

• 2030 SDG GOALS •

TIME CAPSULE ESCAPE SUITCASE

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Sustainable Development Goals Time Capsule

Escape suitcase by Grazia Colabufo, Luise Tiks, Annalisa Zaccaria, Alejandro Crespo Aranda and Hilmar Schipper

Story

A time capsule has arrived from year 2031 to year 2020. The players receive a message from the future. There are serious issues in the future and it is up to the players to save the future.

Target group

Students aged 14+, it is also suitable for adults. Previous experience and knowledge about escape rooms and environmental issues is helpful but not a prerequisite.

Aim

To raise awareness about local and global environmental problems and to help players relate to these problems on a personal level.

Learning objectives

Players get basic knowledge about climate change, invasive species, disappearance of bees, lack of drinking water and water pollution. They will learn a couple of ways how they can improve the situation.

Briefing

Outline the story, about what we found: a time capsule suitcase from the future and we need to resolve it.

Question: Have you ever been in an escape room?

Introduce and explain the difference with the escape suitcase: that the aim is to figure out the story, rather than to escape the room.

Tip: You need the team to work together to achieve the goals.

Tip: Read the story well and focus on what is written because the tips are already there.

Warning! Don't drink or eat anything.

Tip: Don't be afraid to explore all the objects.

General tips (use when necessary)

Ask them to read better the paper, because the solution, the act to do is there.

Pollution of the air box: invite to read better what is the action written on the paper, "take off the emission gas"

Water box: read better the paper, and do what is written "use the pills to purificare the water"

Animal box: underline the autoctonas and invasive species and what is necessary to do.

World box: remember them about the color and what is the last object that they had find

Elements and set-up

6 OF 6 - SPEAKER BOX

WHERE: ZIPPED SIDE OF LUGGAGE

OPENED WITH: 5-COLOUR-CODED NUMBER (24120) CODE

FROM: 5 OF 5 COLOURED MEDICINE CAPSULES WITH UV NOTE INSIDE, VARIOUS

ORDER IN GAME: 6TH ELEMENT

1. Speaker with music track and congratulations message
2. Plastic small globe
3. Decorations as desired (string, sequins, other)



5 OF 6 - CRYPTEX BOX

WHERE: OPEN SIDE OF LUGGAGE (FIRST COMPARTMENT) IN CRYPTEX BOX

OPENED WITH: ILOVEU CODE

FROM: WATER DECONTAMINATION BOX AFTER VIT C TABLET USED

ORDER IN GAME: 5TH ELEMENT

1. Cryptex with 6-letter ILOVEU combination (if not available, adapt as appropriate)
 - a. UV light to reveal final clue, 24120 number code
 - b. 1 of 5 coloured capsules with UV number on inside note
 - c. Optional note



4 OF 6 - WATER DECONTAMINATION TABLET BOX

WHERE: ZIPPED SIDE OF LUGGAGE

OPENED WITH: AGUA WORD-LOCK CODE

FROM: AIR MOLECULE BOX

ORDER IN GAME: 4TH ELEMENT

1. Quarter of 1 1000mg Vitamin C effervescent tablet (citrus-yellow-natural flavouring).
Each decontamination tablet should be ~250mg Vitamin C.
2. 1 minigrip resealable tiny plastic bag (approx 1 by 2 inch)
3. 1 moon crescent (or other) metal earring piece or marker, to connect with 100ML contaminated water travel bottle (see below for travel bottle details)
4. 1 of 5 coloured capsules with UV number
5. Educational plot note with clues in appropriate language (note contents in document)

NOTE: Vitamin C is used with the polluted water bottle found in a bag in the suitcase.



