Leader overview

The Jungle Awakens is a story-led, unplugged escape room adventure set in a mysterious rainforest. Learners take on the role of young explorers following the trail of missing archaeologist Professor Karla Mendez. Through teamwork and clever thinking, they solve a series of jungle-themed puzzles that draw on logic, pattern recognition, spatial reasoning, and cryptography. All of the puzzles in this escape room can be found in the <u>Bebras Challenge collection</u> online.

This is an engaging, offline activity suitable for use in Code Club or classroom enrichment sessions. Learners work through six sequential puzzles that lead them to the gates of the ancient Temple of the Emerald Heart.

Target audience

- Aimed at learners aged 9–16
- Works well with a range of ability levels, especially in mixed teams or collaborative pairs

Embedded learning

Bebras puzzles reinforce core computational thinking concepts without using screens or programming:

- Logical reasoning through multi-step logic gates and movement rules
- **Pattern recognition** through decoding routes
- Algorithmic thinking seen in decoding sequences and direction-following
- Cryptography through ciphers and symbol mapping
- Conditionals and constraints especially in physical logic puzzles
- Collaboration and communication central to progressing as a team





Escape room challenges

1. The Hidden Outpost

Learners must analyse three map clues and identify the jungle outpost where Karla Mendez has hidden her supplies. The puzzle involves comparing layered environmental clues and choosing from five symbolic locations.

2. The Village of Secrets

This is a logic puzzle featuring a network of huts connected by walkways. Learners use information about neighbours and relationships to deduce which hut belongs to Tracker, who has the map to the temple.

3. The Locked Hut

In this mechanical logic puzzle, learners simulate placing rocks on wooden blocks to activate locks. The goal is to release exactly two balls via specific rules involving triangle and square locks.

4. The Rapids of Repetition

This spatial reasoning puzzle follows a jammed canoe through jungle rapids. At each junction type, the canoe always exits in the same direction. Learners must trace its route on a river map and identify its final landing spot.

5. The Racing Stones

A circular track with carved animal symbols forms the basis of this timed puzzle. The tortoise and hare travel at different speeds around the track — learners must determine the first symbol where they meet again, reinforcing cyclical patterns and common multiples.

code club 6. The Octagon Cipher

This is the final puzzle, and involves logic and decoding. Using answers from the previous puzzles, learners extract coordinates that are used with a rotating cipher disc to uncover a final password and open the temple gate.



Facilitation tips

Group size: Works well in pairs or solo, and can also be scaled to small teams

Time required: 60–75 minutes total

Materials needed: Printed puzzle sheets, pencils, scratch paper, optional printed

map tokens, and optional jungle symbols

Support strategies:

- Provide nudges or tiered hints if learners are stuck for more than 5–10 minutes
- Use theming or character roleplay to boost immersion
- Encourage learners to explain their reasoning aloud to reinforce their thinking
- Debrief after the session to reflect on strategy, teamwork, and challenge-solving

Why it works

- Narrative immersion keeps learners motivated and curious
- No devices needed it's screen-free but rich in computational ideas
- **Scalable challenges** some puzzles have multiple entry points or solution paths
- Supports metacognition learners reflect on how they solved each step
- Fun and atmospheric perfect for creative Code Club enrichment

Extension and enrichment ideas

- Ask learners to describe the path they've taken in their 'Explorer's log'
- Invite them to create an extra jungle puzzle for the next group
- Build a leaderboard of fastest explorers
- Offer bonus puzzles for learners who finish early
- Integrate a physical treasure or hidden token as a reward at the end



Puzzle answers

Puzzle 1: The Hidden Outpost

Answer: Outpost 1

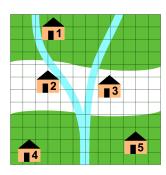
Emoji: 🦇

Explanation:

To locate the hidden outpost where Karla stashed her supplies, clues from all three of her hand-drawn maps must be combined. The correct outpost needs to be:

- Hidden deep within the thickest part of the jungle
- Close to the river reachable by canoe

When the three maps are overlaid, only **Outpost 1** matches both conditions. It's surrounded by dense trees and positioned right beside the riverbank.



