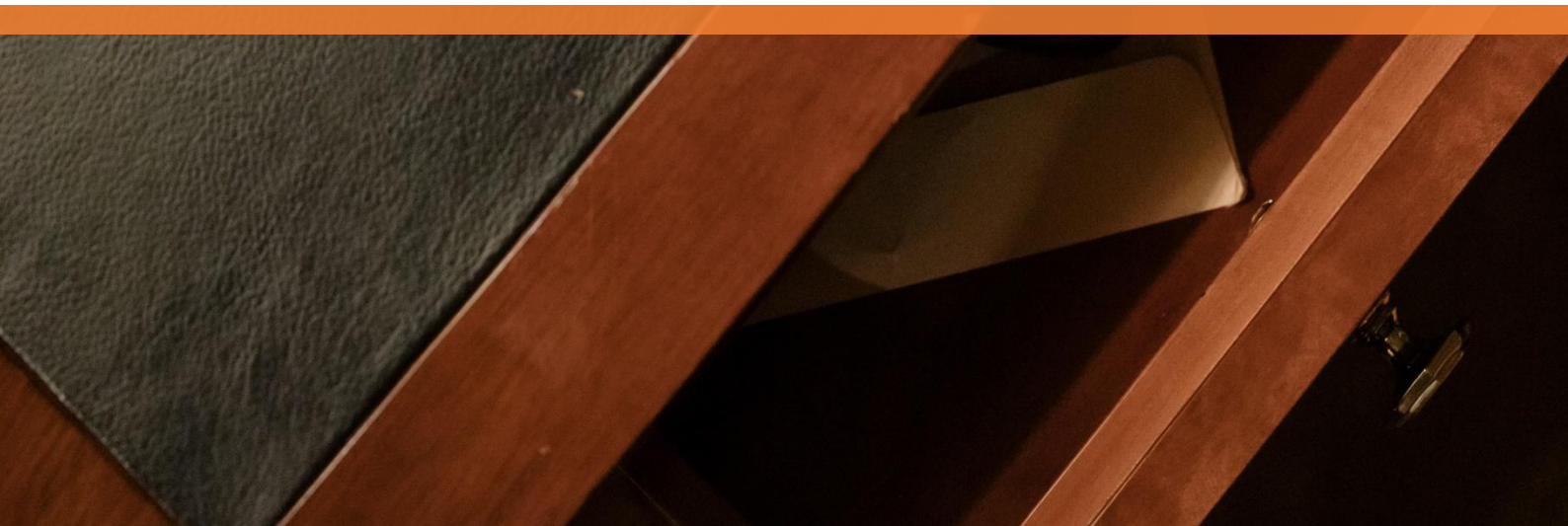




Educational Escape Rooms for Vocational Guidance

Escape Room Settings



Co-funded by the
Erasmus+ Programme
of the European Union

Escape  Stay

Escape Stay

**Making vocational education and training
a first option - not a second choice!**

www.escape2stay.eu



2020-1-DE02-KA202-007427

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DINNER FOR ONE ROYAL



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DINNER FOR ONE ROYAL



Another hotel is unable to host the Queen who is on a national visit to your country. Now you have to take her in – the problem is, she will be here in 30 minutes!

Can you prepare everything for your royal guest?

This is one of five free escape rooms you can play with your students to make vocational education career paths attractive.

In this escape room you will immerse in the
HOSPITALITY SECTOR (SERVICE)

and cover the following related skills and typical tasks:

1. Cognitive skills (memory, thinking outside the box)
2. Ability to perform under time pressure
3. Physical skills (balance)
4. Problem-solving competence

Find all of them here:
www.escape2stay.eu



After completing this escape room, your students will be able to:

- ✓ work with digital media / QR code
- ✓ distinguish mathematical sizes and calculate
- ✓ comply with complicated instructions
- ✓ understand basic cultural backgrounds
- ✓ work with sector-specific materials (cutlery, waiter pad)

RIDDLE OVERVIEW

1. QR Code Jigsaw Puzzle
2. Cleaning Royally
3. Balancing a Plate for the Queen
4. Unlocking the Silverware
5. Castle of Glass
6. Welcoming Her Majesty

CONTENTS OF THE BOOKLET

Instructions for game masters	1
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Starting the game	4
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INSTRUCTIONS FOR GAME MASTERS

This booklet will provide you with all necessary information to implement the escape room and link all needed materials.

As a game master, you will introduce the game setting and aim to your group of players. You will be available in case they need help and provide them with hints that will guide them to find the solutions of the riddles and ultimately reach the goal.

Sometimes the Game Master has to interfere without being asked to avoid players working too long in the wrong direction or to prevent them from settling on a wrong solution. But not too much! Watch out for your body language and where you look in the room to avoid unintentional hints.

Remind players that they can use a hint – sometimes they forget or pride prohibits them from asking. Read the room and be flexible with the hints. You do not have to use the exact hints that are provided in the instructions.

*To find out more about your role as a game master, please have a look at the **Escape2Stay handbook** and our complete guideline here:*

www.escape2stay.eu



GAME RULES

When introducing the Escape Room, make sure to:

- define the playing area and let the players know if there are any objects that are off limits. If the room is very full of material, mark objects that are not part of the game with a coloured dot.
- instruct them that they do not have to destroy/break any objects in the room. They will never need force to discover any clues.
- Some riddles instruct players to use a smartphone, so they are allowed to have one.
- In this room the goal is not to open the door but to assemble something in the given time. If there is a need to, the door can always be opened.
- Set the time limit to 30 minutes and make sure that the players have an opportunity to see the time passing by placing a clock or a countdown visibly in the room.



TIME FRAME

- | | |
|-------------|---|
| 120 minutes | Preparation before playing for the very first time including reading instructions, preparing materials and getting familiar with the game |
| 10 minutes | Introduction of the escape game to players |
| 30 minutes | Estimated game time for one group |
| 15 minutes | Resetting the room after one play-through |



PREPARATION

To play the game you need a suitable room where you can comfortably hide four envelopes and a locked safe (or have a locked drawer). The room needs to be big enough to build a bridge when bending backwards ("Twister" game) and at least two empty tables should be provided.

ITEMS TO PREPARE

- **4 A4 envelopes** → Place the material for each riddle into a separate envelope. Add a puzzle piece for the final puzzle to each. Hide the envelopes in the room.
- **Plain napkin** → write numbers into the corners of the folded crown (2,30; 2,70; 2,10; 1,90)
- **Waiter pad** (or similar paper stack) → write Twister instructions on it
- **Tape** for the Twister spots → Stick the "Twister" spots to the floor in an open space.
- **4 paper plates** → glue provided pattern on them. Hide the plates in the direction the head of the player forming a bridge will point (behind their back standing up on the spots).
- **Tablecloth**
- **Safe with key** (unless a lockable drawer is available) → hide in the room.
- **1 drinking glass** → Place the drinking glass close to the "Castle of glass" riddle.
- Players need a **smartphone** with QR scanner/reader
- If no **WiFi** is available, the videos have to be downloaded on a separate device



You can find all instructions here:

www.escape2stay.eu/dinner-for-one-royal-1



PREPARATION BEFORE FIRST PLAY-THROUGH

Estimated time: 120 minutes

- Reading instructions and getting familiar with the hints (45 minutes)
- Buy needed objects if necessary
- Research potential WBL offers of restaurants in the area
- printing of materials in colour (15 minutes)
- putting the riddles in envelopes and writing the number of the clue on envelopes
- setting up the room for the first time (20 minutes)
- Make notes where you have hidden the hints for players in the room. As each room is a bit different, you can choose yourself where to put the hints (2 minutes)





PREPARATION TIME TO RESET THE ROOM

Estimated time: 15 minutes

- removing traces and notes from previous group/play-through and hiding new hints (15 minutes)



PRINTABLE MATERIALS

- **QR code for the explanatory video** → cut it into multiple pieces
- **3 menu cards** → include QR codes to local restaurants and institutions offering WBL in gastronomy on the back
- **mirrored instructions for the napkin**
- **final puzzle with QR code for end video on the back** → cut it into four pieces (if your material looks very different from the one in the photo, take your own and print it with the QR code on the back)
- **Twister spots** to stick to the floor → cut them out
- **patterns for paper plates** → cut them out and glue them to the plates
- **cutlery** (with numbers on two knives) → cut them out
- **playing cards** → cut them out
- **solution grid**

Find all materials you need here:

www.escape2stay.eu/dinner-for-one-royal-1





STARTING THE GAME

It is recommended to estimate **50 minutes for a play-through**, of which you take 10 minutes to brief the players, 30 to let them play, and 10 for a quick de-briefing. Ideally, you combine it with a more intense career counselling session before or after the escape game.

After generally introducing your plans and motive to play the game with your students, continue with these steps:

- First, build groups of max. 6 players per group.
- Second, introduce the setup and the rules of the escape game.
- Finally, give them the story introduction and start the timer.



INTRO OF “DINNER FOR ONE ROYAL”

Explain that in the room the group will be confronted with several riddles. Each can be solved on its own but they might have an unexpected connection or can be solved better with a team. In general, team work makes mastering the room easier as more people know more and collaboration saves time. Encourage the students to communicate everything they discover and read every clue out loud to use everyone's brain. Let them know they can use their phones if the riddle directly asks for it but for nothing else. Remind them that they can use a hint. If they want one, they should ask you. Also let them know that if they get stuck you might offer a hint on your own discretion.

The backstory of the room will not be explained as it is presented after solving the first riddle. Give the students a hint that what is obviously visible in the room might be a good place to start (QR code puzzle). Leave room for questions but don't give anything away that concerns a riddle.

Watch the intro
video here:

<https://bit.ly/3O7PCDK>



Here is the backstory for the eyes of the Game Master only:

“Hello, this is Hotel Paradise calling.

We have an emergency and we need your help. The Queen is coming to our hotel but we cannot host her. We will send her to your hotel.

However, she will be here in 30 minutes, so please hurry.

I have three menus I will send you, but I forgot which one she chose. She comes from Brighton by the sea where she loves the food. Maybe this helps.

Please set her a perfect dinner table and our sincere apologies.

Best of luck.”



RIDDLE OVERVIEW & HINTS

Riddle 1: QR-Code Jigsaw Puzzle (Quick Win)

Description

A cut-up QR code is found obviously on a table in the room.

Once put together, it can be scanned with a smartphone to open a video that informs the players about the objective of the game including a hint to which menu the Queen wants.

The players have to find and select the right menu out of three (veggie, meat, fish). There are also several envelopes hidden in the room that contain a riddle, instructions and puzzle pieces to help you make the perfect set dinner table.

The goal is reached when players watched the explanatory intro video and have selected the correct menu.

Hints for Game Master

- You need a skill you know from your childhood – to complete a jigsaw puzzle.
- An electronic message has been sent from the other hotel to inform you about the situation.
- Use electronic helpers.

Materials needed

- Cut-up QR code



- Three menu cards



- Smartphone & WiFi (players)

- Intro video
<https://bit.ly/3O7PCDK>





Riddle 2: Cleaning Royally – the Napkin (Manual)

Description

An envelope contains a napkin and a description of how to fold it into a specific shape. The instructions are mirrored with step-by-step pictures. Players must follow the instructions to fold the napkin into a crown. The completed crown has a price written in each of the four corners that, if added, leads to a number for the final code (9).

A puzzle piece is hidden between the pages of the description.

The goal is reached when players have folded the napkin into a crown, obtained the puzzle piece and the number for the final code (9).

Hints for Game Master

- Turn the napkin into something that resembles the Queen's Crown.
- It has to be royal.
- Adding up the bill is always helpful.

Materials needed

- 1 A4 envelope
- 1 plain napkin with numbers written into the corners of the folded crown (2,30; 2,70; 2,10; 1,90)

- mirrored instructions



- puzzle piece for the final puzzle





Riddle 3: Balancing a plate for the Queen (Physical exercise)

Description

An envelope contains an almost empty waiter pad with a “Twister” game description and a puzzle piece in it.

If “Twister” game is performed on the coloured dots on the ground, the head will be pointing towards a hiding spot for the plates. There are four plates with different patterns of which the one which suits the Queen the most (resembling the British flag) must be chosen.

Under each plate is a number, the right plate will give the right number for the final code (3). The right plate must be put in the right place on the table.

The goal is reached when players have selected the correct plate, obtained the puzzle piece and the number for the final code (3)

Hints for Game Master

- Balance is everything.
- Bridge the gap. Your head is where the info is.
- Colour must match the country of origin of the Queen.
- Think about the British flag.

Materials needed

- 1 A4 envelope
- Waiter pad

PLACE



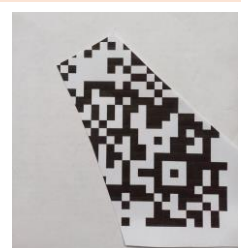
- Twister spots to stick to the floor



- 4 paper plates with printed patterns



- puzzle piece for the final puzzle





Riddle 4: Unlocking the silverware (Search & Combination Game)

Description

In the sealed envelope is a folded tablecloth.

At first there is no obvious riddle. However, if the tablecloth is unfolded, a key and a puzzle piece fall out. Without further instructions, the players have to look for something that can be opened with the key.

They will find a locked box that contains cutlery. Opening that safe with the key, the silverware will be found within. The players need to select the right knife (fish knife, as known through the menu) and set it on the table together with the fork.

On the back of both possible knives are numbers, the one on the fish knife will be the one for the final code (2).

The puzzle piece is for the final puzzle.

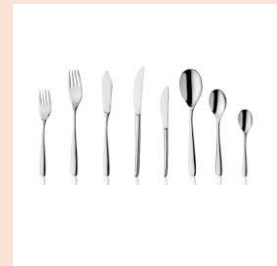
The goal is reached when players have selected the correct knife and placed the cutlery on the table, obtained the puzzle piece and the number for the final code (2)

Hints for Game Master

- Where there is a key, there is a lock.
- Set the base for the table.
- Only give the Queen the silverware she needs.

Materials needed

- 1 A4 envelope
- Tablecloth
- Prepared cutlery (with numbers on two knives)



- safe/ drawer with key
- puzzle piece for the final puzzle





Riddle 5: Castle of Glass (Sorting Game)

Description

Next to a drinking glass is an envelope with a set of playing cards.

The players must choose the right glass size for the Queen's dinner using the playing cards.

The cards with the different sizes must be sorted in ascending order. The correct order provides the toast for the Queen and thus also the password for the QR code on the glass bottom which holds the number for the final code (7).

The password consists of 4 words separated by spaces. The 1st and last word begin with a capital letter. The number of letters can be seen under the QR code.

The envelope also contains a piece for the final puzzle.

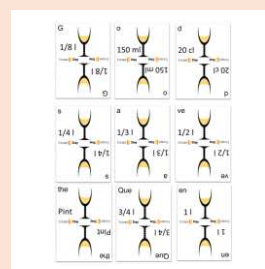
The goal is reached when players have found the 4-word password, obtained the puzzle piece and the number for the final code (7)

Hints for Game Master

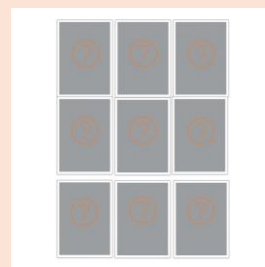
- Start with a sip before you drink up.
- Is there something in the glass?
- The password is essential for the Queen.
English Password: "God save the Queen"

Materials needed

- 1 A4 envelope
- 1 drinking glass
- Smartphone with QR code scanner
- playing cards



- solution grid



- puzzle piece for the final puzzle





Riddle 6: Welcoming Her Majesty

Description

A puzzle piece has been included in each previous riddle package. Only when players have found all riddles, they can put the four pieces of the puzzle together which shows the final set table. The picture can be used to compare the set table at the end.

The picture allocates an order to the products and shows the order of the numbers of the final code to generate the video of the Queen coming to dinner.

A QR code on the back of the puzzle will guide the players to a final video which shows the Queen arriving at the hotel.

The goal is reached when players have completed the jigsaw puzzle, set the table correctly and watched the final video by inserting the previously found password.

Hints for Game Master

- Have you used all riddle pieces?
- All pieces go together.
- Is there an order to the numbers?
- Always check behind.

Materials needed

- 1 A4 envelope
- completed final puzzle





DEBRIEFING

On completion, meet the students and give them feedback about how they performed. Explain what worked well, if and where they surprised you, where they performed better than the average or expected and where team and individual efforts were good and fruitful. Also mention what did not work so well and where improvements in the group and the individual actions could have helped solve the riddles easier.

If they completed the game in the 30 minutes timeframe, congratulate them on their success. If they needed longer, still mention the finalisation positively and explain what caused the delay.

Tell them about the connection to the VET sector gastronomy. Mention the QR codes on the back of the menu: They are actual places that offer WBL in the sector. Explain what skills and characteristics of the sector (cognitive skills, memory, thinking outside the box), ability to perform under time pressure, physical skills (balance), problem-solving competence) the different riddles showed and mention if one student was particularly good at one of them. Provide them with more information material concerning the sector in your region. Give them the QR codes to the local places to take home.

WALK-THROUGH

Students enter the room, not knowing what to expect and what their task is, besides assembling something. A cut up QR code is found obviously on a table in the room. Once put together it can be scanned to open a video on YouTube that informs the players about the objective of the game: A team member from another hotel is calling to inform them that the other hotel was supposed to host the Queen of England this evening but is now unable to accommodate her. Now the players must host her – the problem is, she will be here in 30 minutes! The other hotel has sent them three menus with only a small hint on which one the palace chose: She comes from Brighton, a city by the sea, where she loves the food and wants to some similarity. Now all staff – the students in the room - has to work together to serve Her Majesty with the perfectly set dinner table. Close to the QR code puzzle, the students find the three menu cards of fish, meat and veggie and select the menu the Queen wants (fish).

The players look for other hints in the room. Each item for the perfectly set dinner table they need to assemble lies behind one riddle which can be found in four envelopes hidden in the room. These envelopes contain one riddle including all needed material and a puzzle piece in each.

Have a look at this video from the testing phase:

<https://youtu.be/yk6E5Y0dasg>





The order in which the envelopes are found and/or solved does not matter but all envelopes need to be found for the puzzle pieces for the final puzzle. All riddles need to be solved to generate the code for the final video that shows the Queen arriving.

One of the envelopes contains a napkin and a description of how to assemble it. The instructions are mirrored step-by-step pictures. The pictures must be followed correctly to fold the napkin into a crown. The completed crown has a price written in each of the four corners that, if added, lead to a number for the final code (9). A puzzle piece is hidden between the pages of the description.

Another envelope contains an almost empty waiter pad with a “Twister” game description and a puzzle piece in it. The students need to play a light version of “Twister” on the coloured dots on the ground, their head will be pointing towards a hiding spot for the plates. They will find four plates with different patterns of which they choose the one which suits the Queen the most (resembling the British flag). Under each plate is a number, the right plate gives the right number for the final code (3). The students place the right plate in the right place on the table.

In another sealed envelope is a folded tablecloth. At first the students find no obvious riddle. However, when the tablecloth is unfolded, a key and a puzzle piece fall out. Without further instructions, the players look for something that can be opened with the key. They find a locked box (or a locked drawer) that contains cutlery. Opening that safe with the key, they find silverware within. The players select the right knife (fish knife, as known through the menu) and set it on the table together with the fork. On the back of both possible knives are numbers, the one on the fish knife is the one for the final code (2). The puzzle piece is kept for later.

Next to a drinking glass the students find an envelope with a set of playing cards. The players choose the right glass size for the Queen’s dinner using the playing cards. The cards with the different sizes displayed are to be sorted in ascending order on the provided grid. The correct order provides the toast for the Queen and thus also the password (God save the Queen) for the QR code on the glass bottom which holds the number for the final code (7). The password consists of 4 words separated by spaces. The first and last word begin with a capital letter. The number of letters can be seen under the QR code. Again, the envelope also contains a piece for the final puzzle that is kept for later.

After the students have found and solved all riddles, they assemble the final puzzle with the pieces from each envelope. The picture then shows the set table. The students use the picture to compare the set table to their result in the room. The picture allocates an order to the products that show the order of the numbers of the final code to generate the video of the Queen coming to dinner. A QR code on the back of the puzzle guides the players to a padlet that once the code is inserted displays the final video which shows the Queen arriving at the hotel.



Dinner for One Royal?

PRINT PDF

Riddle #1 Icebreaker (Puzzle)





MENU VEGGIE

www.escape2stay.eu

Dinner for one Royal

MENU VEGGIE

Champanger Empfang

Champagne reception

Topinambur Suppe

Jerusalem Artichoke Soup

Rote Beete

Röstrüben, Rote-Beete-Karamell

Beetroots

wasted beets, beetroot caramel, pear

Gerösteter Blumenkohl

Romanesco, gespickelte Trauen, Minzöl

Roasted Cauliflower

Romanesco, pickled grapes, mint oil

Tarte Tatin

konfierter Sellerie, karamellisierte rote Zwiebel

Sprossen-Tempura, Pastinakenschaum

Tarte Tatin

celery confit, caramelized red onion

sprouts tempura, parsnip foam

Schokoladenfondant

Grand Marier Mousseline

Nougat Partfrait, Blutorange

Chocolate Fondant

Grand Marnier mousseline

nougat parfait, blood orange

.....



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1. Schloss Neuhardenberg

www.schlossneuhardenberg.de

2. Villa Contessa

www.villa-contessa.de

If you want to become a cook, hotel trader or restaurant specialist please click on the link below:

<https://www.ihk-ostbrandenburg.de/>

.....



MENU FISH

www.escape2stay.eu

Dinner for one Royal

MENU FISH

Champanger Empfang

Champagne reception

Topinambur Suppe

Jerusalem Artichoke Soup

Austern Triple

Champanger Gel / Gurke, Ingwer&Zitronenpüree / Schalottenessig

Oysters Triplets

champagne gel / cucumber, ginger & lemon puree / shallot vinegar

Langoustine Kataifi

Pastinakenpüree, Romanesco, Olive-Tapenade

Langoustine Kataifi

parsnip puree, Romanesco, olive tapenade

Heilbutt aus Brighton

sautiertes Heibuttfilet, Rüben, Pommes Anna

Brokkolipüree, Tempura Sprossen, Bisque

Halibut from Brighton

seared halibut fillet, turnips, "pomes Anna"

broccoli puree, tempura sprouts, bisque

Schokoladenfondant

Grand Marier Mousseline

Nougat Partfrait, Blutorange

Chocolate Fondant

Grand Marnier mousseline

nougat parfait, blood orange

.....



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1. [Restaurant “Das Dorsch”](#)

www.das-dorsch.de

2. [Fischerei Köllnitz](#)

www.koellnitz.de

If you want to become a cook, hotel trader or restaurant specialist please click on the link below:

<https://www.ihk-ostbrandenburg.de/>

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MENU MEAT

www.escape2stay.eu

Dinner for one Royal

MENU MEAT

Champanger Empfang

Champagne reception

Rindfleischsuppe mit Nudeln

Beef soup with noodles

Foie Gras

geröstete feige, Apfelnüsse

Foie Gras

wasted fig, apple puree

Gerösteter Blumenkohl

Romanesco, gespickelte Trauen, Minzöl

Roasted Cauliflower

Romanesco, pickled grapes, mint oil

Schweinenackensteak,

eingelegt in Wodkamarinade, serviert mit Kümmelkartoffeln und Salat

Steak of pork neck,

marinated in vodka, served with fried caraway-potatoes and a salad

Schokoladenfondant

Grand Marier Mousseline

Nougat Partfrait, Blutorange

Chocolate Fondant

Grand Marnier mousseline

nougat parfait, blood orange





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(all companies are also VET training companies)

1. Restaurant & Hotel “Esplanade”
www.esplanade-resort.de

2. Restaurant „Park-Café“ & Theater am See
www.restaurant-park-cafe.de

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<https://www.ihk-ostbrandenburg.de/>

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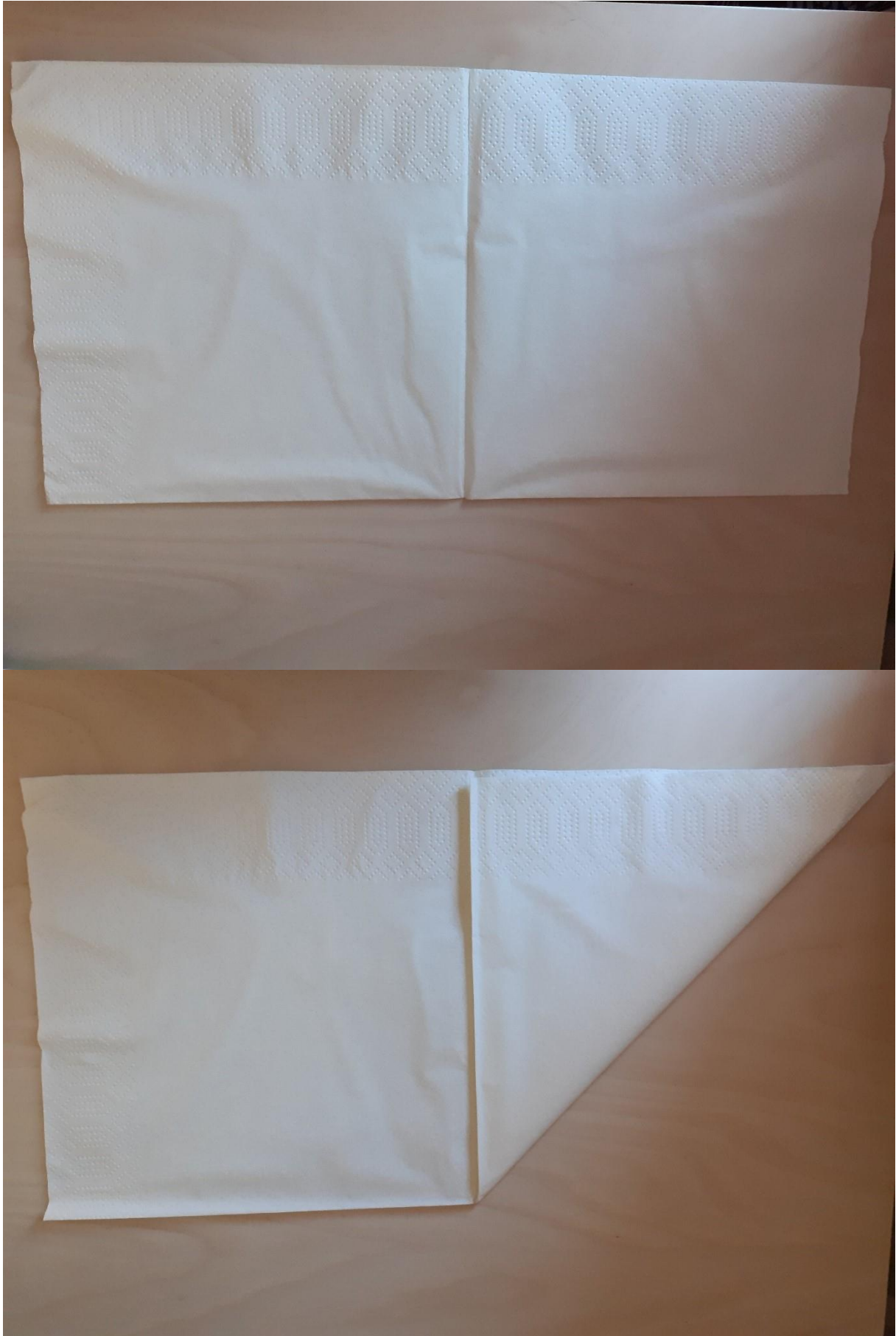
Riddle #2: Cleaning royally – the napkin (Manual)

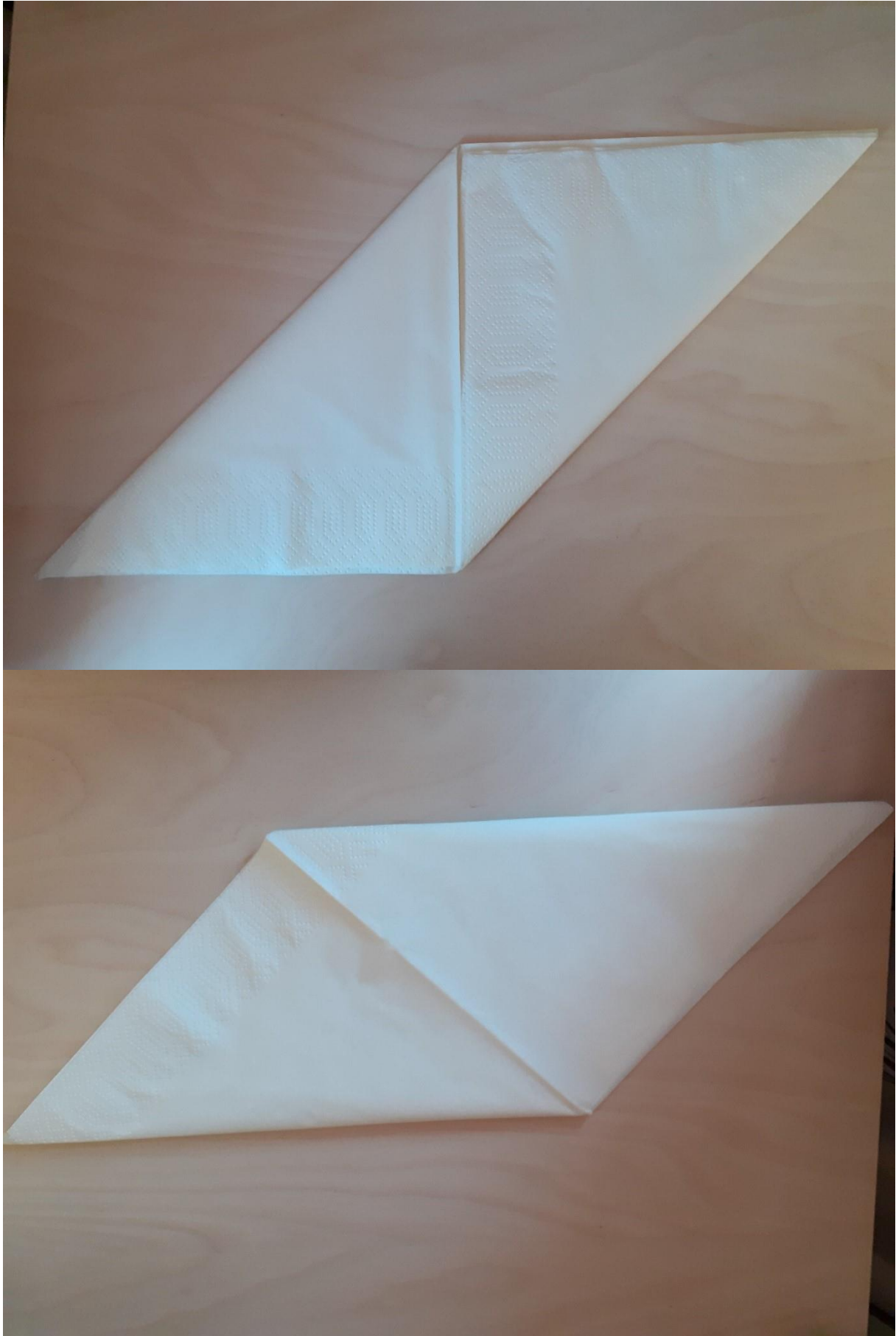
A TABLE NAPKIN FOR THE QUEEN

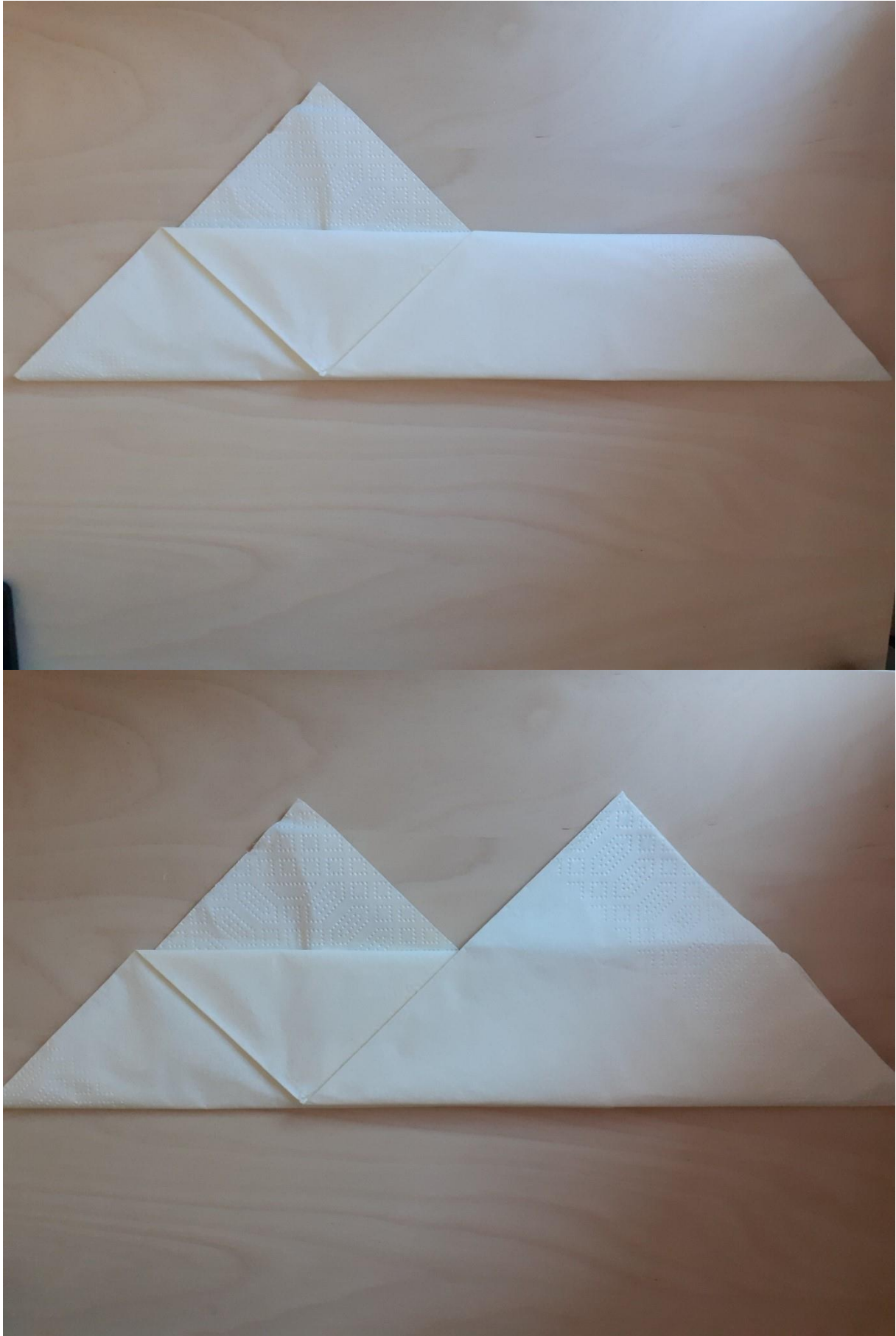
THE QUEEN'S TABLE MANNERS ARE AS PERFECT AS POSSIBLE. THEREFORE, TO PROTECT HER VALUABLE CLOTHING, SHE ALWAYS PUTS SOMETHING ON HER KNEES WHEN EATING.

