

# CREATE YOUR OWN ESCAPE ROOM!

## YOUR TASK

You will be creating an escape room activity for a group of friends or learners in your school (or even the staff!). This will be a mystery puzzle room activity where the challenge is to solve all the puzzles, decrypt all the codes and find all the clues and keys in order to exit the room within a time limit.

## YOU WILL NEED

- **Bags and containers that can be locked shut**  
(purses, backpacks, briefcases, suitcases, coin boxes, storage containers, etc)
- **Various locks**  
(padlocks, luggage locks, bike locks, laptop lock cables)
- **Puzzles and clues**
- **Costumes and set dressing to give atmosphere!**

## THEMES & SETTING IDEAS

### DETENTION DETECTIVES

A group of girls have been accused of starting a food fight. They need to find the truth to clear their name.

### HALLOWEEN HAUNTED HOUSE

Find the door key... before the ghost finds you.

### MISSING TEACHER

Your teacher has gone missing and it's up to you to find out where they've gone.

### SPIES!

Discover the double agent in time to stop a diplomat being assassinated.

### MAGIC SCHOOL

Find all the spell ingredients to magic yourself back home.

### PARALLEL UNIVERSE

Find the mysterious object that has transported you to a parallel universe before the world is ripped apart.



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## 1. TRY ESCAPING

Hopefully you've tried our VIKINGS escape rooms in your class, but if you haven't yet tried an escape room, they are great fun! You and your friends are 'locked in' a room...

You must find clues and solve puzzles to escape before the time runs out. You could try an escape room near you, an escape room board game, an online escape room or download and print an escape room (like our VIKINGS challenges).

Chat with your group about what puzzles and challenges you thought worked well and which you maybe didn't like so well. Did you get stuck on anything? How were the challenges ordered - did you need to solve each puzzle in turn to get the next one or could team members be working on different puzzles at the same time?

## 2. CHOOSE A THEME & STORYLINE

Choose a theme for your game. Think about the locations you can use—don't plan a game set in a science lab if you only have access to a gym hall or a park!

Think about **why** the players are going to be locked in and trying to escape, and why they have to solve puzzles. Once you have chosen a theme, plan out your storyline. This can be used to brief the players before they start the game. For example:

### ESCAPE KITCHEN

**Your teacher is the best in the world.... except for baking.**

She loves baking 'treats' but they're inedible! Tonight, she's going to bake muffins with her special top secret ingredient. Your classmates have trapped you and your friends in the school kitchen. You will only be allowed out if you manage to steal the mystery yucky ingredient from its ultra-secure storage and prevent everyone from eating horrible muffins.

### SCHOOL

**Your class has just sat a Science test but you have ended up with the marking sheet by accident.**

If your teacher realises that someone has the answers you will all have to sit another test tomorrow. You have until the end of lunchtime to put the answers back into your teacher's locked desk drawer. You just need to figure out where the keys are hidden...!

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## 3. THEME YOUR WORLD

Think about the theme you have chosen. Make a list of the props and costumes you will be able to find to decorate the escape room.

Think about objects that you can turn into clues and puzzles that fit your theme that you'll be able to find or borrow.

**Possible props include:**

- **Locks of all kinds** (bike locks, luggage locks, laptop cables, padlocks). It's great if you can find a variety of locks that use keys, numbers and even letters
- **Boxes and bags** (lock boxes, cash boxes, backpacks, suitcases, briefcases). Ideally, you should be able to lock the containers or adapt them so they can be locked (perhaps drilling holes for padlocks on an old Tupperware tub)
- **Maps, atlases and books**
- **Photos, posters and jigsaws**

Don't forget to use what's available in your chosen location, like cupboards, desk drawers, bookcases, and doors with locks.

## 4. PLAN THE GAME

Escape rooms can be organised in different ways. Some rooms are linear, where each puzzle needs to be solved to get the next puzzle. Linear games are good if you want everyone in the team working together.

