer.

As we had a larger room, we decided to create a smaller section within the room where the escape room would take place. We used *chairs (0.18)*, *tables (0.21)*, a *whiteboard (0.41)* and a *stanchion and velvet rope (0.37)* to create this smaller room. Players entered through the *stanchion and velvet rope (0.37)* after the first section of the [script (0.35)](#) had been completed.

https://doi.org/10.6084/m9.figshare.7359398

Starting the game

When players arrive, the host greets them outside the escape room and explains the concept and rules of the game (See *script (0.35)* Section 1). When players are ready to start, they enter the escape room and the host reads Section 2 of the *script (0.35)*. The villain interrupts the host at this time and threatens to lock down all research in the world. Then the host gives the players an option between Puzzle 1a) the Gold Route or Puzzle 1b) the Green Route by pointing to or directing the players to the *Gold and Green envelopes (1.1 and 1.2*, respectively) which have been put on a *whiteboard (0.40)* or some other obvious place. The game will start when players make their choice.

When this happens, the host should advance the *PowerPoint presentation (0.33)* to the second slide and the timer will start. Note that there are further instructions in the PowerPoint presentation and Appendix C on how to display hints during the game.
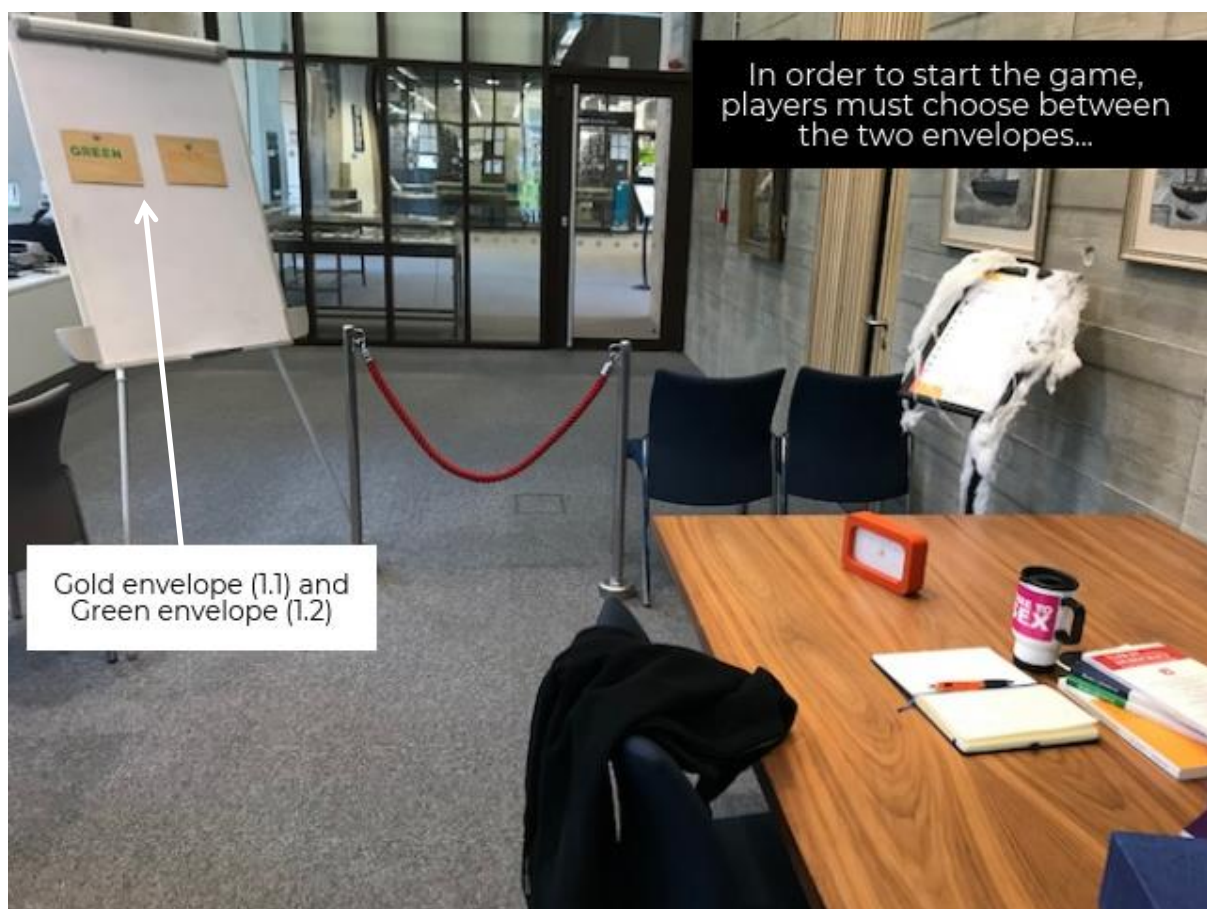

Image: Layout of the 'entrance' to the escape room and the two envelopes.

The first puzzle in the escape room has two routes, depending on what the players choose.

Puzzle 1 a): The Gold Route

Props:

1.1	"Gold" envelope	
1.3	Text about Gold Open Access	[Available to download](#)
1.5	Money (can use money from a board game)	
1.6	Wallet or something to keep money in	
1.7	Jacket (with pockets)	
1.8	Predatory animal	
1.9	"Under" text clue	
1.10	"the" text clue	
1.11	"table" text clue	
1.16	Clue – benefits of Open Access	[Available to download](#)

Predatory animal (1.8) with "table" text clue (1.11)

Clue - benefits of Open Access (1.16) is under the table

Clock (1.12) to be removed if players choose Gold route

"the" text clue (1.10) is in the jacket pocket (1.7)

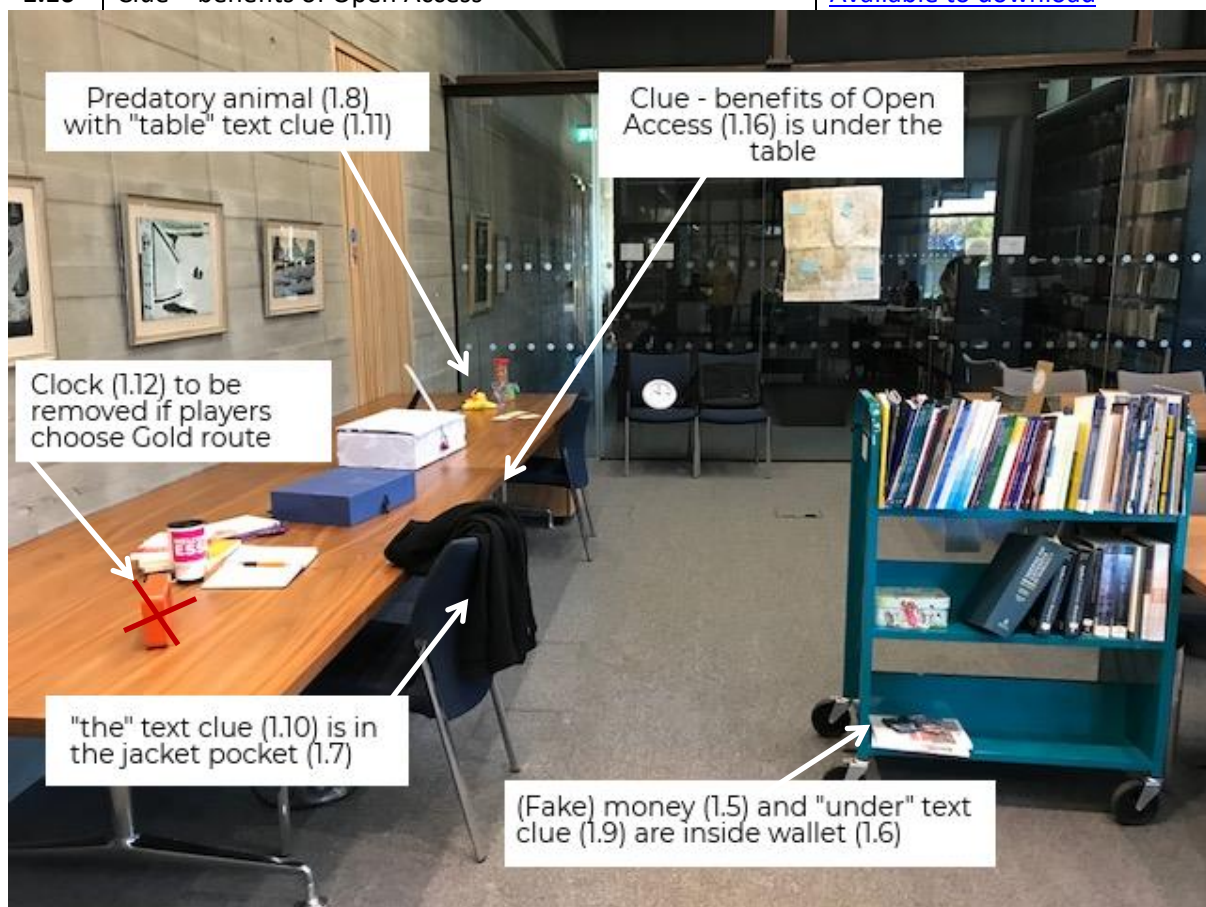(Fake) money (1.5) and "under" text clue (1.9) are inside wallet (1.6)

Image: Layout of props used in Puzzle 1a)

Layout: The *"Gold" envelope (1.1)* (with *text about Gold Open Access (1.3)* inside) needs to be visible for the players (we had it on a *whiteboard (0.40)* next to the *envelope representing the Green route (1.2)*). The *money (1.5)* - hidden inside a *wallet (1.6)*, *jacket (1.7)* and *predatory animal (1.8)* are hidden in plain sight randomly in the room, so that players can find the *text clues (1.9 - 1.11)* when they locate the items highlighted in the text.

Please note that there is a clock (1.12) *in the room which relates to Puzzle 1b) only. If players choose the Gold route this needs to be removed by the host or the villain to avoid confusion as it has the clue* "talk to the villain" (1.13) *under it.*

How it works

If players choose the Gold Route they will read the [text about Gold Open Access (1.3)](#).

In the text three words are highlighted: MONEY, POCKET and PREDATORY. These are hints to where the next clues are; the *wallet (1.6)* - where players should look for *money (1.5)* - is where players find the *"Under" text clue (1.9)*, the *jacket pocket (1.7)* contains the *"the" text clue (1.10)* and the *predatory animal (1.8)*, which in our case is a lion, has the *"table" text clue (1.11)*. Under the table is where they will find the next clue.

"Gold" envelope (1.1) and [text about Gold Open Access (1.3)](#)

From this point on the game is the same regardless of which route the players choose.

Hint for the players

If players are stuck you can click on the money symbol in the PowerPoint presentation, which will give the clue "Can you find the money, pocket and predator?"