3 OF 6 - AIR MOLECULE BOX

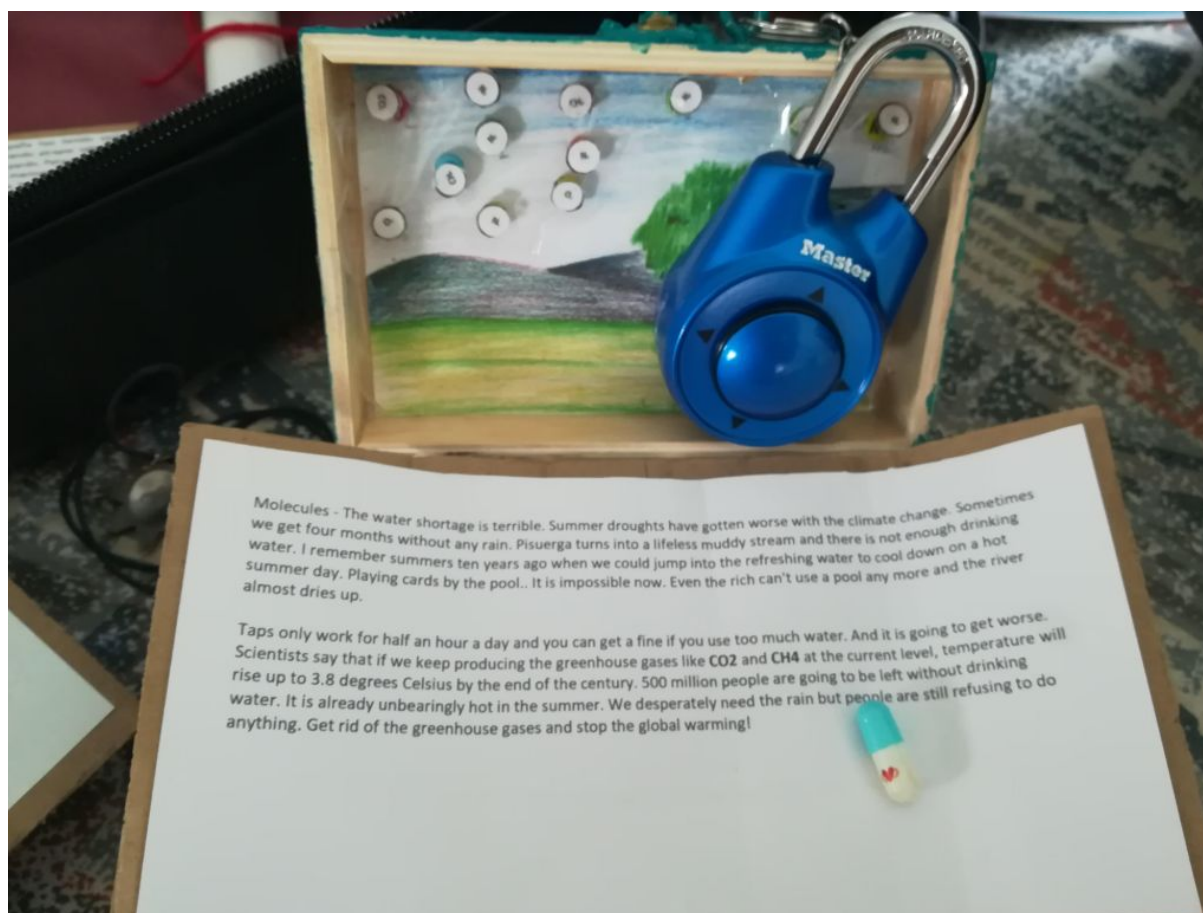
WHERE: OPEN SIDE OF LUGGAGE (FIRST COMPARTMENT)

OPENED WITH: DIRECTIONAL LOCK

FROM: INVASIVE SPECIES MAZE

ORDER IN GAME: 3RD ELEMENT

1. Laminated picture of sky and green fields stuck inside locked box
2. Lettered beads stuck onto sky randomly with 10 letters, 4 spelling AGUA to access water decontamination tablet box
3. 10 tiny laminated paper circles with molecules stuck onto tiny beads, covering all 10 lettered beads, stuck with Blue Tac or other (CO_2 and CH_4 molecules attached to letters A, G, U, A)
4. 1 of 5 coloured capsules with UV number
5. Educational plot note with clues in appropriate language (note contents in document)