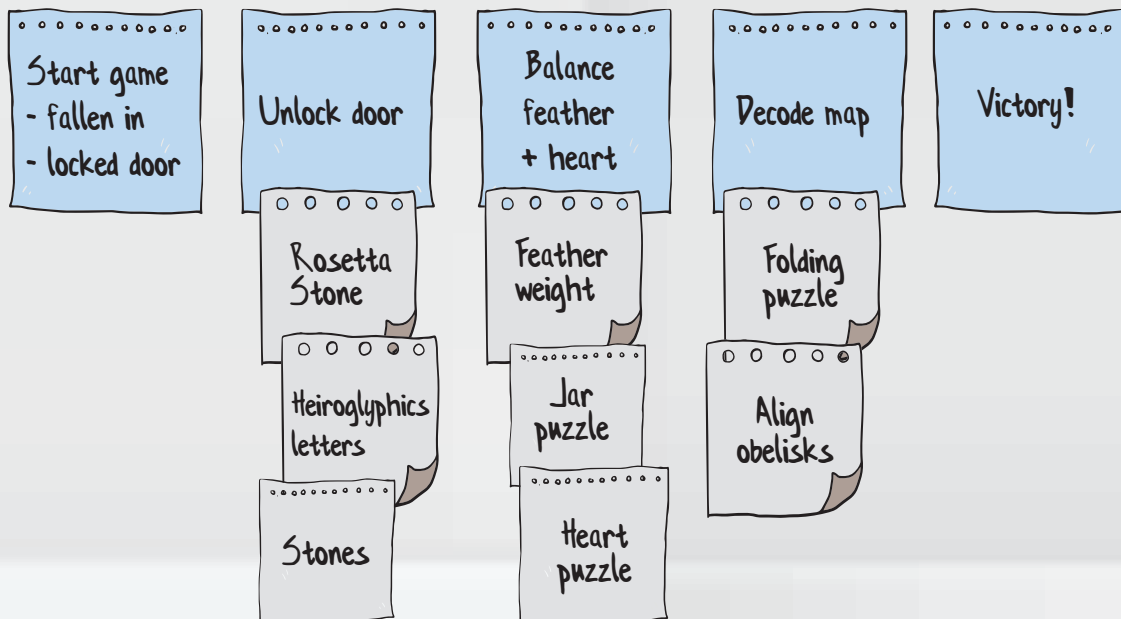
Some rooms have multiple parallel puzzles (that can be solved in any order), where the players get several different paths of puzzles at the same time. This is good when you want to make sure everyone in the team is busy solving puzzles.

**Use sticky notes to plan out the steps that the players are going to have to solve to complete the game.** Breaking a big task down into smaller pieces is a great way to solve any kind of problem.