Wallet (1.6) with *(fake) money (1.5)* and *"under" text clue (1.9)* inside

"the" text clue (1.10)

Predatory animal (1.8) and *"table" text clue (1.11)*

Puzzle 1b): The Green Route

Props:

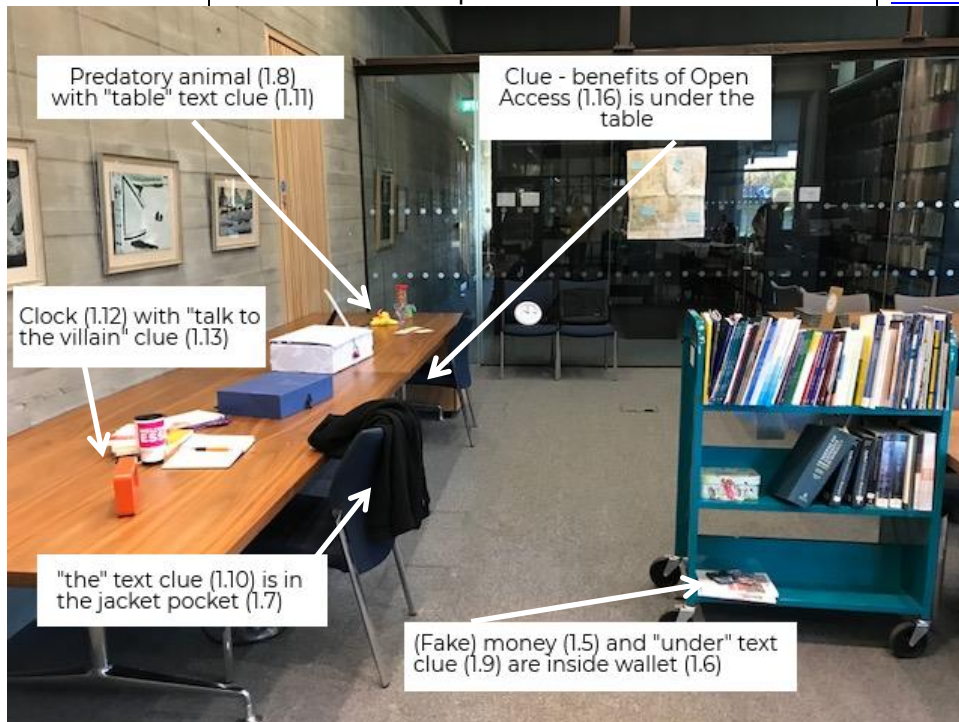| 1.2	"Green" envelope	
1.4	Text about Green Open Access	[Available to download](#)
1.5	Money (can use money from a board game)	
1.6	Wallet or something to keep money in	
1.7	Jacket (with pockets)	
1.8	Predatory animal	
1.9	"Under the table" text clues	
1.10	"the" text clue	
1.11	"table" text clue	
1.12	Clock	
1.13	"talk to the villain" clue	
0.35	Script – Section 3	[Available to download](#)
1.14	Paper fortune teller	
1.15	Clue – best hiding places	[Available to download](#)
1.16	Clue – benefits of Open Access	[Available to download](#)

Image: Layout of the props used in Puzzle b)

Layout: The *"Green" envelope (1.2)* (with *text about Green Open Access (1.4)* inside) needs to be visible for the players (we had it on a whiteboard next to the *envelope representing the Gold route (1.1)*). The *clock (1.12)* is placed close to where the host stands in the beginning of the game. The villain has the *paper fortune teller (1.14)* and the *clue with best hiding places (1.15)*, which will not be in the game until the players find the *"talk to the villain" clue (1.13)*. The *(fake) money (1.5)* – hidden inside a *wallet (1.6)*, *jacket (1.7)* and *predatory animal (1.8)* are hidden randomly in the room, so that players can find the text clues if they go through the *clue with best hiding places (1.15)* and look in all hiding places.

Please note that if players choose the Gold route rather than the Green route the clock (1.12) *needs to be removed by the host or the villain to avoid confusion as it has the clue* "talk to the villain"(1.13) *under it.*

How it works

If players choose the Green Route they will read the *text about Green Open Access (1.3)*. At the end of the note, it will ask them if they have the TIME for Green Open Access.

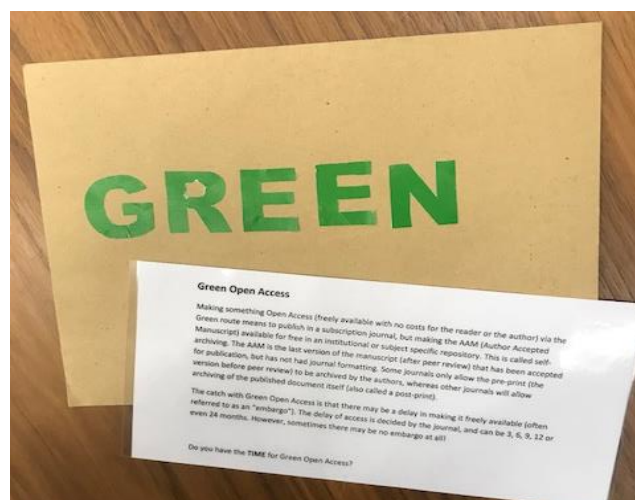This clue will lead them to the clock and the *"Talk to the villain" clue (1.13)*.

As a response to this, the villain suggests that they play a game (see *script (0.35)* Section 3). The villain uses the *paper fortune teller (1.14)* and asks the players to choose one colour to start the game. Players are then asked to choose one number, and then another number. Depending on what colour and numbers the players choose, they will get a penalty; 10 seconds, 20 seconds, 30 seconds, 45 seconds or even 1 minute. This penalty mimics an embargo. At this point the host can tell them about embargo to make sure they understand why they are waiting... or you can just make them wait!

"Green" envelope (1.2) and text about Green Open Access (1.4)

When the 'embargo' is over, the villain 'accidentally' drops the *clue – best hiding places (1.15)*. This clue will lead the players to the *(fake) money (1.5)* in the *wallet (1.6)* and *"Under" text clue (1.9)*, the *jacket pocket (1.7)* and *"the" text clue (1.10)*, and the *predatory animal (1.8)* and *"table" text clue (1.11)*. The last hiding place listed on the *clue – best hiding places (1.15)* is under the table, which will lead them directly to the *clue – benefits of Open Access (1.16)*.

Clock (1.12) and "talk to the villain" clue (1.13)

From this point on the game is the same regardless of what route the players chose.

Hint for the players

If players are stuck you can click on the clock symbol in the PowerPoint presentation, which will give the clue "Where is the clock?"
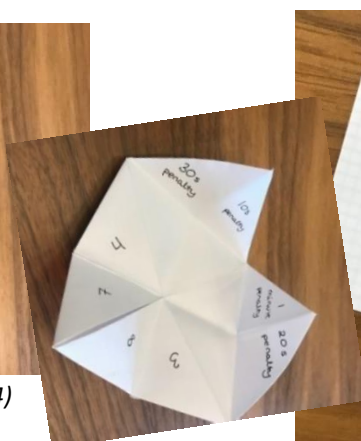

Paper fortune teller (1.14)

Clue – best hiding places (1.15)

Puzzle 2: The Benefits of Open Access
Props:

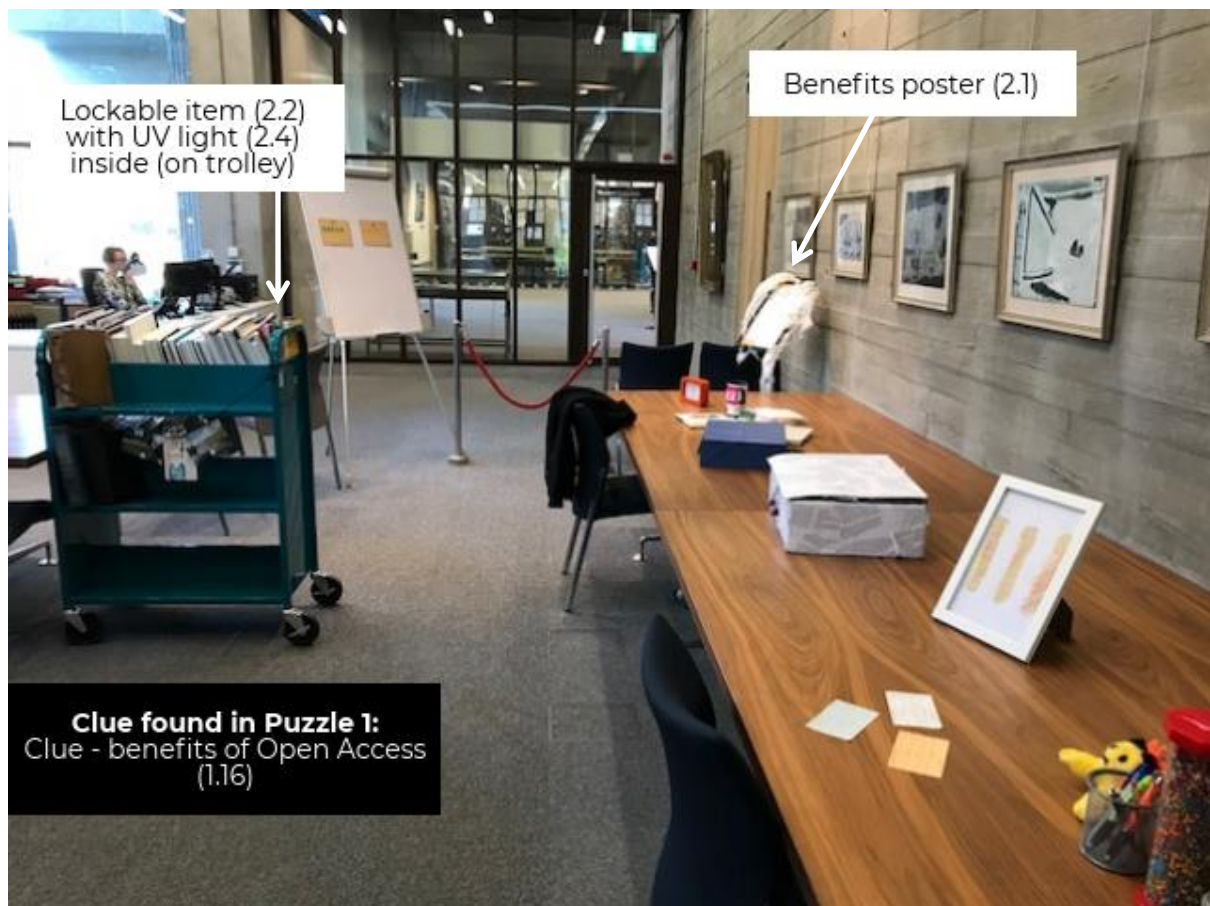|		
2.1	Benefits poster	Available to download
1.16	Clue – benefits of Open Access	Available to download
2.2	Lockable item	
2.3	Padlock (3 digit)	
2.4	UV light	

Image: Layout of the props used in Puzzle 2

Layout: The *benefits poster (2.1)* can be placed anywhere in the room. We used a poster stand, but the poster can also be placed on a wall. The *lockable item (2.2)* with the *padlock (2.3)* can be placed anywhere in the room, with a *UV light (2.4)* inside.

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How it works
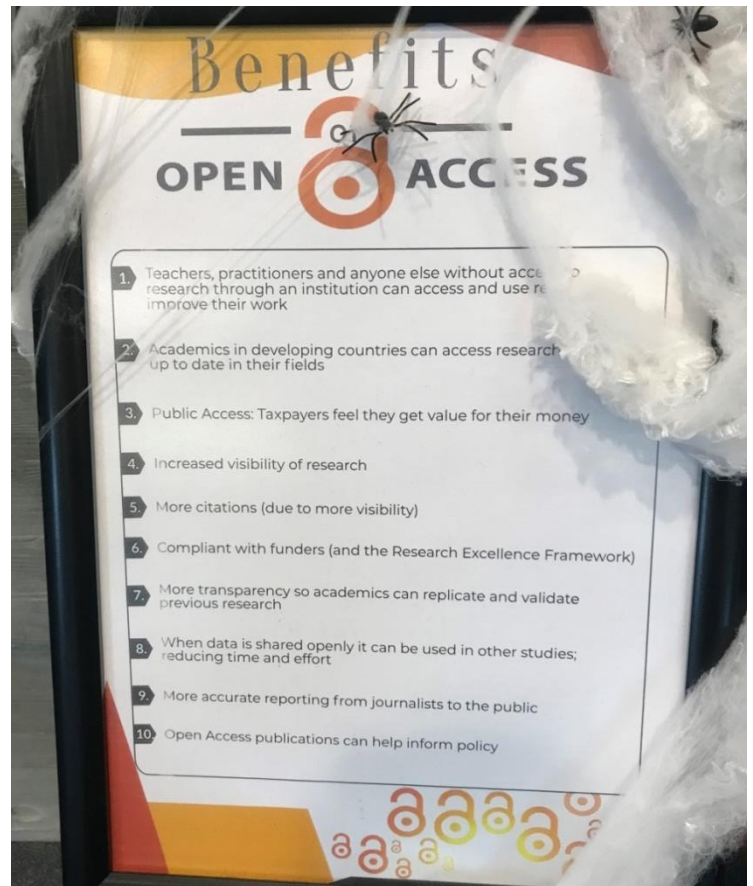
The *clue – benefits of Open Access (1.16)* that players find under the table in Puzzle 1a) or Puzzle 1b) will list three of the benefits of Open Access. This clue links to *the benefits poster (2.1)* which lists 10 benefits of Open Access. The three benefits listed in the *clue (1.16)* will lead players to a code when they combine the clue with the poster