2 OF 6 - INVASIVE SPECIES MAZE

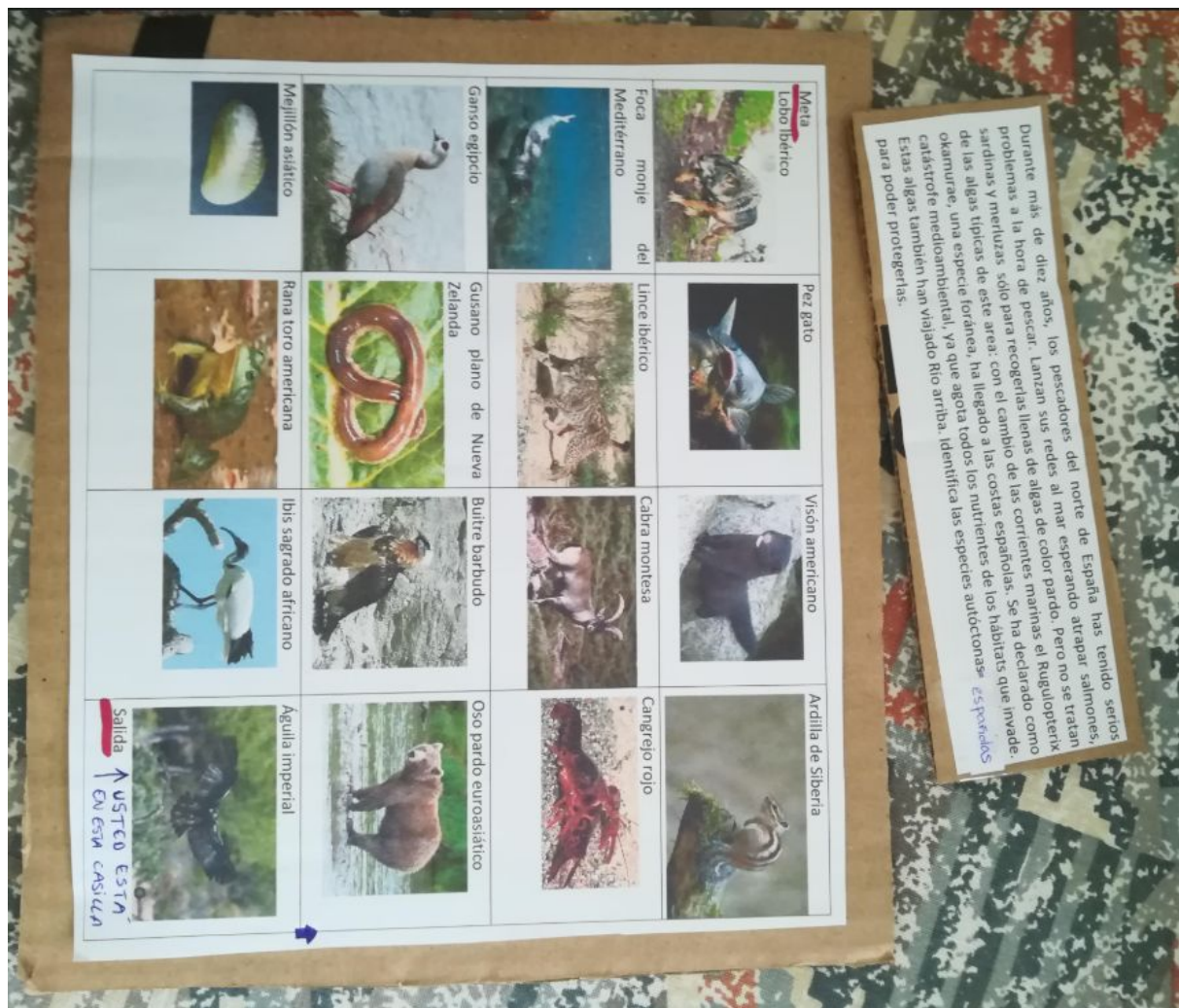
WHERE: ZIPPED SIDE OF LUGGAGE, HIDDEN IN SECOND (ZIPPED BUT UNLOCKED) COMPARTMENT

