



Trapped in a dwarf mine



Scenario Conception and room setup



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Additional decor elements (optional)

Decorate the room with rocks, spider webs, and every element that you think will make the experience immersive.



Detailed conception

I1 – Introductory parchment

Material requirement

- Paper that's been crumpled up and smoothed out
- Pen with black ink

Explanations

You can use the following text as guidance on what should be written on the dwarves' wrinkled piece of parchment. Remember to use the present simple to craft any game text.

"Welcome to our mine! You must think you can find treasure in here, but you're on the wrong path! As dwarves, we are the cleverest creatures and can trick any trolls, ogres, goblins or other evil creatures who try to steal from us. This mine can only open for those creatures that are smart enough to solve our tricks. Use clues in this mine to help you. You have 60 minutes to find all the answers – after that, prepare for an explosion...ka-boom!"





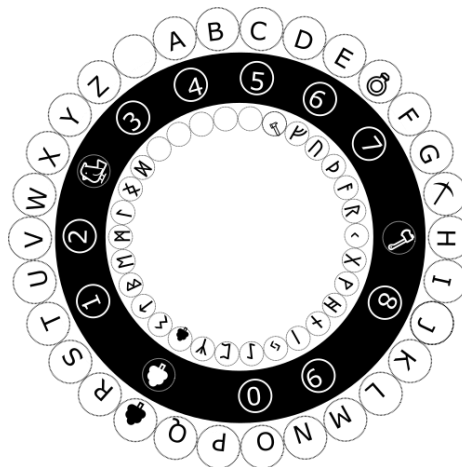
I2 – Code wheel with three concentric circles

Material requirement

- 3 pieces of cardboard (or wood)
- 2 pieces of coloured paper
- 1 piece of black chalkboard paper
- 1 ruler
- 1 marker for filling in the fields
- 1 pair of scissors
- 1 brass fastener to connect the three circles
- 1 piece of chalk for filling in the middle circle

Explanations

For a graphic representation on what the completed code wheel should look like, refer to this picture:



This picture is also available as annexe N°1 in a higher resolution.

For instructions on how it can be made with the materials mentioned, refer to this YouTube tutorial:

<https://www.youtube.com/watch?v=pn3Np7nnWyY>



I3 – Clue attached to table with chalk

Material requirement

- Piece of paper
- 1 pen/marker for writing the clue
- 1 piece of chalk

Explanations

For students to be able to understand how the middle concentric circle of the code wheel should be filled in, write this clue for players on the piece of paper:

“When tools match up, start to count with single numbers at the rune that marks treasure on a map.”

I4 – Chest and pinned parchment

Material requirement

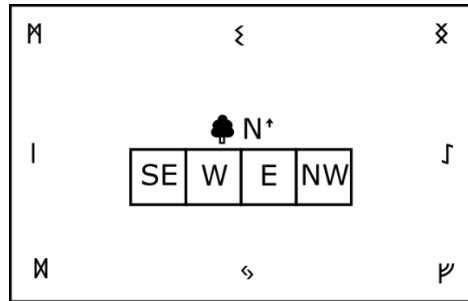
- Pieces of cardboard (more than 20)
- Glue stick or glue gun
- Toothpicks or slender pieces of circular wood
- 3 pieces of circular paper
- 1 pair of scissors
- 1 piece of paper
- 1 tack to pin the paper to the chest
- 1 marker for filling in the fields, directions and drawing the tree

Explanations

For the creation of a treasure chest that requires a 4-digit code to open, you can refer to this YouTube video that shows how it can be done with some clever use of cardboard and everyday items: <https://www.youtube.com/watch?v=OOUXBOjVmYY>



For information on which runes should be displayed on the front of the chest and which information should be contained in the paper pinned to the chest, refer to this diagram:



runes : P I J M

code : 6 - 9 - 0 - 2

15 – Three cryptexes: red, blue, green

Material requirement

- Cardboard
- A glue gun
- A metal ruler
- A compass
- A cutter
- Several popsicle sticks
- 3 pieces of differently-coloured paper (red, blue and green)

Explanations

For the creation of a cryptex, refer to this

tutorial: <https://www.youtube.com/watch?v=CFVFvj5c8IE>

To create cryptexes which correspond to the scenario, create five input fields instead of six. The input fields of each cryptex will differ – the red one will have 4



digits and a letter (code: 3 2 D 8 0), the blue one runes (code: Þ Æ Ƴ ǫ ƿ), and the green one letters (code: P I C K S). The red cryptex will also have an image of a bow and 5 runes on one side (M Ʒ ƿ ƿ H), and the green cryptex will have a pigpen cypher code on one side (refer to I9 for image).