4 – Increased visibility of research

2 – Academics in developing countries can access research that is up to date in their field

7 – More transparency so academics can replicate and validate previous research

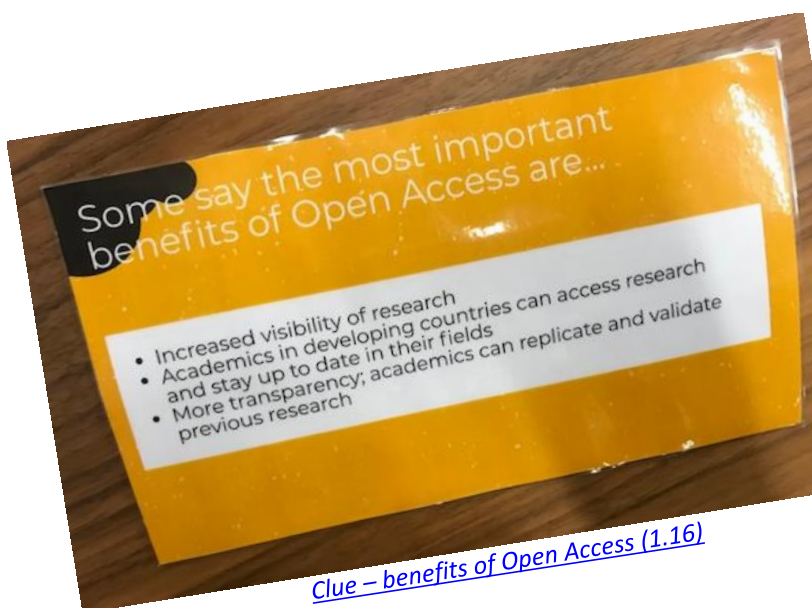This is the code to the first item they unlock which contains a *UV light (2.4)*.

Benefits poster (2.1)

Hint for the players

If players are stuck you can click on the numbers symbol in the PowerPoint presentation, which will give the clue "What numbers on the list do the benefits have?"

Clue – benefits of Open Access (1.16)

Lockable item (2.2), padlock (3 digit) (2.3) and UV light (2.4)

Puzzle 3: The Map and the Data

Props:

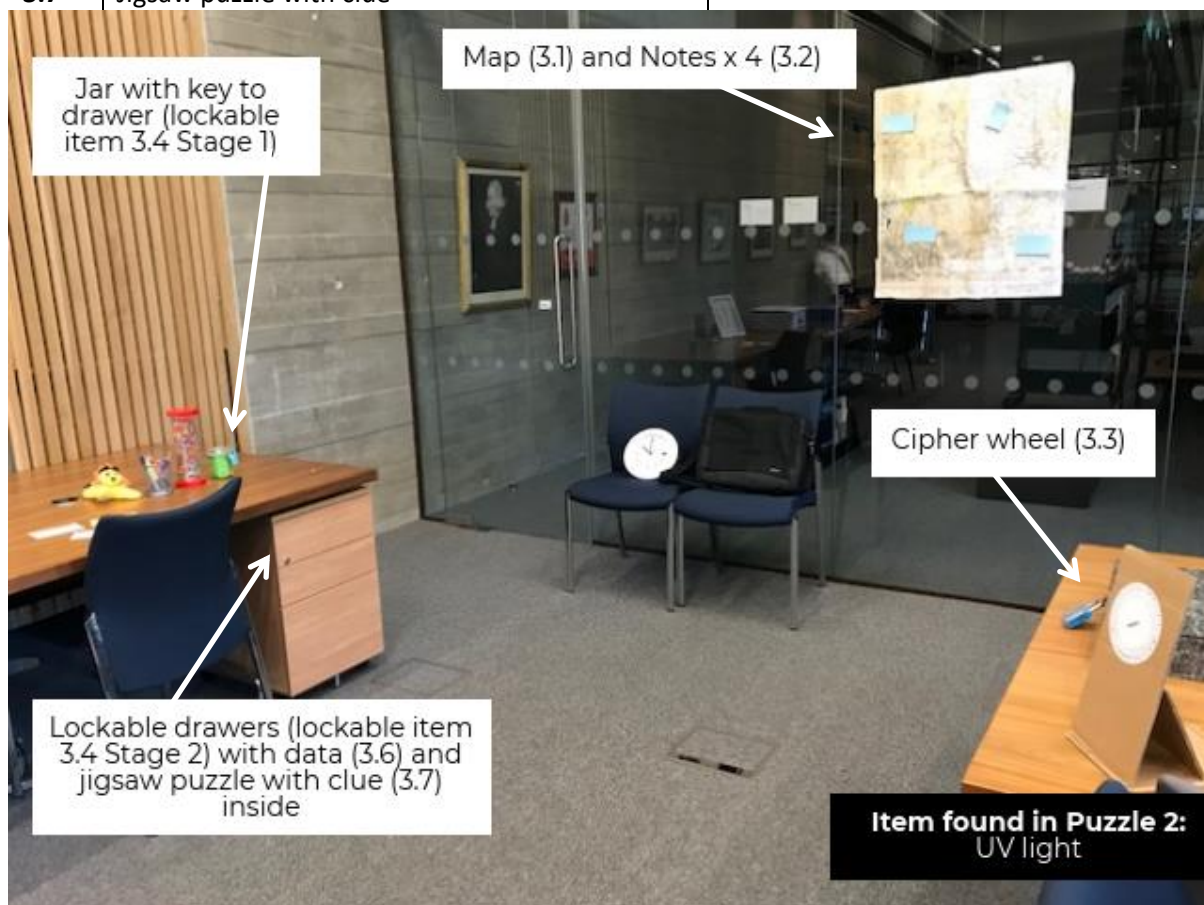| 3.1	Map	
3.2	Notes x 4	[Available to download](#) (but clues need to be added with UV marker)
2.4	UV light	
3.3	Cipher wheel	[Available to download](#)
3.4	Lockable item	
3.5	Padlock (3 digit)	
3.6	Data with circled/highlighted number in a folder	
3.7	Jigsaw puzzle with clue	

Image: Layout of the props used in Puzzle 3

Layout: *The map (3.1)* can be placed on a wall, with the *[four notes (3.2)](#)* on the map (we added notes on to the map because it was difficult to see the UV marker when we drew directly on the map). Blue paper worked best in terms of hiding the hidden message in daylight, and making it visible under UV light. The visible messages on the notes form part of the clue when UV light is shone on them. The hidden messages are codes to be unlocked with the *[cipher wheel (3.3)](#)* and the ordering for the *padlock (3.5)*. The *[cipher wheel (3.3)](#)* can be placed anywhere in the room. The *lockable item* (3.4)* with the *Data with circled/highlighted number (3.6)* and *the jigsaw puzzle with clue (3.7)* inside can be anywhere in the room.

*We used a two stage unlocking process, as we locked a key to a side table with lockable drawers (0.36) in jar (3.4) as we didn't have any larger pad-lockable items left to use.

How it works

The *UV light (2.4)* unlocked in Puzzle 2 is connected to the *map (3.1)* on the wall, where *four notes (3.2)* have been added with some messages. The clues on these messages are only visible when you shine the *UV light (2.4)* over it.

The clues on these messages can be decoded by using a *cipher wheel (3.3)*. When you line up the two symbols an arrow will point to a number.
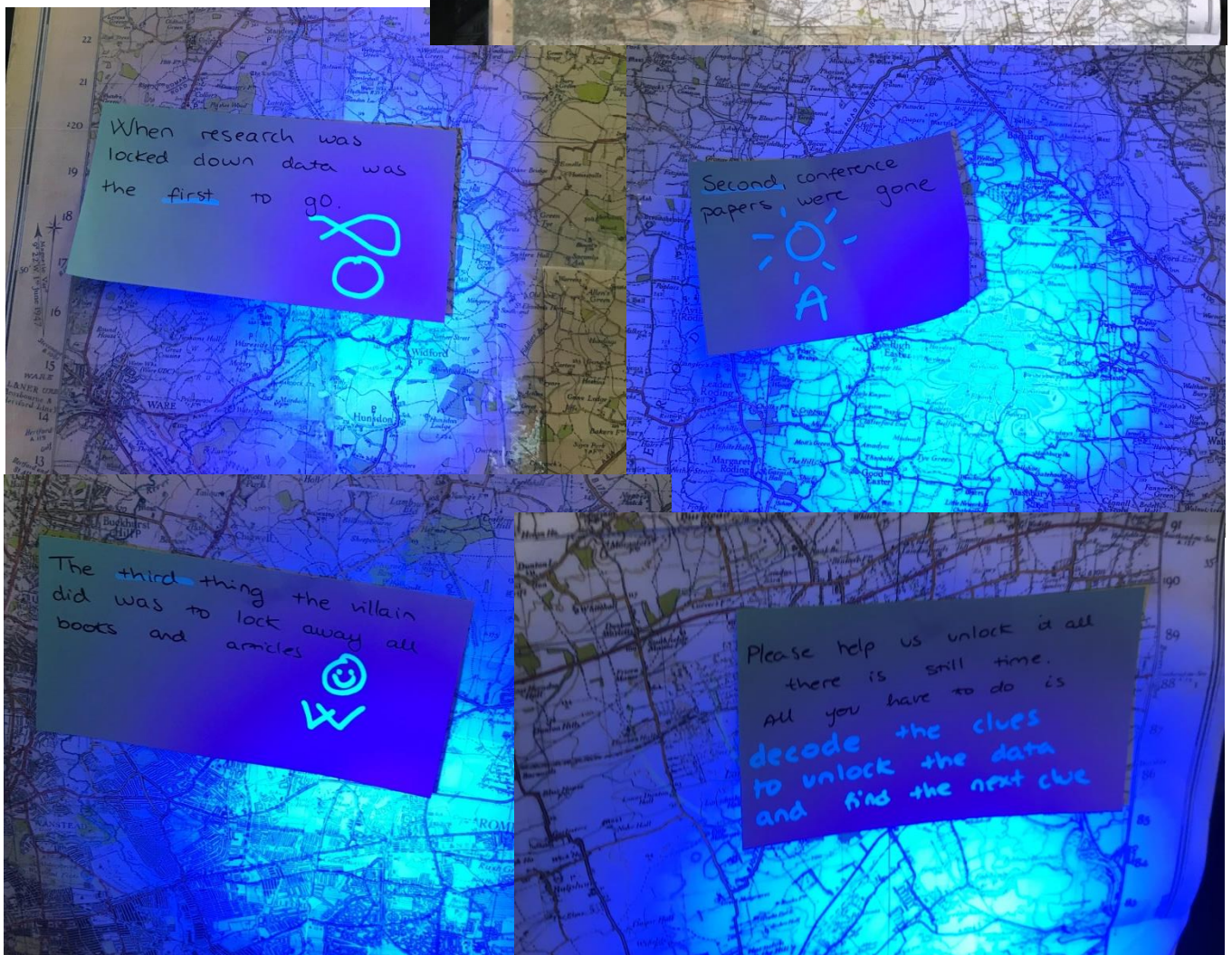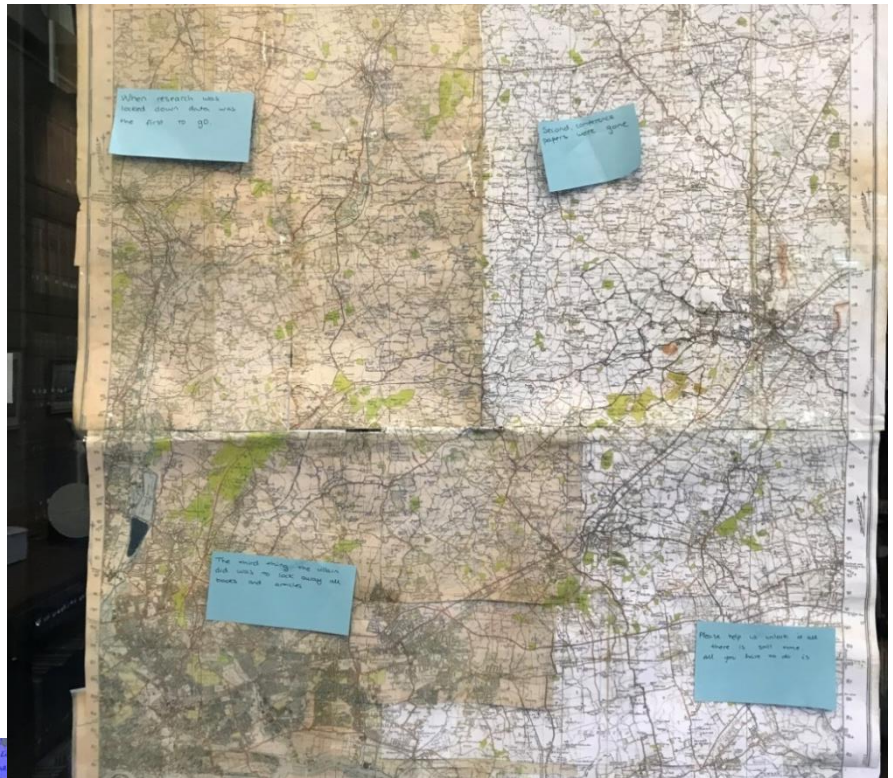
Map (3.1) with *four notes (3.2)* – with and without *UV light (2.4)* shone on them