OPENED WITH: ONLY ZIP AFTER 4-NUMBER (2139) CODE

FROM: BEES - NUMBER SUBSTITUTION CYPHER PUZZLE

ORDER IN GAME: 2ND ELEMENT

1. Invasive and local indigenous species picture grid: 4 X 4 (each picture about 1x1 inch, total 10 by 10 inches) depicting 16 animals. Animals are randomly ordered to create directional path starting from bottom right picture (maze entrance) to top left picture (maze exit) e.g. Up, Left, Up, Left, Left, Up
2. Educational plot note with clues in appropriate language (note contents in document) with 1 of 5 coloured capsules with UV number, taped. To access air molecule box



1 OF 6 - BEES - NUMBER SUBSTITUTION CYPHER PUZZLE

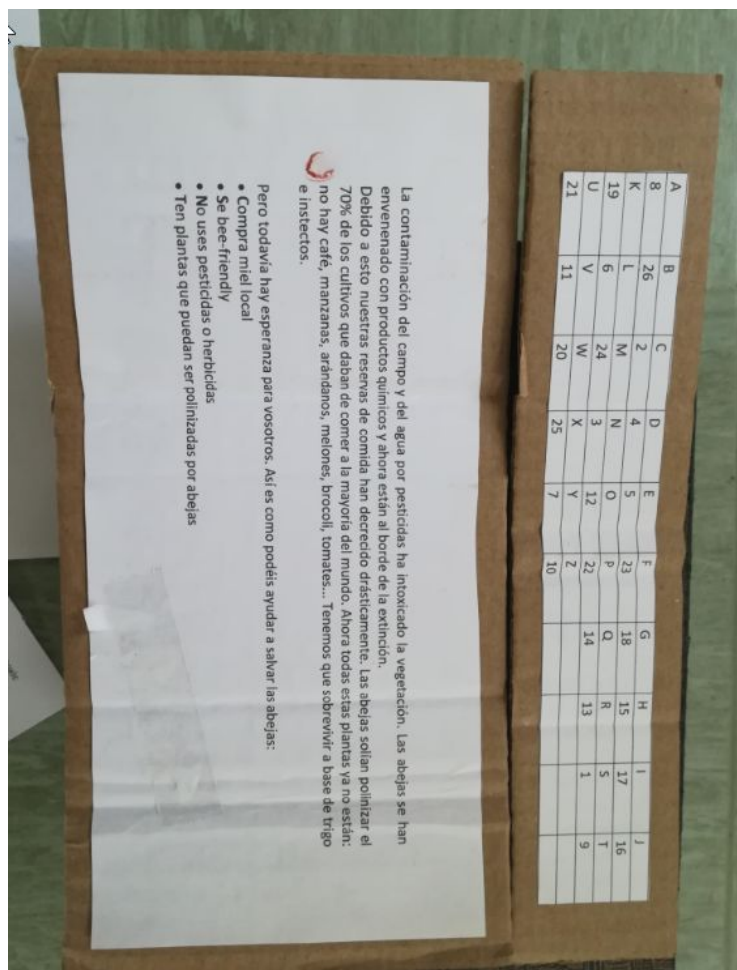
WHERE: OPEN SIDE OF LUGGAGE

OPENED WITH: EXTERIOR SUITCASE 4-DIGIT (2030) CODE

FROM: EXTERIOR LETTER FROM ALEJANDRO FROM FUTURE 2031

ORDER IN GAME: 1ST ELEMENT

1. Educational plot note with 4-lettered clue in appropriate language (note contents in document) to reveal 4-digit code using Number Substitution Cypher, with 1 of 5 coloured capsules with UV number, taped
2. Number Substitution Cypher (randomised, e.g. C-2)