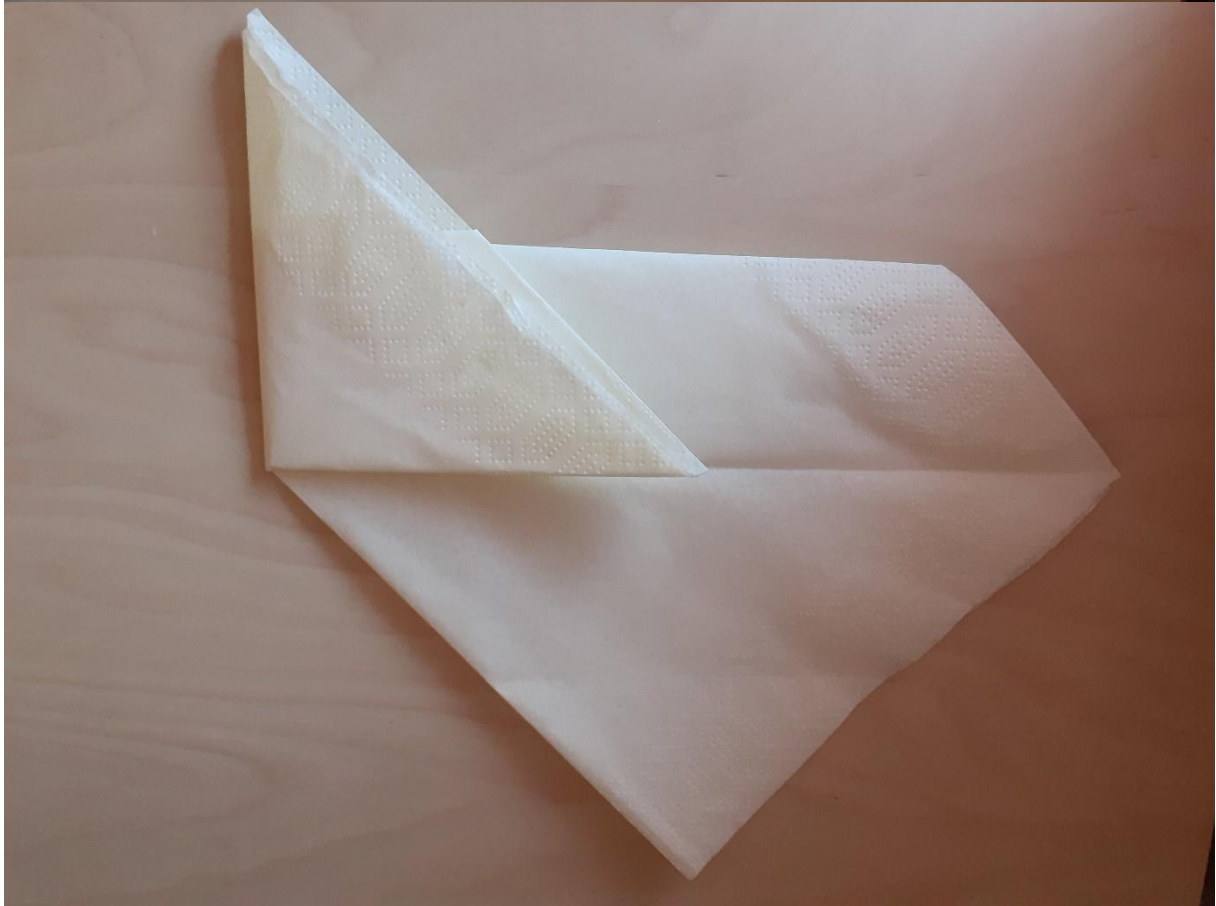
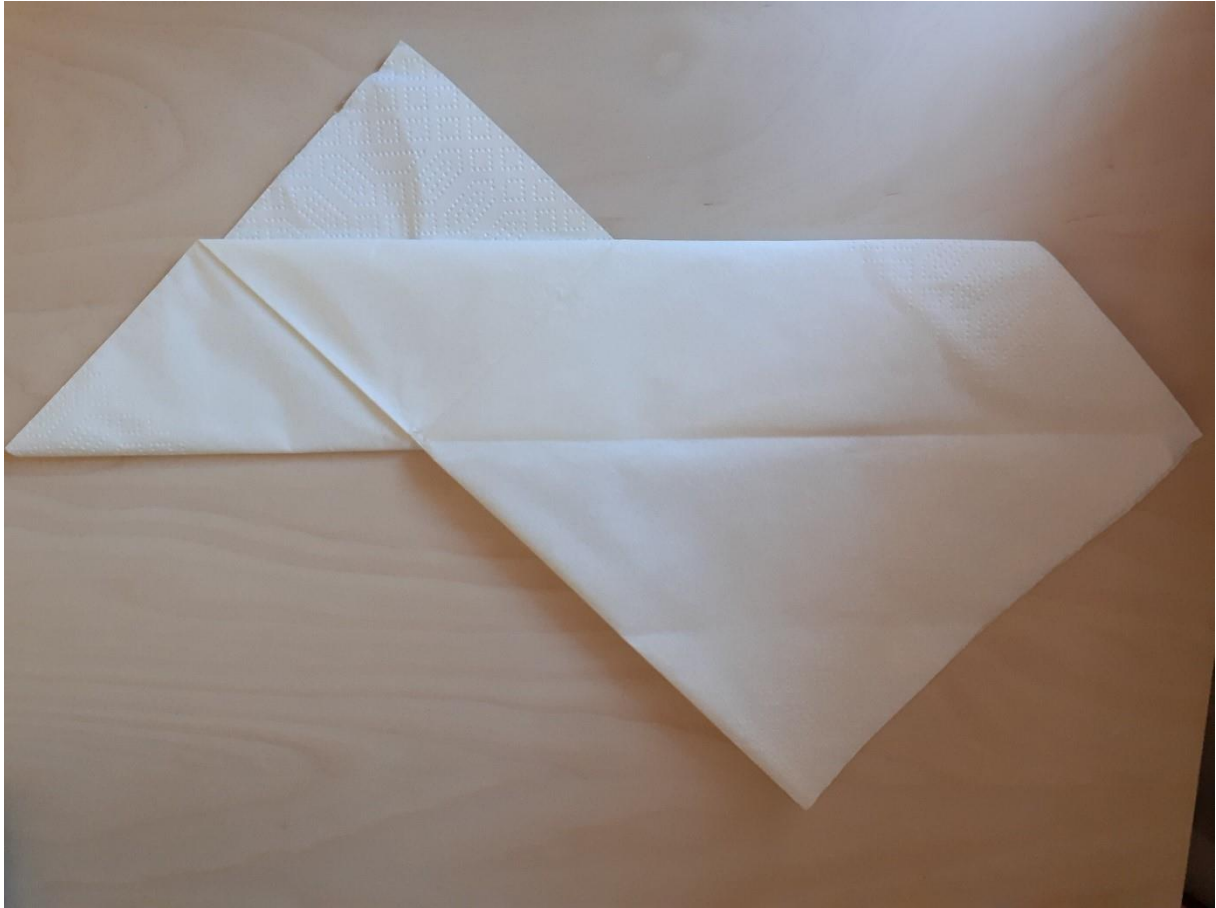
PUT THIS ON THE TABLE BEFORE SHE COMES. TO ALSO PLEASE THE EYE IT NEEDS TO HAVE A NICE FORM.

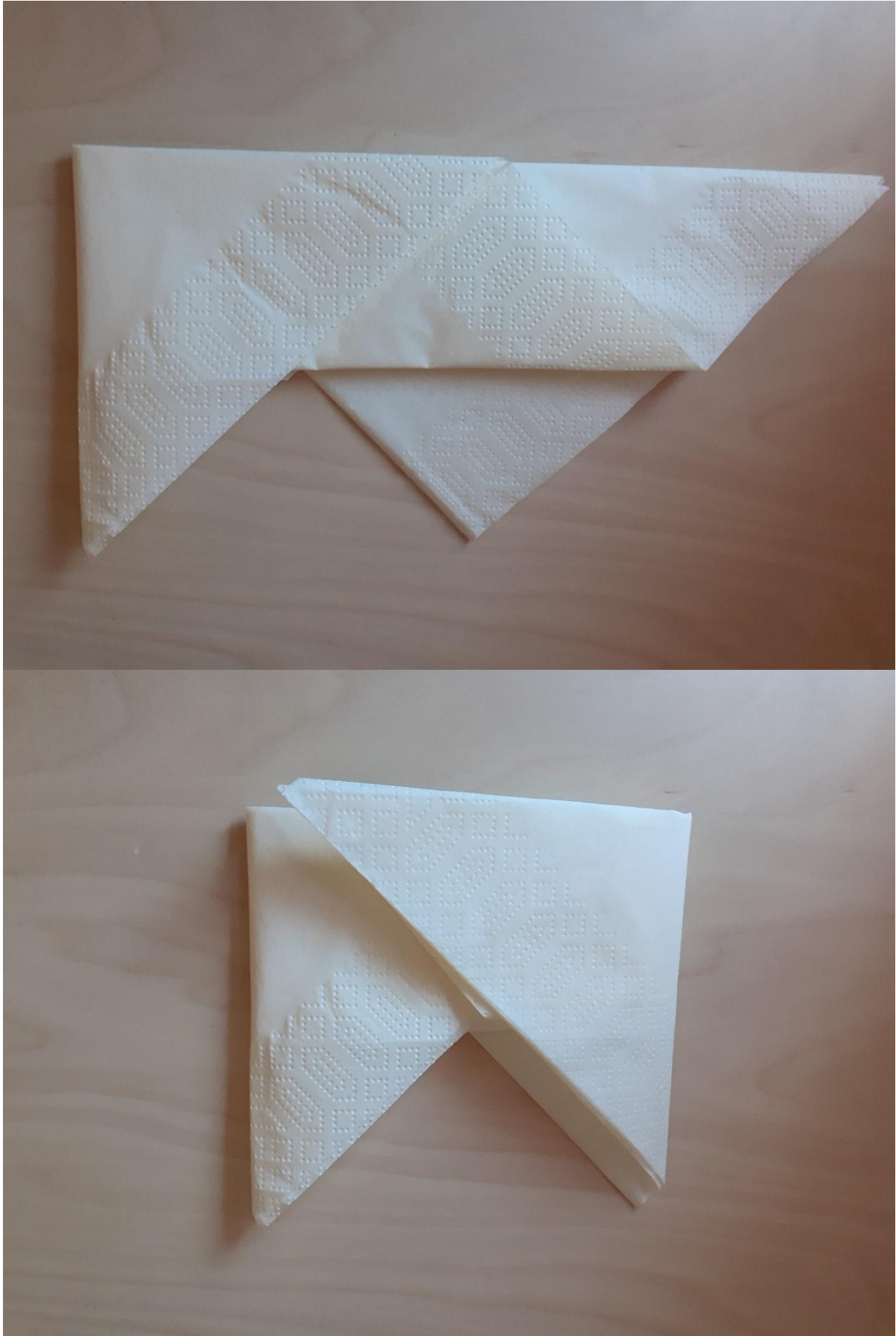
FOLLOW THE DIRECTIONS IN THE PICTURES, BUT BE AWARE, THINGS MIGHT JUST BE TURNED ON ITS HEAD.

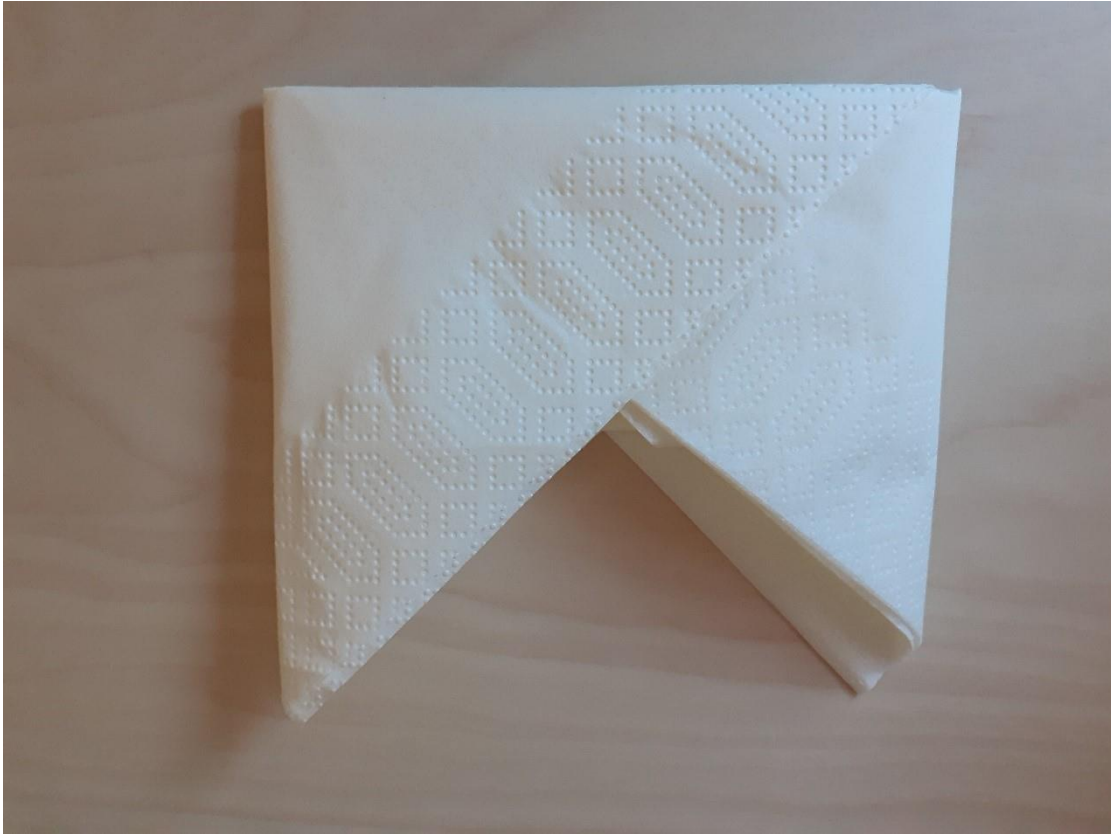








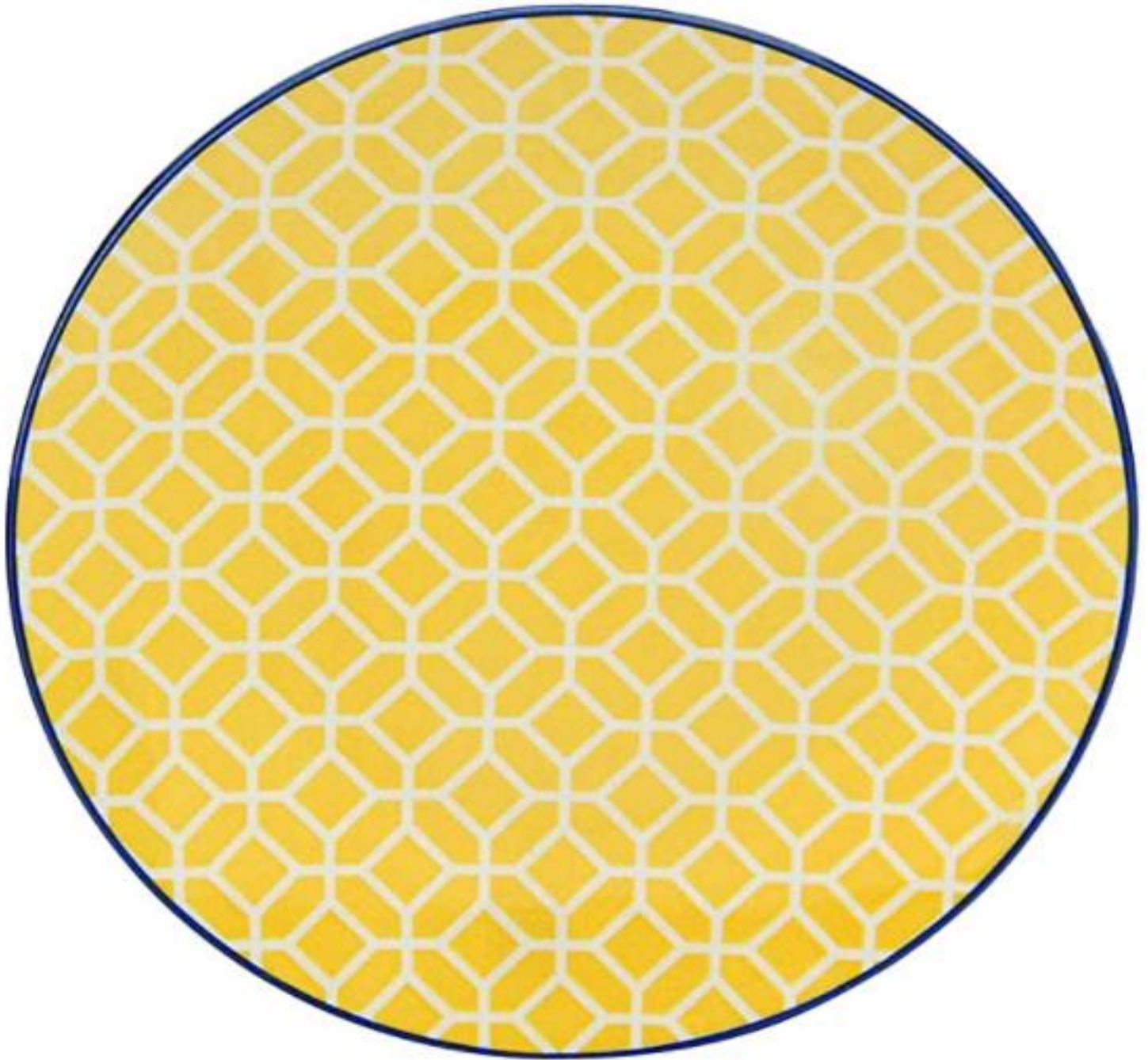






Riddle #3: Balancing a plate for the Queen (Physical exercise)

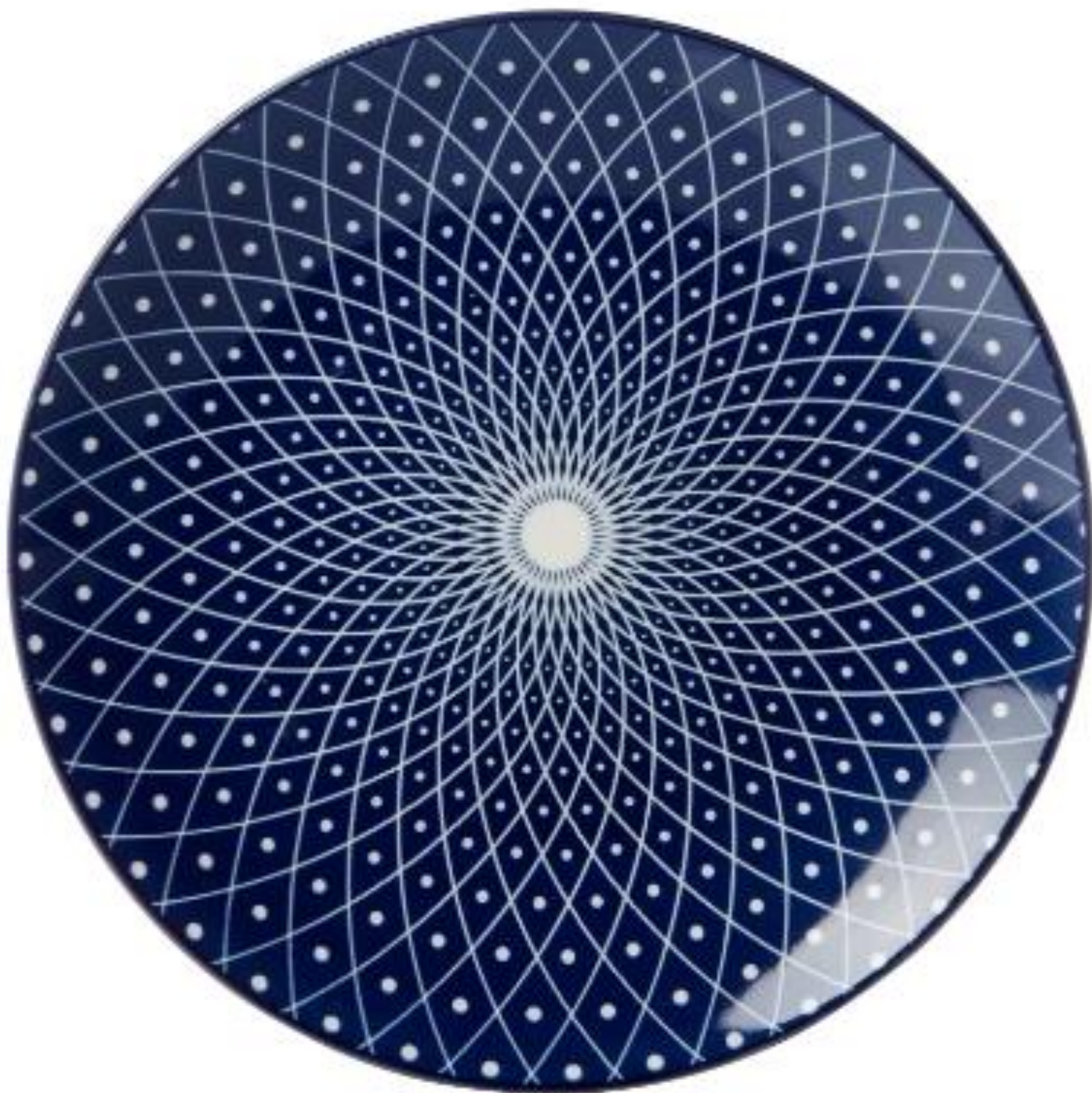






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“BUILDING BRIDGES – WHERE IS YOUR HEAD AT?”

Instructions for attaching the playing fields for the Game Master before opening the room:
Below you will find two templates for the individual playing fields (red and yellow). Please fasten the yellow (right) and the red (left) field at the same height parallel to each other at a distance of 40 cm. When fastening the fields, make sure that standing on the fields, the desired direction is in the middle behind your back. Hide the plates in that direction.

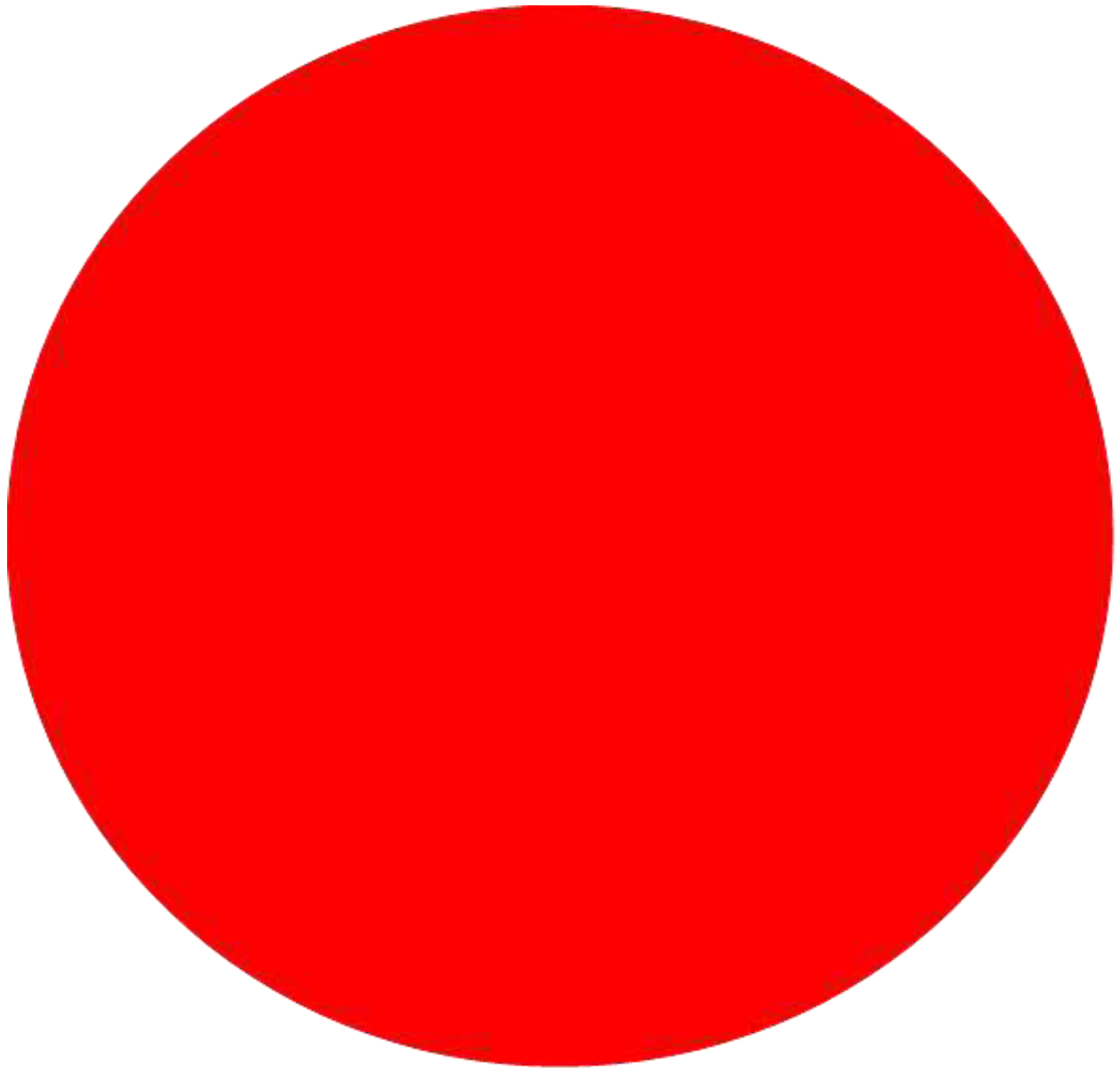
Instructions for Twister:

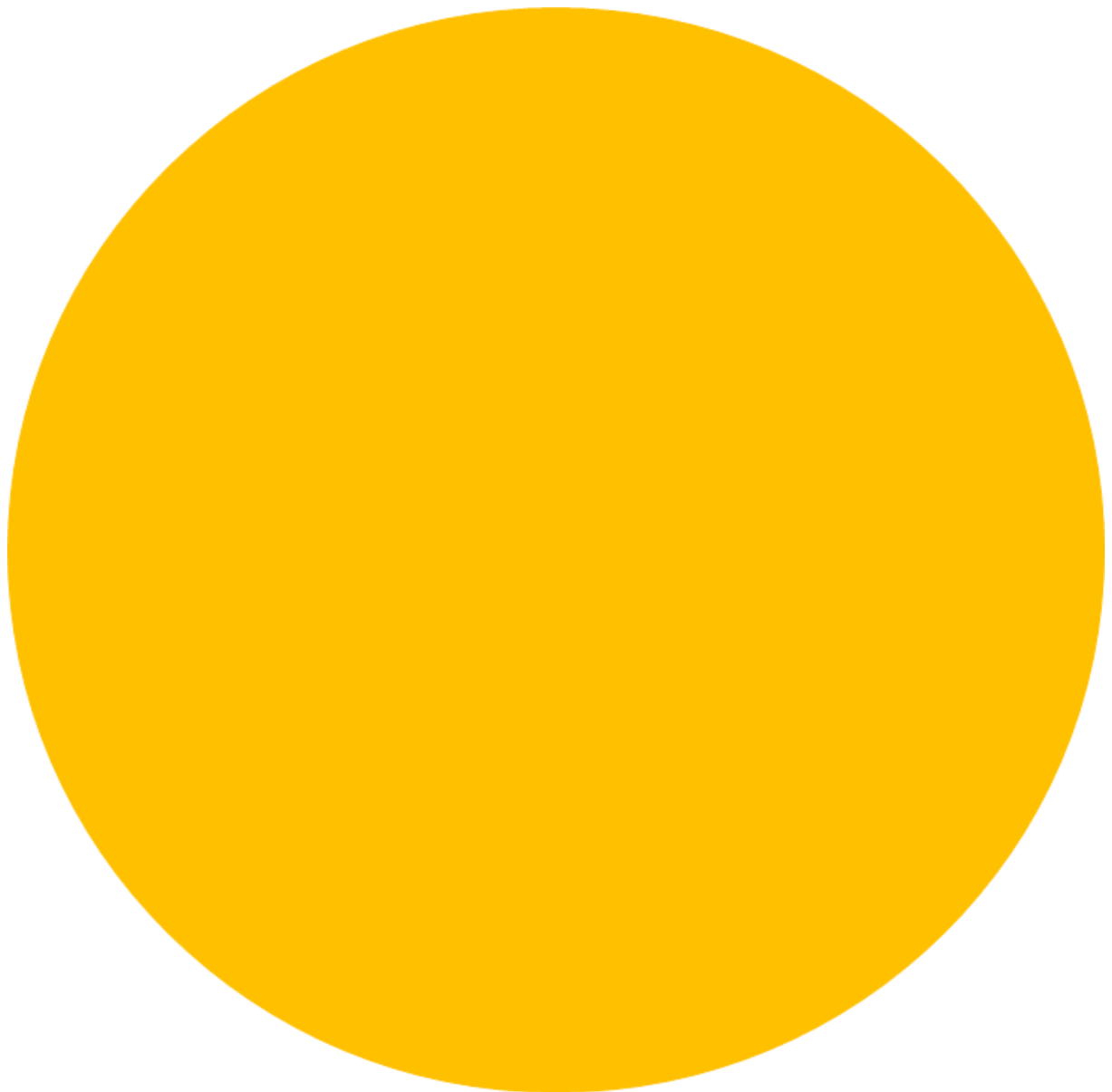
(The following text needs to be written on different pages of a waiter pad or another paper block)

„PUT YOUR RIGHT FOOT ON THE ONE COLOUR WHICH IS NOT REPRESENTED IN THE BRITISH FLAG .”

