
MATHS
ESCAPE ROOM
CHALLENGE

MATHS ESCAPE ROOM CHALLENGE

Overview: In this activity, students work in small groups to solve a series of maths-related puzzles. Each puzzle gives them a "clue" to advance to the next stage. The aim is to solve all the puzzles in a set time to “escape” the room.
Duration: 45-60 minutes
Setup:

- Divide the class into groups of 3-4 students.
- Create 5-6 stations (either at different desks or different areas of the classroom).
- Each station should include a puzzle that leads to the next station. The puzzle solution could be a number, a word, or a clue that unlocks the next challenge.

Puzzles (Example Ideas):

1. **Algebra Puzzle (Station 1):**
   - Puzzle: Solve for xxx in the equation: 5x+12=375x + 12 = 375x+12=37.
   - Answer: x=5x = 5x=5.
   - Clue: Find the envelope with the number 5 to proceed to the next station.
2. **Geometry Challenge (Station 2):**
   - Puzzle: Find the area of a triangle with a base of 6 cm and height of 8 cm.
   - Answer: Area=12×6×8=24 cm2\text{Area} = \frac{1}{2} \times 6 \times 8 = 24 \, \text{cm}^2Area=21×6×8=24cm2.
   - Clue: The next station is located 24 steps away from your current position (students must walk and count steps to reach the next station).
3. **Logic Puzzle (Station 3):**
   - Puzzle: A train leaves the station at 8:00 AM traveling 50 km/h. Another train leaves the same station at 9:00 AM traveling 70 km/h. How long will it take for the second train to catch up to the first?
   - Answer: 2.5 hours after the second train leaves.
   - Clue: "2.5 hours" is the code to unlock the next envelope.

4. **Probability Challenge (Station 4):**
    - Puzzle: If you roll two six-sided dice, what is the probability of rolling a sum of 7?
    - Answer: The probability is 6/36 or 1/6.
    - Clue: The code for the next lock is "16."

5. **Final Challenge (Station 5):**
    - Puzzle: A riddle or final maths-based challenge that requires combining clues from previous stations.
    - Example Riddle: "I am a three-digit number. The sum of my digits is 9. I am divisible by 9 and 11. What number am I?"
    - Answer: 198.
    - Clue: Unlocks the final “escape.”

Why It Works:

- Skills covered: Algebra, geometry, probability, logical reasoning.
- Engagement: Students collaborate under time pressure, promoting teamwork and applying maths concepts.
- Adaptability: Teachers can adjust the difficulty of the puzzles based on students’ levels.