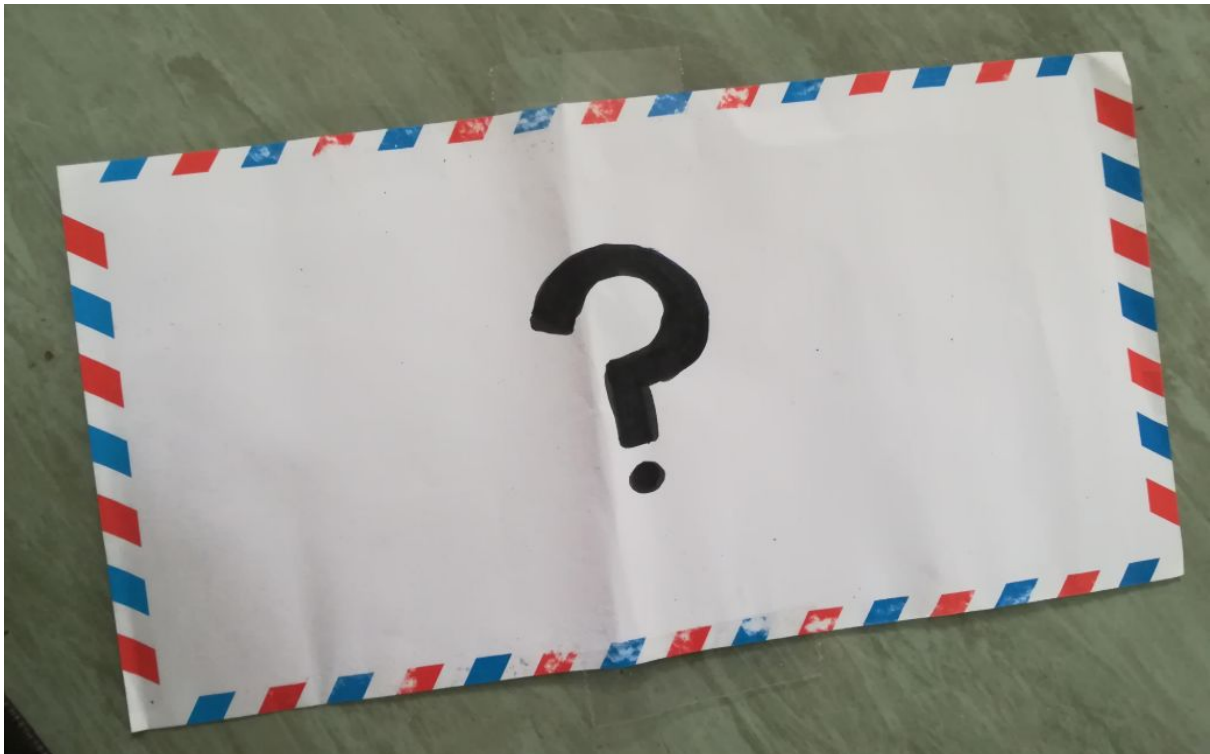


OTHER ELEMENTS IN THE SUITCASE

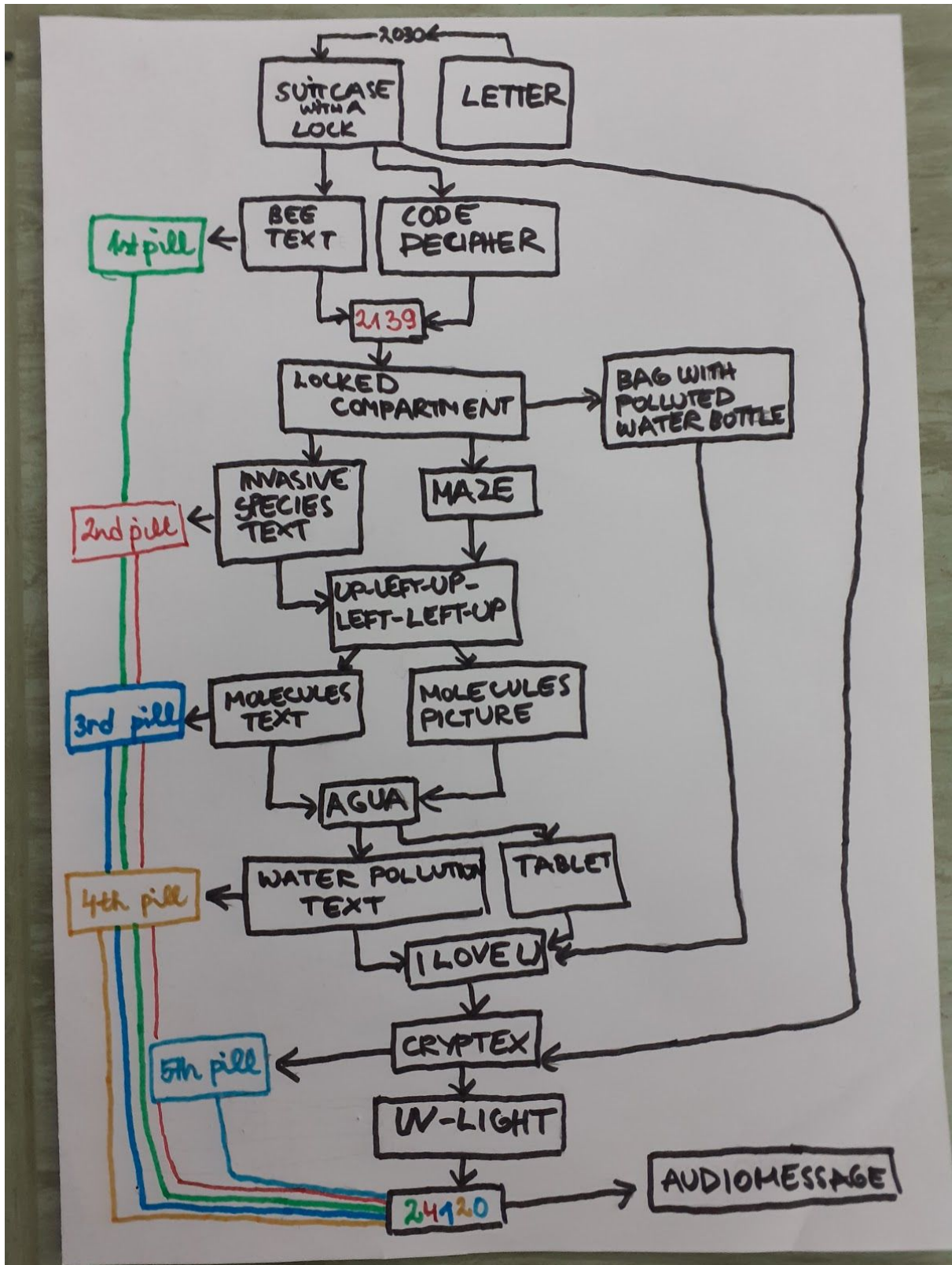
1. 100ML HAND LUGGAGE TRAVEL BOTTLE WITH 10MG (TINY PINCH) POTASSIUM PERMANGANATE MIXED IN WATER, SHOULD BE DARK PURPLE COLOUR WITH INTERIOR ILLEGIBLE. AFFIXED TAPED NOTE TO EXTERIOR OF BOTTLE, WITH DANGEROUS TOXIC CHEMICAL WARNING. INTERIOR OF TAPED NOTE (MUST BE READ THROUGH INTERIOR OF BOTTLE) READING ACRONYM SENTENCE FOR: I----- L----- O----- V----- E----- U-----.
2. MOON CRESCENT EARRING PIECE TAPED TO BOTTOM OF BOTTLE TO PAIR WITH OTHER EARRING PIECE WITH TABLET FROM WATER DECONTAMINATION BOX
3. DECORATIVE PURSE TO HOLD TOXIC 100ML WATER TRAVEL BOTTLE
4. CRYPTEX BOX
5. DECORATIONS (e.g. symbolic bracelet or jewellery, red herring)