“PLACE YOUR LEFT FOOT ON THE NON-EXISTENT COLOUR.”

**“BEND OVER BACKWARDS LIKE THE LONDON BRIDGE.
WHERE IS YOUR HEAD AT?”**





Riddle #4: Unlocking the silverware (Search & Combination Game)

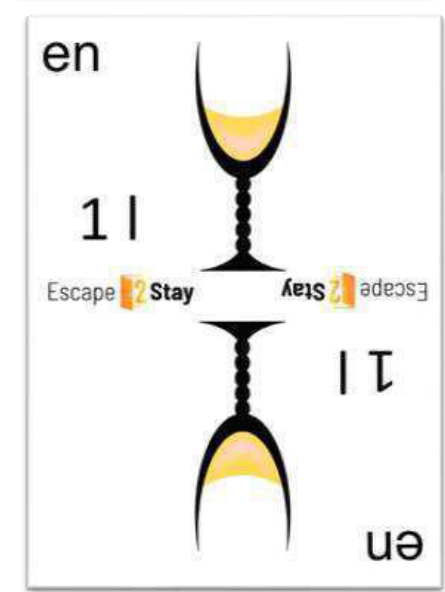
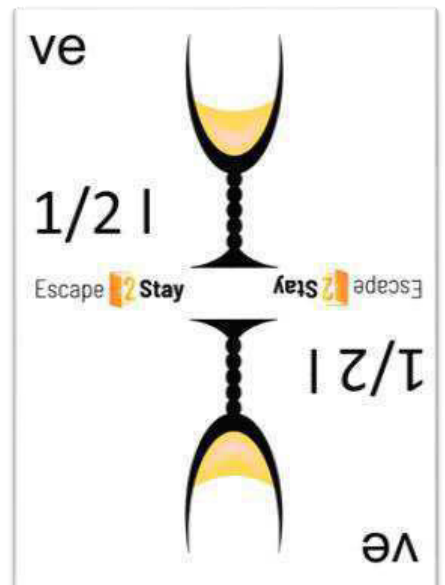
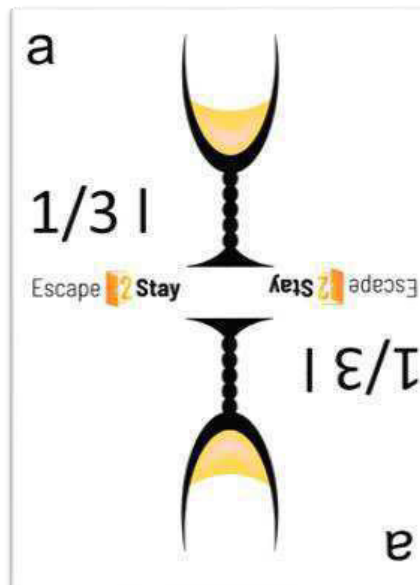
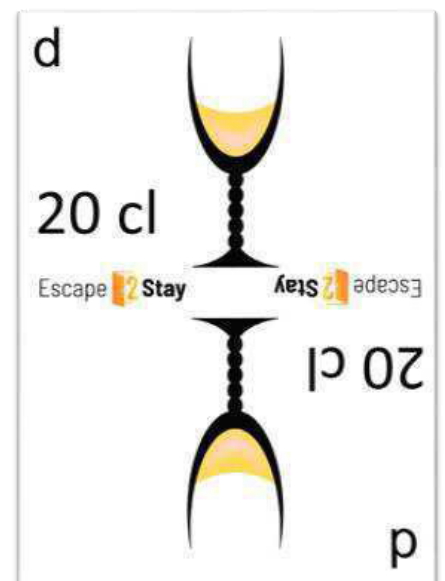
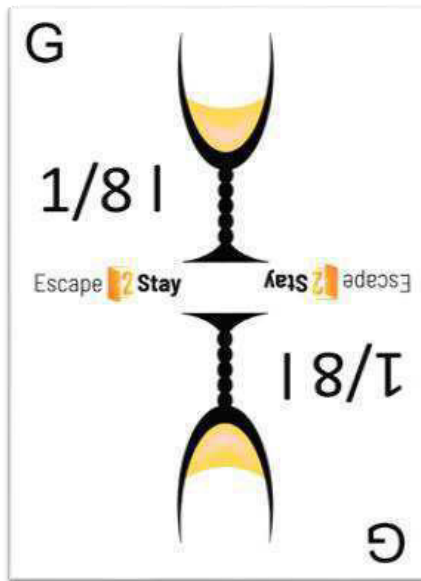




Riddle #5: Castle of Glass (Sorting Game)



PW: -----

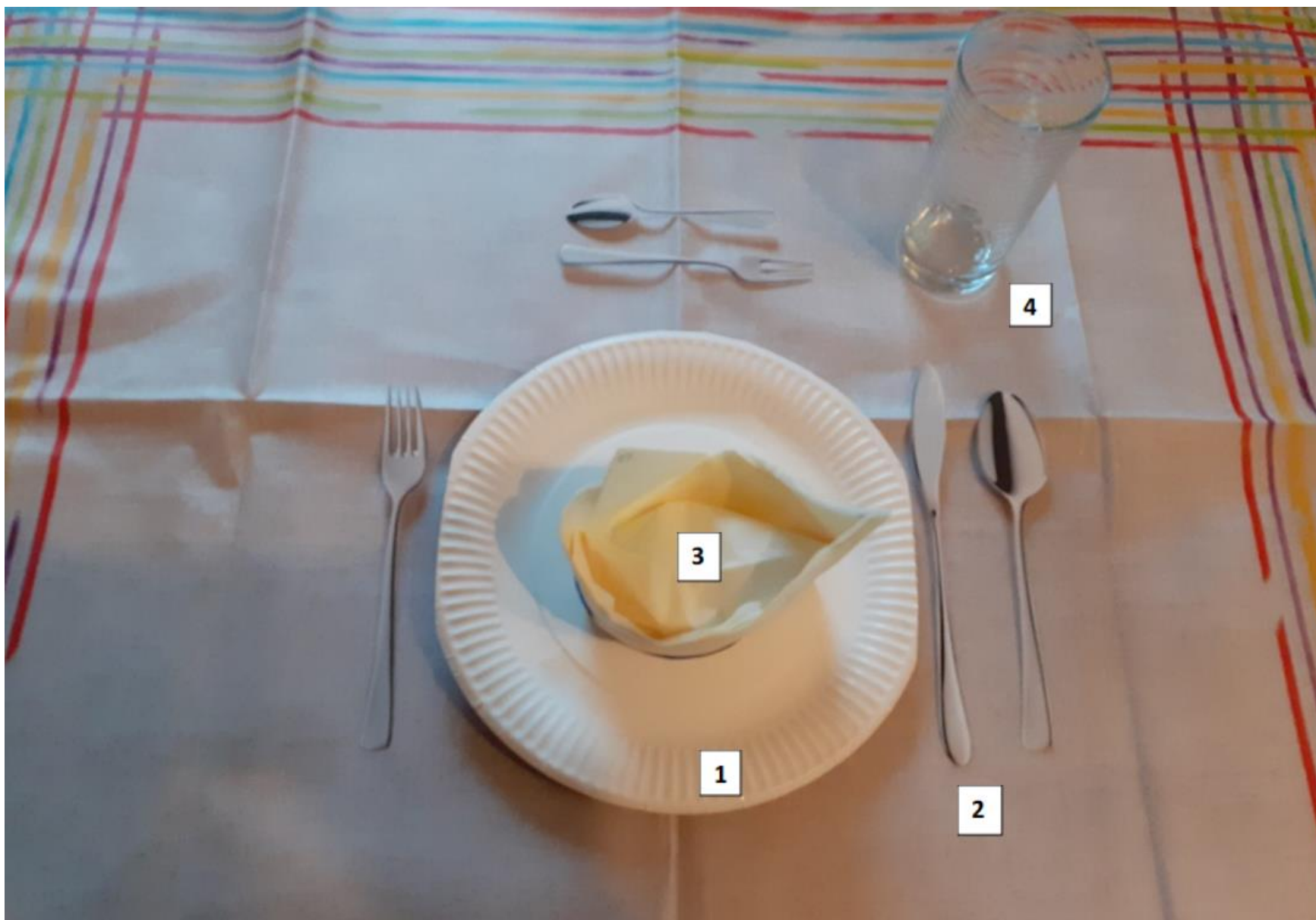






Riddle #6: Final Puzzle





Escape Stay



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THINK AS FAST AS LIGHTNING



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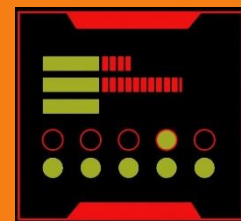
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THINK AS FAST AS LIGHTNING



You and your class were on a school trip to a close-by VET school, where you decided to check out an interesting room. However, after you enter the room, the door closes, and you cannot open it...

Can you get out before the teacher notices your absence?

This is one of five free escape rooms you can play with your students to make vocational education career paths attractive.

Find all of them here:
www.escape2stay.eu

In this escape room you will immerse in the

MECHATRONICS

and cover the following related skills and typical tasks:

1. Maths
2. Electronics
3. Arduino
4. Binary
5. Colour code



After completing this escape room, your students will be able to:

- ✓ Name the combination of disciplines that are present in Mechatronics.
- ✓ Name the basic physical components in Mechatronics.
- ✓ Understand how programming can improve daily life.
- ✓ Understand what a microcontroller is, and some of its functionalities.

RIDDLE OVERVIEW

1. Timer
2. Find the Components
3. Maths Problem
4. Colour Riddle

CONTENTS OF THE BOOKLET

Instructions for game masters	1
Preparation	2
Starting the game	4
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INSTRUCTIONS FOR GAME MASTERS

This booklet will provide you with all necessary information to implement the escape room and link all needed materials.

As a game master, you will introduce the game setting and aim to your group of players. You will be available in case they need help and provide them with hints that will guide them to find the solutions of the riddles and ultimately reach the goal.

Sometimes the Game Master has to interfere without being asked to avoid players working too long in the wrong direction or to prevent them from settling on a wrong solution. But not too much! Watch out for your body language and where you look in the room to avoid unintentional hints.

Remind players that they can use a hint – sometimes they forget or pride prohibits them from asking. Read the room and be flexible with the hints. You do not have to use the exact hints that are provided in the instructions.

*To find out more about your role as a game master, please have a look at the **Escape2Stay handbook** and our complete guideline here:*

www.escape2stay.eu



GAME RULES

When introducing the Escape Room, make sure to:

- define the playing area and let the players know if there are any objects that are off limits. If the room is very full of material, mark objects that are not part of the game with a coloured dot.
- instruct them that they do not have to destroy/break any objects in the room. They will never need force to discover any clues.
- Set the time limit to 30 minutes and make sure that the players have an opportunity to see the time passing by placing a clock or a countdown visibly in the room.



TIME FRAME

120 minutes	Preparation before playing for the very first time including reading instructions, preparing materials and getting familiar with the game
10 minutes	Introduction of the escape game to players
30 minutes	Estimated game time for one group
15 minutes	Resetting the room after one play-through



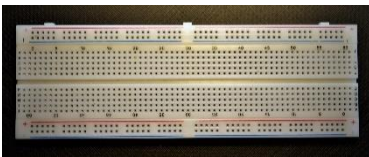
PREPARATION

ITEMS TO PREPARE

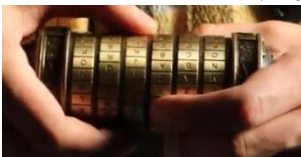
- 2 Arduino



- 1 Breadboard



- 2 USB cables
- 4 Arduino kit cables
- 1 RGB LED
- UV invisible ink pen
- UV flashlight
- six-letter word lock (Cryptex)



- 4-digit number lock
- 3-digit number lock
- 1 safe (or lockable box) with 3-digit lock
- 1 safe with key (or lockable box with key lock)
- 2 boxes
- 2 clocks
- 2 chains to close the boxes with a lock: Use the best locks that you can buy and have in consideration the size of the boxes.
- Various sheets of paper – some to provide clues, some to distract with any kind of content
- Pens & paper for the players



You can find all instructions here:

www.escape2stay.eu/think-as-fast-as-lightning





PREPARATION BEFORE FIRST PLAY-THROUGH

Estimated time: 120 minutes

- Reading instructions and getting familiar with the hints (45 minutes)
- Buy needed objects if necessary
- setting up the room for the first time (20 minutes)
- Make sure that all materials in the room are well closed, and accessible.
- Do a small test on the room and on all the materials to check if they are functioning properly.
- Make notes where you have hidden the hints for players in the room. As each room is a bit different, you can choose yourself where to put the hints (2 minutes)



Find all materials you need here:

www.escape2stay.eu/think-as-fast-as-lightning



PREPARATION TIME TO RESET THE ROOM

Estimated time: 15 minutes

- removing traces and notes from previous group/play-through and hiding new hints (15 minutes)





STARTING THE GAME

It is recommended to estimate **50 minutes for a play-through**, of which you take 10 minutes to brief the players, 30 to let them play, and 10 for a quick de-briefing. Ideally, you combine it with a more intense career counselling session before or after the escape game.

After generally introducing your plans and motive to play the game with your students, continue with these steps:

- First, build groups of max. 6 players per group.
- Second, introduce the setup and the rules of the escape game.
- Finally, give them the story introduction and start the timer.



INTRO OF “THINK AS FAST AS LIGHTNING”

This Escape Room will show you some basic knowledge concerning the Mechatronics VET course. You will understand many of the terms that are used in this subject. You will also understand the number of subjects that are presented in this course. The Escape Room will introduce you to some theoretical aspects, but also some practical parts of mechatronics.

You are not allowed to use your mobile phone, nor any other device that is not in the room. Everything that you need to fulfil the escape from the room is present in the room. You can only use each object once. Work as a team to solve the riddles and communicate with each other so you all have the same information.

Now the story:

You and your class were on a school trip to a close-by VET school. This trip was intended to give you some ideas of what you can study if you go to that specific VET School. You and a group of your friends found a room and decided to leave the rest of the class and checkout that room. However, after you enter the room, the door closes, and you cannot open it. All of you know that if your teacher notices that all of you have disappeared you will have major problems at your school. You have 30 minutes to leave the room.

*Watch the intro
video here:*

<https://bit.ly/3O7PCDK>





RIDDLE OVERVIEW & HINTS

Riddle 1: Timer (Code in Words)

Description

The first task to be done is to connect a timer that will start counting down the clock. Above the timer there is the following sentence:

Look at th3 t1m3.

The code written in this sentence will open a lock. This will be a little more difficult to understand since in the room there will be at least two other clocks that the players may want to check.

After understanding the code, the players will have to open a box where they will find a UV flashlight and a sheet of paper stating:

“Use me to find the components”.

The goal is reached when players have found the code in the riddle (313), and when they open the first locker.

Hints for Game Master

- There will be a sheet saying that the first clue can be found by connecting the timer.
- The phrase is also a clue.

Materials needed

- Arduino programmed with a timer



- Power supplier
- Two other clocks
- A box locked with a three-digit padlock
- A sheet of paper with the phase “Use me to find the components”
- A sheet of paper with the clue that the timer has to be connected.



Riddle 2: Find the Components (Invisible Ink)

Description

After finding the UV flashlight, the players must use it on the papers that can be found in the room.

They will find four pieces of paper with words written in invisible ink. One of those four pieces will have a binary code sheet, and the other three will have the information needed to unlock the next lock.

After unlocking this new lock, they will find several components and a sheet of paper with an image and a maths problem.

The goal is reached when players have found how to reach the components, and have managed to open the second lock.

Hints for Game Master

- The game master can tell the players to use the lamp on the sheets of paper.
- The game master can tell them that binary code is a type of language.

Materials needed

- UV ink pen and UV flashlight
- Several sheets of paper with the information written in invisible UV ink
- Arduino



- RGB LED cables
- USB cable
- Sheet of paper with the full scheme ((the way to connect the Arduino components that the students must develop later) and the maths problem



Riddle 3: Math Problem

Description

After finding the components and the piece of paper with the image the students will understand that one component is still missing.

To find that component they will have to solve a simple math problem that will give them a code for a four number lock.

After solving the math problem, they will find all the components to develop the build as per image.

Materials needed

- Sheets of paper
- Pens
- Box
- 4-digit lock
- Breadboard
- Math problem

The goal is reached when players have fulfilled the math problem and have reached a result that unlocks the four number lock.

Hints for Game Master

- The Game master can inform the players that there is a math problem to solve.
- The GM can also inform the players to respect the calculation order (multiplication and division are first, and then the rest).



Riddle 4: Colour Riddle

Description

The players will have to create the “robot”, only after developing properly the build the RGB will give a colour code.

The way the players can read the code is using a sheet of paper with a code key that will be in the room.

The word will be a **SENSOR** and will be used to open a six-letter word lock. In that six-letter word lock, the players will find a key to open the last safe, in this last lock, they will find the room keys.

The goal is reached when players have understood the colour code and found that the missing word is SENSOR. At the end of this riddle the room is fulfilled.

Hints for Game Master

- The GM will have to advise the players to develop the build exactly as shown in the image. This is important since if the build is slightly different that will give a very different code.

Materials needed

- Sheets of paper
- Pens
- someplace to connect the USB cable
- Six-letter word lock
- Paper with colour code
- Keys to the last safe
- Safe with key
- Room keys



DEBRIEFING

On completion, meet the students and give them feedback about how they performed. Explain what worked well, if and where they surprised you, where they performed better than the average or expected and where team and individual efforts were good and fruitful. Also mention what did not work so well and where improvements in the group and the individual actions could have helped solve the riddles easier.

If they completed the game in the 30 minutes timeframe, congratulate them on their success. If they needed longer, still mention the finalisation positively and explain what caused the delay.

Ask the following reflective questions:

- What did you feel about your performance in the Escape Room?
- What did you learn in it?
- What subjects will you learn in the Mechatronic course?
- How did you feel in the Escape Room?
- Are you interested in learning more about Mechatronics?
- Do you see yourself working in this field?
- How was your teamwork inside the Escape Room?



WALK-THROUGH

Students enter the room without knowing the topic of the room. The Game Master brief them about the story behind their entrance into that specific room. The students are there since they were on a school trip to a VET school, and they walked aside from the rest of the class to check this room. The students got stuck in the room and if they do not find a way out in 30 minutes the teacher and the school director will discover and will punish them.

The timer starts right after the story is told to the students. After the timer starts the students will look around the room collecting all the boxes and locks, they can find. Since there is a sign that says that the room is to start at a certain point, they will understand that they must connect the Arduino into a plug. This action will start a new timer that was written on it the following "Look at th3 t1m3".

From all the collected materials that the students have found one box is closed by some chains and a three-digit lock. This box contains a flashlight that is useful to read invisible ink. The students will start to use this flashlight on the papers that they will find in the classroom. They will detect that some of them have binary code written on them. They will also find a piece of paper that has a list of numbers in binary. Students will discover through this the code for another three-digit locker. In this locker, the students will find almost all the Arduino components that they need. They will also find in the same box a piece of paper that contains the Arduino build that they need to develop (this paper also explains the components) and a math problem at the end.

The participants will understand that they are missing an important component in developing the build, that component is the whiteboard. The students must resolve the math problem that can be found in the build sheet in order to have access to the four-digit code that will hope the locker where the whiteboard is hidden.

After having all the components, the students have to develop the Arduino build that they have on the piece of paper. The students must develop the build exactly as it is in the paper in order to achieve the result. The build when connected to a power source will turn on a multicolour led. This led will change its colours in order to make a code. Students will be able to find a paper with an association between letters and colours, they must use this paper to find the word SENSOR that is being emitted by the LED.

The word SENSOR will be used to open the six-letter locker that has the room key inside. This will trigger the room to open and the game to finish. At this moment the Game Master will debrief all the participants in order to collect the feedback and to make the students think about what they have learned.

Have a look at this video from the testing phase:

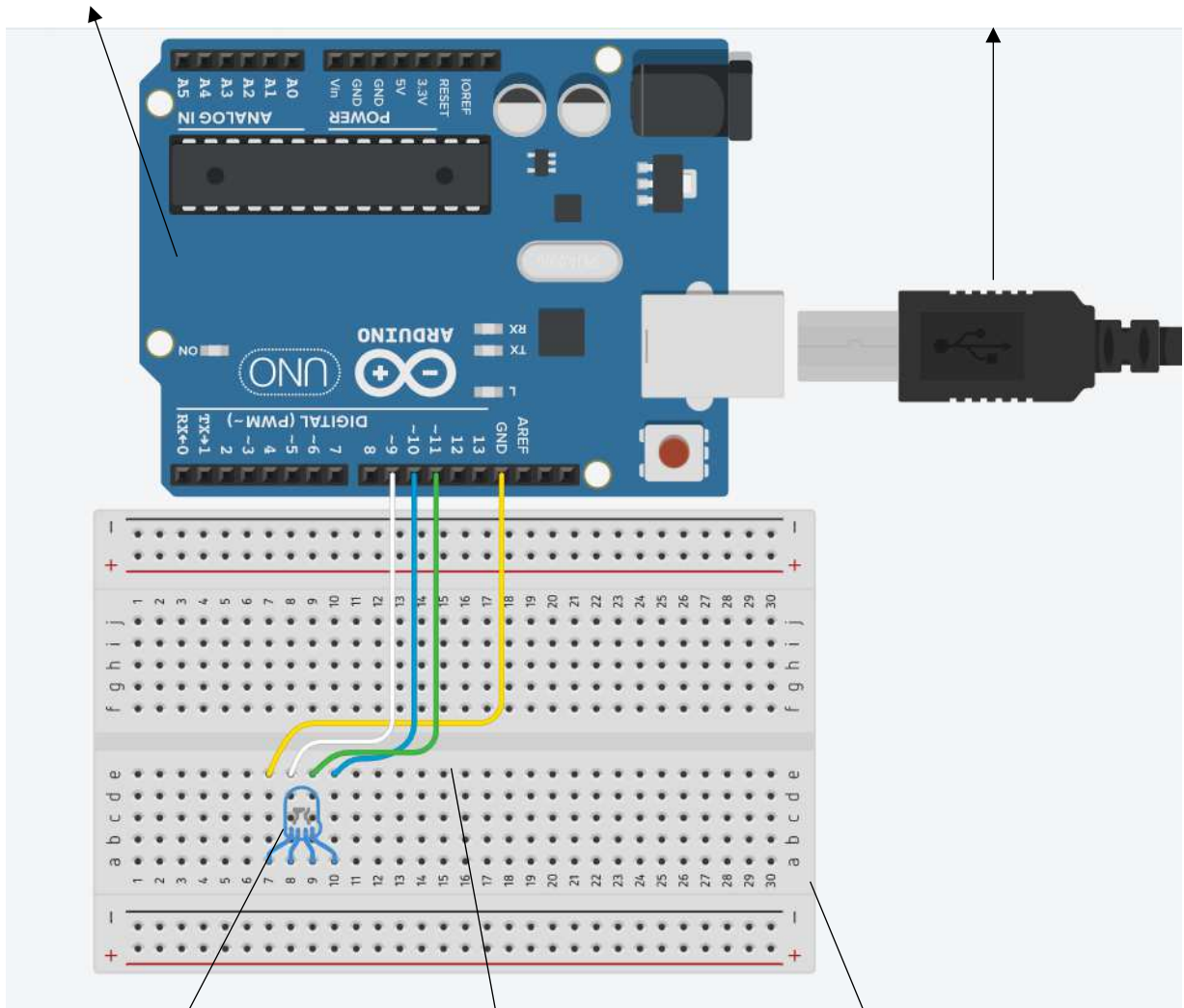
<https://youtu.be/YHbHYxt5DAY>





This component is the Arduino. The Arduino is a microcontroller that receives and sends information. This component acts as the brain of the project.

This component is a USB cable. It serves to connect the microcontroller to the computer and also serves as a power supply.



This component is an RGB LED. It mimics different colours depending on the code given to it.

These are cables, their function is to connect the Arduino to the white board.

This component is the white board. This is where all the components connect.



**TO FIND THE KEY, YOU
MUST START HERE**

Escape Stay



IHK-Projektgesellschaft mbH
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**OPEN THE
DOOR...
PLEASE?!**



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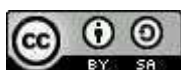
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OPEN THE DOOR... PLEASE?!



You are on a guided tour in a local power generating utility with your class. Suddenly, an electric security door shuts down. There is only air for 30 minutes...

Can you escape in time?

In this escape room you will immerse in

ELECTRONIC ENGINEERING

and cover the following related skills and typical tasks:

1. Ability to read and apply technical documents (basic terms and principles)
2. Identification of work equipment, working methods, and safety measures
3. Understanding and repairing circuit boards
4. Logical, problem-solving and numerical skills

After completing this escape room, your students will be able to:

- ✓ Name relevant basic terms and principles of electronic engineering
- ✓ Understand basic circuit boards and identify errors/ensure a proper electric flow
- ✓ Name and identify relevant equipment of electronic engineers
- ✓ Identify safety hazards typical for the work of electronic engineers

This is one of five free escape rooms you can play with your students to make vocational education career paths attractive.

Find all of them here:
www.escape2stay.eu



RIDDLE OVERVIEW

1. Investigate surroundings
2. Key safe code
3. Understanding the final goal
4. Find the electrician
5. Understanding the circuit plan
6. Equipment grid
7. Ohm's Triangle note

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Starting the Game	4
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Debriefing	13



INSTRUCTIONS FOR GAME MASTERS

This booklet will provide you with all necessary information to implement the escape room and link all needed materials.

As a game master, you will introduce the game setting and aim to your group of players. You will be available in case they need help and provide them with hints that will guide them to find the solutions of the riddles and ultimately reach the goal.

Sometimes the Game Master has to interfere without being asked to avoid players working too long in the wrong direction or to prevent them from settling on a wrong solution. But not too much! Watch out for your body language and where you look in the room to avoid unintentional hints.

Remind players that they can use a hint – sometimes they forget or pride prohibits them from asking. Read the room and be flexible with the hints. You do not have to use the exact hints that are provided in the instructions.

*To find out more about your role as a game master, please have a look at the **Escape2Stay handbook** and our complete guideline here: www.escape2stay.eu*



GAME RULES

When introducing the Escape Room, make sure to:

- define the playing area and let the players know if there are any objects that are off limits. If the room is very full of material, mark objects that are not part of the game with a coloured dot.
- instruct them that they do not have to destroy/break any objects in the room. They will never need force to discover any clues.
- Set the time limit to 30 minutes and make sure that the players have an opportunity to see the time passing by placing a clock or a countdown visibly in the room.




TIME FRAME

75 minutes	Preparation before playing for the very first time including reading instructions, preparing materials and getting familiar with the game
10 minutes	Introduction of the escape game to players
30 minutes	Estimated game time for one group
10 minutes	Resetting the room after one play-through



PREPARATION

ITEMS TO PREPARE

- Printed materials for riddles (see list on next page)
- A5/A4 envelopes to insert the clues (optional)
- **Key safe** with a number pad that can be programmed with an individual code (costs are about 15-20 €). Alternatively, a numeric lock and a box can be used. Either way, the key safe or the box have to be big enough for the circuit board solution cards.
- The **key safe code** should be programmed to be **794 for a 3-digit lock** and **7194 for a 4-digit lock**.
- Draw or glue these symbols on the key safe / the locked box

- Recommended but not necessary: a clock or even better a countdown very visible in the room so that players can see how much time has passed.
- Players should be provided with paper & pens. They do not need a calculator or mobile phone.



You can find all instructions here:

www.escape2stay.eu/open-the-door-please/



PREPARATION BEFORE FIRST PLAY-THROUGH

Estimated time: 75 minutes

- Reading instructions and getting familiar with the hints (45 minutes)
- printing of materials one page (not double sided!) and in colour (15 minutes)
- putting the riddles in envelopes and writing the number of the clue on envelopes (e.g., 1/5 or 4/5).
- shopping for **key safe** (time needed depends on your situation and if you buy it online or locally)
- **setting the code of the key safe** (5 minutes)
- setting up the room for the first time (10 minutes)
- Make notes where you have hidden the hints for players in the room. As each room is a bit different, you can choose yourself where to put the hints (2 minutes)



PREPARATION TIME TO RESET THE ROOM

Estimated time: 10 minutes

- removing traces and notes from previous group/play-through and hiding new hints (10 minutes)





PRINTABLE MATERIALS

For players:

- **Riddle 1:** Image of circuit plan (1 A4 page)
- **Riddle 2:** 4 hint cards with numeric puzzle for the key safe code.
Cut them in squares, but give players only one "Part B"-card, depending on the number of digits of the key safe/numeric lock. (1 A4 page)
- **Riddle 3:** Prepare a handwritten note that says:
"Use four of these in case of emergency to power up the door"
and put it in the key safe.
- **Riddle 4:** 9 circuit board solution cards (4 correct ones, 5 wrong ones) (riddle 3-8), printed double sided as on their back there should be the construction worker jigsaw puzzle. Fold in half, glue together and cut them in squares (1 A4 page, double-sided print) and put them in the key safe.
- **Riddle 5:** Maze and handout with circuit symbols and explanations (2 A4 pages)
- **Riddle 6:** Equipment Grid (1 A4 page)
- **Riddle 7:** Note with Ohm's law and equation to solve (1 A4 page)



[www.escape2stay.eu/
open-the-door-
please/](http://www.escape2stay.eu/open-the-door-please/)



For game masters (Hints & Solutions):

- **Riddle 2:** Solutions to the key safe hint cards numeric puzzle
- **Riddle 3/8:** Completed circuit plan including the specification of the 4 correct circuit plan solution cards
- **Riddle 4:** Full picture of the jigsaw puzzle including the highlighted solution
- **Riddle 5:** Solved maze and written solutions of circuit board symbols and their names
- **Riddle 6:** Solution to the equipment grid
- **Riddle 7:** Solution for Ohm's law note





STARTING THE GAME

It is recommended to estimate **50 minutes for a play-through**, of which you take 10 minutes to brief the players, 30 to let them play, and 10 for a quick de-briefing. Ideally, you combine it with a more intense career counselling session before or after the escape game.

After generally introducing your plans and motive to play the game with your students, continue with these steps:

- First, build groups of max. 6 players per group.
- Second, introduce the setup and the rules of the escape game.
- Finally, give them the story introduction and start the timer.



INTRO OF “OPEN THE DOOR... PLEASE?!”

“Welcome to the guided tour in our power generating utility!

Today you will learn what electrical engineering is all about to find out if this could be a future profession for you. You will see that our facility is equipped with most modern security measures and many of our control rooms – like this one – can be completely sealed shut in case of emergency. So, please stay closely together to ensure our group does not split up.

Our main technician is out of the house today, so it would be the worst timing to encounter a technical problem!”

You and your friends find yourself alone in a control centre room when suddenly an alarm goes off. In the same moment, the electric security door shuts down, cutting you off from the rest of the group. Even though you try immediately to open it again, it does not move. After a few moments of shock, the voice of your guide comes on the intercom:

“Hey, are you in there? We have lost connection to the door and the only way to power up again is in this room. You have to find the broken circuit board and repair it with 4 spare parts; I will try what I can do from the outside. Let me know if you need help, okay? And I don’t want to stress you, but this room is hermetically sealed, so no air will come in. The air inside is just enough for about 30 minutes, so do not waste a breath! Get to work!”

There is an intro video available:

<https://tinyurl.com/y4cutzbz>





RIDDLE OVERVIEW & HINTS

Riddle 1: Investigate Surroundings (Quick Win)

Description

The group has to search for clues in the room.

They will find:

- A **picture of an electric circuit** that is broken.
The whole picture is divided into squared grid, but they players do not yet know why.
- A **key safe**
- **3 cards** with symbols and numbers that need to be put together (see riddle 2)

The goal is reached when the group has the 2 pictures, the 3 cards and the key safe.

They can also find more riddles/clues, which they will need for the next riddles.