7

3

5

These numbers are the code to unlock the next clues; *data with circled/highlighted number (3.6)* and a *jigsaw puzzle with clue (3.7)*.

The key to unlock the data has been locked in a jar due to lack of larger pad-lockable items, and therefore two items were unlocked in this illustration.
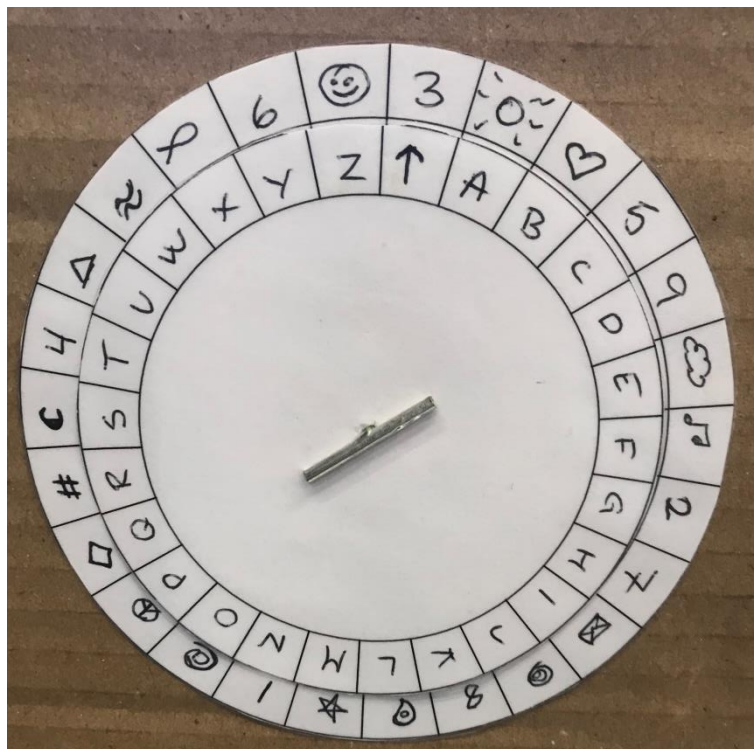
Cipher wheel (3.3)
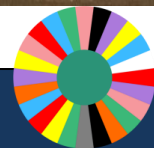
Hint for the players

If players are stuck you can click on the colourful circle symbol in the PowerPoint presentation, which will give the clue "Use the cipher wheel to decode the messages on the map"

Lockable item (3.4) – Stage 1
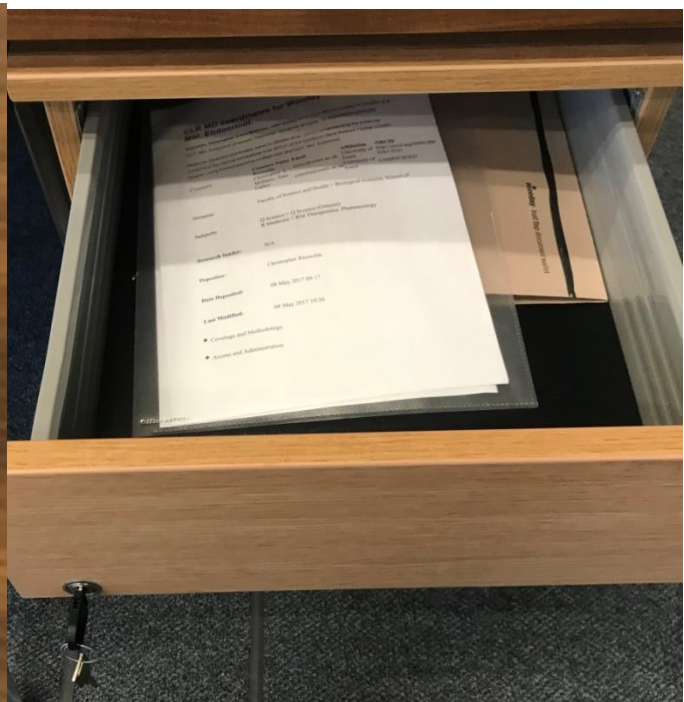
Lockable item (3.4) - Stage 2 - with *data with circled/highlighted number 7 (3.6)* and *jigsaw puzzle with clue (3.7)* inside

Puzzle 4: The Jigsaw Puzzle, the Postcard and the Conference Papers

Props:

3.7	Jigsaw puzzle with clue	Ideally 20-40 pieces
4.1	Journal from specific country/location/subject area	
4.2	Decodable postcard	Text for postcard to be decoded available to download
4.3	Postcard decoder	
4.4	Borrowing notes	Available to download
4.5	Lockable item	
4.6	Padlock (4 digit)	
4.7	Conference paper x 5 in a folder	
4.8	Class-mark clue	
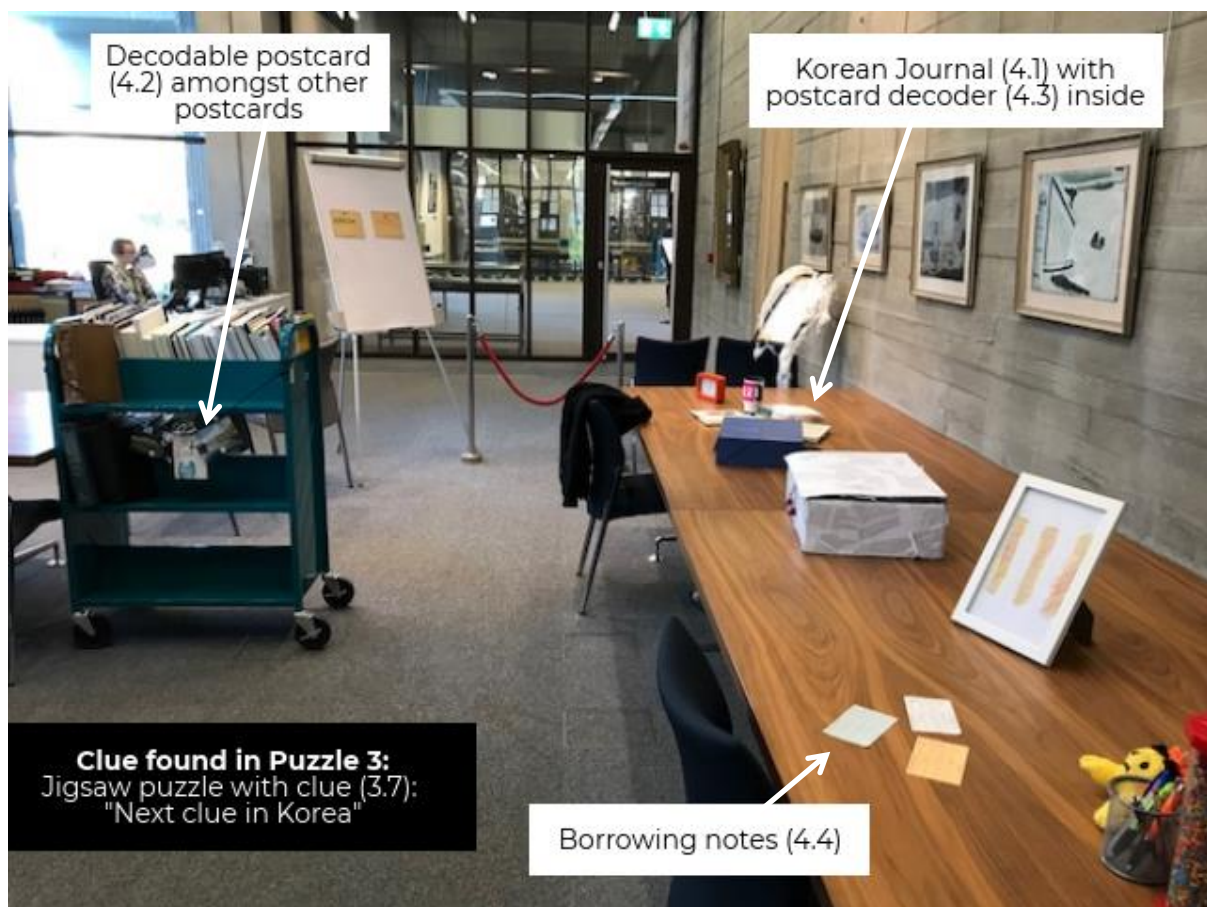
Image: Layout of the props used in Puzzle 4
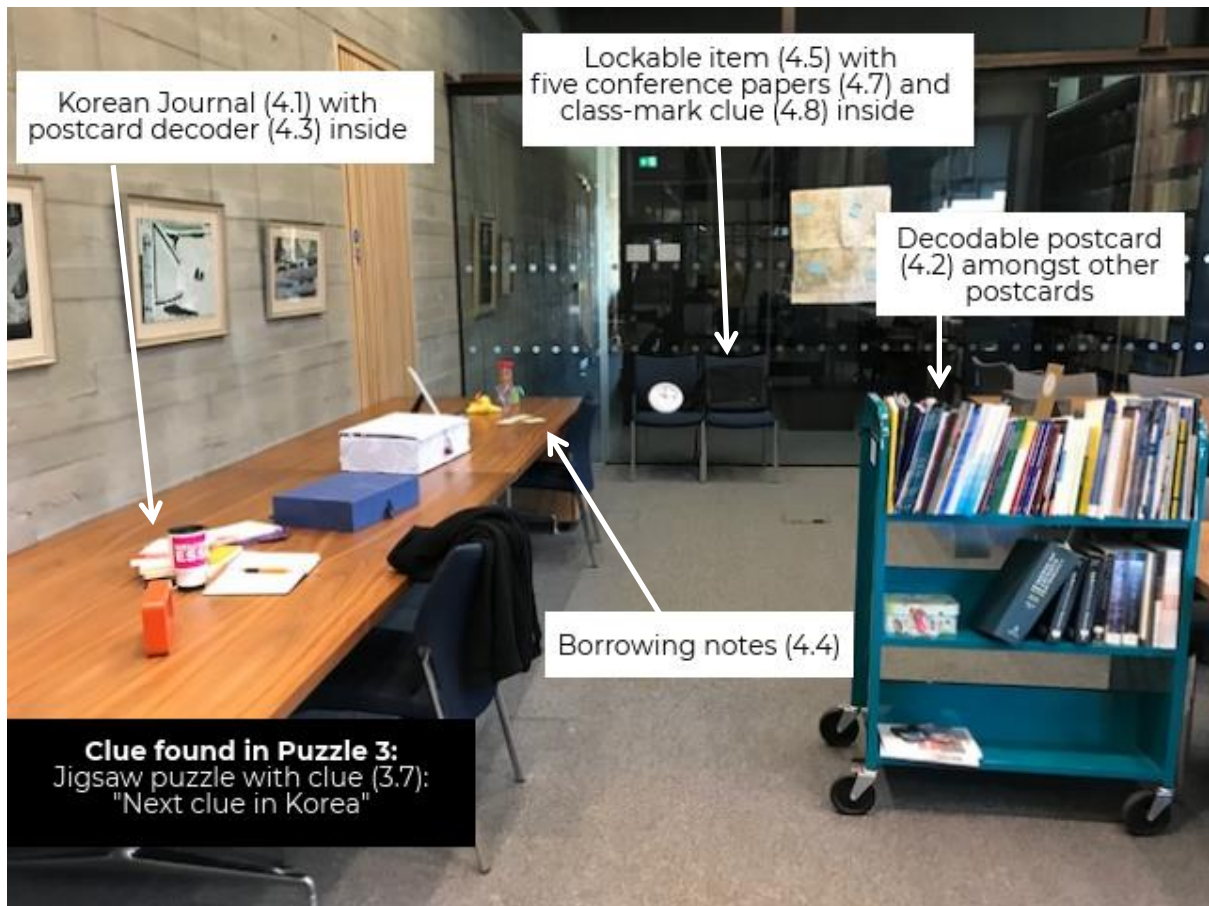
Image: Layout of the props used in Puzzle 4 – seen from a different angle

