

Enrichment – Maths Maze

Your Mission: You are codebreakers and problem solvers navigating a maze of maths challenges. Each puzzle you crack unlocks new paths - and proves how logic, strategy, and teamwork fuel discovery.

Pre-Visit Activity

Hook	10 mins	Watch The Future of Delivery Robots. While watching, jot down: <ul style="list-style-type: none"> • One opportunity these robots could bring. • One challenge that's unique to your town or neighbourhood.
Local Starting Point	5 mins	<ul style="list-style-type: none"> • In small groups, pick one real local business: bakery, pharmacy, takeaway, canteen, or supermarket. • This will be the launch point for your robot's first route. • It could be: <ul style="list-style-type: none"> ○ A bakery, supermarket, or takeaway shop ○ The school canteen ○ A local pharmacy ○ Any place that could deliver to nearby homes or businesses
Investigate the Scenario	15 mins	<ul style="list-style-type: none"> • Opportunities: how could this robot help customers, businesses, or your community? • Obstacles: narrow footpaths, busy crossings, weather, animals, vandalism, safety. • Propose Solutions: one realistic fix for each major obstacle. • Imagine Impacts after 12 months: what would change—positives and negatives?
Council Pitch	15 mins	<ul style="list-style-type: none"> • Each group gives a 60-second presentation to "Council" (the class). • Must include: <ul style="list-style-type: none"> ○ Location chosen ○ Biggest opportunity ○ Biggest obstacle ○ Smartest solution

Teacher notes

- This is discussion-based - students can jot quick bullet points on scrap paper, mini-whiteboards, or a shared doc.
- Push for local details - street names, landmarks, local habits - so ideas feel authentic.
- Encourage constructive thinking: every obstacle should be paired with at least one potential solution.
- Frame group pitches as "advice to council" so there's a real-world stake. using local Yarra Valley suppliers

Post-Visit Activity

Your Mission: Every robot - whether on your street or on Mars - must solve the same puzzle: get from point A to point B safely and efficiently. Now it's your turn to step into the robot's 'brain' and see if you can navigate the maze.

Maze Coding Challenge	15 mins	Go to Code.org Maze Programming . Complete the puzzles: help an angry bird reach a pig, a zombie finds the sunflowers, etc. Recognise this as the <i>same logic</i> robots use to navigate your streets.
Watch and Reflect	5 mins	Play: Hour of Code – Wrap Up . Prompt: how does this short challenge connect to real robots?
Critical Thinking Discussion	30 mins	Still relevant? If AI can code, does programming knowledge still matter? Beyond code: What do humans bring to make tech useful and safe? AI as partner: How does coding knowledge help work with AI? Your verdict: Would you still invest time in learning to code? Why?
Humans in an AI Future Challenge	30 mins	Groups create a “Top 3 Tips for Humans in an AI Future” poster or mini video.

Teacher notes

- The activity is a gentle introduction to some core coding concepts and logical thinking strategies.
- The reflection questions are designed as a provocation to connect the activity to bigger questions about skills, AI, and the future of work.
- Works best as a group discussion to surface diverse perspectives before moving to individual responses.