Hints for Game Master

Take notes where you hid the items in the room:

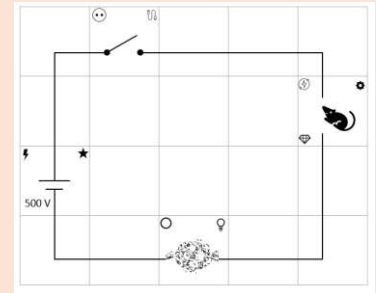
- The picture of the electric circuit is hidden in the

- The key safe is hidden in the

- There are 3 hint cards for the second riddle hidden in the following locations:

Materials needed

- Picture of the broken circuit plan



- Key safe
(in the key safe there are more hint cards
→ see riddle 3)
- 3 cards with numeric puzzle (→ see riddle 2)

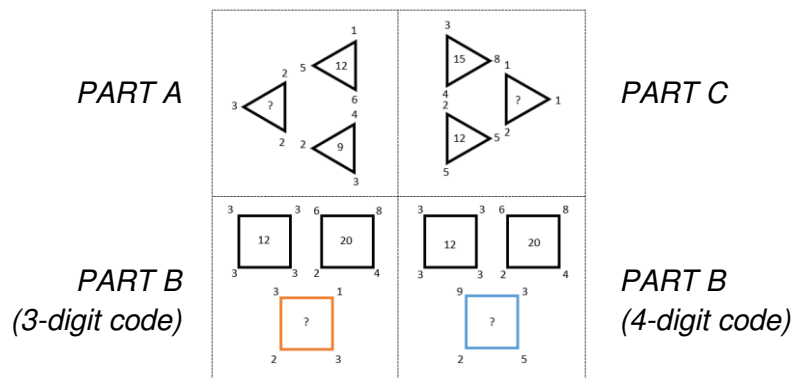


Riddle 2: Key Safe Code (Numeric Puzzle)

Description

The players have found 3 cards with symbols and numbers in the room in riddle 1.

The players do not now that the cards are named Part A, Part B and Part C (this identification is only for the game master).



They also found these symbols on the key safe:



Now they have to find out the numbers represented by the question mark and put them in correct order according to the order of symbols on the key safe.

The goal is reached when the players open the key safe and obtain the 9 solution cards.

Hints for Game Master

- Hint 1: Add up the numbers at the edge of the symbols.
- Hint 2: Look at the key safe to find out the order.
- Hint 3:

◁ = Part A = 7

□ = Part B = 9 (for 3-digit code) **OR** 19 (for 4-digit code)

▷ = Part C = 4

Materials needed

- Make sure to **program the key safe** before the game starts with the following code:
The code for a **3-digit** safe should be 794.
The code for a **4-digit** safe should be 7194.
- Give players **only one Part B card**, depending on the number of digits for the key safe.
- Draw or glue these symbols on the key safe:
◁ □ ▷
- If you cannot program the key safe yourself and have to keep the initial code it comes with, remodel the hint cards so that the code for the safe is the solution of the riddles.
- Instead of a key safe, you can also use a simple number lock and a box, granted you can use a 3-digit or 4-digit code and can fit the cards inside.



Riddle 3: Understanding the final goal (Quick Win)

Description

The players find strange cards in the key safe and a note that says:

“Use four of these in case of emergency to power up the door”.

On the cards, there are fragments of a circuit board, but too many to fit on the circuit board they found in riddle 1.

The goal is reached when the players understand that they somehow have to use these cards to repair the door by putting the correct pieces in the correct places.

Hints for Game Master

All cards have something unique on them (symbol). The other riddles will provide the solution, so that the players can identify the correct cards.

It is possible that players found hints for the cards in riddle 1, while investigating the room. If they have already found all clues (and solutions) before acquiring the cards in the key safe, **this is may be the final riddle. Once they correctly place the cards on the broken circuit board, the door is repaired and they can exit the room.**

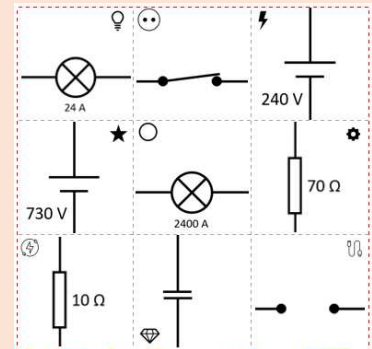
There is a picture of the repaired circuit board for the Game Master, including the symbol and location in the grid. Do not show this to the players until the end!

Help the players understand the end goal of the game by asking questions such as:

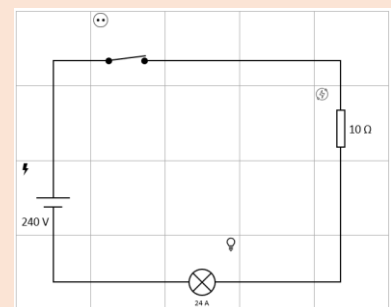
- “What do you think you should do with these cards?”
- “Do the cards remind you of something you have already found?”
- Reward them with a positive answer (verbal or non-verbal) if they get it right.

Materials needed

- The cards featuring the fragments of the circuit boards.



- The picture of the final solution to open the door.



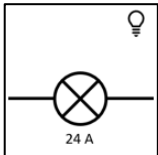


Riddle 4: Find the Electrician (Jigsaw Puzzle)

Description

On the back of the cards found in the key safe, there is a jigsaw puzzle. If put in the correct order, the players see an image of construction workers and the players need to identify the card piece with the electrician. This is one of the correct cards to be put on the circuit board to repair it.

The goal is achieved if players identify the piece of the jigsaw puzzle that shows the electrician, turn it around and put it in on the circuit board in the correct location.



Hints for Game Master

This riddle can be solved immediately after the players found the cards in the key safe, but maybe they do not recognise it right away.

- Hint 1 (if the player did not yet see the jigsaw puzzle on the back of the cards): "Have you tried looking at the back of the cards?"
- Hint 2: "One of those professionals can maybe help you with your electrical problem."
- Hint 3: "Can you spot the electrician?"

Materials needed

- Solution cards with jigsaw puzzle on their back which were found in the key safe (→ see riddle 3)



Designed by macrovector / Freepik

- Picture of the broken circuit plan (→ see riddle 1)



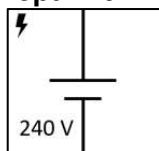
Riddle 5: Understanding the Circuit Plan (Maze)

Description

One of the items the players can find in the room in riddle 1 is a labyrinth that connects the symbols featured on the circuit board with the correct explanations.

This riddle can be done in parallel to the previous riddles and if the players already know what the symbols on the circuit board mean, it is mostly obsolete. Nonetheless, one solution the labyrinth provides is one correct placement of the cards found in the key safe as the players are able to find a broken part on the circuit board and replace it with a working one on the cards.

The goal is reached when the players can name the symbols on the circuit board and have place one correct card on it to repair it.



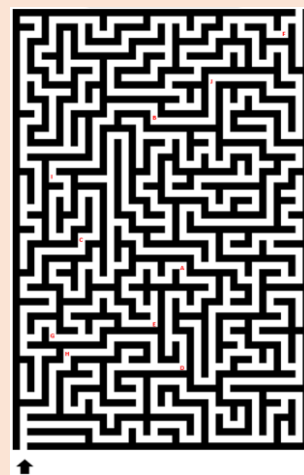
Hints for Game Master

The Game Master has a solved maze available as well as the solutions to the symbols and names.

- Hint 1: Clarify the challenge if the players do not understand that they have to solve the maze and encounter the letters in the maze in the order of the symbols given. Each letter corresponds with a name/description and they have to make the connection.
- Hint 2 – 3: help players if they have made a mistake and correct them when necessary.

Materials needed

- The maze and handout for the players



The names and descriptions of the symbols have been mixed up. Find the correct names by solving the maze. The order in which you encounter the letters in the maze is the correct order. Draw the connections between the symbols and names below.

Symbol	Number	Name/Description
	1	ELECTRIC CONSUMER An electric consumer is an electronic device that takes power from the power source of the circuit. For example: a lamp or a motor.
	2	RESISTOR Resistors reduce the current flow and provide a specific voltage for an electric consumer.
	3	CAPACITOR A capacitor can store electrical energy and is used for transmitting a continuous flow of energy to electric consumers. It helps in delaying electrical signals.
	4	SWITCH A switch is used to control the electric circuit. If it is closed, the current can flow through and feed the electric consumer. If it is open, the current cannot flow and no power is provided to the consumer.
	5	TRANSISTOR A transistor is a "semiconductor" that can control the flow of electricity by switching or amplifying electrical signals.
	6	CURRENT Current is a different word for electricity and it should always flow in a closed circuit in order to be functional. The current is measured in Amperes (A).
	7	VOLTAGE Voltage expresses the "pressure" that a power source puts on an electric current in the circuit. The unit to measure this pressure is Volt (V).
	8	POWER SOURCE / BATTERY Every electronic circuit needs a power source from which the electric current can flow.
	9	ELECTRIC CONSUMER Every electronic circuit needs a power source from which the electric current can flow.
	10	VOLTAGE Voltage expresses the "pressure" that a power source puts on an electric current in the circuit. The unit to measure this pressure is Volt (V).

- The solved maze and solutions for the Game Master

SOLUTIONS

Symbol	Name/Description	Letter
	POWER SOURCE / BATTERY Every electronic circuit needs a power source from which the electric current can flow.	1 - H
	RESISTOR Resistors reduce the current flow and provide a specific voltage for an electric consumer.	2 - D
	ELECTRIC CONSUMER An electric consumer is an electronic device that takes power from the power source of the circuit. For example: a lamp or a motor.	3 - A
	SWITCH A switch is used to control the electric circuit. If it is closed, the current can flow through and feed the electric consumer. If it is open, the current cannot flow and no power is provided to the consumer.	4 - E
	TRANSISTOR A transistor is a "semiconductor" that can control the flow of electricity by switching or amplifying electrical signals.	5 - G
	CAPACITOR A capacitor can store electrical energy and is used for transmitting a continuous flow of energy to electric consumers. It helps in delaying electrical signals.	6 - C
	CURRENT Current is a different word for electricity and it should always flow in a closed circuit in order to be functional. The current is measured in Amperes (A).	7 - I
	POWER SOURCE / BATTERY Every electronic circuit needs a power source from which the electric current can flow.	8 - B
	VOLTAGE Voltage expresses the "pressure" that a power source puts on an electric current in the circuit. The unit to measure this pressure is Volt (V).	9 - J
	VOLTAGE Voltage expresses the "pressure" that a power source puts on an electric current in the circuit. The unit to measure this pressure is Volt (V).	10 - F

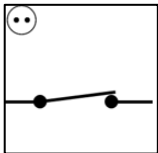


Riddle 6: Equipment Grid (Connect the points)

Description

In this rather quick riddle, the players find a grid filled with equipment used by electrical engineers and random objects. They have to connect the squares featuring the useful equipment. Together, the connected squares form a symbol that is also found on the circuit cards. By finding all equipment pieces in the grid, they can identify one part to repair the electric circuit.

The goal is reached once the players have identified the hidden symbol and place the correct card on the circuit board.



Hints for Game Master

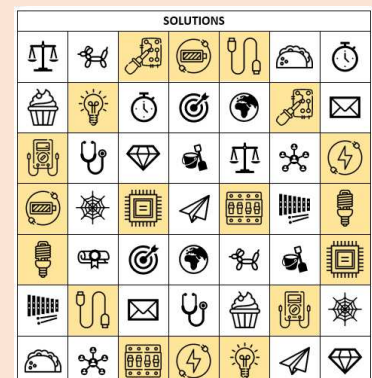
- Hint 1: Clarify the goal of the riddle by telling the players that they have to find all icons used by electrical engineers in their work.
- Hint 2: help players if they have overlooked a symbol and ask a question that helps them find the missing item in the grid.
- Hint 3: Show them all solutions to the grid.

Materials needed

- The empty grid for the players



- The solved grid for the Game Master





Riddle 7: Ohm's Triangle Note (Calculating)

Description

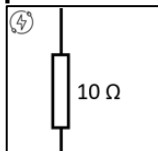
This riddle is an equation the players have to solve by applying Ohm's law and by calculating.

The players find this riddle somewhere in the room. It looks like someone took a quick note and there is a triangle with 3 letters on it (Ohm's law triangle). The note tells them that the resistor is often broken and that in order to fix the door, the right resistor needs to be installed.

The battery/power source has 240 V (Volt). The current has 24 A (Ampere). By applying Ohm's law triangle, the players will need to calculate $V/I=R$, hence $R=10\ \Omega$.

There are two cards for the circuit board that feature a resistor, but only one is specified as 10R. Hence, the players need to place this card with the 10R resistor on the board.

The goal is reached once the players solved the equation and place the correct card on the circuit board.

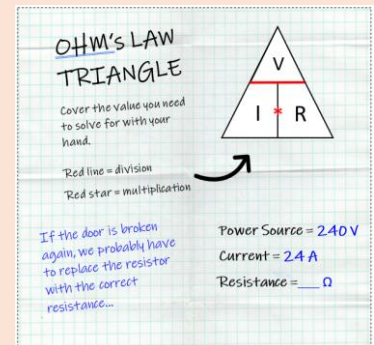


Hints for Game Master

- Hint 1: Mention that they could use the solutions of the maze to understand the meaning of the letters and symbols.
- Hint 2: Make them aware that the solution can be calculated very easily without a calculator.
- Hint 3: Make them aware that there are two possible solution cards, and only one of them makes sense as result of the calculation.

Materials needed

- The empty grid for the players



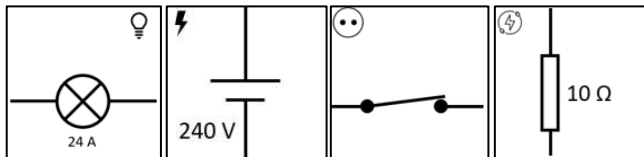


Riddle 8: Opening the Door

Description

This final riddle is similar to riddle 3, because the only goal is to place all correct cards from the key safe on the circuit board to open the door.

The goal is reached once the players have identified the hidden symbol and place the 4 correct cards on the circuit board.

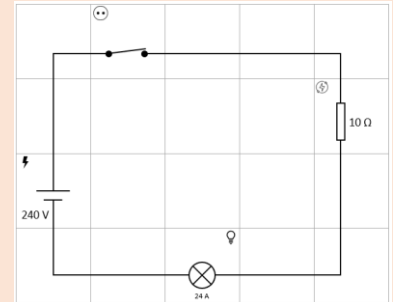


Hints for Game Master

- Check the final line-up of the circuit board shown to you by the players.
- **If they have found the correct solution, stop the time and congratulate them to successfully escaping the room in time.**
- If they have made a mistake, tell them that there is an error, but do not tell them yet where the mistake is.
- They can use hints to ask you to tell them which card/cards is/are in the wrong place.

Materials needed

- Solved solution plan to compare with the repaired circuit plan





DEBRIEFING

Congratulate the players! Ask them, if they understand why the circuit board was broken before and is now repaired. If they are not sure, explain the following.

The circuit board was broken because there were 4 things wrong. Most obviously, a mouse has nibbled on the cable and found its own demise in the process. But even without this, the circuit was not working. The power source was too strong, the electrical consumer was destroyed and the switch was not closed.

Now the repaired circuit board has a more appropriate power source (240 V) and the switch is closed, which allows the current to flow. The resistor (10 Ω) reduces the power of the current and allows the electrical consumer with 24 Ampere to function properly.

Give them also feedback about how they performed. Explain what worked well, if and where they surprised you, where they performed better than the average or expected and where team and individual efforts were good and fruitful. Also mention what did not work so well and where improvements in the group and the individual actions could have helped solve the riddles easier.

If they completed the game in the 30 minutes timeframe, congratulate them on their success. If they needed longer, still mention the finalisation positively and explain what caused the delay.

WALK-THROUGH

The game begins once the Game Master starts to read the intro. After the intro, the timer is set to 30 minutes.

The players start the game with the knowledge that they have to find the broken circuit board and repair it with 4 spare parts.

First, the player should spread out to investigate the room and see what they can find (Riddle 1). The riddles in this escape room do not follow a specific order, but some of them are depending on the solutions of others. The players need to find all hidden clues and open the key safe to solve the game's ultimate goal: repairing the circuit board.

In the room, the players will find the following:

- a printed picture of a broken circuit plan
- a key safe
 - inside are 9 solution cards showing repair parts for the circuit board
- 3 cards with numeric puzzles that provide the code for the key safe (hide closely together)
- a printed 2D-Maze with hidden letters along the path
- a printed handout with electrical symbols that can be connected with their meaning using the letters in the maze
- a printed grid with symbols
- a note featuring Ohm's Triangle



Ideally, the broken circuit board should be one of the first clues the players find – it should be hidden in a fairly easy spot by the Game Master.

The next two clues needed are the key safe and the 3 cards with the numeric puzzle. If players find other clues before that, they can start to solve the riddles, but they will probably not yet know how the solutions contribute to the final goal.

Once the players have found the key safe and the 3 cards with the numeric puzzle, they can find out the code and open the safe (Riddle 2).

In the key safe, they find 9 solution cards that show repair parts for the circuit board. Each card has one tiny symbol in the corner. Players should then realise that the circuit board features the same symbols, but it is not clear yet, which repair parts are able to undo the damage (Riddle 3). For this, they have to find more clues.

One of the first clues to find a fitting repair part is hidden on the solution cards. When turned around, they are a jigsaw puzzle and the instruction says that the players need to find the electrician. Once identified, this piece can be placed on the broken circuit plan (Riddle 4). The piece they are replacing is an electrical consumer that consumes 24 Ampere; it is a circle with an X in it and the symbol used to identify it is a light bulb.

The next three riddles can be solved in any order and help the players identify one repair piece each.

The Equipment Grid is a simple connecting riddle, in which the players must highlight the icons that have something to do with electrical engineering. It will then show a plug-symbol, which they can find on one of the solution cards (Riddle 6). The repair part is a closed switch that allows the current to flow through the circuit.

The note with Ohm's Triangle provides a very easy calculating riddle. It briefly explains that in order to solve for one of the values, one has to cover it in the triangle and then implement the calculation (either divide or multiply). The note gives the values for the power source (V) and the Current (I/A), hence the players must solve for the correct resistance. The calculation is $240/24$, resulting in 10 Ohm for the resistance (Riddle 7). The solution cards show two resistors, only one of them states 10 Ohm. Hence, this repair part must be placed on the circuit board.

Since this riddle requires players to know some specific terms and symbols, they are provided with an informative handout as part of the game. In the room, they have found a printed maze and a handout, however, the symbols are not yet connected with the correct meaning. They have to solve the maze and note in which order they encounter letters in the maze. The order of the letters then enables them to connect the symbols and their meaning on the handout. It also provides one more clue to find a repair part for the circuit board (Riddle 5), which is the correct power source.

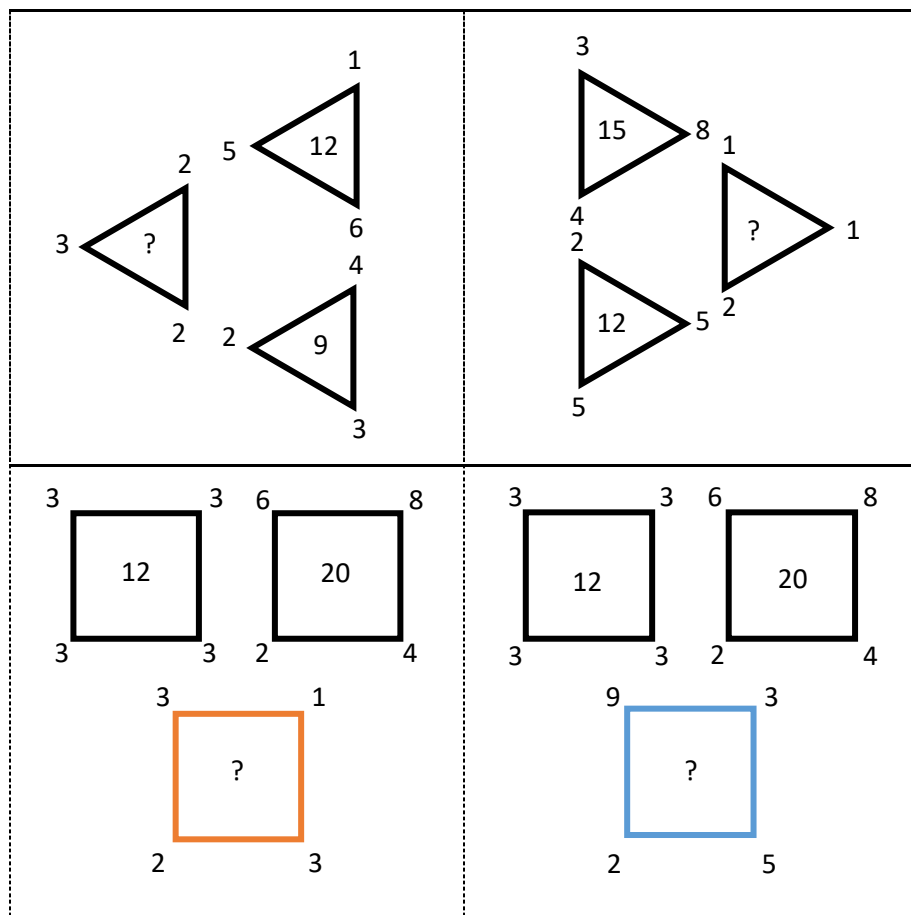
Finally, the players have now placed the 4 correct repair parts on the circuit board. They tell the Game master that they are ready and the Game Master confirms by checking the repaired board (Riddle 8).

The timer is stopped and the players have successfully escaped the room!

Open the door... please?

PRINT PDF

Riddle #2

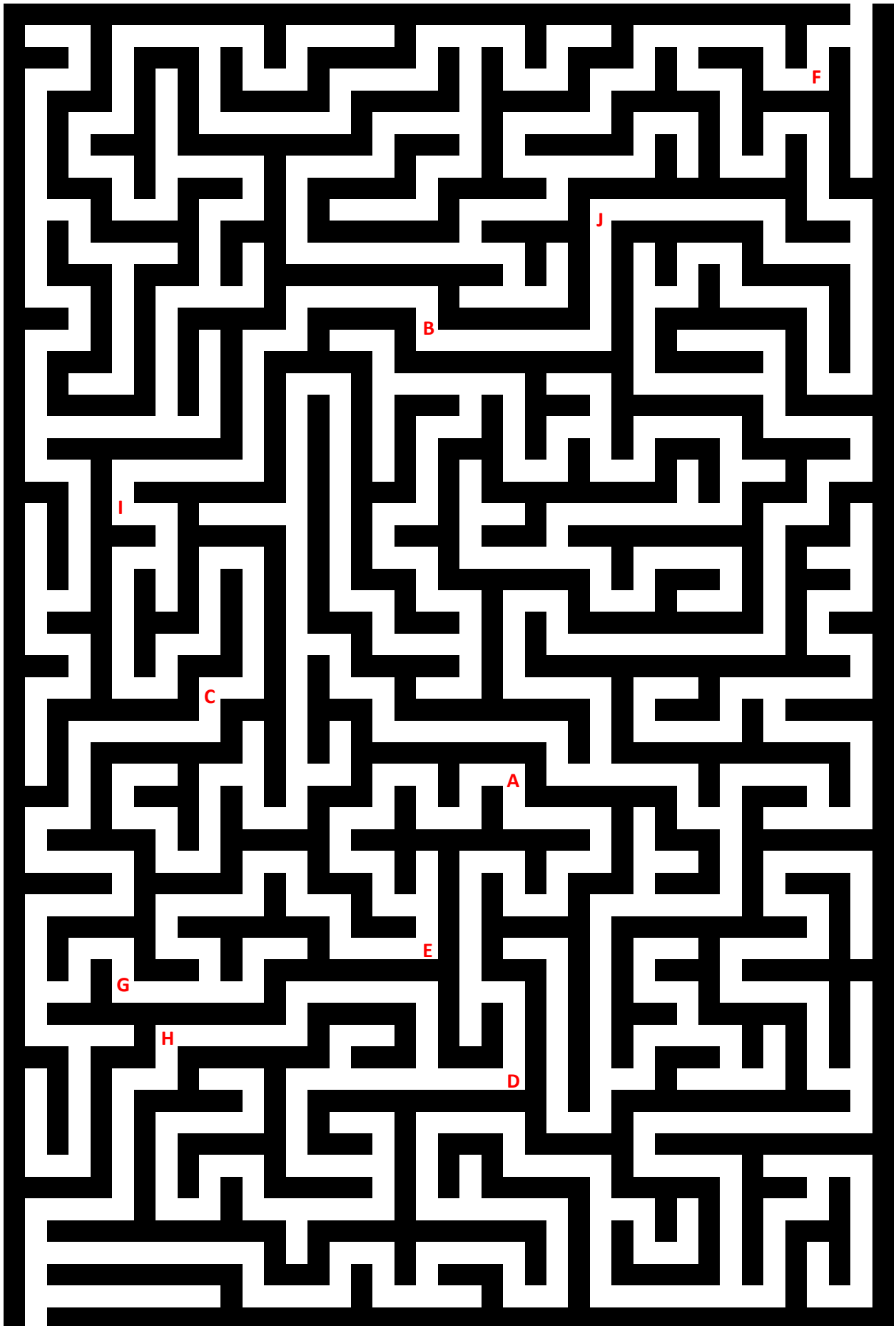


Print this page and cut the squares.

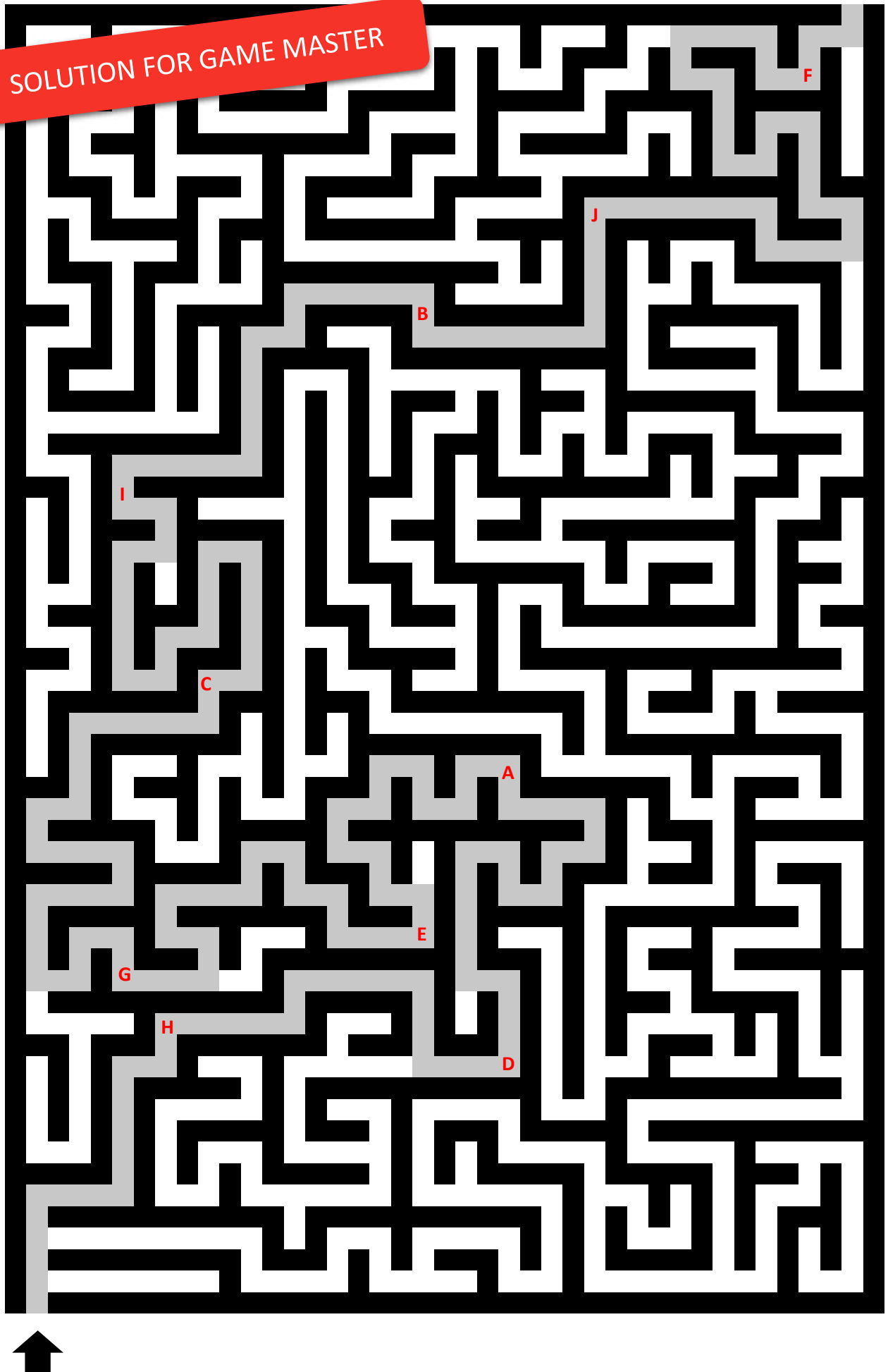
You will need both triangle cards, but only one of the square cards.

If your key safe/lock has a **3-digit code**, you will need the **orange** square.

If your key safe/lock has a **4-digit code**, you will need the **blue** square.



SOLUTION FOR GAME MASTER



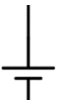






MAZE RIDDLE – Part 2/2

The names and descriptions of the symbols have been mixed up.

Find the correct names by solving the maze.








The order in which you encounter the letters in the maze is the correct order.

Draw the connections between the symbols and names below:

	1
	2
	3
	4
	5
	6
I	7
Ω	8
V	9
	10

A	ELECTRIC CONSUMER <i>An electric consumer is any electronic device that feeds from the power source of the circuit, for example a lamp or even an electronic door.</i>
B	OHM <i>Ohm (Ω) is the unit for the resistance against which an electric current has to flow. The larger the resistance, the greater the barrier to the flow of current.</i>
C	CAPACITOR <i>A capacitor can store electrical energy and is used for transmitting a continuous flow of energy to electric consumers. It helps bridging potential, spontaneous changes of the current.</i>
D	RESISTOR <i>Resistors reduce the current flow and provide a specific voltage for an electric consumer.</i>
E	SWITCH <i>A switch is used to control the electric circuit. If it is closed, the current can flow through and feed the electric consumers. If it is open, the current cannot flow and no power is provided to the consumer.</i>
F	Find this symbol to identify a correct card for the circuit board!
G	TRANSISTOR <i>A transistor is a “transfer resistor” that can control the flow of electricity by switching or amplifying electric signals.</i>
H	POWER SOURCE / BATTERY <i>Every electronic circuit needs a power source from which the electric current can flow.</i>
I	CURRENT <i>Current is a different word for electricity and it should always flow in a closed circuit in order to be functional. The current is expressed in Ampere (A).</i>
J	VOLTAGE <i>Voltage expresses the “pressure” that a power source puts on an electric current in the circuit. The unit to measure this pressure is Volt (V).</i>

SOLUTION FOR GAME MASTER

SOLUTIONS		
	POWER SOURCE / BATTERY <i>Every electronic circuit needs a power source from which the electric current can flow.</i>	1 – H
	RESISTOR <i>Resistors reduce the current flow and provide a specific voltage for an electric consumer.</i>	2 – D
	ELECTRIC CONSUMER <i>An electric consumer is any electronic device that feeds from the power source of the circuit, for example a lamp or even an electronic door.</i>	3 – A
	SWITCH <i>A switch is used to control the electric circuit. If it is closed, the current can flow through and feed the electric consumers. If it is open, the current cannot flow and no power is provided to the consumer.</i>	4 – E
	TRANSISTOR <i>A transistor is a “transfer resistor” that can control the flow of electricity by switching or amplifying electric signals.</i>	5 – G
	CAPACITOR <i>A capacitor can store electrical energy and is used for transmitting a continuous flow of energy to electric consumers. It helps bridging potential, spontaneous changes of the current.</i>	6 – C
I	CURRENT <i>Current is a different word for electricity and it should always flow in a closed circuit in order to be functional. The current is expressed in Ampere (A).</i>	7 – I
Ω	OHM <i>Ohm (Ω) is the unit for the resistance against which an electric current has to flow. The larger the resistance, the greater the barrier to the flow of current.</i>	8 – B
V	VOLTAGE <i>Voltage expresses the “pressure” that a power source puts on an electric current in the circuit. The unit to measure this pressure is Volt (V).</i>	9 – J
	Find this symbol to identify a correct card for the circuit board!	10 – F



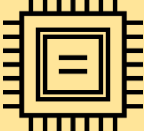

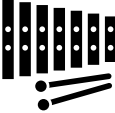


ELECTRONIC PARTS RIDDLE

FIND AND HIGHLIGHT/CONNECT ALL SYMBOLS RELATED TO ELECTRONICS!