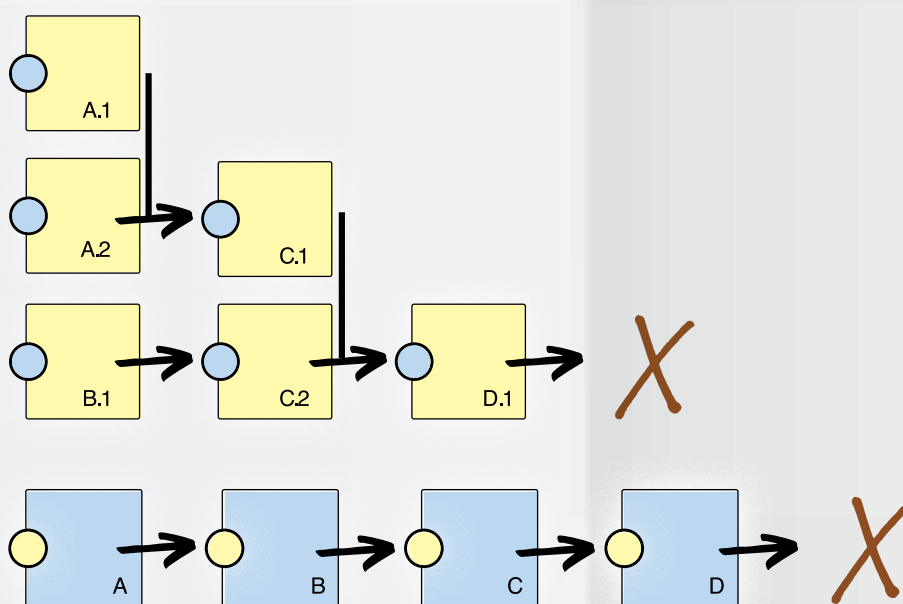


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Next, use a different colour of sticky note to plan each puzzle in the game. For example, if the players need a combination to unlock a cupboard door, first they need to find all the jigsaw pieces and make up the jigsaw to read the numerical code written on it. Each of the pieces is hidden in a different place.



The number of puzzles and steps you need in your game will depend on the number of players you want in a team, and how long you expect the game to last.



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## 5. PLAN THE PUZZLES

Choose puzzles for each of the steps in your sticky note flowchart. Decide which type of puzzle will happen at different times during the game.

It's good to have progression from easy to hard, so that the players get a sense of achievement early in the game. Think about a hint or two for each puzzle to help players who are stuck. Try not to give the answer away completely, instead just gently push the players in the right direction so they can solve it themselves.

Divide the puzzles up amongst your group and each take responsibility for developing one or more of the puzzles.

For each puzzle, think about the input and the output. The input is everything the player needs to know and have beforehand to solve the puzzle. The output will be the goal, what the player gets once they complete the puzzle. This might be numbers or letters, a key, jigsaw pieces or a clue for the next puzzle. Use your sticky note plan to make sure that the inputs for each puzzle will be possible at that stage of the game.

## 6. TEST AND DEBUG THE GAME

First, explain what's going to happen in the game to someone else. Are they confused about anything? Did they ask any questions or bring up issues that should be sorted before you run the game for real?

Next, play test your game. Maybe try out the puzzles individually with family or friends who won't be playing the game. Then when your escape room game is ready, try it out with a group of volunteers. Think carefully about where they get stuck and need clues and hints. Can you tweak the instructions, change the position of the puzzles differently, create hints to help your players?

Think about the timing of your play test. Did the volunteers get through the puzzles too quickly? Or did it take too long?

You might need to alter or add to the puzzles to fit the length of game that you want.



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## 7. BUILD AND RUN THE GAME

Finally, you're ready to run your game! If you are going to run the game with more than one group of players then you could make a checklist of everything that will need reset so you don't forget anything. Figure out how long it will take you to reset the room.

- **If you want to have a countdown clock, you could use a computer, tablet or phone with a countdown timer.**  
There are countdown timers available online and in app stores. Put the timer somewhere the players can see, to keep the excitement and suspense going!
- **Write rules for the players.**  
You will need to let them know what they can and cannot do, and the aim of the game. Let them know how they can get help if they are completely stuck or if any of the players need to leave the room during the game.
- **Remember to think about safety.**  
Even though it's called an Escape Room, you don't actually have to lock the door! Make sure all emergency exits are clear and that there's always a way for the players to get out if the fire alarm goes off or get help if there's an accident.
- **Congratulate the teams afterwards.**  
They should hopefully feel like they've won a great victory! You could take a photo of each team holding a sign with their escape time on it. The teams will want to talk about their experience afterwards but ask them to keep it a secret from anyone who hasn't played the game yet.

### HOW DOES THIS RELATE TO THE WORLD OF COMPUTING AND DATA?

When we try to solve problems in Computing Science, such as creating a mobile app or designing a computer game, we first break down the problem into smaller chunks that are easier to solve.

This is called 'decomposition'.

When a software engineer plans a computer program, she will first work out the inputs and outputs for each section of the program. For example, if the developer is making an app to make secret codes, the section of her program that encrypts the message will need an input of the message in English, and it will output the secret coded message.

In Data Science, it's important to think about how information is encrypted and displayed. Sometimes we want to protect data from other people seeing it, to keep it hidden. This is encryption. Other times we want to communicate information to others, and need to make it as clear as possible.