Puzzle 2: The Village of Secrets

Answer: Hut 4

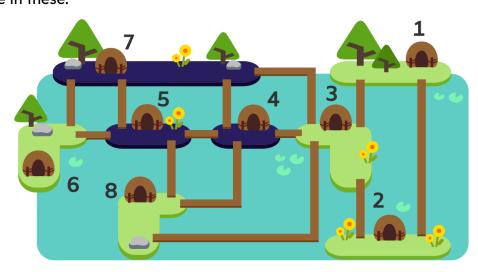
Emoji: 🐞

Explanation:

To uncover which hut belongs to **Tracker**, we need to use all of Karla's clues and analyse the wooden walkways connecting the jungle huts.

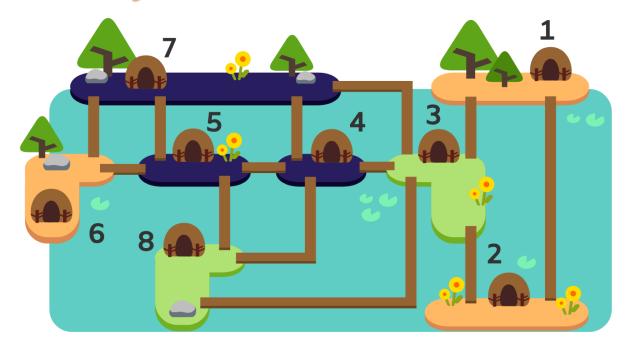
First, we're told that **Tracker**, **Blaze**, and **Thorn** each had **four neighbours**. So we begin by identifying the huts with exactly four walkways:

• Huts 4, 5, and 7 each connect to four other huts. So Tracker, Blaze, and Thorn must live in these.



Next, we learn that **Blaze and Thorn were both neighbours with Echo**, and **Echo has no other neighbours**. That's a big clue.

Only one hut has **exactly two connections** — making it the only one Echo could live in. That's **Hut 6** $\textcircled{\blacksquare}$.



Using that, we now know:

- Echo lives in Hut 6
- Blaze and Thorn must be in Huts 5 and 7 (since both are connected to Hut 6)
- That leaves **Hut 4** as the only other hut with four connections
- So, Tracker's hut is the only remaining eligible one: Hut 4 *

Puzzle 3: The Locked Hut

Answer: 1, 2, 4, 5, 6

Emoji: 🛼

Explanation:

The best way to tackle this puzzle is to work backwards from the hut door.

You know the door will open only if **exactly two balls arrive at the final lock**. The diagram shows that these balls come from **two separate locks** — one a **triangle**, one a **square**.



Let's look at how each of these locks works:

- A Triangle locks only open if two balls arrive at the same time
- Square locks only open if exactly one ball arrives

So for both the triangle and square to open — and for both to send a ball to the final lock — we need:

- The triangle to receive **two balls**
- The square to receive one ball

Now we work backwards from these two locks and trace the paths to see which blocks would send the right number of balls.

You'll notice:

- The triangle lock receives lines from two blocks both of these must be
 active, so you need to place a weight on both
- The square lock also connects to two blocks but a weight should be placed on only one of them to send just a single ball

By carefully testing which blocks (1 to 8) to put weights on, we can see that the only combination that satisfies all the above rules — **two balls to the triangle, one to the square, and two balls total to the final lock** — is **1, 2, 4, 5, 6.** That's the $\frac{1}{2}$ option.

Puzzle 4: The Rapids of Repetition

Answer: F

Emoji: 🌊

Explanation:

To find where the canoe ends up, you need to follow the current through the jungle river system, applying the same steering rules at every type of junction.