THE RESULTING SHAPE HELPS YOU FIND ANOTHER PIECE FOR THE CIRCUIT BOARD!



SOLUTION FOR GAME MASTER

SOLUTIONS						
						
						
						
						
						
						
						

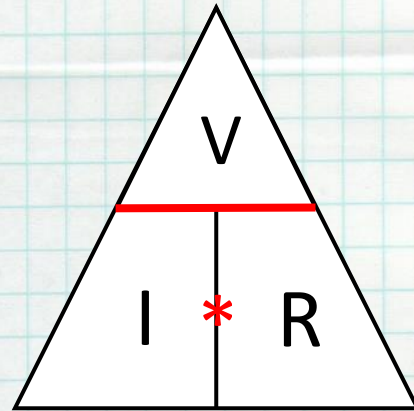


OHM'S LAW TRIANGLE

Cover the value you need
to solve for with your
hand.

Red line = division

Red star = multiplication



If the door is broken
again, we probably have
to replace the resistor
with the correct
resistance...

Power Source = 240 V

Current = 24 A

Resistance = ___ Ω

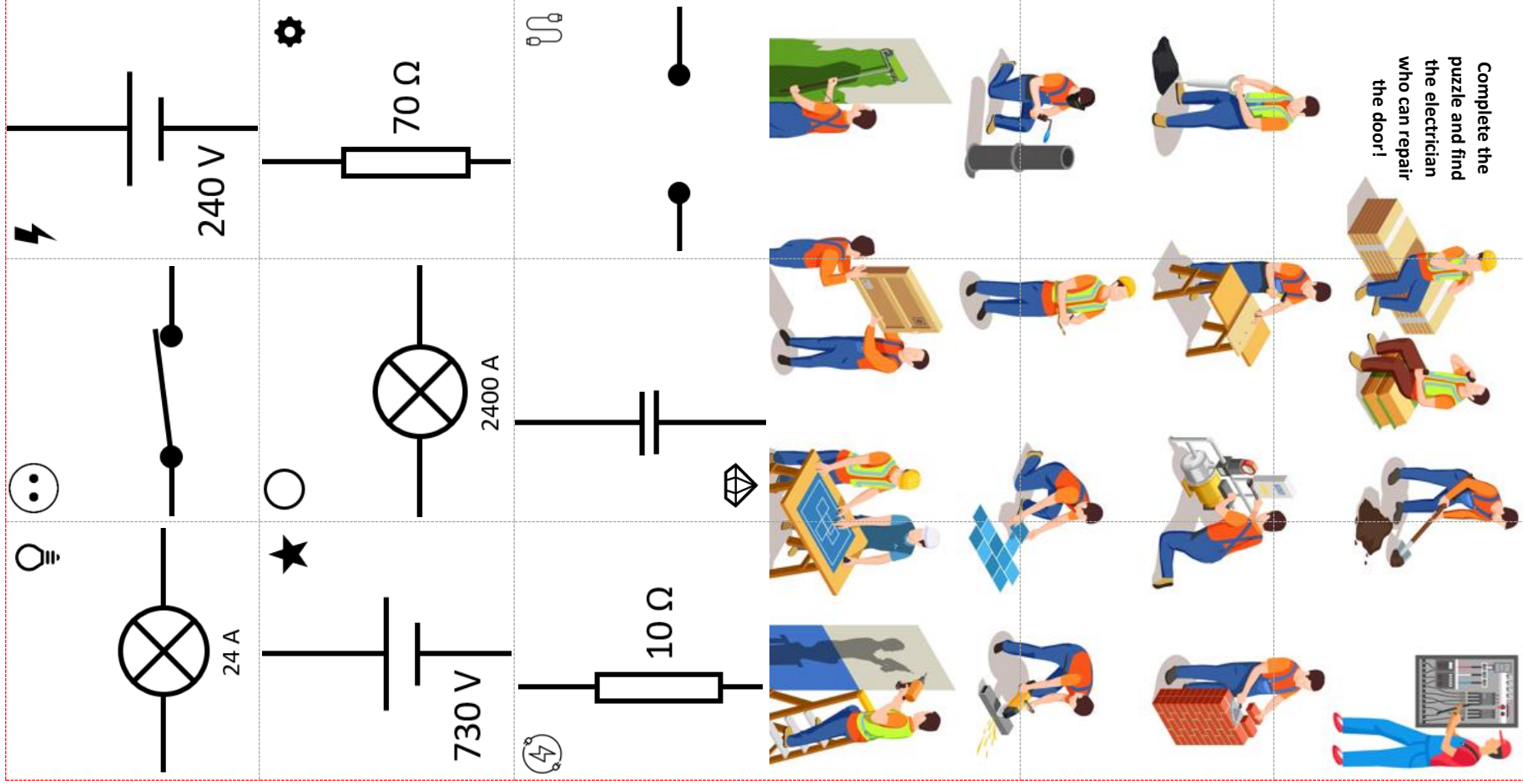
Print this page and cut out the note.

Fold it twice, but make sure that the text is visible when it is folded (this makes it easier for player to identify it as a hint).



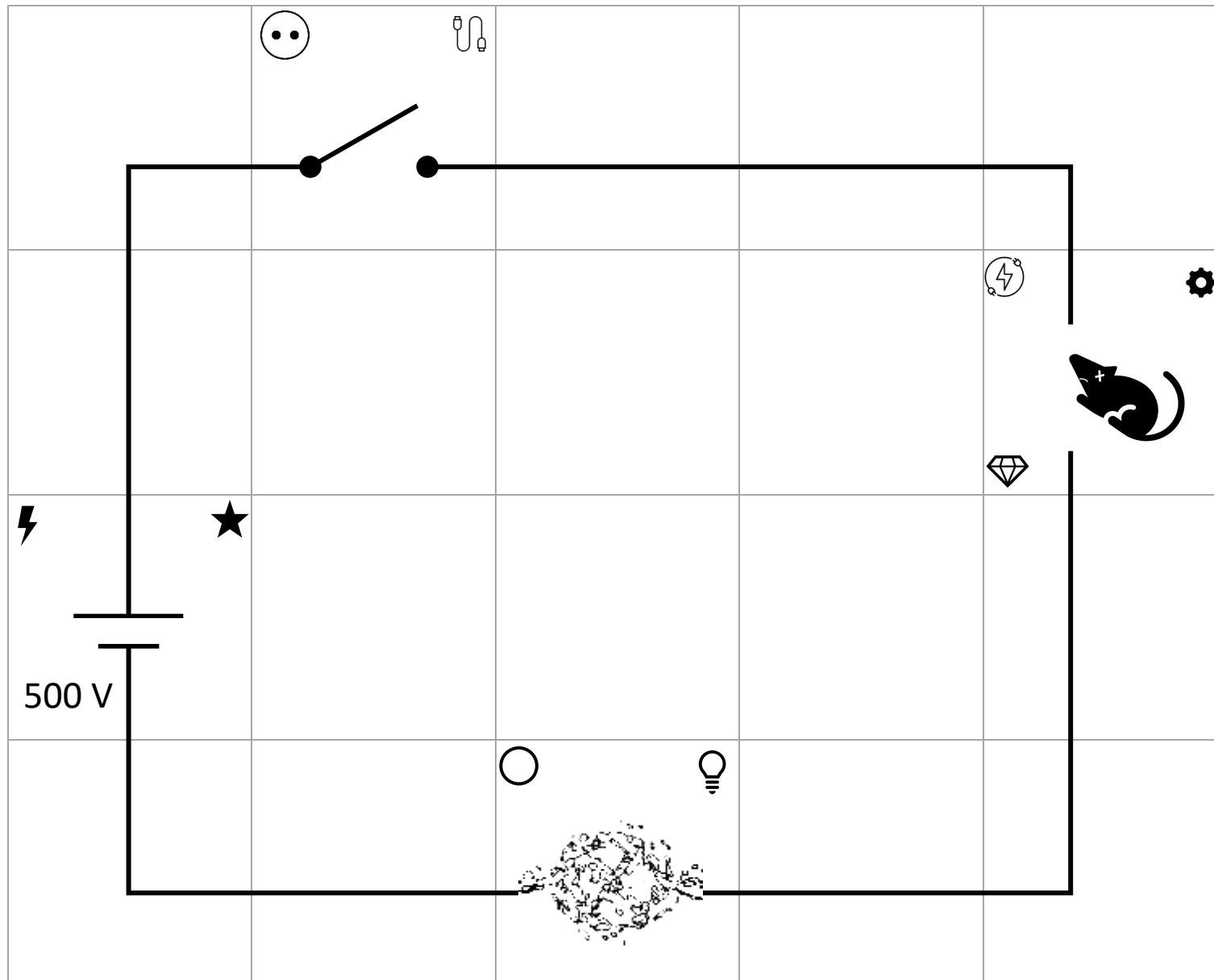
CIRCUIT BOARD SOLUTION CARDS & JIGSAW PUZZLE

1. Cut along the red lines.
2. Fold the resulting shape in half to get a square and glue it together.
3. Cut along the grey lines.





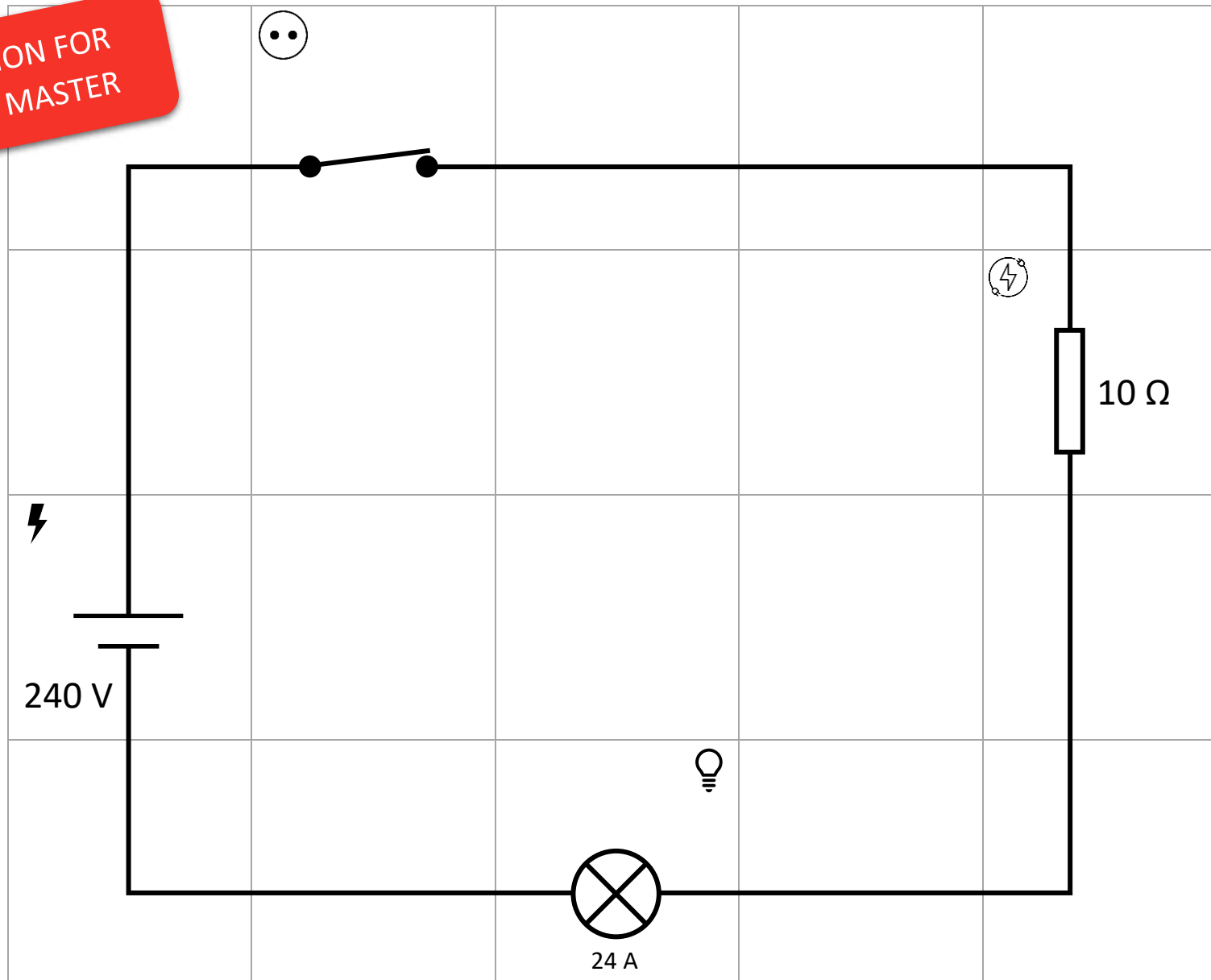
DAMAGED CONTROL ROOM DOOR CIRCUIT PLAN





REPAIRED CONTROL ROOM DOOR CIRCUIT PLAN

SOLUTION FOR
GAME MASTER



Escape Stay



IHK-Projektgesellschaft mbH
OSTBRANDENBURG



www.escape2stay.eu



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2020-1-DE02-KA202-007427

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RESCUE MISSION



You are on a guided tour in a local power generating utility with your class. Suddenly, an electric security door shuts down. There is only air for 30 minutes...

Can you escape in time?

In this escape room you will immerse in

MECHATRONICS

and cover the following related skills and typical tasks:

1. Hand coordination
2. Team-work
3. Communication
4. Thinking outside the box
5. Logic

After completing this escape room, your students will be able to:

- ✓ Reading blueprints
- ✓ Connecting wires
- ✓ Understanding mechanical principles
- ✓ Basic Software use
- ✓ Assembly
- ✓ Object association

This is one of five free escape rooms you can play with your students to make vocational education career paths attractive.

Find all of them here:
www.escape2stay.eu



RIDDLE OVERVIEW

1. Electric Puzzle
2. Math Puzzle
3. PC Puzzle
4. Wood Puzzle
5. Unlocking the Box

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INSTRUCTIONS FOR GAME MASTERS

This booklet will provide you with all necessary information to implement the escape room and link all needed materials.

As a game master, you will introduce the game setting and aim to your group of players. You will be available in case they need help and provide them with hints that will guide them to find the solutions of the riddles and ultimately reach the goal.

Sometimes the Game Master has to interfere without being asked to avoid players working too long in the wrong direction or to prevent them from settling on a wrong solution. But not too much! Watch out for your body language and where you look in the room to avoid unintentional hints.

Remind players that they can use a hint – sometimes they forget or pride prohibits them from asking. Read the room and be flexible with the hints. You do not have to use the exact hints that are provided in the instructions.

*To find out more about your role as a game master, please have a look at the **Escape2Stay handbook** and our complete guideline here: www.escape2stay.eu*



GAME RULES

When introducing the Escape Room, make sure to:

- define the playing area and let the players know if there are any objects that are off limits. If the room is very full of material, mark objects that are not part of the game with a coloured dot.
- instruct them that they do not have to destroy/break any objects in the room. They will never need force to discover any clues.
- Set the time limit to 30 minutes and make sure that the players have an opportunity to see the time passing by placing a clock or a countdown visibly in the room.



TIME FRAME

360 minutes	Preparation before playing for the very first time including reading instructions, preparing materials and getting familiar with the game
10 minutes	Introduction of the escape game to players
30 minutes	Estimated game time for one group
10 minutes	Resetting the room after one play-through



PREPARATION

ITEMS TO PREPARE

- Starter Kit for Arduino R3 Projects with Microcontroller, LCD1602 Module, Breadboard, 9V Battery, Servo, Sensors, Tutorial MA13
- Simple wooden box,
- Wooden sheet, around 3 mm thick from a hardware store/local wood supplier
- Two 4-digit locks. Write the numbers 1 & 2 on the first and 3 & 4 on the second. You will need to label all riddles and the players will obtain 2-digit codes from each riddle solution.
- **Riddle 1:** Arduino Starter Kit including:
 - Arduino UNO
 - Micro Servo
 - Pushbutton 2X
 - High resistor 2X (10kΩ)
 - A power source (USB cable or Battery)
 - Breadboard
 - Set of Jump Wires
 - Cardboard / Wood
- **Riddle 2:** Cardboard/wood puzzle pieces
- **Riddle 3:** PC or Laptop
- **Riddle 4:** Cardboard/wood
- Reward to put into the final box



You can find all instructions here:

www.escape2stay.eu/rescue-mission



PREPARATION BEFORE FIRST PLAY-THROUGH

Estimated time: 75 minutes

- Reading instructions and getting familiar with the hints (45 minutes)
- Implement the preparations as described in detail in the instructions linked on the right.
 - **Riddle 1:**
 - Program the Arduino
 - Setup the electronics
 - Setup the servo
 - Print the schematic picture
 - **Riddle 2:**
 - Print the template and transfer the puzzle pieces on wood or cardboard. Assemble the puzzle.





- **Riddle 3:**
 - Download the compressed folder > extract it > open the Browser file named index > press F11 for full screen.
- **Riddle 4:**
- Set the two 4-digit locks to the following codes: **2842** and **3687**

PREPARATION TIME TO RESET THE ROOM

Estimated time: 10 minutes

- removing traces and notes from previous group/play-through and hiding new hints (10 minutes)



STARTING THE GAME

It is recommended to estimate **50 minutes for a play-through**, of which you take 10 minutes to brief the players, 30 to let them play, and 10 for a quick de-briefing. Ideally, you combine it with a more intense career counselling session before or after the escape game.

All puzzles can be solved individually and not in any set order. At the end the participants will combine the solutions of all the different puzzles to open the final box.

Here you can also find the solutions for the different puzzles.

After generally introducing your plans and motive to play the game with your students, continue with these steps:

- First, build groups of max. 6 players per group.
- Second, introduce the setup and the rules of the escape game.
- Finally, give them the story introduction and start the timer.



INTRO OF “RESCUE MISSION”

Hello, I am a scientist assistant and I have a few problems I need your help with. I cannot find Maja; she is the greatest scientist in the whole milky way, also her flying zeppelin laboratory has crashed! I need your help figuring out what happened to her. I have recovered some pieces of the laboratory from the zeppelin crash. I hope you can use them to figure out what happened and where she is!

In the end, it is revealed that the scientist went on holiday and his assistant (game master) forgot this and was supposed to take care of the zeppelin.



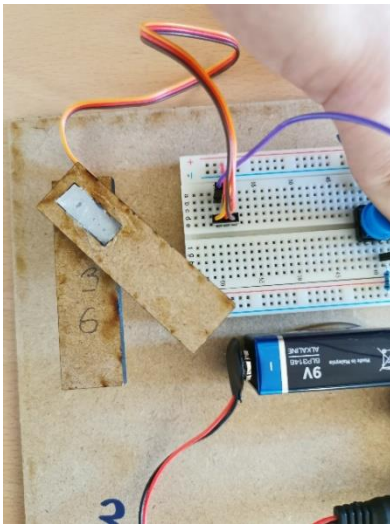
RIDDLE OVERVIEW & HINTS

Riddle 1: Electric Puzzle

Description

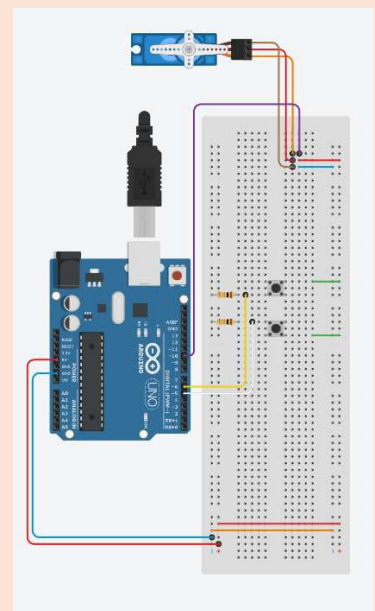
The goal of this puzzle is for participants to correctly read the electric schematic and use it to properly connect the electronic components to the Arduino.

The goal is reached when the players have connected the electronic components and obtain the code (36).



Materials needed

- Arduino UNO
- Micro Servo
- Pushbutton 2X
- High resistor 2X (10kΩ)
- A power source (USB cable or Battery)
- Breadboard
- Set of Jump Wires
- Cardboard / Wood
- Printed schematic



Hints for Game Master

- Carefully read the schematics.
- The servo motor needs to move.
- You have to press the two buttons.



Riddle 2: Math Puzzle

Description

The objective of this puzzle is for players to re-arrange the pieces of the wood/cardboard puzzle.

They must fit squares A and B into the big hole where the C square was. If they arrange them properly, they will get a code number.

This puzzle is a visual example of how the Pythagoras theorem works.

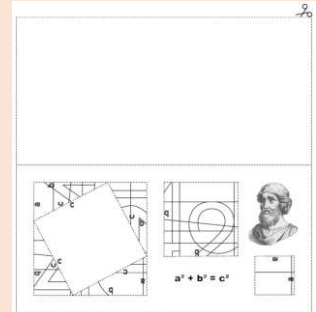
The goal is to arrange the pieces correctly and obtain the code (42).

Hints for Game Master

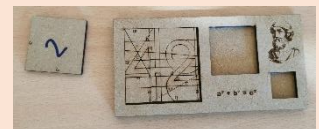
- Look at the lines on the pieces.
- The result must be two numbers.
- Think about how you can fit all the pieces (with writing on it) into the big square hole.

Materials needed

- Printed template:



- Transferred template on cardboard or wood





Riddle 3: PC Puzzle

Description

The objective of this puzzle is for the participants to decrypt a message on a WEB Page.

They will be given access to a computer with an encrypted message that they will need to input to get the result which will be a number needed to unlock the final puzzle.

Decrypted message: cryptography

Link to the zip folder containing the webpage:


<https://bit.ly/3z2PQ8y>

The goal is reached when players decrypted the message and obtained the code (87).

Hints for Game Master

- You have to decode the message on the website.
- It is a simple cypher.
- Numbers represent letters.

Materials needed

- PC or laptop with web page opened and ready
- Webpage in zip folder
<https://bit.ly/3z2PQ8y>

- Pens & paper



Riddle 4: Wood Puzzle

Description

The objective of this puzzle is for the participants to figure out the right position of pieces and then finish the equation to get the right result.

There are many different combinations and the participants will have to use the process of elimination to get the correct set of 3 pieces to complete the puzzle.

Afterwards, they will need to also use some basic math skills to get the correct result from the equation.

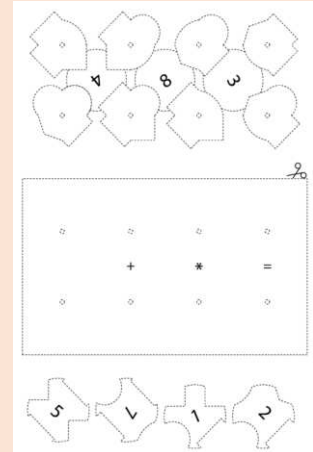
The goal of this puzzle is for the participants to figure out the right position of pieces and then finish the equation to get the right result (28).

Hints for Game Master

- You won't need all the pieces.
- Some pieces might fit but are not correct.
- At the end you get an equation that you need to solve.

Materials needed

- Printed template and shaped transferred to wood or cardboard:





Riddle 5: Unlocking the Box

Description

This is the challenge that connects all the other puzzles. The goal for this one is to collect all the results of previous puzzles and use them to unlock the box.

The goal is reached when the players opened the box.

Hints for Game Master

- You have to input the given numbers from previous puzzles in the right combination.
- If you copied our challenges exactly than you can set the first lock to code 1: **2842** and the second to code 2: **3687**

Materials needed

- Simple box
- Two 4-digit padlocks





DEBRIEFING

In the end, it is revealed that the scientist went on holiday and his assistant (game master) forgot this and was supposed to take care of the zeppelin.

At the end we should also ask the participants what they thought of the puzzles and the escape room in general.

Meet the students and give them feedback about how they performed. Explain what worked well, if and where they surprised you, where they performed better than the average or expected and where team and individual efforts were good and fruitful. Also mention what did not work so well and where improvements in the group and the individual actions could have helped solve the riddles easier.

If they completed the game in the 30 minutes timeframe, congratulate them on their success. If they needed longer, still mention the finalisation positively and explain what caused the delay.



WALK-THROUGH

Before you solve the last puzzle, you have to solve the previous 4. The order in which you solve these isn't important. From them you then get 8 numbers which you need to solve the last puzzle.

Riddle 1: Electric Puzzle

The participants are given all the pieces of the puzzle. This includes the battery, wires, servo, an Arduino and a diagram of how the circuit should be assembled. The participants assemble the circuit according to the diagram. If the circuit is successfully assembled, the servo should move by the press of both buttons and reveal a secret 2-digit number that is part of the solution to the final puzzle.

Riddle 2: Math Puzzle

The participants find this puzzle assembled in a way that A, B and C pieces are placed in separate space. They have to see that some pieces have lines on them that match other pieces and that these lines make up a symbol. They have to find a way to fill the C space with only pieces with lines on them. They have to see that A and B pieces can fit into the C space together with the triangles. In the end, the puzzles must reveal a 2-digit number that is another piece of the solution for the final puzzle.

Riddle 3: PC Puzzle

The participants are given a computer and have to decipher a string. The logic behind this riddle is that they have to use a lookup table that they also have on the screen. The participants have to figure out that the individual numbers correspond to letters. If they replace the numbers with the correct letters they get the password to the puzzle. This grants them access to the website and gives them a 2-digit number, that is part of the solution to the final puzzle.

Riddle 4: Wood Puzzle

The participants are to be given a bunch of different pieces of this puzzle. In the end, however, they will use only 3. The goal is to orient the pieces bolted to the board in the correct orientation and then fit the correct pieces in between them. This will then show them a mathematical equation. Afterwards, they have to use some basic math skills to solve the equation. The result is another 2-digit number that is part of the solution to the final puzzle.

Riddle 5: Unlocking the Box

As the final puzzle, the participants are presented with a locked box/drawer with two number locks on it, each requiring the right combination of 4 numbers to unlock. To unlock it, the participants have to merge all the solutions of all previous puzzles in the correct order to unlock both of the locks.

RESCUE MISSION

PRINT PDF & DETAILED INSTRUCTIONS

Riddle 1: Electric puzzle

The goal of this puzzle is for participants to correctly read the electric schematic and use it to properly connect the electronic components to the Arduino.

Item list:

- Arduino UNO
- Micro Servo
- Pushbutton 2X
- High resistor 2X (10kΩ)
- A power source (USB cable or Battery)
- Breadboard
- Set of Jump Wires
- Cardboard / Wood

Program for Arduino

The following lines of code must be copied into Arduino IDE and uploaded to Arduino UNO. (Online you can find multiple tutorials for this)

Program:

```
#include <Servo.h>

int Button = 0;

int Button1 = 0;

int CanRotate = 0;

Servo servo_10;

void setup()
{
  pinMode(5, INPUT);
  pinMode(6, INPUT);
  servo_10.attach(10, 500, 2500);
}

void loop()
{
  Button = digitalRead(5);
  Button1 = digitalRead(6);
```

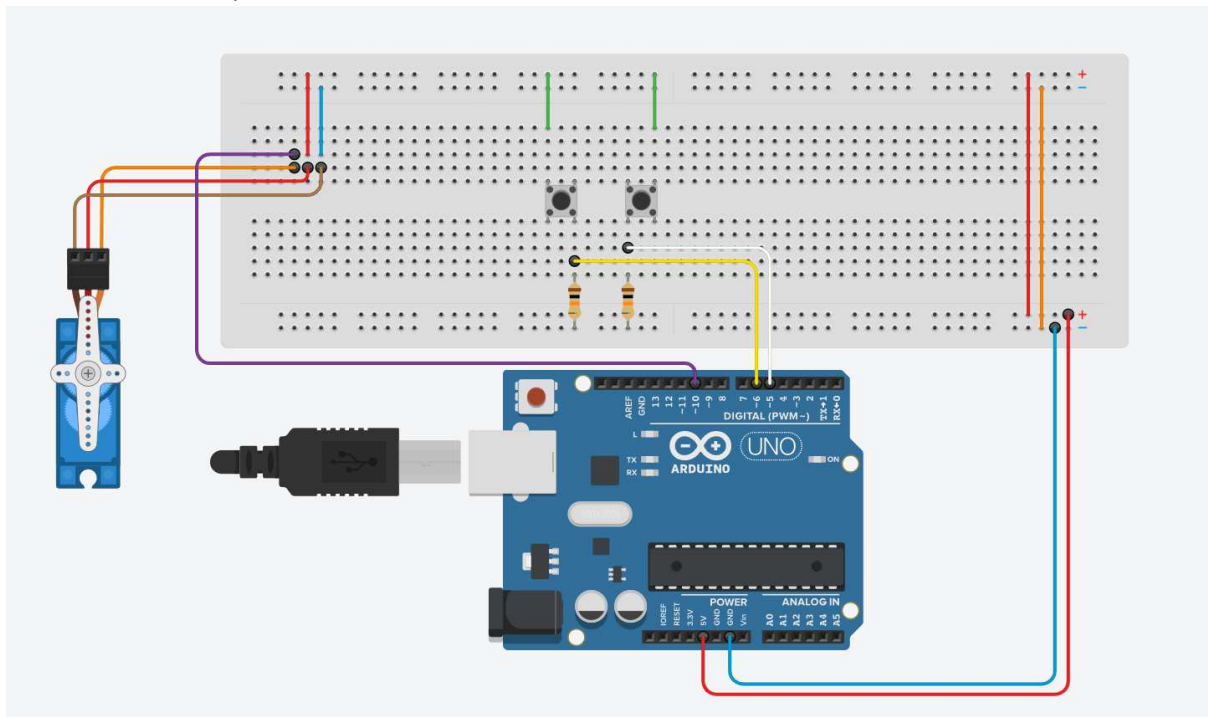


```
if (Button == HIGH && Button1 == HIGH) {  
    CanRotate = 1;  
} else {  
    CanRotate = 0;  
}  
if (CanRotate == 1) {  
    servo_10.write(45);  
} else {  
    servo_10.write(2);  
}  
delay(0.1); // Delay a little bit to improve simulation performance  
}
```

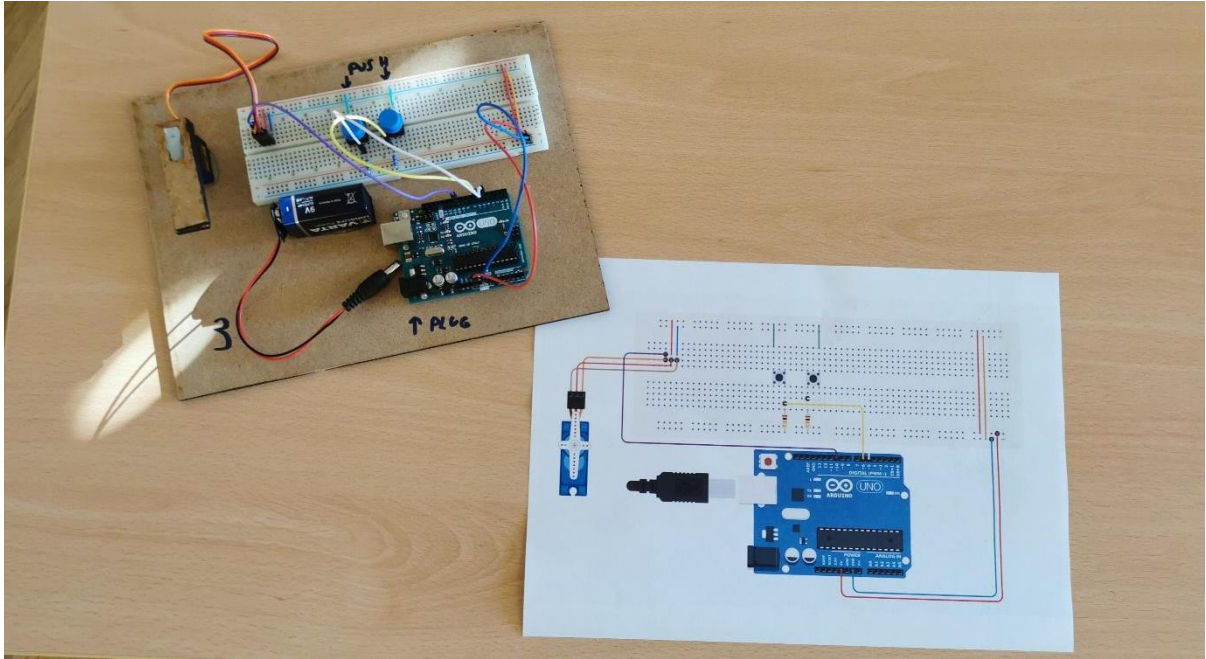
End of program

Electronics set up

For the challenge to be played it is required to set up the electronics first. We recommend fully assembling the challenge to test if it works correctly. When everything is set up as shown in the picture below the servo should rotate for 45 degrees when both buttons are pressed, when released the servo returns to the first position.