I6 – Images of fantastical creatures/medieval weapons, and text for riddle

Material requirement

- Wikimedia commons images
- Printer
- String to hang the images from walls
- Marker to write letters and runes on the images of the fantastical creatures
- Parchment to write text behind the image of the bow
- Tape for the parchment

Explanations

In order to better transport students to the fantastical and medieval setting in which the scenario takes place, print out five images of fantastical creatures and three of medieval weapons. Three of the images must be a mermaid, centaur and a bow to correspond with the escape game enigma.

You can use these copyright-free images from Wikimedia commons:

- Mermaid: https://commons.wikimedia.org/wiki/File:Medieval_Mermaid.jpg or https://commons.wikimedia.org/wiki/File:Little_Mermaid_Proteus_1887.jpg
- Centaur: https://commons.wikimedia.org/wiki/File:Centaure_royal_MS_12.jpg
- Dwarf: <https://commons.wikimedia.org/wiki/File:Dwarf.jpg>



- Unicorn:
https://commons.wikimedia.org/wiki/File:BM_Valenciennes_Ms._320,_%27monocerate%27.jpg or
https://commons.wikimedia.org/wiki/File:Unicorn_Aberdin_bestiary.jpg
- Dragon: https://commons.wikimedia.org/wiki/File:800x480-Y_Ddraig_Goch.png
- Sword: https://commons.wikimedia.org/wiki/File:Genannt_Herr_Dietrich_Von_Berns_Schwert_by_Wendelin_Boeheim.jpg
- Bow: https://commons.wikimedia.org/wiki/File:Turkish_bow_Boeheim.jpg
- Axe: [https://commons.wikimedia.org/wiki/File:Battle-axe_blade_\(PSF\).png](https://commons.wikimedia.org/wiki/File:Battle-axe_blade_(PSF).png) or
[https://commons.wikimedia.org/wiki/File:Boeheim_\(368\).jpg](https://commons.wikimedia.org/wiki/File:Boeheim_(368).jpg)



When it comes to which riddle to attach to the bow, refer to this text from the scenario:

"I am a simple, wooden bow. I have many owners. The creature with the long, red hair and fish tail likes to use me to catch evil men. The creature with the legs and tail of a horse likes to use me to catch its next dinner. But my favourite owner is my 4th one."



I7 – Pouch and images on cardboard for describing

Material requirement

- 1 drawstring pouch
- 1 blue marker
- Images of different attire, hairstyles, beards, tools, weapons, and fantastical creatures (one of which needs to be a goblin)
- 1 pair of scissors for cutting out the characters
- 1 glue stick or tube of glue
- Cardboard for pasting on the images

Explanations

For the mysterious pouch filled with images, you can use any drawstring bag such as this one:



In case you do not have such a bag, for the purposes of setting authenticity, do not replace with a plastic or paper bag, but rather one made of cotton or another cloth material.



The images that you will choose to put inside can be left up to you, but, in order to fit with the scenario, they must contain:

- a goblin
- blond hair
- a green shirt
- red pants
- a sword

For ideas on which other fantastical creature images you can use, you may refer to the list in I-5 or the ones that have been mentioned throughout the scenario.

I8 – Pigpen cipher riddle

Material requirement

- Differently coloured paper
- 2 pieces of green paper (solid and translucent)
- Cryptex pigpen code
- Pigpen cypher (dots and lines)
- Pigpen cypher (letters)
- 1 marker for writing down riddle

Explanations

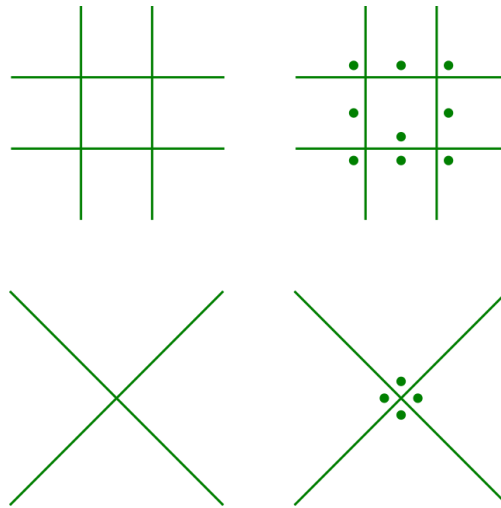
In order to craft the enigma for opening the green cryptex, you will need to use two pigpen cypher images (one with dots and lines on solid green paper and one with letters on translucent green paper). They will help identify which letters correspond to the pigpen code on the cryptex. See the three following images for reference:



Pigpen code on cryptex:

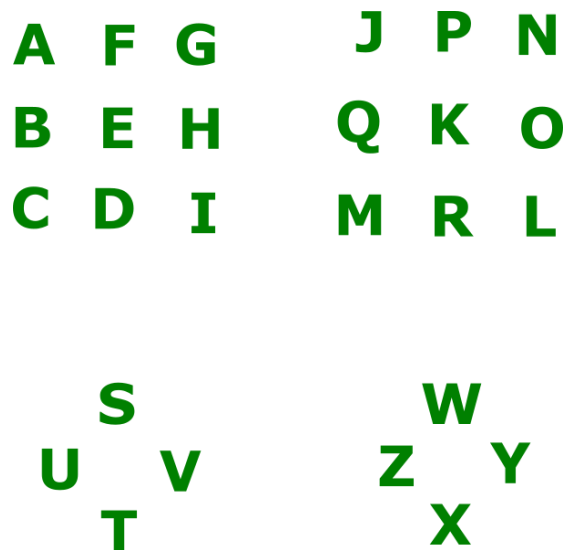


Pigpen cypher (dots and lines):



"You must find one more green paper to give you the answer you need, but I don't have time to show you where it is."

Pigpen cypher (letters):





I9 – Three statuettes

Material requirement

- Printed images of an elf, a dwarf and a human
- Three cylinder-shaped pieces of wood or cardboard
- 1 tube of glue
- 3 RFID chips

Explanations

Find images of an elf, a dwarf and a human using a copyright-free website, such as Wikimedia commons. Then, paste those images on cylinder-shaped pieces of cardboard or wood in order for them to be able to stand and for you to be able to attach the RFID chips to the bottom of each statuette.

I10 – RFID-controlled box

Material requirement

- RFID controller (with negative and positive power wires)
- RFID antenna
- Cardboard box with three circles drawn on it
- 1 marker for labelling the 3 circles

Explanations

In order to activate the box with the three statuettes, you can use RFID-activated technology. For reference on how to wire an RFID controller and connect it to your cardboard box, watch this video below:

<https://www.youtube.com/watch?v=o9X33T3cprY&t=39s>



I11 – Locked cardboard maze box

Material requirement

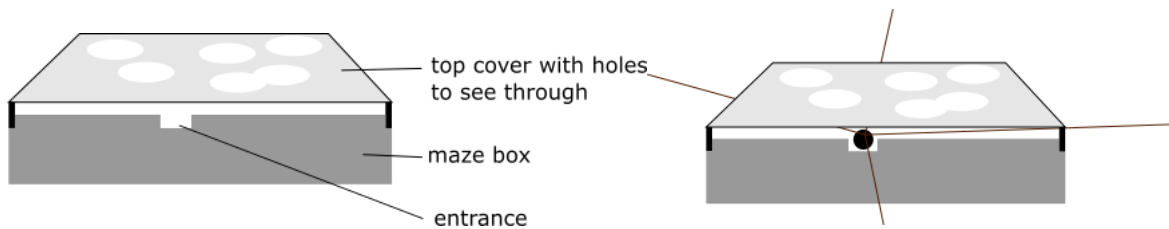
- Cardboard
- 1 pair of scissors
- 1 glue stick or tube of glue

Explanations

For reference on how to create the final box which opens with a key provided in the RFID-controlled box, turn to this helpful tutorial:

<https://www.youtube.com/watch?v=nN62zIH8ALI&t=21s>

Inside of the box is a cardboard maze, with a piece cardboard covering it. That cardboard cover should have holes in strategic points (see I12), so that the students can see at some points exactly where they are situated in the maze. Students should put the magnet in the entrance and manipulate it with the strings.



Inside the maze box, there should be a key, that will be recovered with the help of the magnet, when the students follow the path in I12.