ELEMENTS OUTSIDE THE SUITCASE

1. 4-DIGIT 2030 NUMBER CODE
2. LETTER FROM ALEJANDRO FROM FUTURE 2031 IN ENVELOPE



Flow



Debriefing

Congratulations! Big applause to you all. You as a team managed to save the world! The world is in your hands.

After all this wonderful work you guys did, you must have experienced something within you. Can you share a bit about what you experienced along the process?

(Happy, excited, included, amazed, depressed, more aware, anxious, etc)

What happened, or what did you do for the last 30 minutes? What was the story?

Do you think the situation that was created is a realistic one?

What did you do in the room? (Elaborate about cleaning the water, removed the greenhouse gasses, etc)

What did you learn? What have you discovered along the experience that you didn't know before participating in this escape room?

Are you aware of the impact you have on this planet?

How can you do something about it?

Elaborate for instance about that everyone has a footprint on this planet, especially as a westerner. You are born with a very large footprint. However, you also have a handprint.

Your handprint is about that even you have this large footprint on this planet, every person around us can give and create awareness about the problems and solutions about environmental topics we as a species are facing. What can you do on a personal level to create more awareness about environmental topics? This is your handprint. You have impact! And you can change the world around you!

In the end I would like to thank you all for participating in this experience and I would like to give you this diploma and if you like we can take a picture.

Tips for the facilitator:

Create a "safe space" for the participants. There is no right or wrong along the process. Make them feel comfortable to participate and share in the experience.

Take notes of actions and comments in the room. You can use this during the debriefing.

What to avoid: Not making it too depressing, stay realistic and that you as an individual or as a group have impact with your actions! (Footprint, handprint)

Printouts for the story

Letter

It's 2031. My name is Alejandro, and my life is very different than it used to be. I know it might not seem like it right now but things are about to change rapidly. Due to the epic failures and mistakes of our generation, we failed all of the UN 2030 goals for sustainable development. Earth is screwed up pretty badly. I'm scared and I think you might be our only chance. We have received intelligence that this is the only time capsule that has made it safely back to the year 2020. Your team must work together to learn from our mistakes and fix the grave mistakes you are about to make!

Bees text

The pollution of the land and of the water by pesticides has contaminated the vegetation. The bees ate toxic pollen and are now almost extinct. The global warming has made it even harder for bees to adapt. Without their pollination action, our food resources have drastically decreased.

Bees used to pollinate 70 of the around 100 crop species that fed most of the world. All of these plants are now gone. We have no coffee, no avocados, apples, berries, grapefruit, melons, broccoli, cucumbers... We have to survive mostly on grains and insects, and even that food is scarce. The government has decided to ration the food, but there is never enough, we are angry!

But there is still hope for you! Here is how you can help save bees:

- **Buy** local honey
- **Act** bee-friendly
- **Do not** use any pesticides, fungicides or herbicides
- **Bee-friendly** plants in your garden

Code decipher

| | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|----|
| A | B | C | D | E | F | G | H | I | J |
| 8 | 2 | 26 | 4 | 5 | 23 | 18 | 15 | 17 | 16 |
| K | L | M | N | O | P | Q | R | S | T |
| 1 | 6 | 24 | 3 | 12 | 9 | 14 | 13 | 19 | 22 |
| U | V | W | X | Y | Z | | | | |
| 21 | 11 | 20 | 25 | 7 | 10 | | | | |

Molecules text

The water shortage is terrible. Summer droughts have gotten worse with the climate change. Sometimes we get four months without any rain. Pisuerga turns into a lifeless muddy stream and there is not enough drinking water. I remember summers ten years ago when we could jump into the refreshing water to cool down on a hot summer day. Playing cards by the pool.. It is impossible now. Even the rich can't use a pool any more and the river almost dries up.