Layout: This *jigsaw puzzle with clue (3.7)* is in the drawer the players just unlocked, with the clue only readable once players have finished the jigsaw puzzle. The *postcard decoder (4.3)* is hidden in a *journal from a specific country/location (4.1)*; in this game we hid the *postcard decoder (4.3)* in a *Korean journal (4.1)* that was laid on the table. We added several other Korean journals on the table to add some noise. The *decodable postcard (4.2)* can be anywhere in the room, we added two other *postcards (0.32)* next to the *decodable postcard (4.2)* as noise. *The borrowing notes (4.4)* are laid out on a table, but not close to where the Korean Journals are. Only one of the notes matches the clue from the *decodable postcard (4.2)*, so the other *borrowing notes (4.4)* work well as noise.

If you want to create your own borrowing notes you need to make sure you're not adding any clues to books in the room as it might confuse players.

How it works

In this Puzzle players are expected to complete the *jigsaw puzzle with clue (3.7)* that they unlocked in Puzzle 3 When they complete the puzzle the text "Next clue in Korea" will be readable.

The next clue, the *postcard decoder (4.3)*, is hidden* inside a *Korean Journal (4.1)* which is on the table amongst other Korean Journals.

Jigsaw puzzle with clue (3.7)

The *postcard decoder (4.3)* they find will decode the *decodable postcard (4.2)* we hung up in the room.

Two other *postcards (0.32)* are next to it to slow players down. Once decoded, the message from the *decodable postcard (4.2)* will say "Year Routledge Borrowed Book" This information can be found in the *borrowing notes (4.4)* on the table.

2

0

1

0
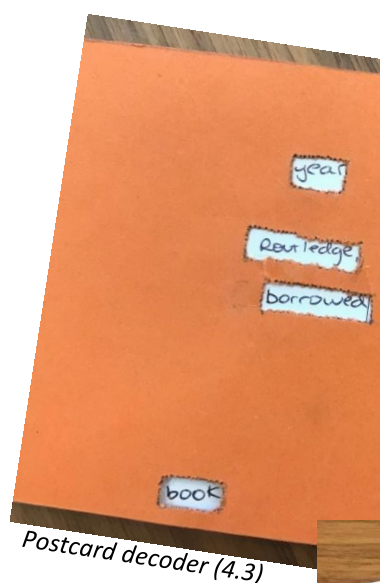
Postcard decoder (4.3)
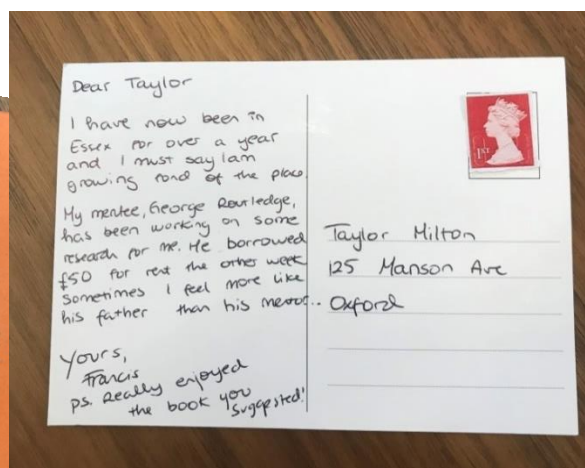
Decodable postcard (4.2)

This will unlock a *laptop bag (4.5)* with a *folder of conference papers (4.7)* with a *class-mark clue (4.8)*. In our game the text read "Next clue: HD 62.1.B4", which is a class-mark to a book. Please note that this clue match the class-mark on the *hollow book (5.1)* in Puzzle 5.
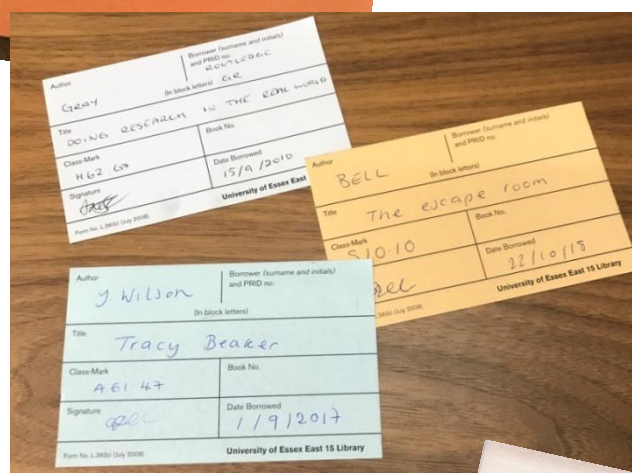
Borrowing notes (4.4)

Hint for the players

If players are stuck you can click on the postcard symbol in the PowerPoint presentation, which will give the clue "Can you decode any of the postcards with the decoder?"

* Players are able to stumble upon this clue before they are "meant to", however this is emphasised in the beginning of the game by the host, and players are encouraged to follow the game in a linear matter. They are of course able to find this clue and continue the game further ahead than they are, but they would have to go back and unlock the other items later in order to complete the game.

Puzzle 5: The Colour-Number Riddles and the Books

Props:

4.8	Class-mark clue	
5.1	Hollow book (cut a hole in a donated book or one that is due to be thrown out)	
5.2	Colour-number riddles	[Available to download](#)
5.3	Lockable item	
5.4	Coloured Padlock (4 digit)	
5.5	Books x 3	
5.6	Red tinted glasses	
5.7	Clue to hidden equations	[Available to download](#)
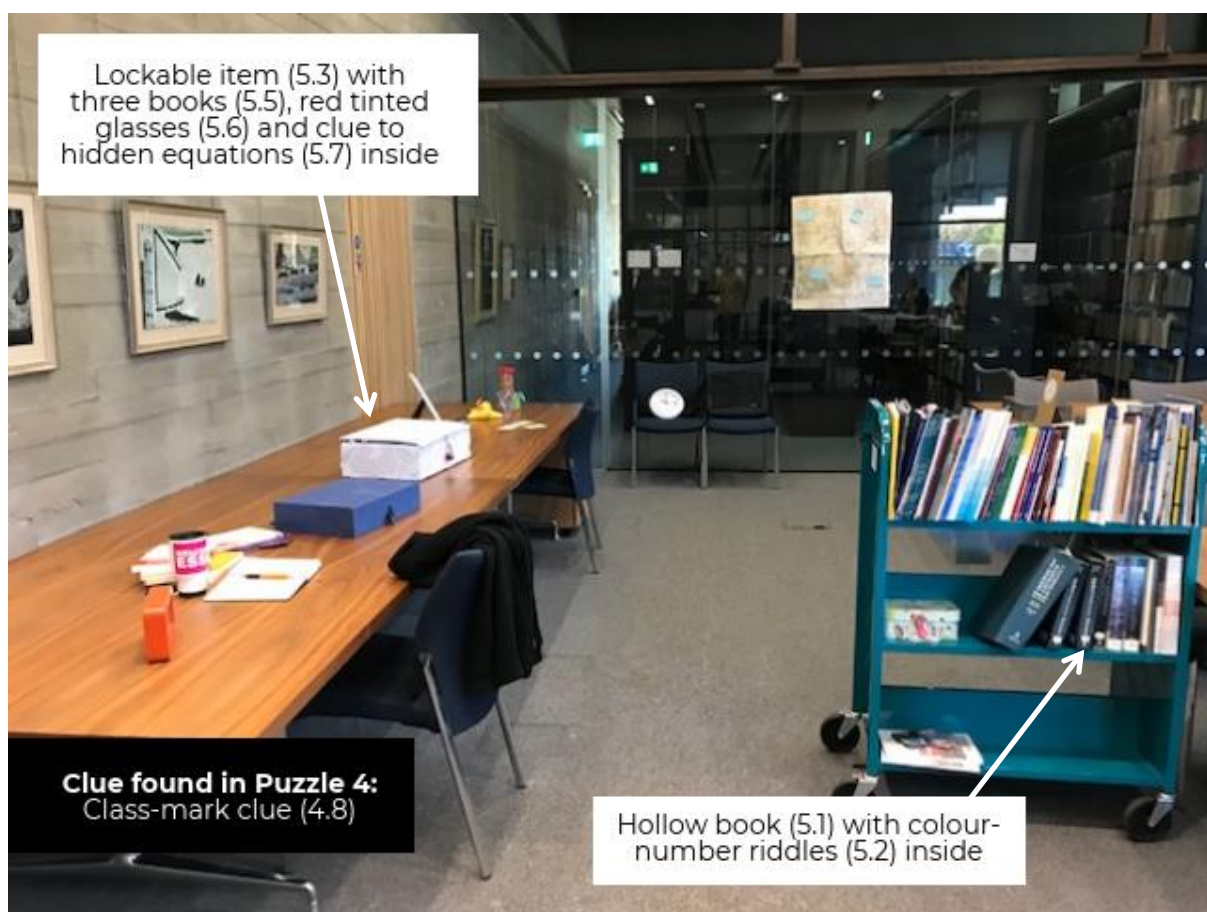
Image: Layout of props used in Puzzle 5

Layout: The *hollow book (5.1)* – with the same class-mark the *class mark clue (4.8)* unlocked in Puzzle 4 revealed – can be hidden anywhere in the room. We hid it on a trolley amongst loads of other books to try to keep people from discovering it by accident. The *colour-number riddles (5.2)* are hidden inside the *hollow book (5.1)*. The *lockable item (5.3)* with the *three books (5.5)*, *red tinted glasses (5.6)* and *clue to hidden equations (5.7)* inside can be anywhere in the room.

How it works

The *class-mark clue (4.8)* from Puzzle 4 will lead to *a hollow book (5.1)* - don't worry, this book was withdrawn and was heading to the bin so in a way we saved it. When players open the book they will find some *the colour-number riddles (5.2)** to be solved.