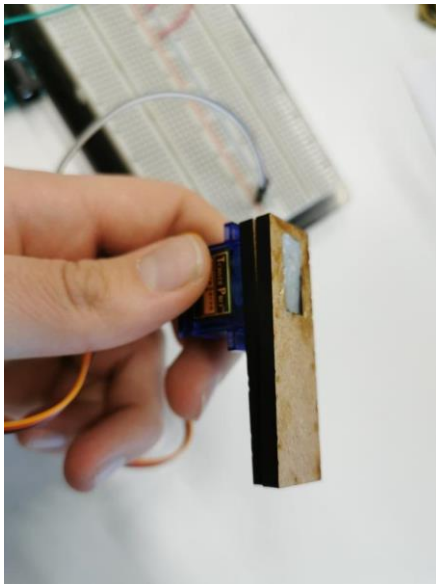
Picture 1 Schematic



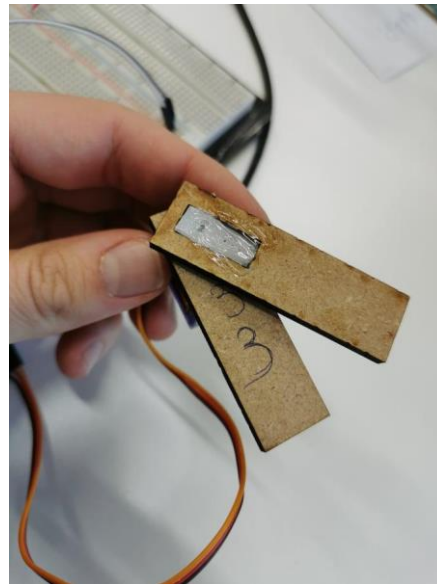
Picture 2 Actual connections based on schematic

Servo setup

The servo motor must be set up in a way that when activated will reveal the code number. It is best to first make the electronics and start it so that the Arduino rotates the servo to 0°. When you are sure the servo is rotated to 0° you can glue on two pieces of wood or cardboard to make like a scissor arrangement.



Picture 3 Closed scissors (0°)

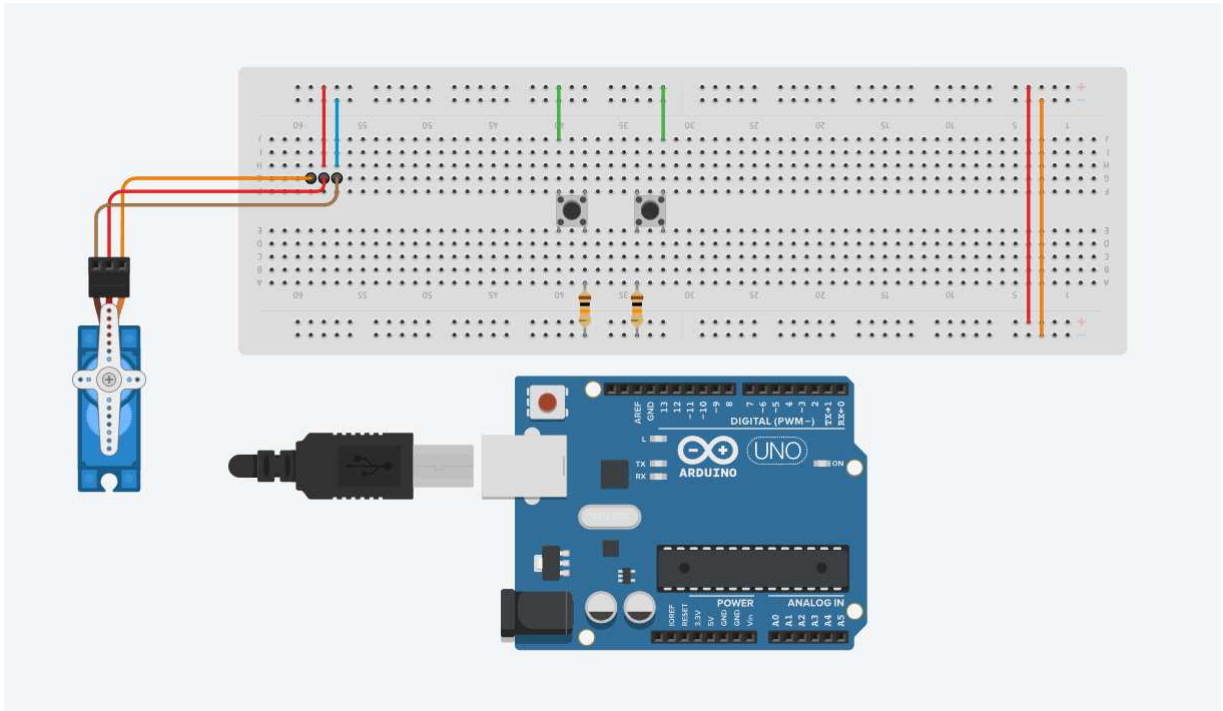


Picture 4 Open scissors (45°)

With cardboard or wood, we must achieve that when the servo is rotated to 0° the two pieces are aligned and hiding the number and when the Servo is activated and rotated to 45° the two pieces must come apart and reveal the number. On the bottom piece, write 2 numbers that are part of the lock.

Game preparation

When we confirm that the electronics work and the Servo is set up, we must prepare the puzzle for players. First, we can print the schematic picture that we provide next to the electronics. Second, we must remove a few Jumper Wires from the electronics as shown in the picture below.

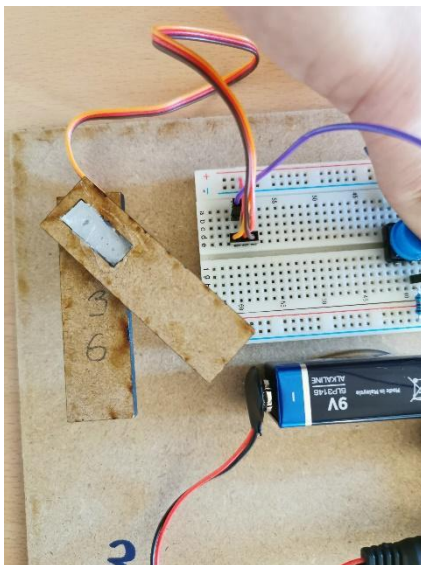


Picture 5 Disconnected schematic

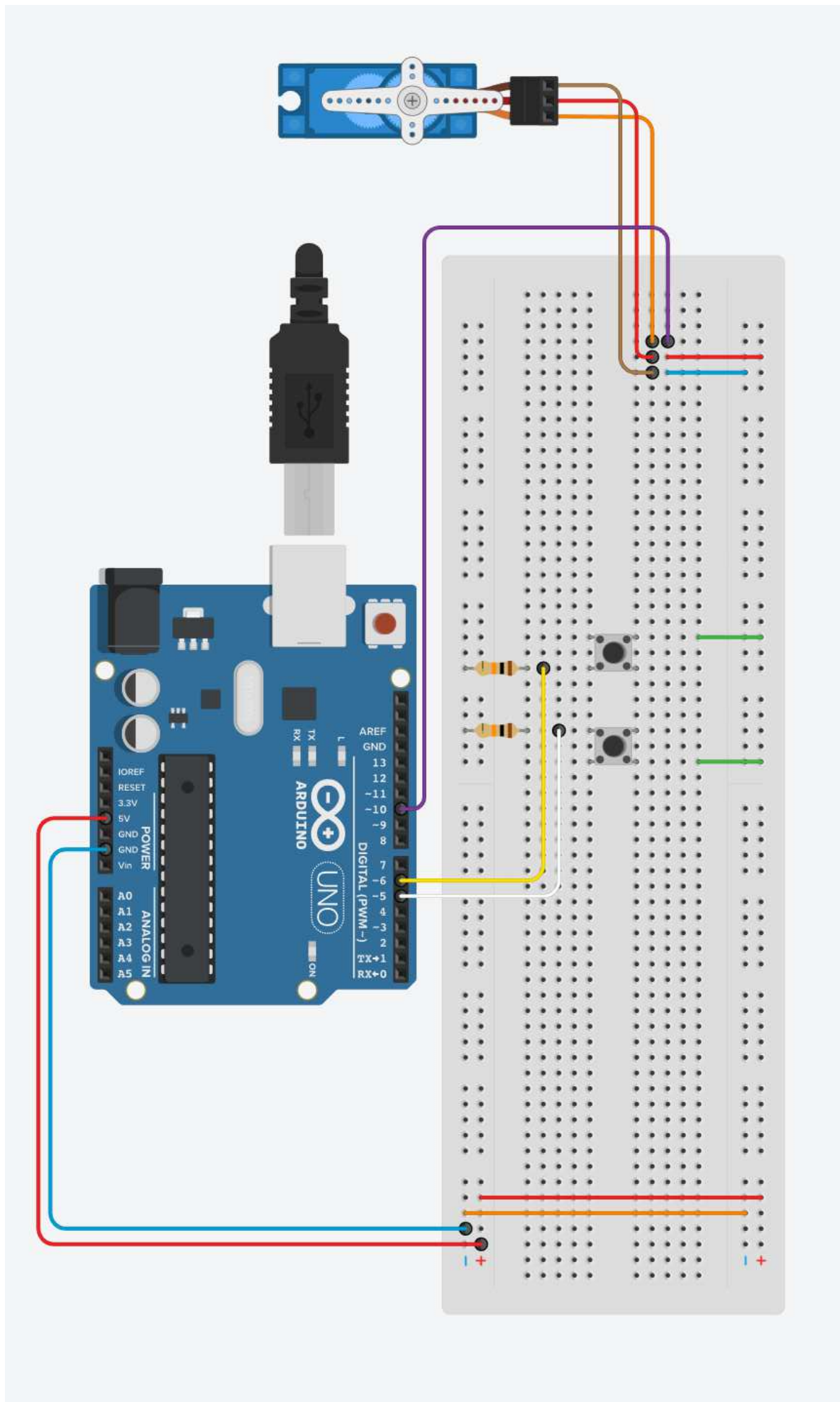
Now the challenge is ready to be played.

Solution:

The solution for our puzzle is: 36



Print the last page.



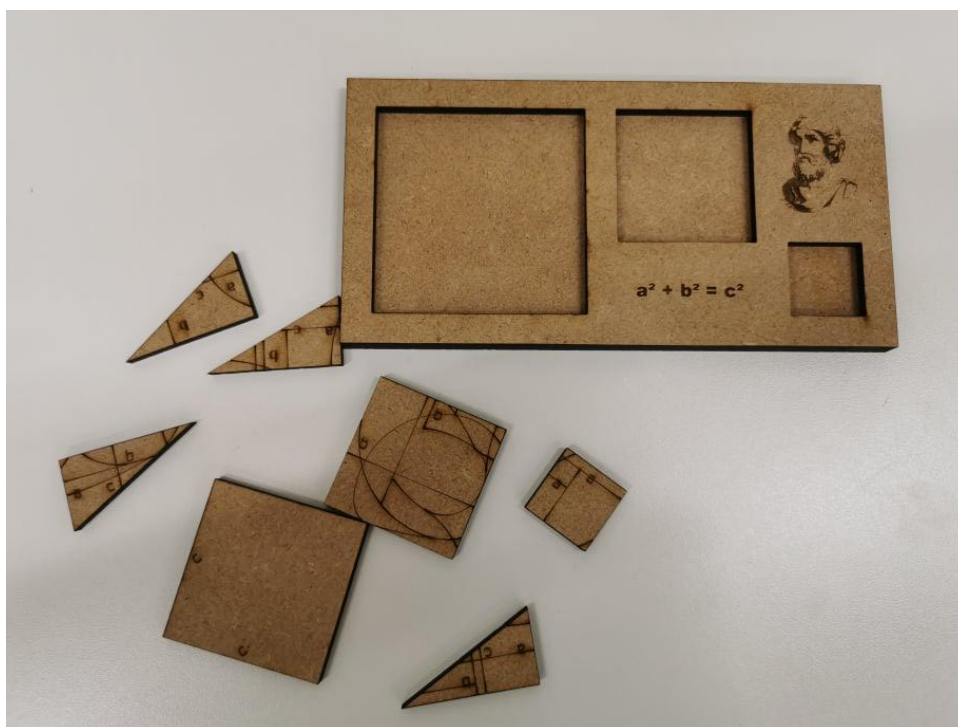
The goal of this puzzle is for players to re-arrange the pieces of the puzzle. They must fit squares A and B into the big hole where the C square was. If they arrange them properly, they will get a code number. This puzzle is a visual example of how the Pythagoras theorem works.

- Cardboard / Wood

For this puzzle, we must print the template below.



When you print the template, you must glue it to a piece of wood or cardboard. Now all you must do is to cut out everywhere where there is a spaced line. You will end up with one full rectangle and a rectangle with 3 holes. This two are now glued together so that the picture of Pythagoras is facing up.



Picture 2 Glued rectangles and other pieces

Now the puzzle is finished.

Game preparation

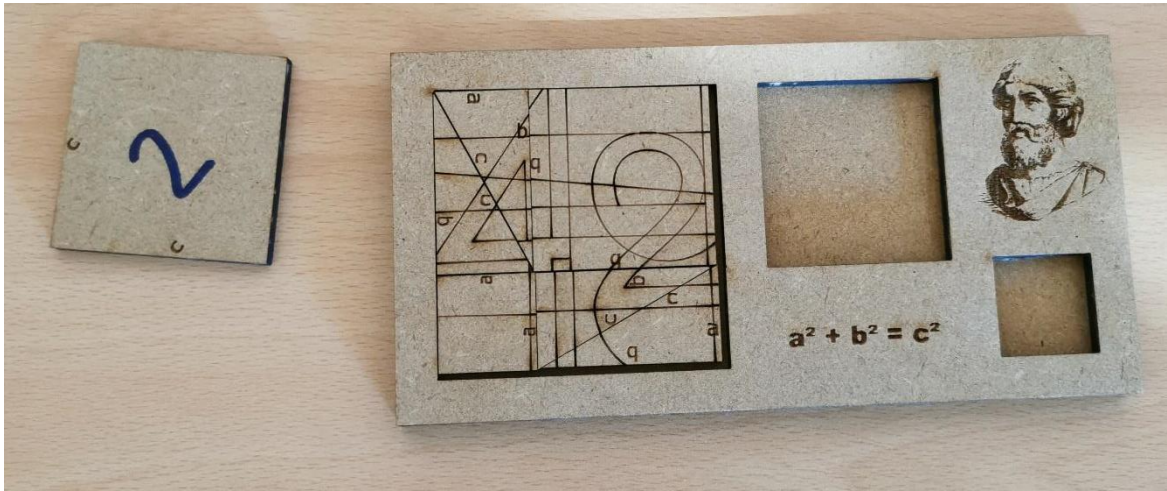
We have completed the puzzle now we have to prepare it for players. We must assemble the puzzle to its basic state, as shown below this is all the setup we need.



Picture 3 Base state of the puzzle

Solution

The solution for our puzzle is: 42



Picture 4 Solved puzzle



Riddle 3: PC Puzzle

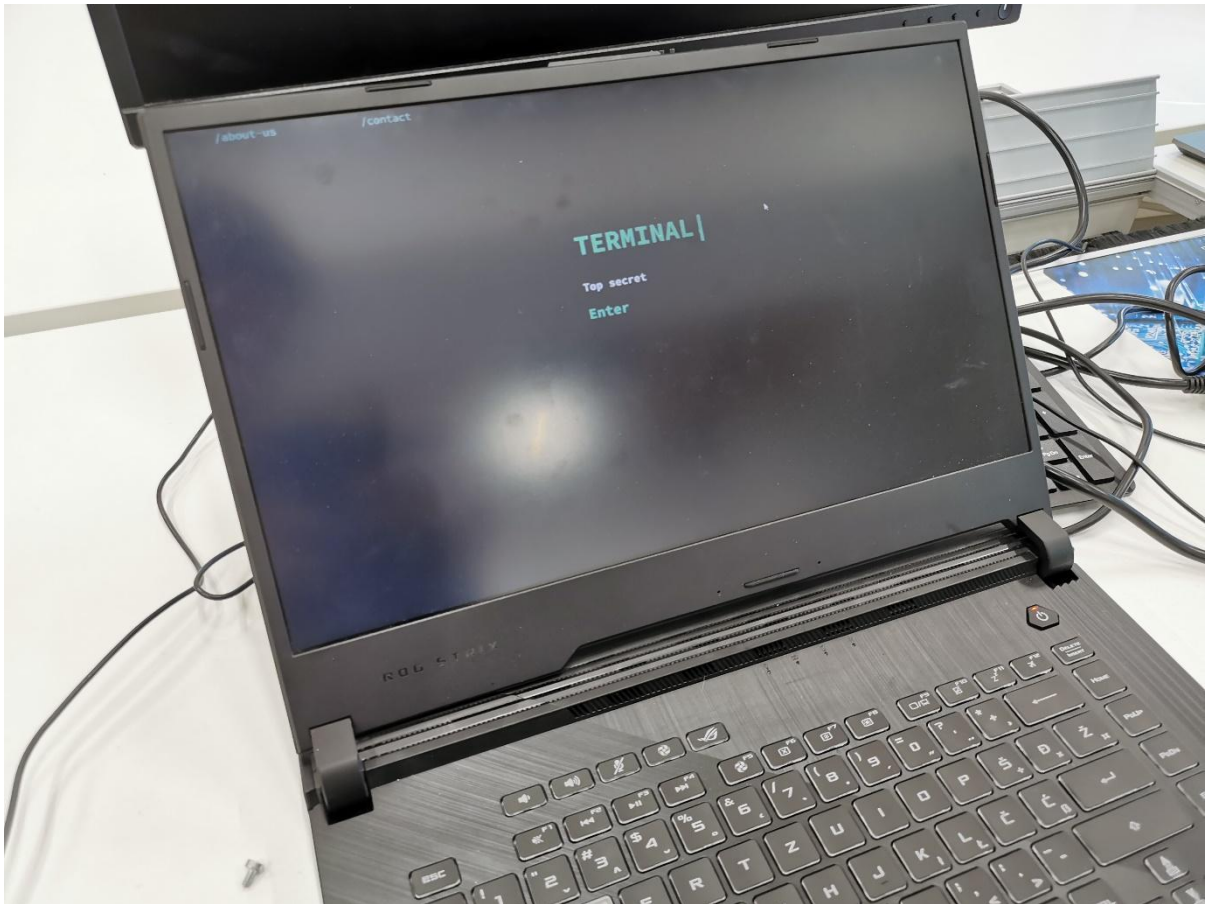
The goal of this puzzle is for the participants to decrypt a message on a WEB Page.

Item list:

- PC or a Laptop.

Preparation:

Download the compressed folder > extract it > open the Browser file named index > press F11 for fullscreen.



And the challenge is set up.

Solution:

The solution for our puzzle is: 87

Riddle 4: Wood puzzle

The goal of this puzzle is for the participants to figure out the right position of pieces and then finish the equation to get the right result.

Item list:

- Cardboard / Wood

Printing:

For this puzzle, we must print the template on the next page.

Game preparation:

When we successfully assemble the puzzle we must just place the board and the free pieces on the table and the puzzle is ready to play.



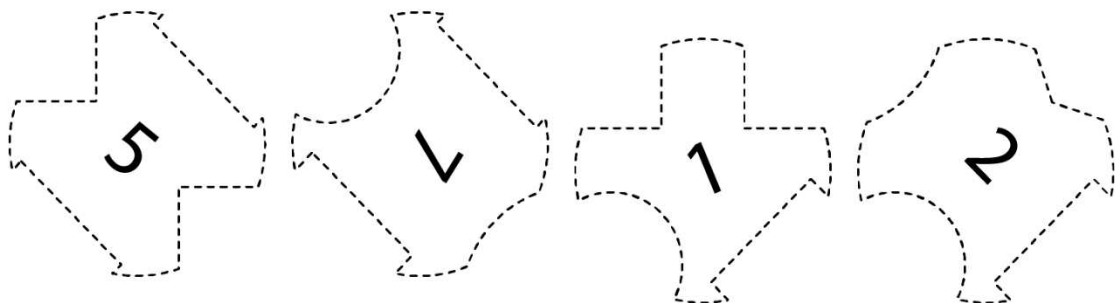
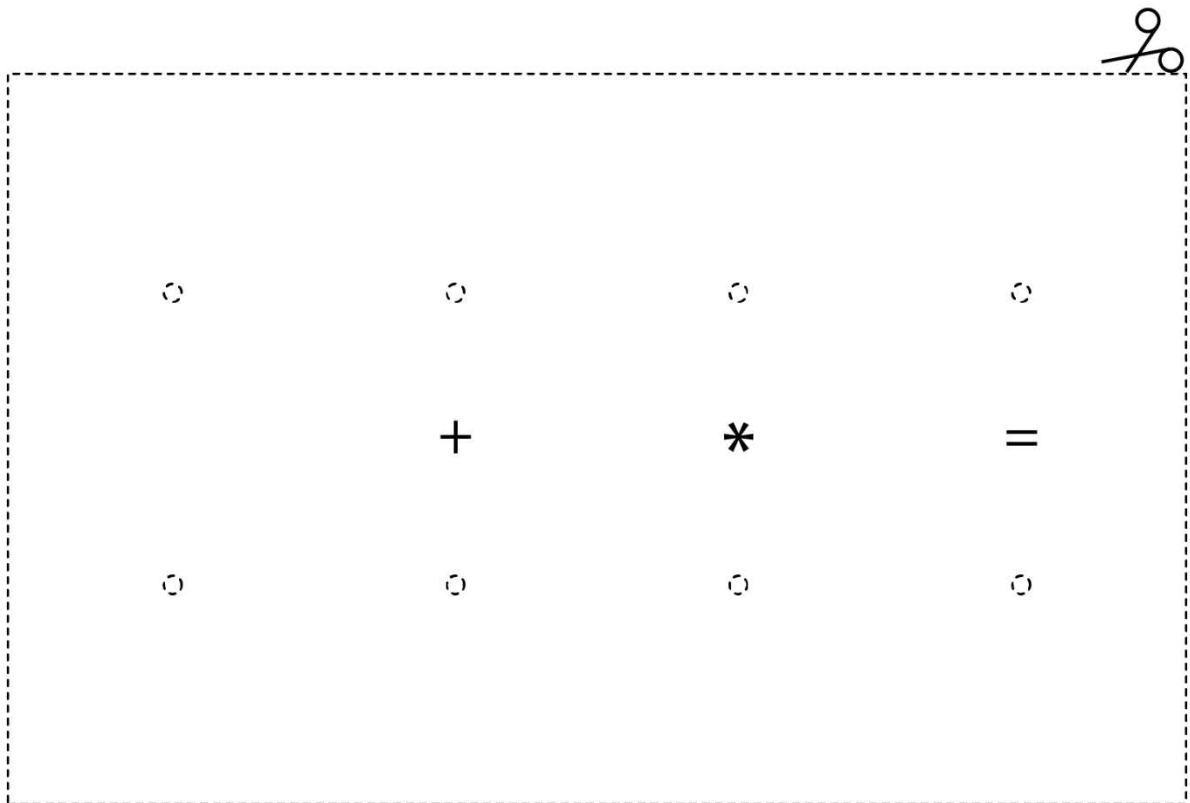
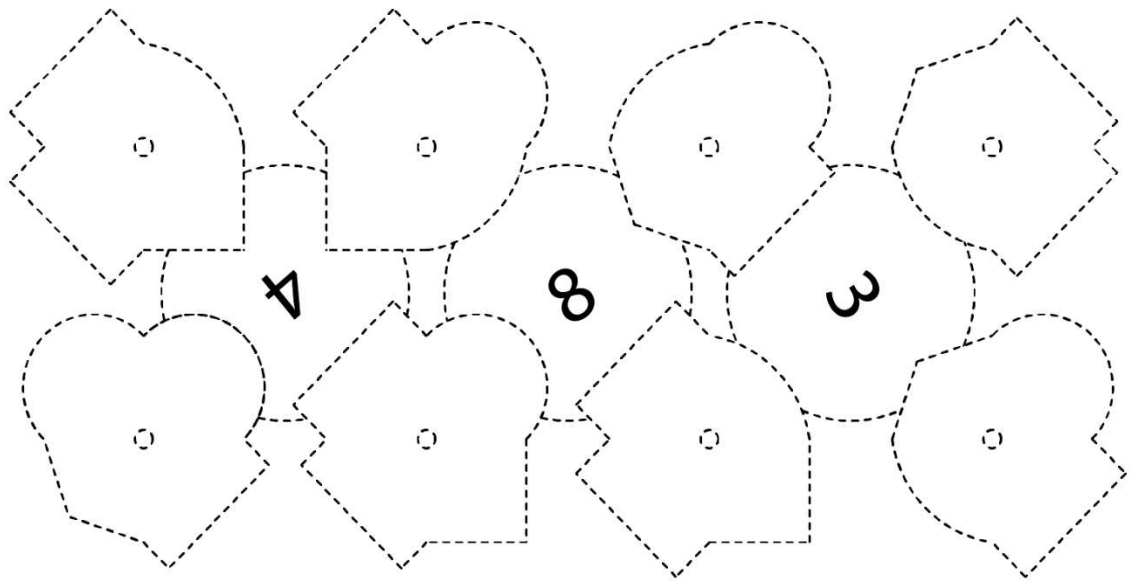
Picture 1 Assembled and prepared puzzle

Solution:

The solution for our puzzle is: 28



Picture 2 Solved puzzle



When the template is printed we must glue it to cardboard or wood and cut it out everywhere there is a spaced line. After this we must secure the pieces of the puzzle with holes in the mainboard, we used M6 screws and bolts.

Riddle 5: Final box

This is the challenge that connects all the other puzzles. The goal for this one is to collect all the results of previous puzzles and use them to unlock the box.

Item list:

- Simple box
- Two locks with four numbers

Preparation:

We used two four digits locks and set it up so from each of the four challenges we got 2 digits that have to be combined in order to unlock the locks.

We also labelled the puzzles from 1-4 and marked the corresponding two digits on the locks so it is clear where to use the results of the puzzles. For this, we used the same marker so it is easier to make the connection.



Picture 1 Final Box

Solution:

If you copied our challenges exactly than you can set the first lock to **code 1: 2842** and the second to **code 2: 3687**

Escape Stay



IHK-Projektgesellschaft mbH
OSTBRANDENBURG



www.escape2stay.eu



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THE GOVERNOR'S PAPERS



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**Making vocational education and training
a first option - not a second choice!**

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THE GOVERNORS' PAPERS



The world's most powerful Governors have identified 5 qualified professionals to assist in the development of life on the new planet.

Can you find the 5 professions and the required skills in 30 minutes?

This is one of five free escape rooms you can play with your students to make vocational education career paths attractive.

In this escape room you will immerse in

VARIOUS VET SECTORS

and cover the following related skills and typical tasks:

1. Social skills

Communication, sharing of tasks, pooling of ideas, rapport, cooperation, empathy

2. Soft skills

Communication, adaptability, leadership, teamwork, time management, organization, collaboration, creativity, problem-solving, decision-making, stress management, active listening...

3. Cognitive skills

Attention to detail, concentration, critical ability and rational thinking. Quick decision making but always considered decisions, working under pressure, patience...



Find all of them here:
www.escape2stay.eu

After completing this escape room, your students will be able to:

- ✓ Work as part of a team.
- ✓ Follow the logic of an investigation.
- ✓ Solve different puzzles and tests using logical reasoning and working in teams.
- ✓ Know the skills related to 5 important professions.

RIDDLE OVERVIEW

1. Open the Briefcase
2. Carmen, Nursery Assistant
3. Christine, IT Specialist
4. Hans, Mechanic
5. Malik, Electrician
6. Francesco, Cook
7. Final chart

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INSTRUCTIONS FOR GAME MASTERS

This booklet will provide you with all necessary information to implement the escape room and link all needed materials.

As a Game Master, you will introduce the game setting and aim to your group of players. You will be available in case they need help and provide them with hints that will guide them to find the solutions of the riddles and ultimately reach the goal.

Sometimes the Game Master has to interfere without being asked to avoid players working too long in the wrong direction or to prevent them from settling on a wrong solution. But not too much! Watch out for your body language and where you look in the room to avoid unintentional hints.

Remind players that they can use a hint – sometimes they forget, or pride prohibits them from asking. Read the room and be flexible with the hints. You do not have to use the exact hints that are provided in the instructions.

To find out more about your role as a game master, please have a look at the
Escape2Stay Handbook
and our complete guideline here:

www.escape2stay.eu/the-governors-papers/



GAME RULES

When introducing the Escape Room, make sure to:

- Define the playing area and let the players know if there are any objects that are off limits. If the room is very full of material, mark objects that are not part of the game with a coloured dot.
- Instruct them that they do not have to destroy/break any objects in the room. They will never need force to discover any clues.
- Some riddles instruct players to use a smartphone, so they are allowed to have one.
- Set the time limit to 30 minutes and make sure that the players have an opportunity to see the time passing by placing a clock or a countdown visibly in the room.



TIME FRAME

120 minutes	Preparation before playing for the very first time including reading instructions, preparing materials, and getting familiar with the game
10 minutes	Introduction of the escape game to players
30 minutes	Estimated game time for one group
15 minutes	Resetting the room after one play-through



PREPARATION

To play the game you need a suitable space. For all the riddles it is very useful and necessary for the participants to have sticky notes, paper, and pens. For this reason, they will be left in the Governors' briefcase.

When preparing the game, you can decide what information you put on the investigation board and what information you put in the briefcase. There is no set order for this game, it is totally dynamic, and each game will be different from the previous one.

ITEMS TO PREPARE

- **"Investigation board"**, this can be a cork board, a large piece of cardboard, a panel, or simply a space on the wall where the players can stick the clues they find.
- **Briefcase**, any briefcase, or box that simulates a Governors' or businessmen's briefcase.
- **Box** that can be locked
- **1 numerical padlock**
- **1 letter combination padlock**
- **1 mirror**
- **Red filtered glasses** or a transparent sheet of red foil.
- **Sticky notes**
- **Voice Recording Button** (e.g. <https://amzn.to/3JlmxLq>)
- **1 envelope**
- **1 brass fastener**
- **Printable materials** (some need to be assembled)

PRINTABLE MATERIALS

- **Riddle 1:** Print or write the sticky note with the time of the Governors' meeting.
- **Riddle 2:** Print Carmen's photo and put it in the briefcase. Print the morse code alphabet card and pin it to the investigation board.
- **Riddle 3:** Print the QR code and cut it into four pieces. Place one piece on the investigation board and the other three pieces in the briefcase. Print Christine's photo and place it in the briefcase.
- **Riddle 4:** Print, cut and assemble the Caesar Cipher wheel. Print the card with the encrypted message. Put the card and the wheel in an envelope. Write on the envelope that the sender is Christoph. Print the photo. Put everything in the briefcase.
- **Riddle 5:** Print the CV and place it with the mirror in the briefcase.
- **Riddle 6:** Print Francesco's letter in colour. Put the red-filter glasses in the briefcase. Print Francesco's photo and put it in the briefcase.



You can find links to recommended items here:

www.escape2stay.eu/the-governors-papers/



Find all materials you need here:

<http://www.escape2stay.eu/the-governors-papers/>





- **Riddle 7:** Print the findings chart players have to fill throughout the game with the information they find. Put the button with the recorded message inside the box. Close the box with the letter combination padlock.
(!) Please, keep in mind that the letters included are different in each padlock of this type. If it is not possible to create the same combination as indicated in this game, you will have to insert another word. In this case, the findings chart's solution will have to be modified to be the same password as the one set as in the letter lock.