For reference on how to create the cardboard maze, you can take a look at this tutorial: <https://www.youtube.com/watch?v=b83TdAlcabY>



I12 – Directions on exiting the mine

Material requirement

- Parchment
- Quill
- Map of mine as reference

Explanations

In order for students to adequately practice the vocabulary topics covered by this scenario, they are required to write down directions on how to reach the mine exit from their current position. For students to better understand what is required of them from the parchment and quill, use both resources to write down the instructions:

“To remember how to get out of the mine, write down directions from the map.”

I13 – Magnet with strings

Material requirement

- Magnet (spherical would be best to resemble a ball)
- Strings or another material that could wrap around a magnet and create ties to 4 sides

Explanations

Students are required to use a magnet attached to strings to move along the maze of the final box (I12). The strings should be tied to the magnet in such a way that it allows 2-4 students to hold onto a string and manoeuvre the magnet around the maze together.



I14 – A dark talking box

Material requirement

- Cardboard
- An LED light
- A speaker
- A controller board (eg. Raspberry pi, Arduino)
- A blue button or lever
- A picture of a goblin (1) with a blond hairstyle (2), wearing a green shirt (3) and red pants (4), holding a sword (5).

Explanations

In step B2, the opening of the blue cryptex, one student will need to look inside the box and describe the content to the other students.

On the box should be a blue button, or lever, decorated in such a way that it shouldn't look like a modern button but be part of the box, in keeping with the medieval context. If you choose not to make your button blue, make sure to have another blue element on the box, so that the players can make the link with the blue cryptex.

There should also be a small hole on the box, only wide enough to see inside with one eye. Inside the box, it should be too dark to see anything without a light source.

Pressing the button triggers two actions, ideally with a short delay between action 1 and 2. The button works as many times as needed by the students.



Action 1 consists of playing a short recording on the speaker:

“Only one person can look inside the box! Decide which person is the ‘chosen one’ to look inside and describe to the others what he or she sees.”

Action 2 activates an LED light inside the box, so that “that chosen one” can see the numbered pictures inside: a goblin (1) with a blond hairstyle (2), wearing a green shirt (3) and red pants (4), holding a sword (5). By describing what he/she sees to the other players in the correct order, they will find the corresponding items from the blue bag (17) and decipher which five runes unlock the blue cryptex.