The eight *colour-number riddles (5.2)* found inside the *hollow book (5.1)* each have a number on one side and a riddle on the other side. The solution to each riddle will be a colour. Four of the colours match the *coloured padlock (5.4)* and will give players the combination to unlock it. The remaining four riddles are added in as noise so that the puzzle isn't too obvious.

7 – Blue

6 – Green

4 – Yellow

1 – Pink

This will unlock *three books (5.5)*, a pair of *red tinted glasses (5.6)* and the *clue to hidden equations (5.7)*.

Hollow book (5.1) with *colour-number riddles (5.2)* inside
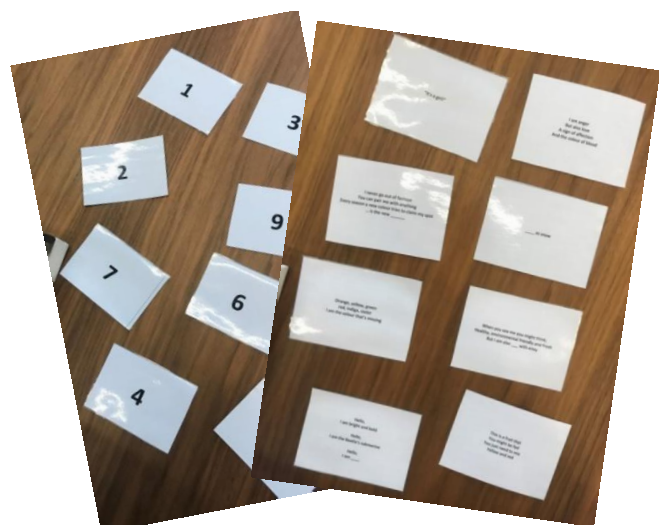
Colour-number riddles (5.2)

Lockable item (5.3) and *coloured padlock (5.4)*

* *Players are able to stumble upon this clue before they are "meant to", however this is emphasised in the beginning of the game by the host, and players are encouraged to follow the game in a linear matter. They are of course able to find this clue and continue the game further ahead than they are, but they would have to go back and unlock the other items later in order to complete the game.*

Hint for the players

If players are stuck you can click on the book in the PowerPoint presentation, which will give the clue "Can you find the book with the class-mark?"

Puzzle 6: The Red Tinted Glasses and the Articles

Props:

5.6	Red tinted glasses	
5.7	Clue to hidden equations	Available to download
6.1	Hidden equations on A4 paper	Equations available to download, need to create the hidden message
6.2	A4 Picture frame	
6.3	Lockable item	
6.4	Padlock (3 digit)	
6.5	Final clue note	
6.6	Articles x 4 in a folder	

Tip! *Instructions on how to create red tinted glasses and hidden messages can be found here.*
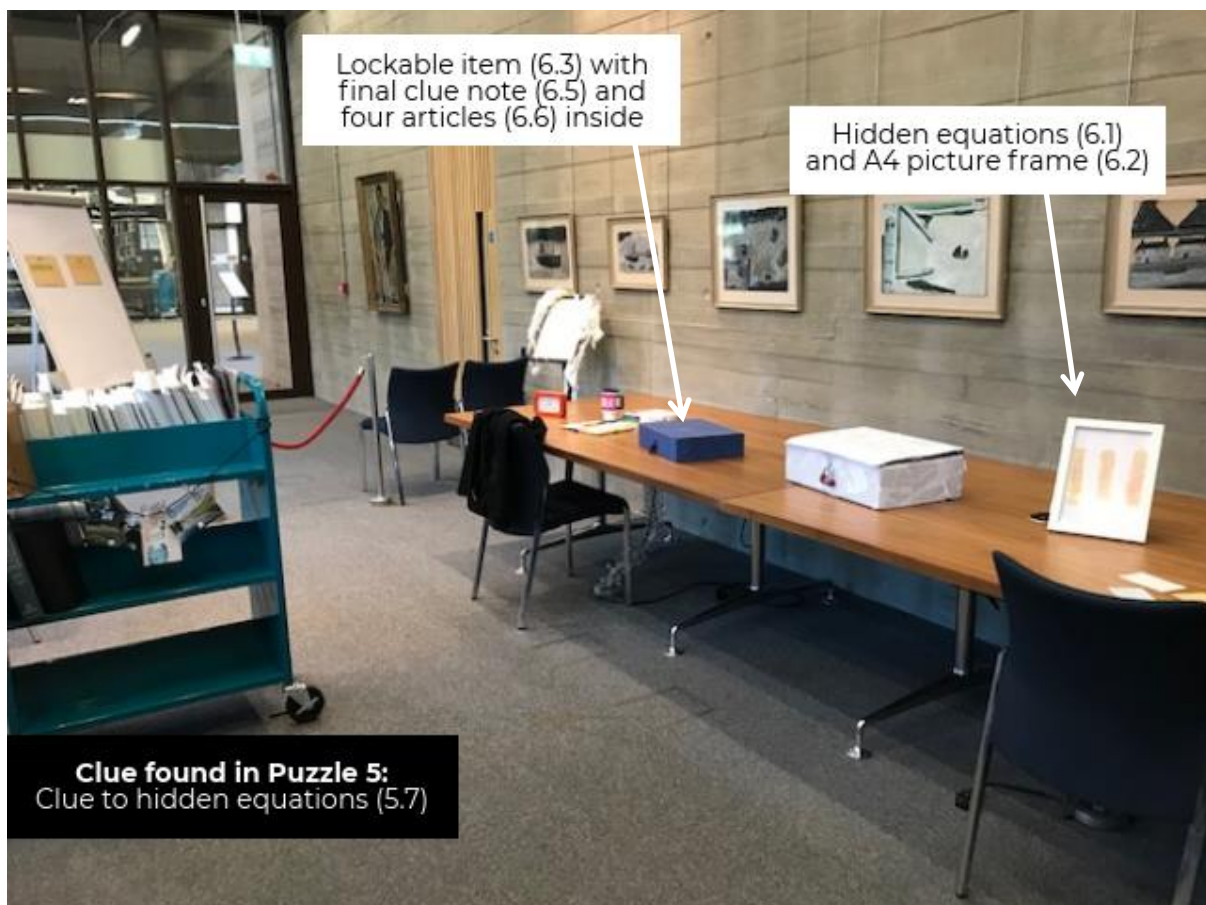
Image: Layout of the props used in Puzzle 6

Layout: The *hidden equations (6.1)* in the *picture frame (6.2)* can be anywhere in the room, and visible to players as they won't be able to know what they need from the hidden equations until they have the *clue to hidden equations (5.7)* from inside the *lockable item (5.30)* in puzzle 5. The *lockable item (6.3)* with the *final clue note (6.5)* and *four articles in a folder (6.6)* inside can be anywhere in the room.

How it works

The *red tinted glasses (5.6)* unlocked in Puzzle 5 help players decode the *hidden equations (6.1)*. During testing one of our players were able to see the equations without the glasses, so we added some noise and added a *clue to hidden equations (5.7)* that would be unlocked with the *red tinted glasses (5.6)*. The clue is "A4 – B3 – C7", meaning the players need to find lines 4, 3, and 7 on the A, B, and C columns, respectively, and then solve the equations to get the next code.

9 – (A4: 6+3)

4 – (B3: 2x2)

2 – (C7: 4x0 +2)

This will unlock the *final clue note (6.5)* and the *four articles in a folder (6.6)*.
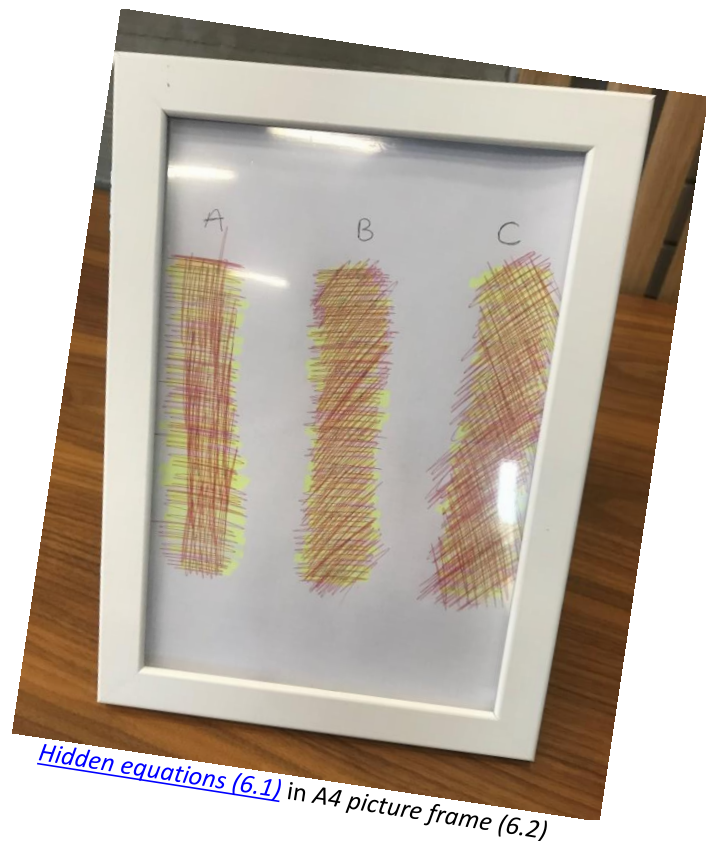
Hidden equations (6.1) in *A4 picture frame (6.2)*
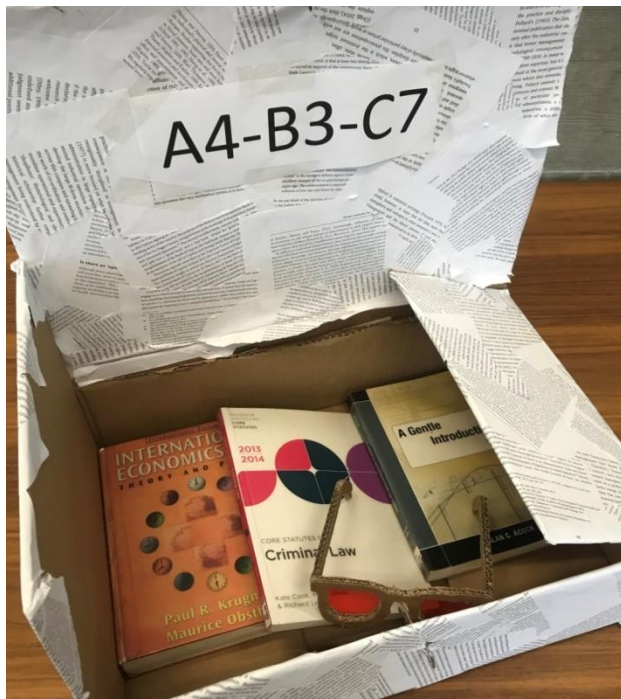
Lockable item (5.3) from Puzzle 5 with *clue to hidden equations (5.7)*, *three books (5.5)* and *red tinted glasses (5.6)*

Hint for the players

If players are stuck you can click on the glasses symbol in the PowerPoint presentation, which will give the clue "Can you decode any artwork with the glasses?"