PREPARATION BEFORE FIRST PLAY-THROUGH

Estimated time: 120 minutes

- Reading instructions and getting familiar with the hints (45 minutes)
- Buy needed objects if necessary
- Printing of materials in colour (15 minutes)
- **Set the two padlocks:**
 - Write the numerical code as the Governors' meeting time on a sticky note (→ see riddle 1). Put the sticky note on the investigation board so that it is obvious to the players at the start of the game.
 - Set the letter combination padlock to the word you have decided to hide in the findings chart. (→ see riddle 7).
- **Record the winner's message** with the voice recording button. Put it in the box. Close the box with the letter combination padlock.
- Put the following items in the **briefcase**:
 - Carmen's photo (nursery assistant)
 - 3 pieces of the QR code
 - Christine's photo (IT specialist)
 - Envelope with the Caesar Cipher wheel and Hans' encrypted message
 - Malik's CV (electrician)
 - Mirror
 - Letter from Francesco (cook)
 - Red filtered glasses
 - Locked box (which contains the voice recording button)
- Put the following items on the **investigation board**:
 - Sticky note with the time of the Governors' meeting
 - Morse alphabet card and a brass fastener
 - 1 piece of the QR code
 - Hans's photo (mechanic) and his business card, Francesco's photo (cook) and Malik (electrician)
 - Findings chart
- Setting up the room for the first time (45 minutes)



Find all materials you need here:

<http://www.escape2stay.eu/the-governors-papers/>





PREPARATION TIME TO RESET THE ROOM

Estimated time: 15 minutes

- Removing traces and notes from previous group/play-through and hiding new hints (15 minutes)



STARTING THE GAME

It is recommended to estimate **50 minutes for a play-through**, of which you take 10 minutes to brief the players, 30 to let them play, and 10 for a quick de-briefing. Ideally, **you combine the game with a more intense career counselling session before or after the escape game.**



After generally introducing your plans and motive to play the game with your students, continue with these steps:

- First, build groups of max. 6 players per group.
- Second, introduce the setup and the rules of the escape game.
- Finally, give them the story introduction and start the timer.

The game will be played in **two game zones**:

1) The Governors' briefcase.

2) The Governors' investigation board/panel.

The players will have to gather information and make sense of the clues they find in the briefcase and then arrange them on the investigation panel to discover who the 5 professionals who are going to travel to the new planet are.

The game, therefore, does not have an established order, it will develop according to the logic of the investigation followed by the participants. The riddles do not have a fixed order of development, the clues will be scattered randomly around the briefcase and the board (unless the description of the riddle indicates a specific place for a specific clue).



INTRO OF "THE GOVERNORS' PAPERS"

To present the story, it can be done in two different ways:

The first way is by reciting the following story:

A new planet on which human life is possible has been found. The world's most powerful Governors have identified 5 qualified professionals to assist in the development of life on the new planet.

As the operation was underway and the 5 professionals were being recruited, the Governors have realised that someone has manipulated and encrypted all their documents and clues! They need your help to decipher the information and give it back to the Governors.

We only have the Governors' briefcase, a notepad, and the board where they were documenting all the information. Inside the briefcase is all the information we need to complete the mission... but all the information has been mixed!

You have half an hour to complete the mission: **discover the identity of the 5 professionals who will be sent to the new planet.**

<http://www.escape2stay.eu/the-governors-papers/>



Another way is by projecting the following Youtube video to make this presentation of the story more interactive and visual:

<https://youtu.be/NThwDDTeOJo>



RIDDLE OVERVIEW & HINTS

Riddle 1: Open the Briefcase

Description

The participants find the Governors' briefcase and the investigation board panel in the room.

To start the game, they need the clue on the board to open the Governors' briefcase, which is locked with a 4-digit numerical lock.

The clue is the Governors' meeting time, which is pinned on a post-it to the investigation board.

Note on the board that reads:

Next Governors' meeting: Tuesday 8 April at 23:40

The number is actually the numbering that opens the briefcase (2340).

The goal is reached when players figured out the code for the numerical lock and opened the briefcase.

Hints for Game Master

- The Game Master has to remind the participants that EVERYTHING on the panel can help them.
- The Game Master can help participants to focus on what they are looking for, what they need to continue in the game: a number, a word, a specific piece of information... In this case they need a number to open the briefcase.

NOTE: You can choose the code for the briefcase freely.

It is not relevant for any other riddles. If you have a 3-digit padlock, set the time for the Governors' meeting before noon (e.g. 9:45).

Materials needed

- Briefcase filled with clues (see → Preparation)
- 4-digit numerical lock set to the code **2340**
- Investigation board
- Post-it note:





Riddle 2: Carmen, Nursery Assistant

Description

Participants have to decipher the skills of the nursery assistant, which are written in morse code on the photo.

Participants have to match the encoded message with the code alphabet to decipher the message. They must use logic, be thorough and patient to do so.

The goal is reached when players have deciphered the message and written them in the findings chart.

Solution:

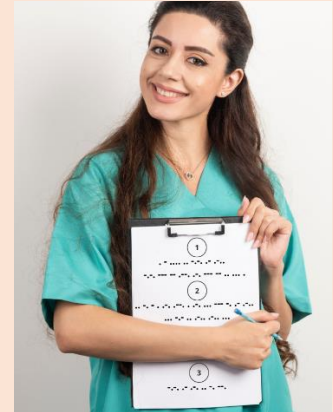
- ✓ Ethical compromise
- ✓ Caring
- ✓ Interpersonal skills

Hints for Game Master

- The Game Master can remind the participants that ALL elements of the game can help them.
- The Game Master should know how the Morse code alphabet works.
- The Game Master can guide the participants, telling them that they must be patient to solve this test.

Materials needed

- Photo of Carmen



- Morse code alphabet card

A ·····	J ·····	S ·····	2 ·····
B ·····	K ·····	T ·····	3 ·····
C ·····	L ·····	U ·····	4 ·····
D ·····	M ·····	V ·····	5 ·····
E ·····	N ·····	W ·····	6 ·····
F ·····	O ·····	X ·····	7 ·····
G ·····	P ·····	Y ·····	8 ·····
H ·····	Q ·····	Z ·····	9 ·····
I ·····	R ·····	0 ·····	

This may help you... Carmen, nursery assistant. Spain



Riddle 3: Christine, IT Specialist

Description

Participants have to complete a jigsaw puzzle with pieces of a QR code they will find in the briefcase and in the investigation board.

Then they have to scan the QR code which takes them to the professional blog of Christine and find the information they need.

The goal is reached when players have read the online blog to know the skills of an IT specialist and write all the information found on the findings chart.

Solution:

- ✓ Logical thinking
- ✓ Innovation
- ✓ Updating and continuous learning

Hints for Game Master

- The Game Master has to make sure that the participants have all the pieces of the QR code.

Materials needed

- QR code jigsaw puzzle



- Photo of Christine (misleading item)



- Smartphone with internet access and QR code reader/scanner



Riddle 4: Hans, Mechanic

Description

Hans has sent the Governors an envelope, in this envelope he sends them the wheel to decrypt his message in Caesar cipher.

In addition, the Governors have a business card and a photo of him.

The goal is reached when players have deciphered the message and introduce all Hans' information in the findings chart.

Solution:

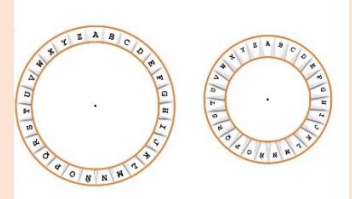
- ✓ Manual dexterity
- ✓ Accuracy
- ✓ Organizational skills

Hints for Game Master

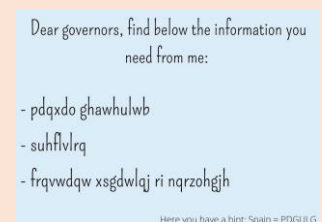
- The Game Master has to remind the participants that they have to write down and save all the data they find and believe to be valuable.

Materials needed

- Caesar Cipher Wheel



- Letter and card with message



- Business card (misleading item)



- Photo of Hans (misleading item)





Riddle 5: Malik, Electrician

Description

Participants will find the CV of an electrician. In that CV they can find all the information they need about the electrician.

The skills are written backwards, and participants will have to decrypt them using a mirror.

The goal is reached when players discover the skills and include them in the findings chart.

Solution:

- ✓ Problem solving
- ✓ Ability to work individually
- ✓ Interpretation of technical drawings

Hints for Game Master

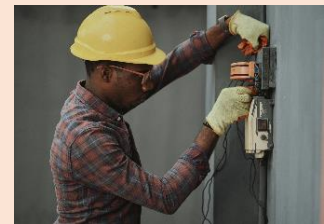
- The Game Master has to be attentive and remind the participants that they have to fill the findings chart so there is information in the CV that it is not that important for them.
- The Game Master may need to remind the participants that all the elements in the room may be useful to solve the riddles.

Materials needed

- CV



- Photo of Malik (misleading item)



- Mirror



Riddle 6: Francesco, Cook

Description

Participants will have to put on the glasses with red lenses to decipher the message hidden in a cypher letter sent by the cook.

By placing the red filter glasses over the coloured letters, the hidden message can be seen.

The goal is reached when players have deciphered the hidden message and put Francesco information in the findings chart.

Solution:

- ✓ Creativity and imagination
- ✓ Quick decision-making
- ✓ Ability to work under pressure

Hints for Game Master

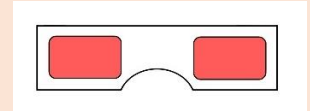
- The Game Master has to remind them that to decipher a riddle they may need more than one element.

Materials needed

- Coded letter



- Red filtered glasses



- Photo of Francesco





Riddle 7: Final Chart

Description

To solve this riddle participants must have solved all the previous games (in no particular order).

When they have completed the table with all the information they have discovered, they will find a hidden word in the table "Findings chart" underlined in red.

The hidden word is the combination that opens the letters combination lock that closes the box that the participants will have found in the briefcase.

Inside the box they will find a push button, when activated, a recording will play to announce victory.

In the prepared materials the hidden word that opens the lock is BRAVO, but it can be modified with any other word or combination of letters. As each padlock has a random combination of letters that may not allow the BRAVO word to be set, the final word solution can vary and a different word will need to be set, even by entering a series of letters that do not make up a word.

The riddle is done when players complete the table and discover the word that allows them to open the box and activate the button. At that point the game ends, and the timer stops.

Hints for Game Master

- Players need to realise that they need a word because it is a lock coded by letters, not numbers.
- It is important that players understand that they need to have achieved all the riddles to complete the findings chart with all the information.
- The final hint appears when the full game is achieved.

Materials needed

- Findings chart

NAME	PROFESSION	SKILLS

- Box
- 1 letter combination padlock
- Voice recording button with the recorded winner's message



DEBRIEFING

On completion, meet the students and give them feedback about how they performed. Explain what worked well, if and where they surprised you, where they performed better than the average or expected and where team and individual efforts were good and fruitful. Also mention what did not work so well and where improvements in the group and the individual actions could have helped solve the riddles easier.

If they completed the game in the 30 minutes timeframe, congratulate them on their success. If they needed longer, still mention the finalisation positively and explain what caused the delay.

In the debriefing of the game, the Game Master will ask several questions that will encourage a discussion about the information young people have and the information they are missing regarding VET and the professional families:

- Did you know all these professions?
- Did you know that VET offers so many options in our country?
- Which skills list do you most relate to?

Finally, the Game Master will remind the participants that this is one more option to take into account. To conclude the activity, different promotional and information leaflets will be given. The idea is to present VET as a valid higher education option. That is to say, not to introduce university OR vocational training but university AND vocational training as valid options.



WALK-THROUGH

PREPARATION

- 1) Change the letter combination padlock password using the instructions provided. We will set it with the password BRAVO.



- 2) Record the final message on the voice recording button. Insert the recording button into the box and close it with the letter lock.
 - FINAL MESSAGE: Congratulations! You have completed the mission. Thank you!



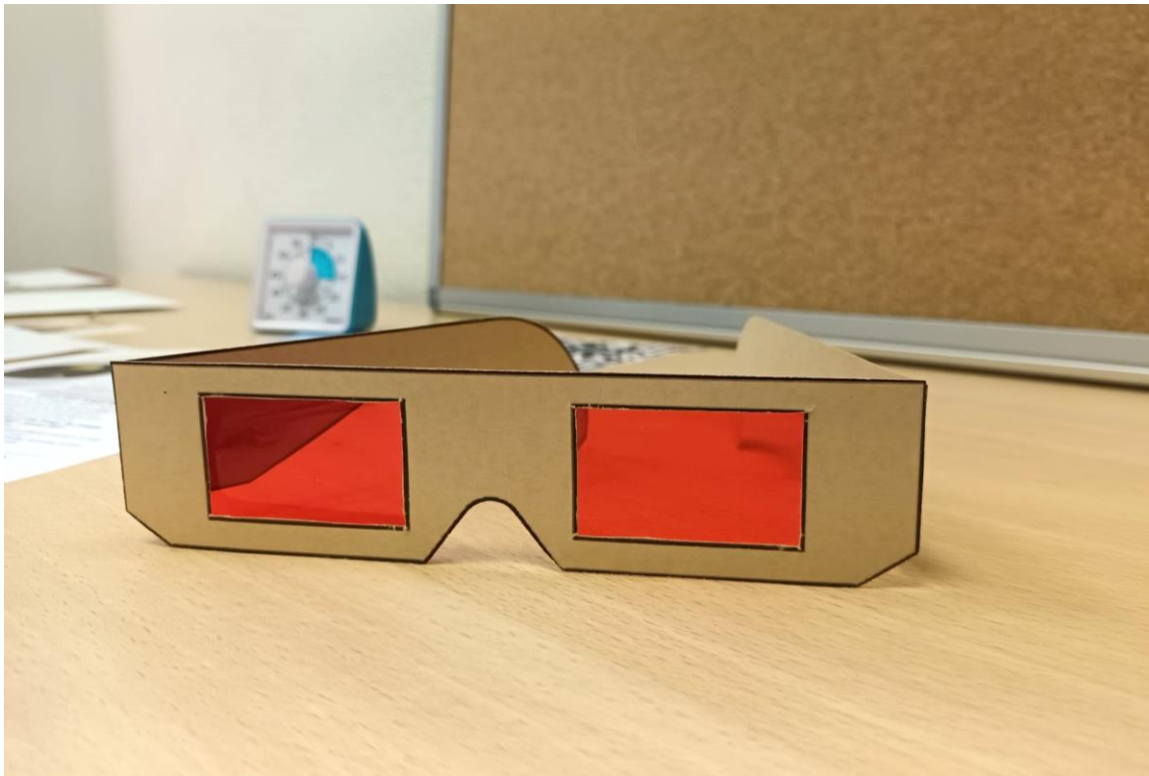


- 3) Set the timer with the half hour available to complete the game.

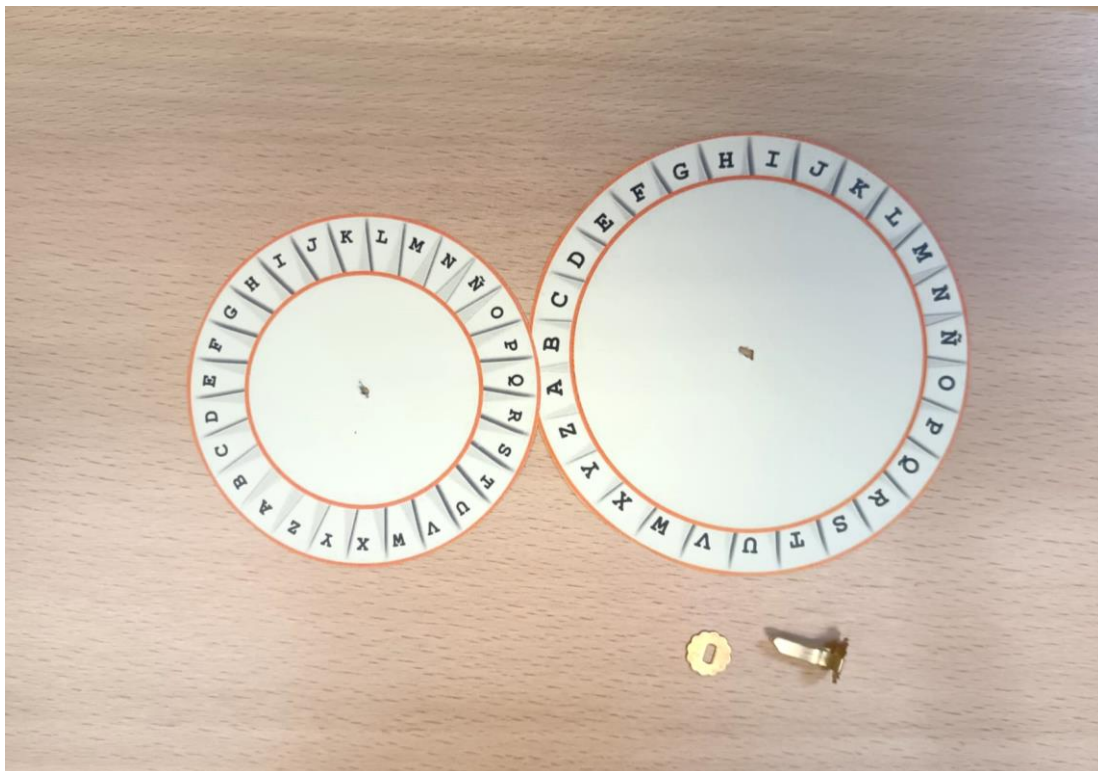




- 4) Create the red- filtered glasses with red foil. (Remember that you can also create a lense with a red filter)



- 5) Assemble the Caesar cipher wheel with the help of a brass fastener.



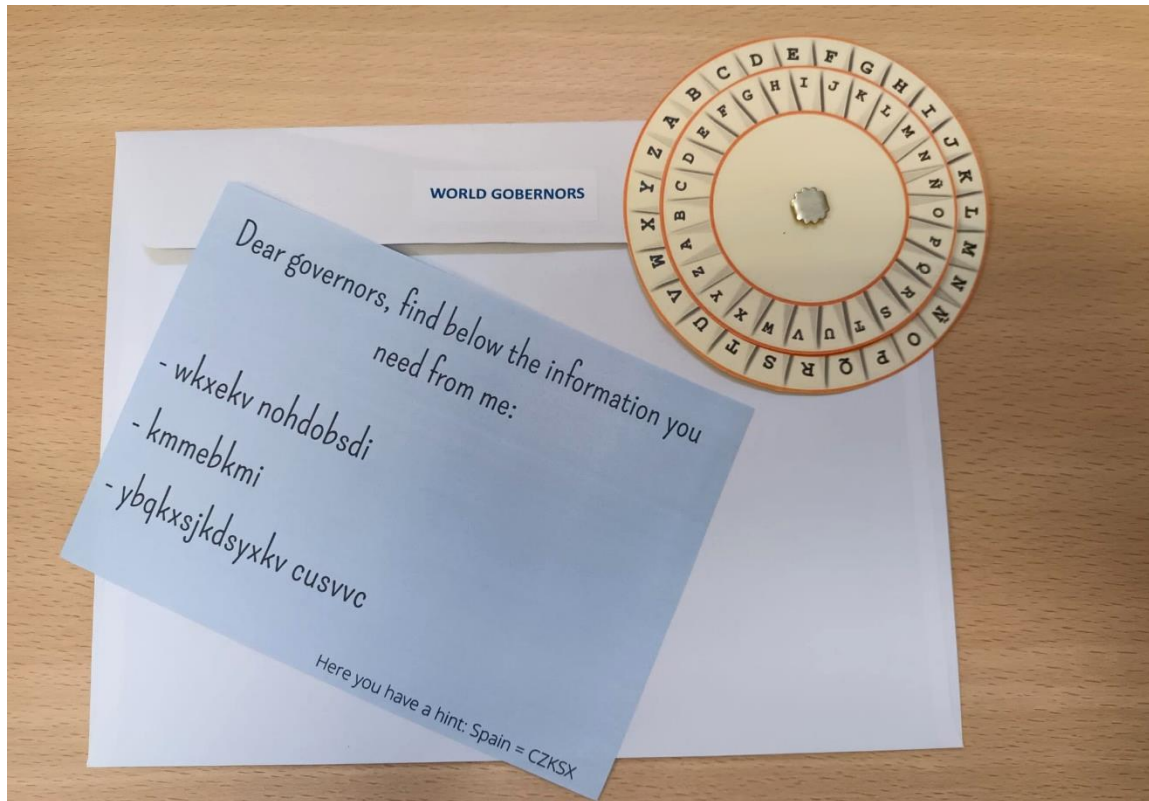


6) Cut the QR code into 4 pieces.





- 7) Put the Caesar cipher wheel and the encoded letter in an envelope with Hans' name on the return address.



- 8) Check out that the professional skills of Malik's CV are correctly readable with the mirror.





9) Include each game element in its corresponding place as detailed in the following table:

INVESTIGATION BOARD	MALETÍN
<ul style="list-style-type: none"> ✓ Sticky note that indicates the meeting time ✓ Morse alphabet ✓ 1 piece of the QR code ✓ Hans' photo (Mechanic) and his business card, Francesco's (Cook) and Malik's (Electrician) ✓ Findings chart 	<ul style="list-style-type: none"> ✓ Carmen's photo (Nursery assistant) ✓ 3 pieces of the QR Code ✓ Christine's photo (IT Specialist) ✓ Envelope with the encrypted message from Hans and the Cesar cipher wheel ✓ Malik (Electrician)'s CV ✓ Mirror ✓ Brass fastener ✓ Francesco's letter (Cook) ✓ Red filtered glasses ✓ Box (that contains the voice recording button)





10) Set the numerical padlock with the time of the governors' meeting and close the briefcase.





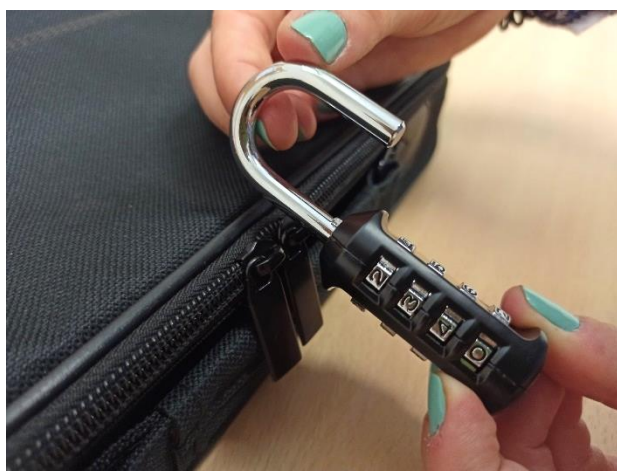
GAME DEVELOPMENT

Once everything is ready participants can start the game. This is the first image that the participants will see when they enter the game room.



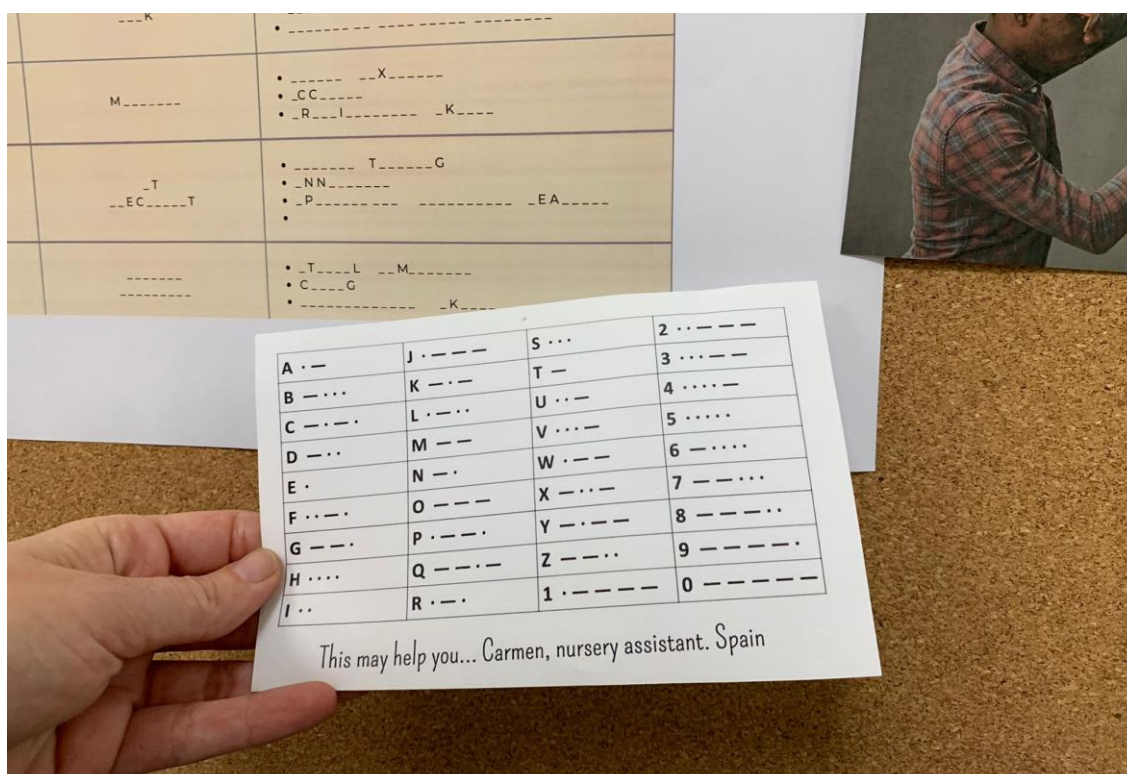
We will explain how each of the riddles are developed. Remember that the order of the riddles does not affect when reaching the final solution.

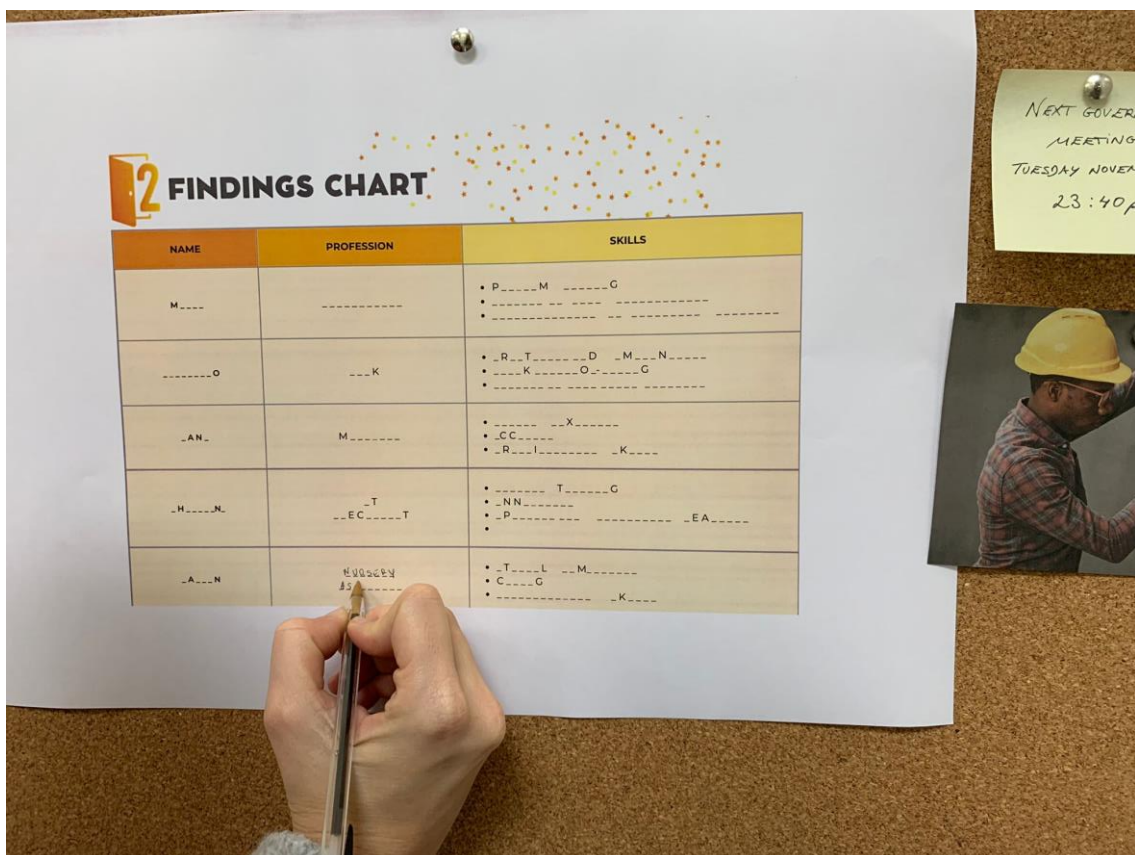
Riddle 1: The sticky note on the investigation board indicates the date and time of the next governors' meeting. The numbers of this time are the ones that open the numerical lock on the briefcase.



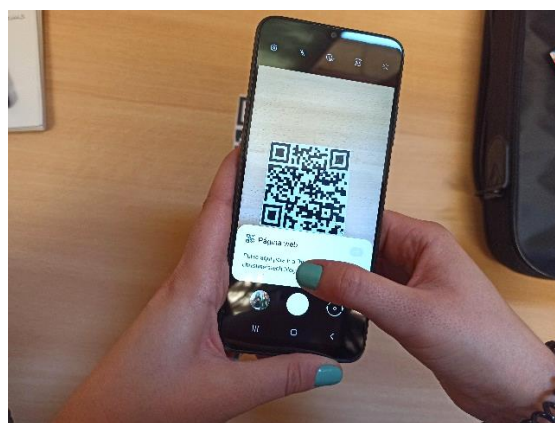


Riddle 2: In the briefcase there is a picture of a girl holding a board with an encrypted message. The board includes the Morse code alphabet, with which to decipher the words written on the board. These words are three skills that a nursery assistant should have. We will include all the information in the findings chart.





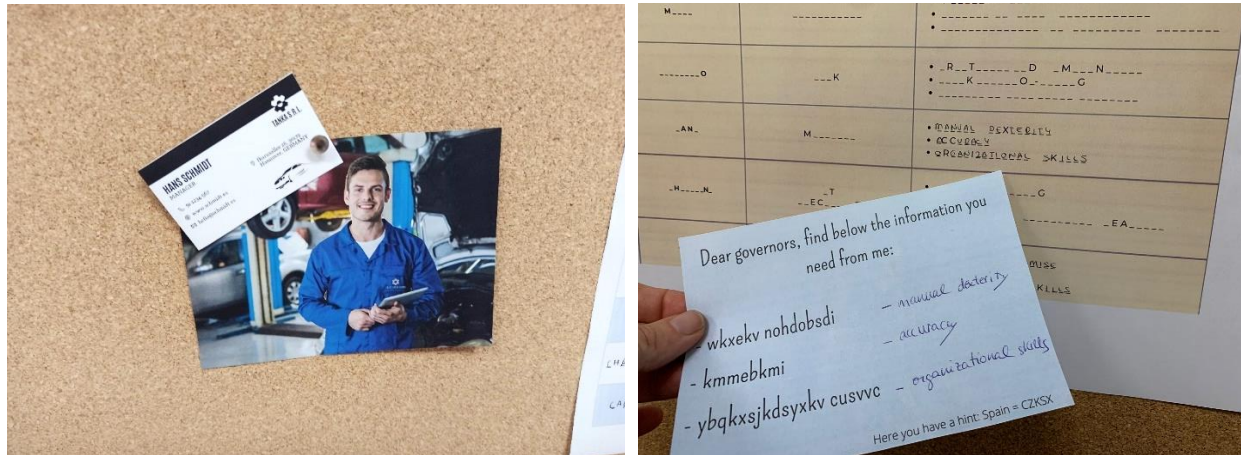
A photograph of a corkboard. On the left, a small piece of paper with a QR code is pinned. On the right, a larger sheet of paper with a table is pinned. The table has two columns: 'NAME' and 'PROFESSION'. It contains several rows of text, some of which are partially obscured or cut off. The QR code is a standard black and white matrix code. The corkboard itself is a light brown, textured surface.