Because the **rudder is jammed**, the canoe always reacts the same way:

- At a **T-junction**, the canoe **always turns right**
- At a whirlpool, it always takes the third exit going anti-clockwise
- At a 4-way crossing, it always goes straight ahead

Starting from the **jetty behind the hut**, you enter the rapids and apply each rule step by step. After the route indicated by the dotted blue line, the steps are as follows:



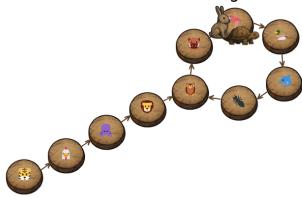
- 1. The first junction is a **whirlpool**, so the canoe takes the **third exit going anti-clockwise**, heading **up**.
- 2. It then meets a **T-junction** it turns **right**.
- 3. At the **4-way crossing**, it continues **straight**.
- 4. It then meets another **T-junction**, turning **right** again.
- 5. And finally, it meets another **4-way crossing** it goes **straight through** and reaches landing point **F**.

Puzzle 5: The Racing Stones

Answer: 🦩 Emoji: 🦩

Explanation:

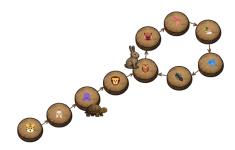
The tortoise and the hare will finish on the flamingo stone:



The figures below show the locations of the tortoise and the hare after every minute. After 1 minute:

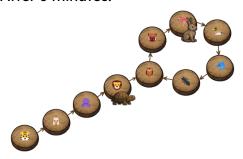


After 2 minutes:

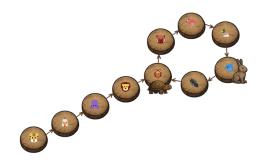




After 3 minutes:



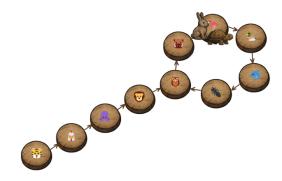
After 4 minutes:



After 5 minutes:



After 6 minutes they meet again, on the flamingo stone:





Puzzle 6: The Octagon Cipher

Password: WATER

Explanation:

These emojis are placed on a coordinate grid found at the base of the stone pedestal. By finding each emoji on the grid, you collect the following number pairs:

- $\bullet \quad \clubsuit \rightarrow (7, 2)$
- $\gg \rightarrow (1, 1)$
- $\frac{1}{2}$ \rightarrow (6, 2)
- $\bullet \quad \boxed{2} \rightarrow (3, 2)$
- $\stackrel{\bullet}{>}$ \rightarrow (4, 3)

These give you the encrypted number sequence: 72 - 11 - 62 - 32 - 43

Now it's time to decode each number pair using the octagon dial.

You start with the mechanical arrow pointing at ABC. For each number pair:

- The first digit tells you how many corners to rotate the arrow clockwise
- The second digit tells you which letter to take from the letter group it points to
- 1. 72
- o Move the arrow 7 corners clockwise \rightarrow pointing to VWX
- $\circ \quad \text{Take the 2nd letter} \to \mathbf{W}$
- 2. 11
- \circ Move the arrow **1 corner clockwise** \rightarrow pointing to **ABC**
- \circ Take the **1st letter** \rightarrow **A**
- 3. **62**
- Move the arrow 6 corners clockwise → pointing to STU
- \circ Take the **2nd letter** \rightarrow **T**
- 4. 32
- Move the arrow 3 corners clockwise → pointing to DEF
- \circ Take the **2nd letter** \rightarrow **E**



5. **43**

- \circ Move the arrow **4 corners clockwise** \rightarrow pointing to **PQR**
- o Take the **3rd letter** \rightarrow **R**

Put them all together: W - A - T - E - R

Congratulations! You did it!



Puzzle 1: The Hidden Outpost

Rain drums on the rusted tin roof of the abandoned trading post as you prise open an old travel chest. Inside lies the journal of the missing archaeologist, **Professor Karla Mendez** — last seen on an expedition to uncover the **Temple of the Emerald Heart**, a lost treasure whispered about in only the oldest explorers' tales.