Puzzle 7: Defeating the Villain and Making Research Open

Props:

6.5	Final clue note	Available to download
6.6	Articles x 4	
5.5	Books x 3	
4.7	Conference papers x 5	
3.6	Data with circled/highlighted number 7	
7.1	Lockable item	
7.2	Padlock (4 digit)	
7.3	Final note	Available to download
7.4	Buzzer button	
7.5	(Fake) Diamonds (optional)	
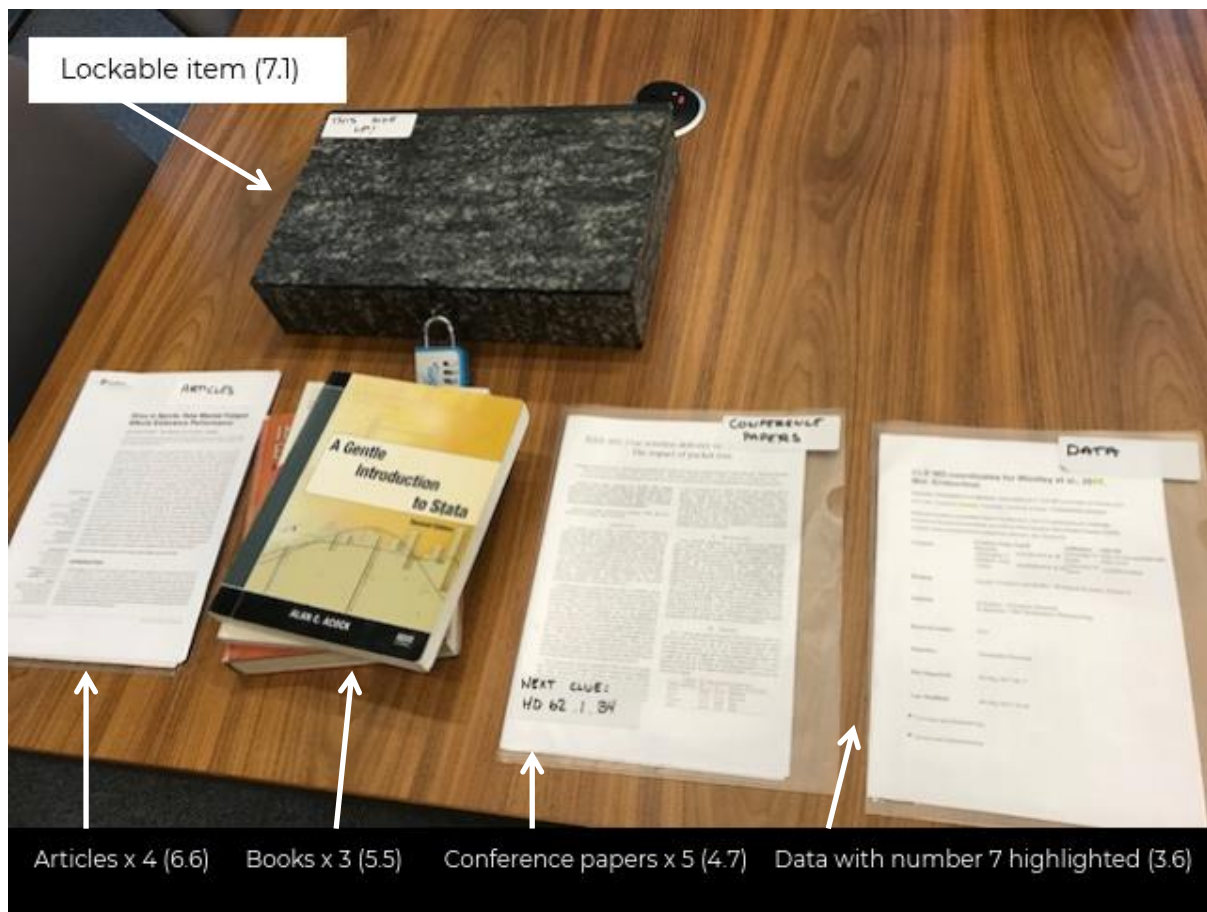
Image: props used in Puzzle 7

Layout: The *final clue note (6.5)* is inside the *lockable item (6.3)* unlocked in Puzzle 6. The *lockable item (7.1)* can be anywhere in the room, and players must find the documents they have unlocked previously to be able to solve the last puzzle; *four articles (6.6)*, *three books (5.5)*, *five conference papers (4.7)* and the *data with the number seven highlighted (3.6)*. The *lockable item (7.1)* contains a *final note (7.3)*, a *buzzer button (7.4)* and some *(fake) diamonds (7.5)*.

How it works

The box players unlocked in Puzzle 6 contains *four articles in a folder (6.6)* and the [*final clue note (6.5)*](); a note that asks players to combine what they have unlocked in order to unlock the last box and defeat the villain.

The code is

4 – (Linked to item 6.6: Number of articles unlocked)

3 – (Linked to item 5.5: Number of books unlocked)

5 – (Linked to item 4.7: Number of conference papers unlocked)

7 – (Linked to item 3.6: The number highlighted on the data that was unlocked)

Once the players have unlocked the last *lockable item (7.1)*, there is a *buzzer button (7.4)* inside they can press to make all research open again.

When players press this button, the game has ended and the villain is defeated!

Tip! *If players want they can take a picture with their time and hold the Open Access Escape Room Posters.*
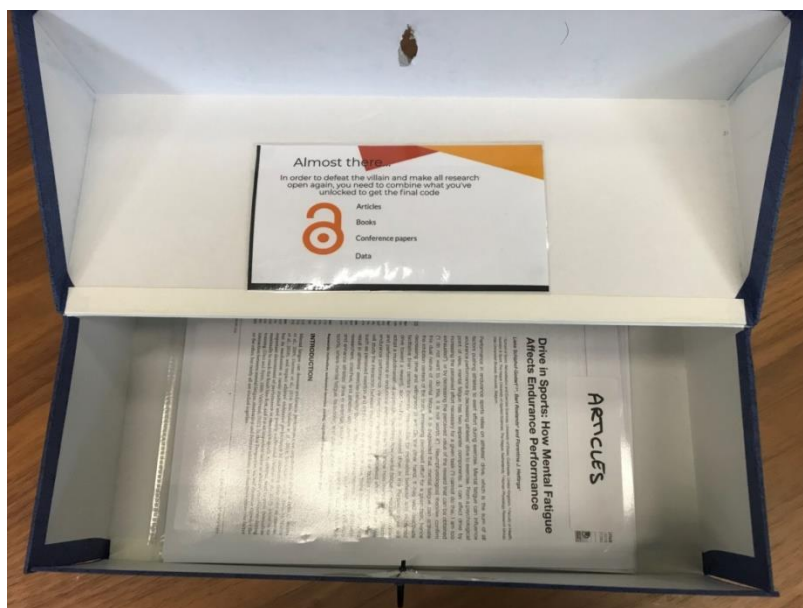
Lockable item (6.3) with [*final clue note (6.5)*]() and *four articles in a folder (6.6)* inside

Lockable item (7.1) with final note (7.3), buzzer button (7.4) and fake diamonds (7.5) inside

Hint for the players

If players are stuck you can click on the question mark symbol in the PowerPoint presentation, which will give the clue "How many articles, books and conference papers are there? And what number is circled on the data?"

Acknowledgements

First of all I would like to thank Dr Simon Kerridge for all the help and support he has given me during the development of the escape room and the shared material. I also want to thank John Stammers, Izzy Eddyshaw and Emily Bell for their involvement in making the open access escape rooms come to life. In addition, I am very grateful for the support and help I have received from colleagues in the Albert Sloman Library at the University of Essex. Last, I would like to thank all those who played the game during the testing phase, as this allowed us to improve the escape room even further, and all those who came to play the game during the launch of the escape room in Open Access Week 2018.

Appendix A: List of props and items used

This is a complete overview of all the items used in the making of the Open Access Escape Room, followed by detailed lists of all the props used in each puzzle.

Tools to create the game

ID	Item	Used for
0.1	A3 paper x 1	To print out *Benefits poster (2.1)* in Puzzle 2
0.2	A4 paper (approximately 25)	For example to create a *paper fortune teller (1.12)* in Puzzle 1b) and the *hidden equations (6.1)* in Puzzle 6 and various notes
0.3	Adhesive tape	To help create some of the lockable items
0.4	Blue crayon	Used to create *hidden equations (6.1)* in Puzzle 6
0.5	Cardboard	To make *Red tinted glasses (5.6)*
0.6	Coloured paper x 1	To create *Notes x 4 (3.2)* in Puzzle 3 (blue paper works best)
0.7	Dark coloured pen	To create *Notes x 4 (3.2)* in Puzzle 3 and to create the *paper fortune teller (1.12)* in Puzzle 1b)
0.8	Foldback clips	To make hasps for the home made lockable items
0.9	Glue gun	To help create some of the lockable items
0.10	Highlighter	To highlight number on *dataset (3.6)* and to create *hidden equations (6.1)* in Puzzle 6
0.11	Laminator	To laminate notes/text in puzzles in order to make them last longer
0.12	Plastic strips	To make hasps for the home made lockable items
0.13	Red acetate sheets	To make *Red tinted glasses (5.6)*
0.14	Red pen	Used to create *hidden equations (6.1)* in Puzzle 6
0.15	Scissors	To cut out various downloadable items and props
0.16	UV marker	To create *Notes x 4 (3.2)* in Puzzle 3

General props

ID	Item	Available to download?	Used for
0.17	Book trolley		To keep various props and puzzle items on
0.18	Chairs		Four were used in the game as props. We also used some instead of walls as the room we had was too big to be used for this escape room
0.19	Computer		For the *PowerPoint presentation (0.33)*
0.20	Crown for the villain		We made one out of cardboard and tin foil
0.21	Desk/table		To hide *Clue – benefits of Open Access (1.12)*
0.22	Display screen		Depending on your set-up, a monitor, TV or a projector that is visible to the players at all times. Used to display the time left and hints
0.23	Find it! Kids World		Red herring
0.24	Finished poster 1 – I love Open Access	**Yes**	Used for when people finish the game and want to take a picture
0.25	Finished poster 2 – Make all research open	**Yes**	Used for when people finish the game and want to take a picture
0.26	Finished poster 3 – We defeated the villain	**Yes**	Used for when people finish the game and want to take a picture
0.27	Notebook with random notes		Red herring – NB make sure notes do not relate to any of the puzzles in any way
0.28	OA Escape Room icon	**Yes**	Used for marketing
0.29	Pen pot with various pens		Red herring/general prop
0.30	Piggy bank with chocolate coins		Used as a prop for the villain
0.31	"Please wait here" sign	**Yes**	Used outside the room for when players arrive
0.32	Postcards		Noise for puzzle 4
0.33	PowerPoint presentation	**Yes**	Used in the game as a timer and to give players hints
0.34	Travel mug		Red herring/general prop
0.35	Script	**Yes**	Used for the host and villain
0.36	Side table with lockable drawers		Used in puzzle 3 in a two stage-unlocking as we didn't have any larger lockable items left
0.37	Stanchion and velvet rope		Used as a doorway as the room we used was so large it needed cordoning of
0.38	Various books		General prop/noise
0.39	Various journals		General prop/noise
0.40	Wall clock		General prop/noise
0.41	Whiteboard		For players to write down any clues during the game
0.42	Whiteboard marker		For players to write down any clues during the game

You can also use any other items you have to create the right environment for the Open Access Escape

Puzzle 1: The Green and the Gold route

ID	Item	Available to download?	Notes
1.1	"Gold" envelope		**Puzzle 1a)** Can use a plain envelope and print out letters or write with Gold marker
1.2	"Green" envelope		**1b)** Can use a plain envelope and print out letters or write with Green marker
1.3	Text about Gold Open Access	**Yes**	1a)
1.4	Text about Green Open Access	**Yes**	1b)
1.5	(Fake) Money		**1a) & 1b)** Can use money from a board game
1.6	Wallet or something to keep money in		
1.7	Jacket (with pockets)		**1a) & 1b)**
1.8	Predatory animal		**1a) & 1b)** Can use any predatory reference to hide clue. In *clue – best hiding places (1.15)* the text should match the animal type, for example we used a lion
1.9	"Under" text clue		To be hidden with *(fake) money (1.5)* inside wallet (1.6)
1.10	"the" text clue		To be hidden in *jacket pocket (1.7)*
1.11	"table" text clue		To be hidden with *predatory animal (1.8)*
1.12	Clock		**1b)**
1.13	"talk to the villain" clue		**1b)** To create write "Talk to the villain" on a piece of paper and stick it under the clock (1.12)
1.14	Paper fortune teller	**Instructions to create a paper fortune teller can be found here**	**1b)** To create fortune teller use the four colours and eight numbers suggested, but for the eight fortunes write: "10 seconds", "20 seconds", "30 seconds", "45 seconds" and "1 minute". Three of these should be written twice.
1.15	Clue – best hiding places	**Yes**	**1b)** This clue specifically mentions a lion as that is what we used as our *predatory animal (1.8)*. If you use a different predator, e.g. panther, then you need to change the text
1.16	Clue – benefits of Open Access	**Yes**	**1a) & 1b)** Used in Puzzle 2