Taps only work for half an hour a day and you can get a fine if you use too much water. And it is going to get worse. Scientists say that if we keep producing the greenhouse gases like CO_2 and CH_4 at the current level, temperature will rise up to 3.8 degrees Celsius by the end of the century. 500 million people are going to be left without drinking water. It is already unbearably hot in the summer. We desperately need the rain but people are still refusing to do anything. Get rid of the greenhouse gases and stop the global warming!

Invasive species maze text

For more than ten years now, fishermen in the Strait of Gibraltar have been struggling to catch any fish. They would throw out their trammel nets in the hope of catching salmon, sole, bream and cuttlefish, but instead pull up dozens of kilos of brown-colored algae. It is not your typical algae, it is *Rugulopterix okamurae*, a foreign species that has attacked the southern Spanish peninsula.

“It’s an environmental catastrophe,” says Nicolás Fernández, the secretary of the Cádiz Federation of Fishermen's Associations. It's not just the Gibraltar though. The invasive species are everywhere. We brought some of them in with the international goods, some came on their own after the climate change. They outcompete the native organisms, take over the habitats and cause destruction. Our nature cannot adapt fast enough to cope with invasive species. There are close to no native fish left in the Pisuerga. Find Find the path to avoid the invasive species to help our nature survive.

Water pollution text

Even many years ago, in 2020 the Government was already imposing guidelines on maximum fish consumption for children, pregnant women and adults because of how much we polluted the waters with mercury and other toxic chemicals. In 2020 they used to say we could eat large fish and seafood not more than once per week, so that our livers could remove the poison in time for our next meal...

Now, we have urgent government warnings not to eat anything larger than shrimp from the ocean... the situation is desperate. The people from Valladolid have lost La Mejillonera - this staple of our own has closed down... the situation is really desperate. It is too late for me, but we have saved our last hope in this capsule. Just before the collapse, scientists developed a purification solution to decontaminate the waters and to remove the heavy metals and toxic substances. If you succeed, you have hope. If you succeed, you will hold the whole world in your hands.

Solutions

1. Open the letter. The code for the first lock is 2030
2. Open the suitcase and put the boxes outside it. Open the zipper at the back and take the key for translating letters into numbers. Read carefully the letter about the bees. The code to open the lock that is closing the 2nd half of the suit is 2139
3. Open the back zipper and take the map of the foreign animals and the bottle with the solution of KMnO_4 . You have to go from the bottom right corner to the top left one only stepping on native Spanish animals. The solution is: Up, left, up, left, left, up
4. Open the box and read the message. Remove the CO_2 and the CH_4 stickers to get the word water (AGUA). Agua is the key to the next lock.
5. Open the box and take the vitamin C pill and put it inside the toxic water bottle. Wait until the water turns transparent and read the words at the back of the sticker. The criptex code is ILOVEU
6. take the UV light and check the papers inside the pills that you have found inside the boxes or stucked to the messages. The number correspond to the color of the rectangle. The password is 24120
7. Open the lock and play the "congratulations" audio. It can also be a QR code or a letter

CREDITS

5 participants from Spain, Malta, Estonia, the Netherlands and Italy gathered in Valladolid, Spain for a week from the 20th to the 26th of January 2020. This Project is the result of their combined efforts.

They would like to present this project with their genuine hope for a future filled with an escape from our current environmental challenges, with a vision of cooperative solutions.

Sincerely:

GRAZIA COLABUFO

ALEJANDRO CRESPO

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