On top of the journal in the chest, a message is scrawled in smudged ink:

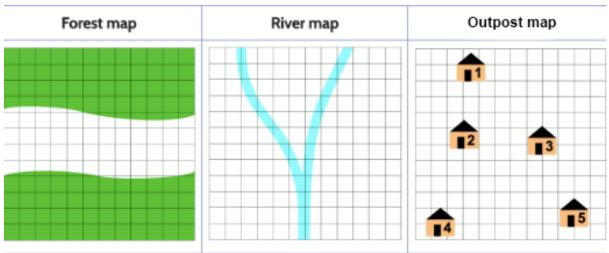
"My supplies were hidden at a forgotten jungle outpost, buried in the trees, yet close enough to the river to reach by canoe. Without it, the journey cannot begin."

Tucked between the pages are three tattered maps — each one hand-drawn and encoded with clues:

- One marks where the **jungle grows thick**
- Another traces the path of rivers that still whisper with ancient secrets
- The last shows **outposts** scattered like breadcrumbs through the jungle

You realise this must be your first task:

Find the hidden outpost where Karla stashed her supplies before vanishing into the jungle.



Which outpost is the right one? Write down the symbol next to the correct answer in your adventure journal:











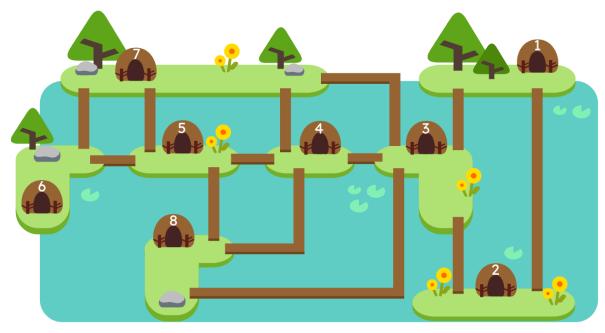
Hint: The outpost must be near to a river, AND in the forest. Imagine the maps all on top of one another. Which outpost is the right one?



Puzzle 2: The Village of Secrets

At the Hidden Outpost, the huts stand quietly on their stilts, surrounded by thick jungle and still water. The place feels deserted — until you spot an old noticeboard covered in moss. Pinned to it is a message written in Karla's hand:

"Tracker had the map to the ancient temple. But no-one ever said where his hut was. He lived among the most people: "He had four neighbours, as did Blaze and Thorn." They were both neighbours with Echo, who trusted no-one else. Find Tracker's hut, and the next path opens."



You glance at the network of huts connected by fragile wooden walkways. Here's what you know about the outpost residents:

- A person is a neighbour only if their hut is directly connected by a single wooden walkway
- Tracker, Blaze, and Thorn each had four neighbours
- Blaze and Thorn were both neighbours with Echo
- Echo has no other neighbours

Which hut is Tracker's? Record the symbol next to the correct number:



2 👺

3 🦅

4 🎠

5

6 40

7 🦧

8 🦨

Hint: Echo has only two neighbours, so she must live in a hut with just two walkways. Can you find a hut with only two walkways and the right neighbours?

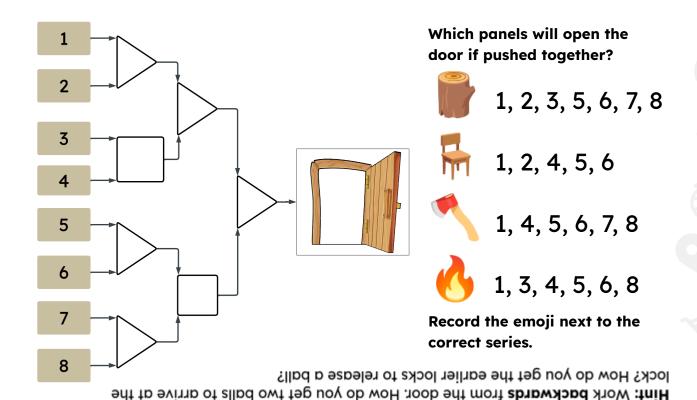


Puzzle 3: The Locked Hut

The door to Tracker's hut is locked. You see some **wooden panels** on the floor. It's some kind of locking mechanism!