Puzzle 2: The benefits of Open Access

ID	Prop	Available to download?	Notes
2.1	Benefits poster	**Yes**	A3 printout is recommended
1.14	Clue – benefits of Open Access	**Yes**	Found in end of Puzzle 1
2.2	Lockable item		We used a small suitcase
2.3	Padlock		3 digit padlock
2.4	UV light		*This is unlocked in this puzzle* Used in Puzzle 3

Puzzle 3: The map and the data

ID	Prop	Available to download?	Notes
3.1	Map		Any map can be used
3.2	Notes x 4	**Yes, need to print on coloured paper and add the remaining clues with an UV marker**	Blue paper works best. Stick notes to the *map (3.1)* See 3.2 Notes UV light – with visible clues for what to add with UV marker
2.4	UV light		Unlocked in Puzzle 2
3.3	Cipher wheel	**Yes**	Blank template can be found here if you prefer to create your own
3.4	Lockable item		We used a jar to lock keys to a *side table with drawer (0.36)*, as we didn't have any more large pad-lockable items to use so we used a two-stage-unlocking process instead
3.5	Padlock		3 digit padlock
3.6	Data with circled/highlighted number 7 in a folder		*This is unlocked in this puzzle* Can be printed out from any OA repository Used in Puzzle 7
3.7	Jigsaw puzzle with clue		*This is unlocked in this puzzle.* Ideal size is 20-40 pieces Used in Puzzle 4

Puzzle 4: The jigsaw puzzle, the postcard and the conference papers

ID	Prop	Available to download?	Notes
3.7	Jigsaw puzzle with clue		Unlocked in Puzzle 3 Ideally 20-40 pieces Clue in puzzle "Next clue in Korea" Can be any clue, directing players to a location/country/subject
4.1	Journal from a specific country/location/subject area		This links to the *jigsaw puzzle with clue (3.7)*
4.2	Decodable postcard	**Text for clue postcard only**	Recommended to add 2-4 additional "noise" *postcards (0.32)*. This main *decodable postcard (4.2)* should be the only one that can be decoded by the postcard decoder
4.3	Postcard decoder		Create your own after you have written the postcard
4.4	Borrowing notes	**Yes**	
4.5	Lockable item		We used a laptop bag in this puzzle
4.6	Padlock		4 digit
4.7	Conference papers x 5 in a folder		*This is unlocked in this puzzle* Used in Puzzle 7
4.8	Class-mark clue		*This is unlocked in this puzzle* We added the text "Next clue: HD.62.1.B4" on a sticker and put it on the folder with the *conference papers x5 (4.7)*. This must match the class-mark on the *hollow book (5.1)* in Puzzle 5 Used in Puzzle 5

Puzzle 5: The colour riddles and the books

ID	Prop	Available to download?	Notes
4.8	Class-mark clue		Unlocked in Puzzle 4
5.1	Hollow book		Use an old/withdrawn book and cut a hole in it. Glue down the pages to create a 'hollow space'. Class-mark on this book must match the *class-mark clue (4.8)*
5.2	Colour-number riddles	**Yes** **(NB! Need to print two-sided, flip pages on short edge)**	There are 8 riddles in total, 4 of these will be clues to the *coloured padlock (5.4)* : Blue, Green, Yellow, Pink (in our example, if you have different colours you will need to change/add clues)
5.3	Lockable item		We created a box from cardboard in this Puzzle. The box is made more interesting by gluing Open Access articles and book chapters on the outside
5.4	Coloured padlock		4 digit coloured (Blue, Green, Yellow, Pink). If you cannot find a padlock with these four colours, then you can use a different code combination as there are four more colours from the *colour-number riddles (5.2)*. If you have a padlock with other colours, you'll need to create additional colour-number riddles
5.5	Books x 3		*These are unlocked in this puzzle* Used in Puzzle 7
5.6	Red tinted glasses	**Instructions can be found [here](#)**	*These are unlocked in this puzzle* Used in Puzzle 6
5.7	Clue to hidden equations	**Yes**	*This is unlocked in this puzzle* Used in Puzzle 6

Puzzle 6: The red tinted glasses and the articles

ID	Prop	Available to download?	Notes
5.6	Red tinted glasses	**Instructions can be found here**	Unlocked in Puzzle 4 Used to de-code the *hidden equations on A4 paper (6.1)*
5.7	Clue to hidden equations	**Yes**	Clue is: A4 – B3 – C7 and links to 4th item on column A, 3rd item on column B, and 7th item on column C
6.1	Hidden equations on A4 paper	**Equations example only, the hidden equations will need to be created**	You need to create this item, by adding all equations on an A4 paper with blue crayon. Cover with red pen, and then cover again with yellow highlighter. It's useful to use the red tinted glasses when you make these to make sure you don't make it too visible (so people can read it without glasses with no problem) or too difficult (so you cannot see any of the equations even with glasses on)
6.2	Picture frame		This can be used to put the A4 paper in. A4 is preferable size for the equation and the picture frame, but it can of course be smaller or larger
6.3	Lockable item		The lockable item was created from a box file
6.4	Padlock		3 digit
6.5	Final clue note	**Yes**	*This is unlocked in this puzzle* Used in Puzzle 7
6.6	Articles x 4 in a folder		*This is unlocked in this puzzle* Used in Puzzle 7

Puzzle 7: Defeating the villain and making research open

ID	Prop	Available to download?	Notes
6.5	Final clue note	**Yes**	This clue will tell players they need the items they have unlocked in order to defeat the villain; *Articles (6.6), Books (5.5), Conference Papers (4.7), Data (3.6)*
6.6	Articles x 4		Unlocked in Puzzle 6
5.5	Books x 3		Unlocked in Puzzle 5
4.7	Conference papers x 5		Unlocked in Puzzle 4
3.6	Data with circled/highlighted number 7		Unlocked in Puzzle 3
7.1	Lockable item		The lockable item was created from a box file
7.2	Padlock		4 digit
7.3	Final note	**Yes**	
7.4	Buzzer button		This was bought in a set of 4 buttons
7.5	(Fake) Diamonds		Optional

Items purchased for the Open Access Escape Room

Many of the items we used in this Open Access themed escape room were things found in the library or donated by/borrowed from colleagues. Below is a list of the items we purchased. You can of course source additional items from anywhere you like; I have included the Ebay links to give you a better idea of the items that we used.

Item	Price	Purchased from
3 digit padlock (pack of 4)	£4.09	Ebay Link to listing
4 digit coloured padlock x 1	£4.36	Ebay Link to listing
4 digit padlock x 2	£9.99	Amazon Link to listing
Buzzer button (pack of 4)	£15.73	Ebay Link to listing
Fake diamonds	£2.49	Ebay Link to listing
Red acetate sheets (pack of 5)	£3.95	Ebay Link to listing
UV light	£3.86	Ebay Link to listing
Total	**£44.47**	

Appendix B: Additional items for creating the escape room theme

Various journals (0.38)

Book trolley (0.17) with *various books (0.37)* and *various journals (0.38)*

Wall clock (0.39)

Find it! Kids World (0.23)

Piggy bank with chocolate coins (0.30)

Side table with lockable drawers (0.35)

Finished poster 1 – I love Open Access (0.24)
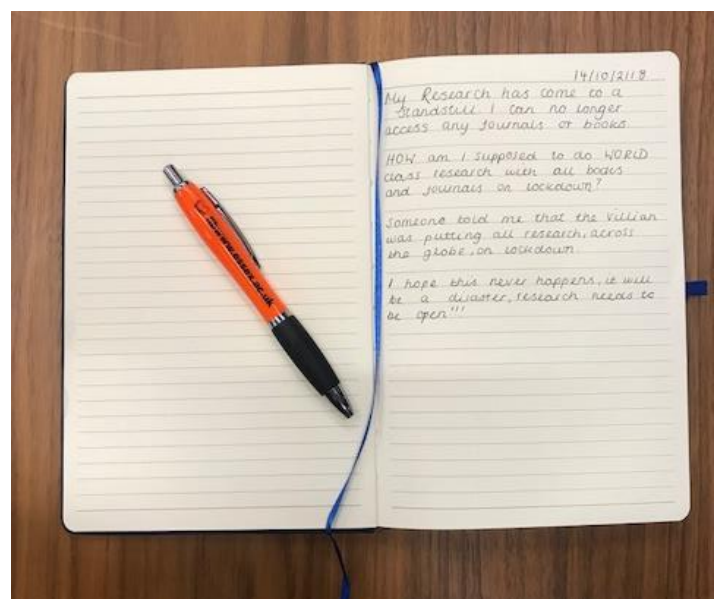

Finished poster 2 – Make all research open (0.25)

Finished poster 3 – We defeated the villain (0.26)

Travel mug (0.33)

Crown for the villain (0.20)

Notebook with random notes (0.27)

Appendix C: Instructions for PowerPoint presentation with timer and hints

In addition to the escape room itself, a PowerPoint presentation was created to work as a timer and as a way the host could give players hints during the game.

The presentation is available to download, and should be loaded to a screen before players arrive. Once the players make the first choice; Puzzle 1a) or Puzzle 1b), the host should advance the presentation to the second slide. This is done by clicking anywhere or pressing any key. The timer will then start. You do not need to do anything during the game to keep the timer going.

Several symbols are visible on the screen, when you click on one of these a hint will appear that is either linked to one of the puzzles, or a general hint. When a hint appears, a sound will also appear (chimes), which will notify players that a hint is available on the screen. If you press the symbol you pressed to make the hint appear again, the hint will go away. Also, the hint will disappear by itself when the presentation goes to a new slide.

Each slide in the presentation lasts 60 seconds, this is important to note as if you want to give players a hint and you give them the hint when the time is e.g. 53:03, the hint will disappear when the timer goes to 52:59 as this will be a new slide. It can therefore be good to be a bit strategic when you show players a hint, or else you will have to click on the relevant symbol two times.

One of the symbols is not a hint, but a way to end the timer when players finish the game. It's important that you note the time and subtract it from 60:00 as the presentation will not do this for you. For example, if players finish when the timer is at 16:32, you retract this from a 60 minute timer to give them 'their time'; 43:28. If you take pictures of the players, this is the time you should note down, e.g. on a whiteboard or on a piece of paper.

Below is a list of the symbols and hints, and what puzzles they relate to

Symbol	Hint	Relates to
	"Hint: Can you find the money, pocket and predator?"	Puzzle 1a): The Gold route
	"Hint: Where is the clock?"	Puzzle 1b): The Green route
	"Hint: What numbers on the list do the benefits have?"	Puzzle 2: The benefits of Open Access
	"Hint: use the cipher wheel to decode the messages on the map"	Puzzle 3: The Map and the Data
	"Hint: Can you decode any of the postcards with the decoder?"	Puzzle 4: The Jigsaw Puzzle, the Postcard and the Conference Papers
	"Hint: Can you find the book with the class-mark?"	Puzzle 5: The Colour-Number Riddles and the Books
	"Hint: What artwork can you decode with the glasses?"	Puzzle 6: The Red Tinted Glasses and the Articles
	"Hint: How many articles, books and conference papers are there? And what number can you find on the data?"	Puzzle 7: Defeating the Villain and Making Research Open
	"Hint: What was the last clue you found?"	Any puzzle, in case you need to guide players back to a clue they found
	Clicking on this symbol will end the timer and congratulate players on finishing the game. This also triggers a sound effect (applause).	