How to Solve Logic Puzzles

Level 2 and 3

Solving a logic puzzle is a bit like being a detective! You need to read through the clues and record the information in a special grid using a ✓ or an X.

Example

Three children love solving puzzles! From the clues below, can you work out the age of each child and which is their favourite type of puzzle? The children are all different ages and like different puzzles

	Wordsearch	Mazes	Crosswords	7 years	8 years	9 years
Sally						
Filip						
Anika						
7 years						
8 years						
9 years						

Clues

1. Sally is 7 years old
2. Mazes are Filip's favourite type of puzzle
3. Anika does not enjoy word searches
4. The child who loves crosswords is 8 years old.

Solution

Clue 1 tells us that Sally is 7 years old. We can put a (tick) in the box where 'Sally' and '7 years' meet. If Sally is 7 years old, then she can't be 8 or 9 so we can put an X in those boxes. Neither Filip nor Anika can be 7 years old so we can put an X in the box where 'Filip' and '7 years' meet and where 'Anika' and '7 years' meet.

	Wordsearch	Mazes	Crosswords	7 years	8 years	9 years
Sally				✓	X	X
Filip				X		
Anika				X		
7 years						
8 years						
9 years						

Clue 2 tells us that mazes are Filip's favourite puzzle. We can put a ✓ in the Filip / Mazes box. We can now put an X in the Filip / Wordsearch and Filip / Crosswords box. Neither Sally or Anika's favourite puzzle can be mazes so we can put a cross in those boxes.

	Wordsearch	Mazes	Crosswords	7 years	8 years	9 years
Sally		X		✓	X	X
Filip	X	✓	X	X		
Anika		X		X		
7 years						
8 years						
9 years						

	Wordsearch	Mazes	Crosswords	7 years	8 years	9 years
Sally		X		✓	X	X
Filip	X	✓	X	X		
Anika	X	X		X		
7 years						
8 years						
9 years						

Clue 3 tells us that Anika does not enjoy wordsearches so we can put an X in the Anika / Wordsearch box.

From these three clues, we can now see that Sally must be the child who likes wordsearches best (as Filip and Anika do not). We can put a ✓ in this box. We can also see that Anika is the child who likes crosswords.

	Wordsearch	Mazes	Crosswords	7 years	8 years	9 years
Sally	✓	X		✓	X	X
Filip	X	✓	X	X		
Anika	X	X	✓	X		
7 years						
8 years						
9 years						

Clue 4 tells us that the child who likes crosswords is 8 years old. We can put a ✓ in box where 'Crosswords' and '8 years' meet and an X in the other boxes in that row and column.

	Wordsearch	Mazes	Crosswords	7 years	8 years	9 years
Sally	✓	X		✓	X	X
Filip	X	✓	X	X		
Anika	X	X	✓	X		
7 years			X			
8 years	X	X	✓			
9 years			X			

From this point, we can actually solve the puzzle without needing any more clues!

Start by filling out the table with the information you have collected. Can you see that we can work out that Filip is 9 years old? The puzzle is solved!

	Wordsearch	Mazes	Crosswords	7 years	8 years	9 years
Sally	✓	X		✓	X	X
Filip	X	✓	X	X		
Anika	X	X	✓	X		
7 years			X			
8 years	X	X	✓			
9 years			X			

Child	Age	Puzzle
Sally	7	Wordsearch
Filip	9	Mazes
Anika	8	Crosswords