- If you place weight on a panel it pushes down, and a ball is released into a tube under the porch
- The tubes lead to locks that also each release one ball
- Triangle locks only open if **two** balls arrive at once
- Square locks only open if **only one** ball arrives
- The door only opens if two balls arrive (as it has a triangle lock)





Puzzle 4: The Rapids of Repetition

You've cracked the mechanism beneath the hut — the final clunk of the lock is followed by a hollow *thunk*, and the door unlocks. Inside, the cabin is empty, save for a message in Karla's handwriting:

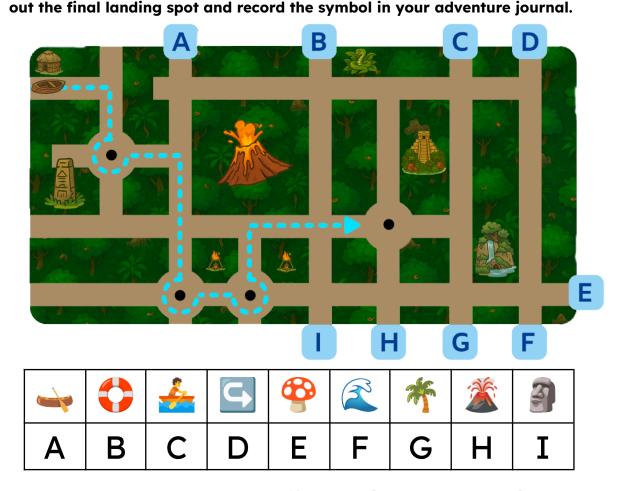
"The only way forward is downriver. But take care: the currents here remember every move, and they never change course."

At the back of the room, a hidden trapdoor swings open, revealing a narrow path through the undergrowth. It leads to a jetty, half-swallowed by reeds. A battered wooden canoe bobs in the water. You untie the canoe and push off. The current grabs you immediately, dragging you into the rushing water.

Just as you're about to steer, the rudder jams! The canoe now makes the same turn every time it reaches the same type of junction (whirlpool, T-junction, or 4-way), as shown below. For example, one of the rules is: the canoe always takes the third exit in an anti-clockwise direction at every whirlpool.

Follow the course of the river, starting from the jetty behind the hut.

Where will the current take you? What's the rule for each type of junction? Work



Hint: What does the canoe do at T-junctions? What does it do at 4-way crossings? It will always do the same thing at each type of junction.



Puzzle 5: The Racing Stones

After battling river currents and dodging floating debris, you drag your canoe up onto a mossy bank. The jungle clears to reveal something strange — embedded in the forest floor is a **circular stone track**, carved with symbols and worn smooth by centuries of rain.

A nearby inscription reads:

"One slow, one swift.

Moving at different speeds, but always together.

When they meet again, press the stone and the way will open."

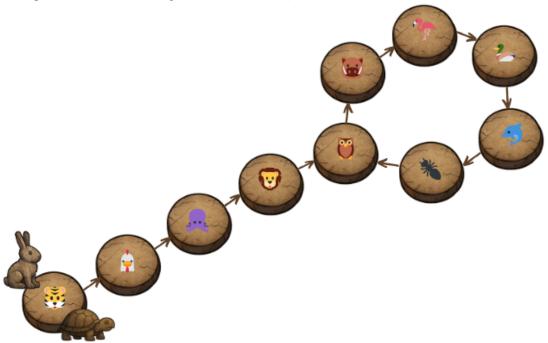
At the track's edge, two figures are carved from stone:

- A **tortoise**, slow and steady
- A hare, alert and fast

They're both carved facing the stone at the start of the path. Arrows in the grooves show the direction they travel, step by step.

- The tortoise moves one stone forwards every minute
- The hare moves two stones forwards every minute
- They both start at the **tiger stone** and follow the direction of the arrows
- You need to figure out where they first land on the same stone again, after starting

Which symbol is on the stone where the tortoise and hare first meet again? Record it in your adventure journal.



Hint: Use tokens to represent each figure on the track and move them the right number of spaces each time. Where do they meet up?