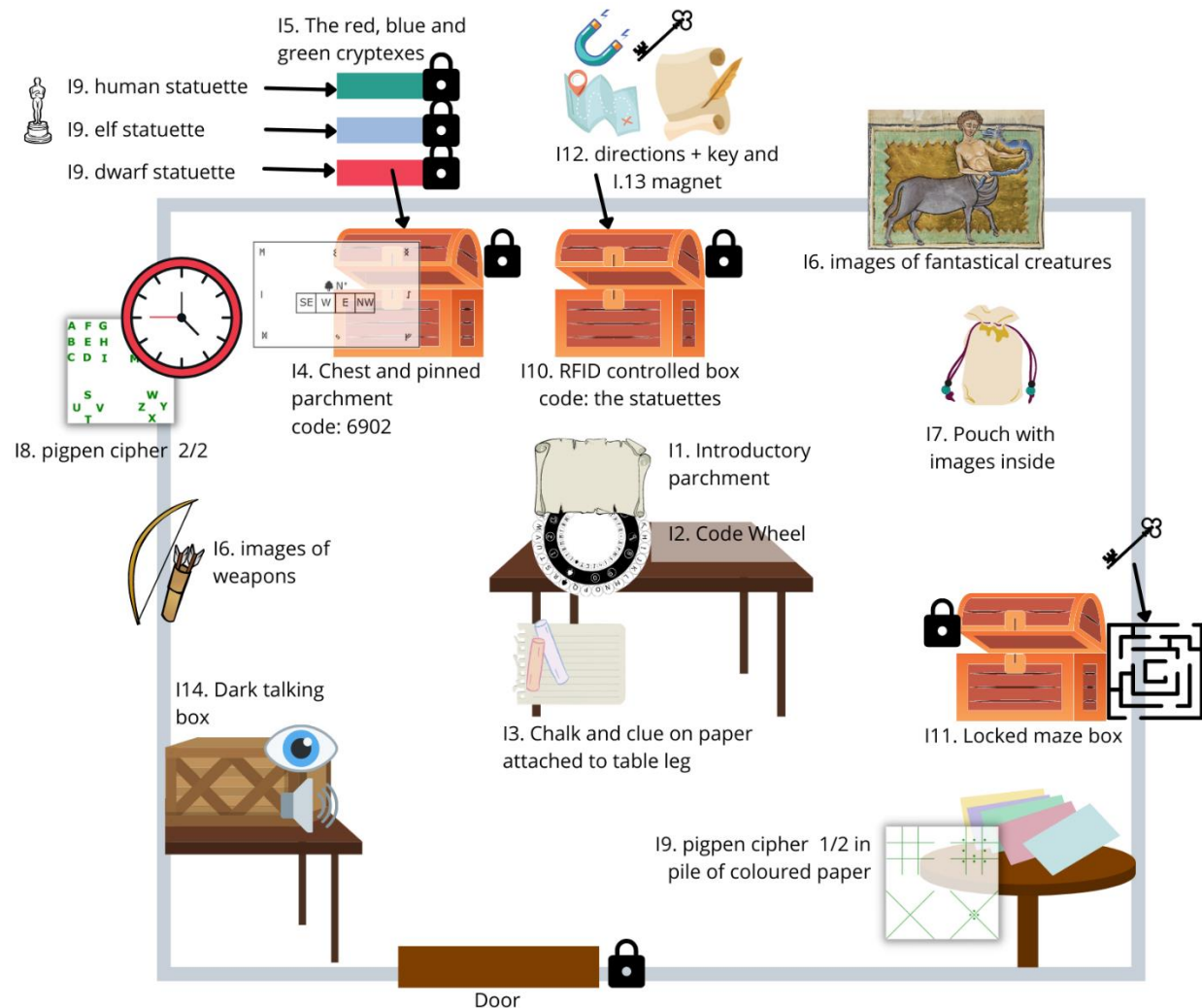
You can use free images, such as

- A goblin: https://commons.wikimedia.org/wiki/File:DnD_Goblin.png
- Blond hair: https://www.flaticon.com/free-icon/braids_3617235?related_id=3617235
- Green shirt: https://www.flaticon.com/free-icon/braids_3617235?related_id=3617235
- A Sword: https://commons.wikimedia.org/wiki/File:Genannt_Herr_Dietrich_Von_Berns_Schwert_by_Wendelin_Boeheim.jpg



Set up the room

The following image will help you visualise how the room to escape from could look like. This image is also in the annexe folder in a higher resolution.



Don't hesitate to add decorative elements and choose some music to improve the immersion of your players.

You can have a look at chapter 3 of our guide "Animation of a pedagogical escape room for language education" (which you will find [on our website](#)) to learn more about how you can make the game more immersive.



**Set up for Phase A:**

1. On a table in the centre of a room, place the introductory parchment (I1) on top of the code wheel (I2), with the chalk wrapped in paper attached to the leg of the table.
2. Place the chest (I4) behind the table with the three cryptexes (I5) inside.
3. Lock the chest with the dials and pin the parchment on top only after you've added the statuettes (and their corresponding RFID chips) inside the cryptexes.

Set up for phase B:

1. Put the statuettes (I10) inside each cryptex (I5) and close them with the three different combinations (see Solutions section).
2. Hang the five fantastical creatures and three medieval weapons (I6) on the surrounding walls, with the paper containing the riddle attached to the back of the image of the bow.
3. At your choice of location, place the images of attire, hairstyles, beards, weapons and fantastical creatures inside a pouch (I8).
4. Prepare the recording to be played from the 'talking' box beforehand and then attach it to a table, secured with rope.
5. Create a pile of differently-coloured papers under a light source (such as a table lamp) and place the translucent green paper either behind or under a clock, but not entirely obscured by it (I9).



Set up for phase C:

1. Paste the map of the mine to the bottom of the RFID-controlled box. Add the magnet with the strings, paper and quill, and key for the final box inside, before attaching the RFID antenna to the underside of each labelled circle.
2. Place the RFID controller and wiring out of view of the setting.
3. Create the maze out of the space inside the final box and cut out holes on the sides for the strings and magnet to move around.
4. Place the classroom key at the 'exit' of the maze.
5. Place the two final boxes, the RFID-controlled box (I11) and the box containing a maze, on a table farthest away from the entrance.



Erasmus+

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