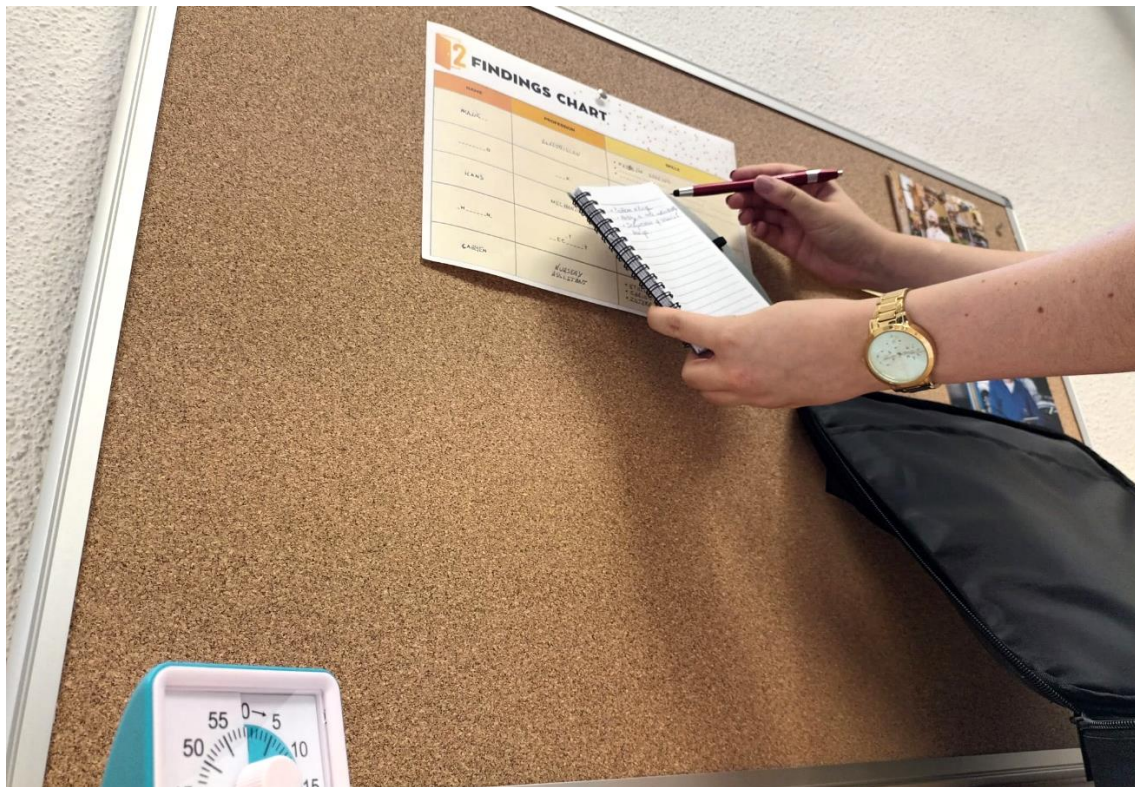
Riddle 4: In an envelope we will find a Caesar cipher wheel and an encrypted letter. Through the clue SPAIN= CZKSX, you will be able to decipher the information detailed in the letter, which are three skills that a mechanic has. We will associate that these skills belong to Hans, the mechanic who appears on the investigation board with his business card. Again, we will include this information in the findings chart.





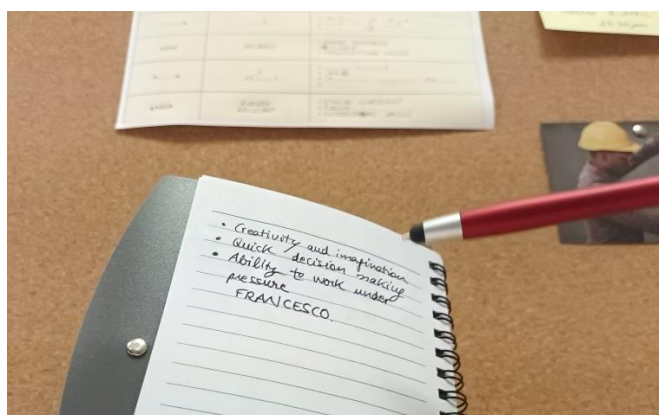
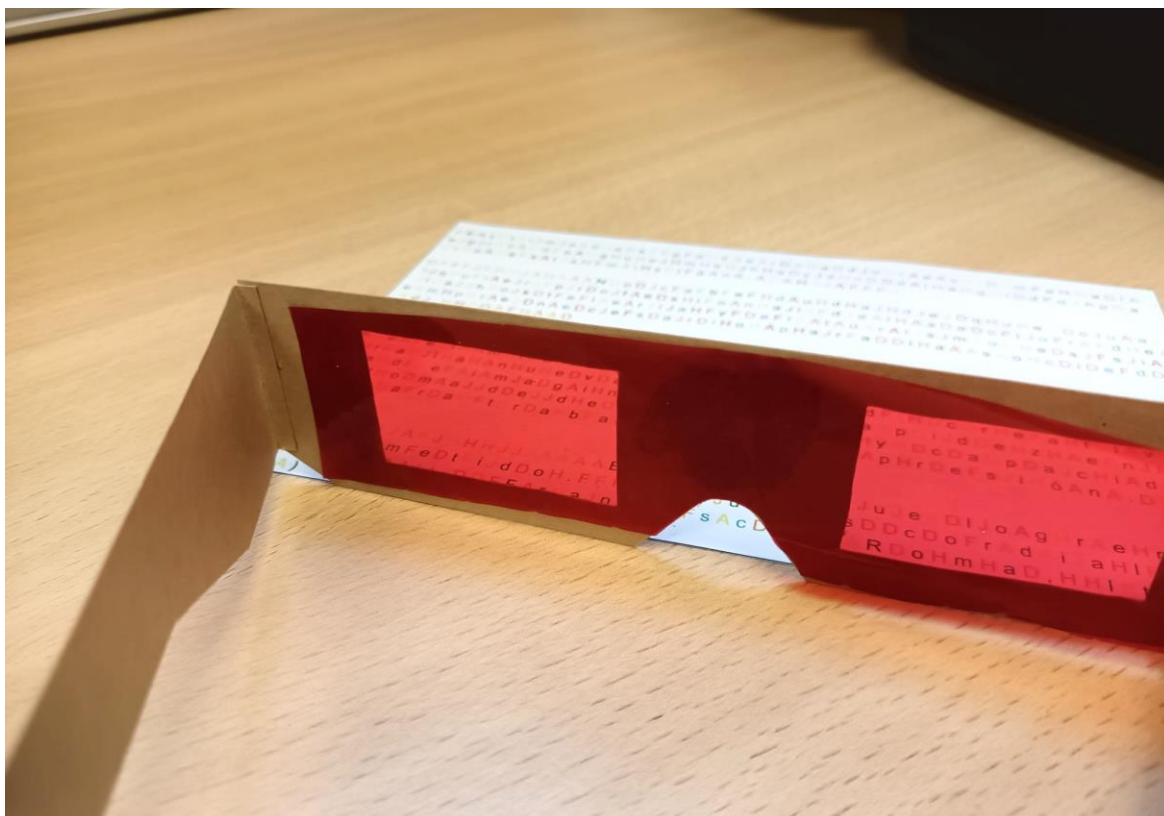
Riddle 5: In the briefcase we find an electrician's CV and a mirror. The professional skills are written backwards, but with the help of the mirror they will be able to read them correctly and add them to the findings chart.





Riddle 6: With the help of the red filtered glasses, we can read the encrypted letter that describes the skills required for the job of a cook.





Riddle 7: Once we have compiled all the information found in the game on the findings chart, we can see that some letters are inside stars. These letters form the word BRAVO, which is the key that opens the box with the letter combination padlock. When we open it, we find a voice recording button, which, when pressed, congratulates us and thanks us for the great work we have done.



2 FINDINGS CHART

NAME	PROFESSION	SKILLS
MALIK	ELECTRICIAN	<ul style="list-style-type: none"> PROBLEM SOLVING ABILITY TO WORK INDIVIDUALLY INTERPRETATION OF TECHNICAL DRAWINGS
ERASEDO	COOK	<ul style="list-style-type: none"> CREATIVITY AND IMAGINATION BULK ACTION/ANALYSIS ABILITY TO WORK UNDER PRESSURE
JANS	MECHANIC	<ul style="list-style-type: none"> DETAILS OBSERVATION COORDINATION ORGANIZATIONAL SKILLS
CHRISTINE	IT SPECIALIST	<ul style="list-style-type: none"> LOGICAL THINKING INNOVATION UPDATING AND CONTINUOUS LEARNING
CAROLIN	RECEPTION ASSISTANT	<ul style="list-style-type: none"> ETHICAL CONSCIOUSNESS CASUALTY INTERPERSONAL SKILLS



CONGRATULATIONS, YOU HAVE COMPLETED THE GAME ON TIME!

PRINTABLE MATERIALS

The Governors' papers

#RIDDLE 1

Instructions

This note is the clue to open the briefcase.

- Print or write the sticky note with the time of the governors' meeting.
- Stick it on the investigation board

You can choose the code for the briefcase freely. It is not relevant for any other riddles. If you have a 3-digit padlock, set the time for the governors' meeting before noon (e.g., 9:45).



Source: <https://www.canva.com/>

#RIDDLE 2

Instructions:

- Print the picture
- Print the Morse Code card

Solution:

- ✓ Ethical compromise
- ✓ Caring
- ✓ Interpersonal skills



Picture source: https://www.freepik.es/foto-gratis/empleado-medico-sexo-femenino-joven-que-lleva-cabo-registros-medicos_15204079.htm#query=enfermera&position=15&from_view=search

A . —	J . — — —	S ...	2 .. — — —
B — ...	K — . —	T —	3 ... — —
C — . — .	L . — ..	U .. —	4 —
D — ..	M — —	V ... —	5
E .	N — .	W . — —	6 —
F .. — .	O — — —	X — .. —	7 — — ...
G — — .	P . — — .	Y — . — —	8 — — — ..
H	Q — — . —	Z — — ..	9 — — — — .
I ..	R . — .	1 . — — — —	0 — — — — —

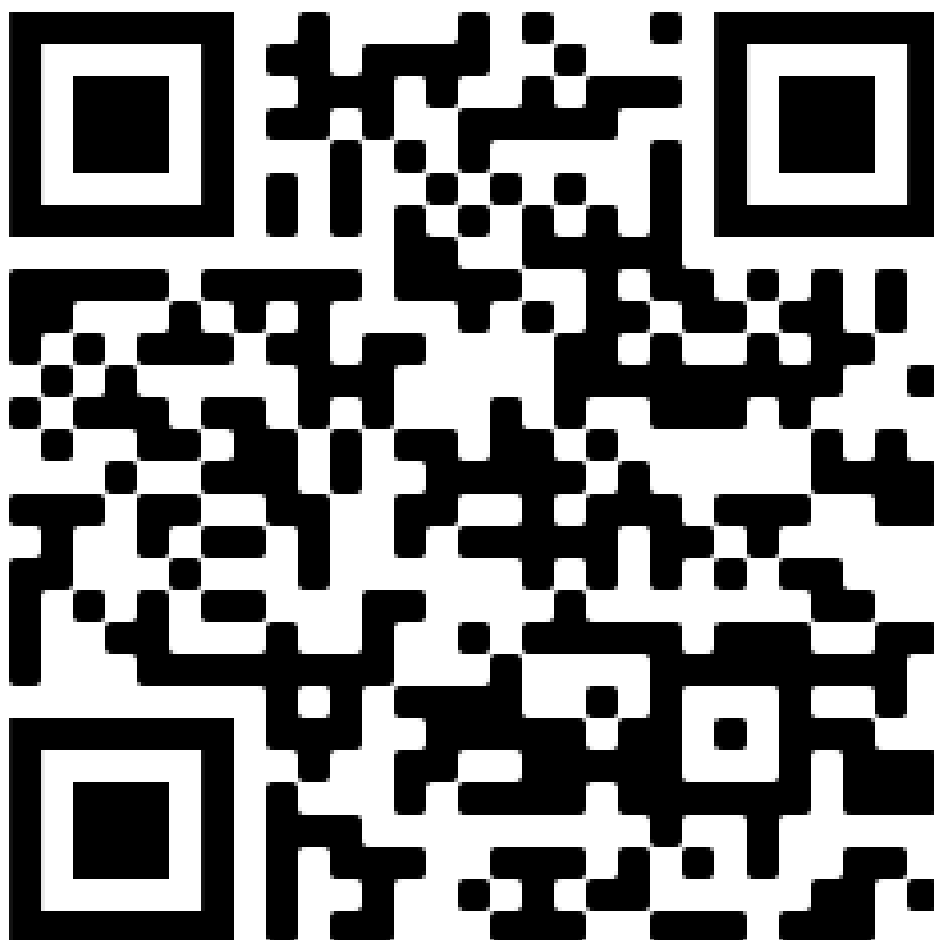
This may help you... Carmen, nursery assistant. Spain

Source: Own elaboration

#RIDDLE 3

Instructions:

- Print the QR code. Cut it into pieces to create a puzzle. (Maximum recommended number of pieces is 5)



Solution:

- ✓ Logical thinking
- ✓ Innovation
- ✓ Updating and continuous learning

#Riddle 4

Instructions:

- Print the encoded message card and the mechanic picture.
- Prepare an envelope as shown in the picture, put the picture and encoded message inside.
- For the Caesar cipher wheels:
 - Print the two Caesar cipher wheels.
 - Cut out the two wheels.
 - Place the small wheel on top of the big wheel.
 - Attach the wheel at the centre point with a paper clip.

Solution:

- ✓ Manual dexterity
- ✓ Accuracy
- ✓ Organizational skills

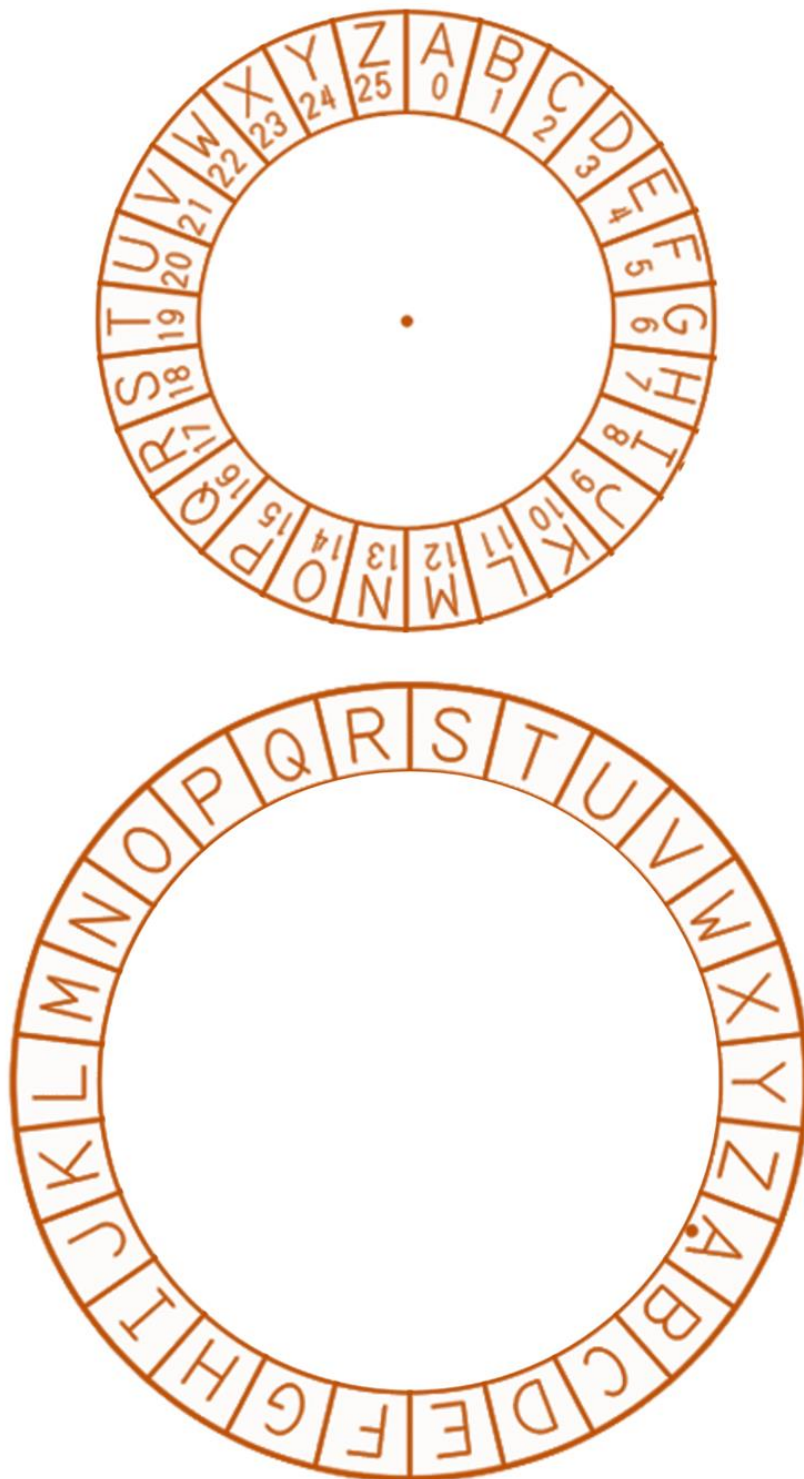
Dear governors, find below the information you
need from me:

- wkxekv nohdobsdi
- kmmebkmi
- ybqkxsjkdsyxkv cusvvc

Here you have a hint: Spain = CZKSX



Source: https://www.freepik.es/foto-gratis/mecanico-celebracion-tableta-digital_1005574.htm#query=mecanico&position=12&from_view=search



#RIDDLE 5

Instructions:

- Print the CV

Solution:

- ✓ Problem solving
- ✓ Ability to work individually
- ✓ Interpretation of technical drawings



PROFILE

Certified electrician with 10 years of residential and commercial experience focused on diagnosis, repair, and installations. Passionate about directing, training, and mentoring others. Experience in hot tubs, electrical panel upgrades, garage & shed wiring, smoke alarms, surge protectors, ceiling fan & light installations, and whole house rewiring.

PROFESSIONAL SKILLS:

- Problem solving
- Ability to work individually
- Interpretation of technical drawings

LANGUAGES

- Arabic (Mother tongue)
- French: High level
- English: Medium level

CONTACT

PHONE:
678-555-0103

EMAIL:
saidimalik@electrician.com

MALIK SAIDI

ELECTRICIAN

EMPLOYMENT HISTORY

Chief Electrician at BCN AZZAD'SQUARE, LLC Sidi Khetab, Algeria October 2014 – Today

I am the Chief Electrician for BCN AZZAD'SQUARE, LLC. My day-to-day responsibilities include:

- Inspecting electrical components to ensure high quality work
- Directing, training, and mentoring team members to install, maintain, and repair both residential and commercial electrical wiring and equipment

Field Electrician at Globaltec, Oran January 2010 – October 2014

I was a Field Electrician for Globaltec where I focused on both home and business services. My day-to-day responsibilities included:

- Reading blueprints and technical diagrams
- Maintaining wiring, control, and lighting systems
- Troubleshooting electrical control circuits

Electrician Apprentice at Alter Energy, Dar El Beïda September 2007 – January 2010

My day-to-day responsibilities included:

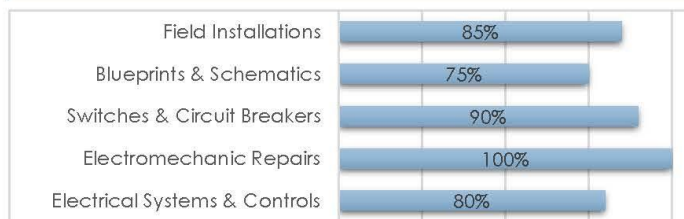
- Researching and suggesting energy-efficient solutions to help our client's save money on electric costs
- Assisting in administrative and clerical duties, including AP/AR, invoicing, repair scheduling, and service calls

EDUCATION

Industrial technology institute. Lycée technique Houari Mahfoud.
Degree: GED

Ecole Winner Software Vocational School Orán, Algeria.
October 2010

APTITUDES



#RIDDLE 6

Instructions

- Get a red-filtered glasses. (You can also create a red-filtered lenses) Different options:
 - Buy them
 - Create your own. DIY instructions: Print the next glasses template, cut the borders, glue red acetate on the rectangles of the glasses.
 - Include a piece of red acetate in the briefcase.
- Print the coded letter.
- Print the picture.

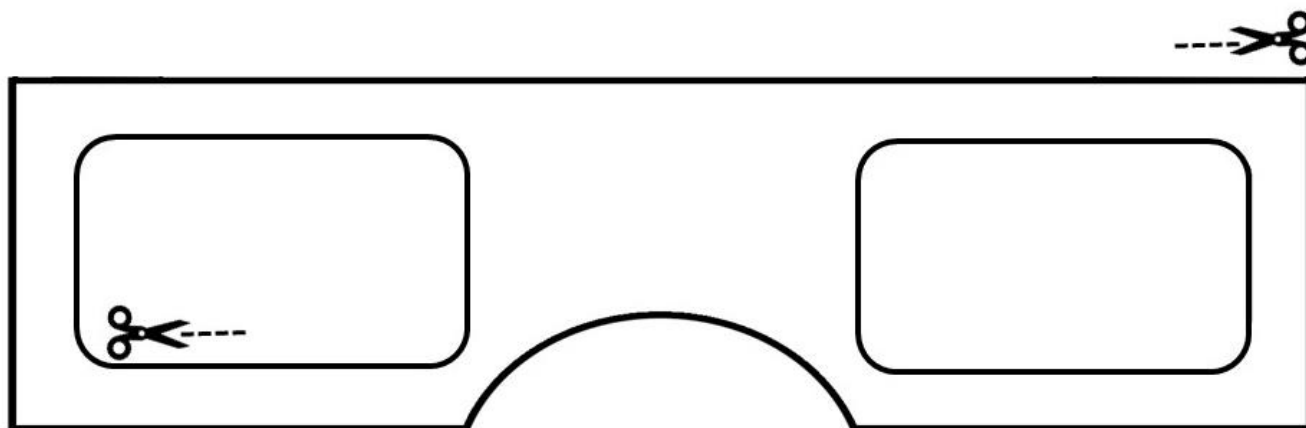
Solution:

Dear Governors, I am glad you have chosen me for this mission.

There is no doubt that any professional in the hospitality and tourism sector is always necessary for society.

I am sure that the skills of a professional profile like mine will be of great help to the new society: creativity and imagination, quick decision-making, and the ability to work under pressure.

I hope you will achieve your mission. Best regards.
Francesco (Rome, Italy)



Source: <https://openclipart.org/detail/69307/3d-glasses>



Source chef picture: https://www.freepik.es/foto-gratis/chef-brazos-cruzados-sobre-fondo-blanco_1156843.htm#query=cocinero&position=9&from_view=search

Source background picture: <https://www.canva.com/>

J D J e A a K r D A G D o B v G e J r G n K o B r S s A , G G I J S a K m J A g K I J a A d J J y A o S u B K h J
a B v K e G J c S h B o B s S e D n S B m D e J J f J o A r D S t B h S i D s K J m G i B s G s J i A o J n

K T G h B e D r S e D D i S s D G n J o B B d S o A u J b G t B s t A h S a A t K K a J n S y G S p B r B o K f s
e K s B s K i D o S n G a G I B S i S n K S t K h A e K K h D o G s A p S i A t B a S I J i D t S y K G a S n D d
B A t A o J u A r D i B s A m D B s J e S c J t S o D r J K i S s D J a D I B w G a J y G s B G n D e A c B e A s
B s S a G r S y A G f B o K r G A s S o B c D i K e J t J y J . D D A A G A A G J

D I A G a A m B A s A u A r J e J J t B h A a S t D B t G h B e A A s S k S i J I K I A s G J o D f A B a S B p D r
D o G f J e A s J s J i S o S n G a D I D S p D r K o B f B i A I A e D K I K i J k D e D J m G i A n G e D A w S i
J I A I B S b G e B A o G f G J g G r K e G a A t S G h S e S I A p G B t B o G D t K h G e S D n J e K w D J s
B o D c K i B e G t D y K : D B c B r A e S a G t K i D v G i K t J y S J a S n J d J K i A m A a S g G i S n B a B
t A i J o B n J , J D q G u G i G c G k K K d D e G c B i D s S i A o S n B - A m K a A k K i S n K g J , A A a B n
A d D D t G h D e S D a B b A i K I J i G t K y A K t B o J B w A o J r B k G B u J n D d D e G r D J p S r S e A
s A s A u J r K e S . J S A A K G J J B D D J J K K G B K D K J B A G D

A I S G h A o J p J e G B y S o G u A J w J i J I S I J K a S c A h G i G e G v J e A B y A o S u B r J B m S i A s
S s J i D o A n B . A G J B B e D s A t K A r K e K g G a S r B d G s A . B B J A G G S D D G A A G A

A F S r B a G n K c J e B s D c A o J B (J R D o A m G e J , G G I K t G a A I K y B)

#RIDDLE 7

- Print the Findings chart

Solution:

- ✓ Findings chart solution: BRAVO

2 FINDINGS CHART

NAME	PROFESSION	SKILLS
MALIK	ELECTRICIAN	<ul style="list-style-type: none"> • PROBLEM SOLVING • ABILITY TO WORK INDIVIDUALLY • INTERPRETATION OF TECHNICAL DRAWINGS
FRANCESCO	COOK	<ul style="list-style-type: none"> • CREATIVITY AND IMAGINATION • QUICK DECISION-MAKING • ABILITY TO WORK UNDER PRESSURE
HANS	MECHANIC	<ul style="list-style-type: none"> • MANUAL DEXTERITY • ACCURACY • ORGANIZATIONAL SKILLS
CHRISTINE	IT SPECIALIST	<ul style="list-style-type: none"> • LOGICAL THINKING • INNOVATION • UPDATING AND CONTINUOUS LEARNING
CARMEN	NURSERY ASSISTANT	<ul style="list-style-type: none"> • ETHICAL COMPROMISE • CARING • INTERPERSONAL SKILLS

Source: Own elaboration



FINDINGS CHART



NAME	PROFESSION	SKILLS
M _ _ _ _	_ _ _ _ _	<ul style="list-style-type: none"> • P _ _ _ _ M _ _ _ _ _ G • _ _ _ _ _ _ _ _ _ _ _ _ _ _ • _ _ _ _ _ _ _ _ _ _ _ _ _ _
_ _ _ _ _ O	_ _ _ K	<ul style="list-style-type: none"> • _ R _ T _ _ _ _ _ D _ M _ N _ _ _ • _ _ _ K _ _ _ _ O _ _ _ _ G • _ _ _ _ _ _ _ _ _ _ _ _ _ _
_ A N _	M _ _ _ _	<ul style="list-style-type: none"> • _ _ _ _ _ _ X _ _ _ _ • _ C C _ _ _ _ • _ R _ _ I _ _ _ _ _ _ K _ _ _
_ H _ _ _ _ N _	_ _ _ T _ _ E C _ _ _ T	<ul style="list-style-type: none"> • _ _ _ _ _ T _ _ _ _ _ G • _ N N _ _ _ _ _ • _ P _ _ _ _ _ _ _ _ _ _ _ E A _ _ _ _ • _ _ _ _ _
_ A _ _ _ N	_ _ _ _ _ _ _ _ _ _	<ul style="list-style-type: none"> • _ T _ _ _ L _ _ M _ _ _ _ • C _ _ _ G • _ _ _ _ _ _ _ _ _ _ K _ _ _

ADDITIONAL PRINTABLE MATERIALS:

- Christine picture
- Hans's picture
- Hans's visit card
- Malik picture



Christine's picture

Source: https://www.freepik.es/foto-gratis/retrato-joven-feliz-que-tiene-idea_7505185.htm#query=chica%20con%20ordenador&position=43&from_view=search



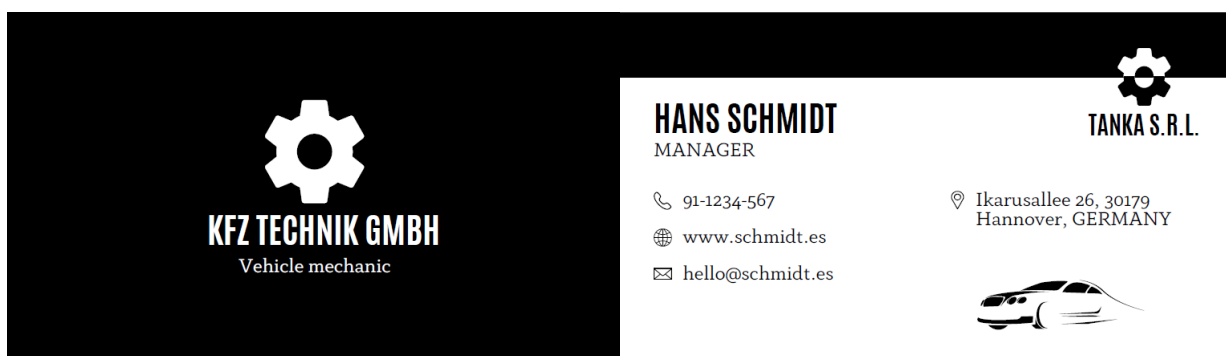
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Escape  Stay

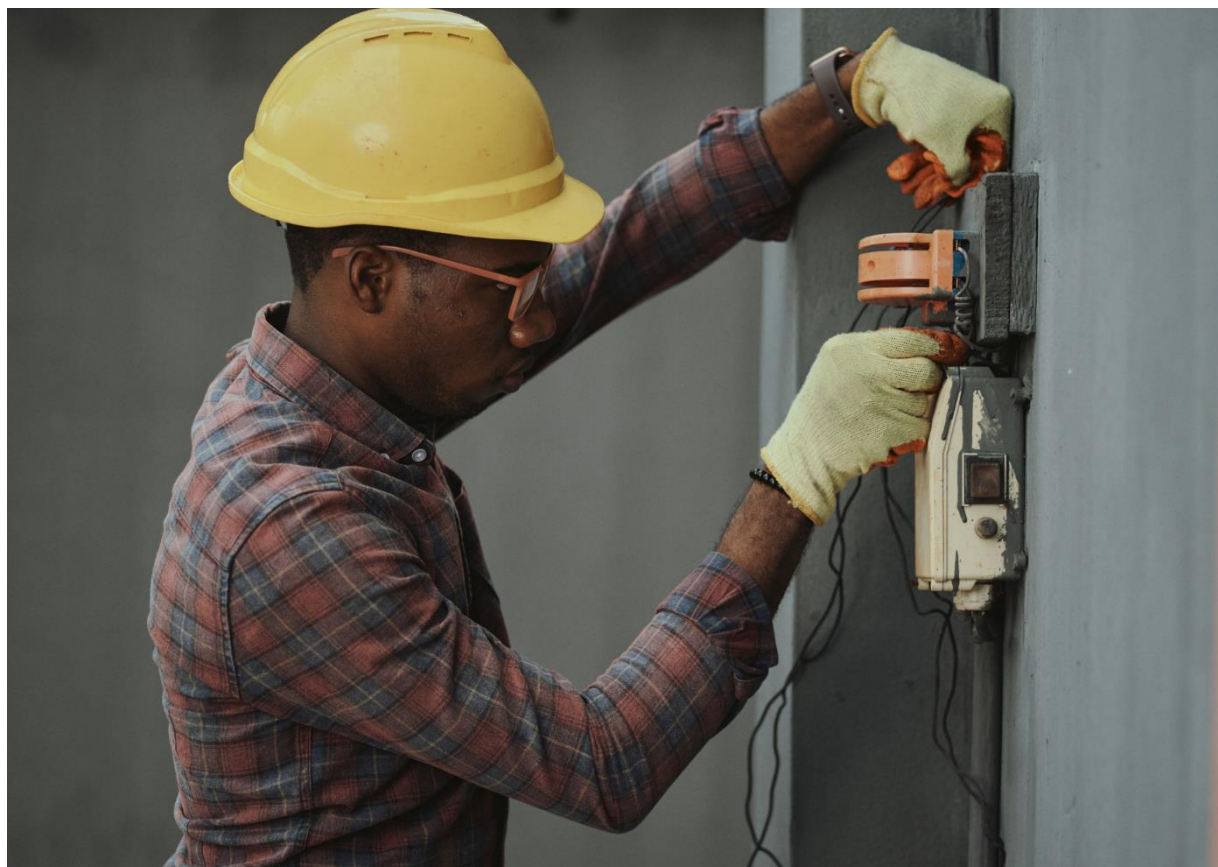


Hans' picture

Source: https://www.freepik.es/foto-gratis/mecanico-celebracion-tableta-digital_1005574.htm#query=mecanico&position=12&from_view=search



Instructions: print it, fold it in half and glue it to have a two-sides visit card.



Malik's picture

Source: <https://www.canva.com/>

Escape Stay



www.escape2stay.eu



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