Puzzle 6: The Octagon Cipher

There before you, the animal carving on the stone shimmers slightly in the shadowy cave. You press it, and a stone temple doorway reveals itself. You're right at the entrance to the lost temple!

You step forwards and suddenly, *click*. Vines recoil as ancient gears grind into motion. Rising from the earth comes a strange stone pedestal. At its base lies a grid covered in symbols you've seen on your journey. The face of the pedestal is smooth, symmetrical, and eight-sided: an octagon. Upon the octagon, an ancient dial.

This puzzle feels older, quieter.

You realise you can use the grid to convert symbols into number pairs — and that later you'll use the octagon dial to decode these number pairs into a password to open the Temple of the Emerald Heart!

You look down at the grid:

- Using your emoji answers from the previous 5 puzzles, use the grid to work out 5 number pairs
- Start with the emoji from the first puzzle, then go in order to the fifth puzzle
- Like coordinates, the first number of each pair should be from the row on the top, and the second number should be from the column on the side



Hint: Make sure you have all the emoji answers from the previous puzzles in the right order, then write down the number pairs using the grid above. Next, use the octagon dial to decode the numbers and work out the word that's spelt out!



Numbers (in pairs):

,	,	,	,	,

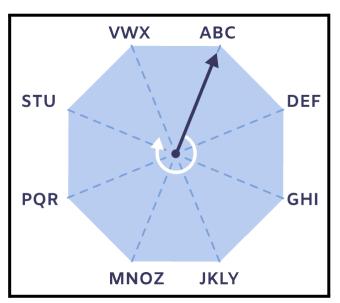
Now you can use the octagon dial to decode your number pairs into the password to open the door to the Temple of the Emerald Heart!

You look at the octagon dial:

At its centre: a mechanical arrow. Around it: groups of three or four letters etched at each corner — **ABC**, **DEF**, **GHI**, and so on. The arrow clicks into place, pointing to **ABC**. It hums faintly, eager to move.

Rules

- 1. The arrow can only move clockwise.
- 2. To decode a number pair into letters, do the following:
 - The first number indicates how many corners of the octagon the arrow should be moved from its current position
 - The second number indicates the position of the encrypted letter in the letter group to which the arrow points



Example:

TREE is encrypted with the sequence **62-73-42-02**:

- **62** (move 6, 2nd letter=T)
- **73** (move 7, 3rd letter=R)
- **42** (move 4, 2nd letter=E)
- **02** (move 0, 2nd letter=E)

Password:



Hint: Make sure you have all the emoji answers from the previous puzzles in the right order, then write down the number pairs using the grid above. Next, use the octagon dial to decode the numbers and work out the word that's spelt out!



The temple reveals its secrets

You speak the secret password. A soft chime echoes through the stone chamber, like the final note of a song long forgotten. You hold your breath.

The octagonal pedestal rumbles.

With a deep groan, the stone temple door creaks open, spilling golden light across the moss-covered floor. The vines retreat as if bowing in respect. Inside, the air is cool and dry, untouched by the centuries.

Carvings line the walls, glowing faintly as you step through: scenes of explorers, animals, stars — hundreds of stories carved into stone and hidden away for generations.

Just then, a final journal page flutters from your bag. Karla Mendez's handwriting dances across the page:

"If you've made it this far, you've done what I could not.

The jungle tested you. The puzzles shaped you.

You're not just a follower of clues — you're a protector now.

The Emerald Heart belongs to no one.

But its secrets?

Those are yours to carry."

You smile. The jungle breathes around you — watchful, alive, and at peace.

Your adventure isn't over.

It's just beginning.



Next: The Jungle Awakens: Temple of the Emerald Heart

You've opened the door. But can you uncover the heart?

The temple halls are deeper than anyone imagined. Whispers echo from chambers long sealed. Strange machines stir. More puzzles await.

Karla left behind one more map — and a warning: "The temple doesn't just house the Emerald Heart. It protects it."

Get ready for the next escape room in the series, where the search will continue inside the temple itself...

