PUZZLE FUN!

Mazes • Logic Puzzles • Bingo • Brain Teasers

Ages 11–13 • Middle School

THINK • SOLVE • REASON • HAVE FUN

A printable puzzle collection designed to build logical reasoning, flexible thinking, problem solving and confidence.

Includes: 12 printable puzzle activities • mazes • logic • bingo • brain teasers • answer key

1. Multiplication Maze

Instructions: Move up, down, left or right. Travel only through numbers that are multiples of 6, from START to FINISH.

START 12	**18**	**7**	**11**	**13**	**17**	**19**
5	**24**	**30**	**9**	**21**	**23**	**29**
3	**15**	**36**	**42**	**45**	**47**	**31**
2	**14**	**20**	**48**	**54**	**55**	**37**
4	**16**	**22**	**27**	**60**	**66**	**41**
8	**10**	**25**	**33**	**72**	**78**	**43**
1	**6**	**35**	**39**	**49**	**84 FINISH**	**51**

Write the numbers in your route: _____

2. Prime Number Maze

Instructions: Move only through prime numbers. No diagonal moves.

START 2	4	6	8	10	12	14
15	3	5	9	15	21	16
18	20	7	11	13	17	18
22	24	25	19	23	29	20
26	27	28	31	37	33	34
30	32	35	41	43	47	36
38	40	42	45	49	53 FINISH	54

Prime numbers have exactly two positive factors.

3. SEATING LOGIC

Five friends sit in seats 1–5. Use all the clues to place them in the correct order.

Friends: Ava • Ben • Chloe • Daniel • Emma

1. Ava sits immediately to the left of Ben.

2. Chloe is not at either end.

3. Emma sits to the right of Chloe.

4. Daniel sits at the left end (seat 1).

5. Ava sits to the left of Chloe.

Seat	1	2	3	4	5
Name	_____	_____	_____	_____	_____

Challenge: Which friend sits in seat 3? _____

4. Mystery Activities

Instructions: Four students each choose a different activity and a different colour.

Students: Liam • Maya • Noah • Sofia

Activities: chess • coding • football • drawing

Colours: blue • green • red • yellow

Clues:

1. Maya chooses coding.
2. The football player likes green.
3. Liam chooses chess.
4. Noah does not like red or yellow.
5. Sofia chooses drawing.
6. The coding student likes blue.

Student	Activity	Colour
Liam	_____	_____
Maya	_____	_____
Noah	_____	_____
Sofia	_____	_____

5. NUMBER DETECTIVE

Find the three-digit mystery number. Use all three clues.

- The hundreds digit is twice the tens digit.
- The ones digit is 3 more than the tens digit.
- The digits add to **15**.

Mystery number: _____

Show your working:

_____

_____

_____

_____

_____

6. MATHS BINGO

Choose **8 different answers** from the answer bank and write one in each empty square. Leave the centre square as FREE. A caller reads a calculation; cover the matching answer.

Answer bank: 12 • 18 • 24 • 30 • 36 • 42 • 48 • 54 • 60 • 66 • 72 • 81

	FREE	

Caller cards: 3×4 • 6×3 • 4×6 • 5×6 • 6×6 • 7×6 • 8×6 • 9×6 • 10×6 • 11×6 • 12×6 • 9×9

How to win: Cover three answers in a straight line — across, down or diagonally — and call “Bingo!”

7. Brain Teaser Blast

Instructions: Solve carefully and show working where useful.

1. A number is multiplied by 3 and 5 is added. The result is 26. What is the number? _____
2. Half of a number is 18. What is the number? _____
3. A clock shows 3:45. What time is it 50 minutes later? _____
4. A rectangle is 12 cm long and 5 cm wide. What is its perimeter? _____
5. What comes next? 1, 4, 9, 16, 25, ___, ___

8. Think Sideways

Instructions: These questions reward careful reading.

1. If you overtake the person in second place, what position are you in? _____
2. A farmer has 12 sheep. All but 5 run away. How many remain? _____
3. You take 2 apples from a basket of 5. How many apples do you have? _____
4. A plane crashes on a border. Where do they bury the survivors? _____
5. Which is heavier: 1 kg of feathers or 1 kg of books? _____

9. Pattern Detective

Instructions: Find the rule and complete each sequence.

Sequence	Next terms
7,14,21,28, ___, ___	_____, _____
96,84,72,60, ___, ___	_____, _____
3,6,12,24, ___, ___	_____, _____
2,5,10,17,26, ___	_____
64,32,16,8, ___, ___	_____, _____

10. Probability Challenge

Instructions: A bag contains 5 red, 3 blue and 2 green counters.

1. Which colour is most likely? _____
2. Which colour is least likely? _____
3. What is the probability of blue? _____
4. What is the probability of not green? _____
5. What is the probability of two reds in a row without replacement? _____

11. Number Grid Challenge

Instructions: Place 1–9 in the grid so every row, column and diagonal totals 15.

8		**6**
	5	
4		**2**

Magic total = _____

12. Ultimate Brain Challenge

Instructions: Solve all four.

1. I am a two-digit number, divisible by 3 and 5. My digits add to 9. What am I? _____

2. A number is multiplied by 4, then 6 is added. The result is 34. What is the number? _____

3. A rectangle has perimeter 30 cm. Its length is 9 cm. What is its width? _____

4. You have 24 cards. You give 1/3 to a friend, then 1/4 of the remaining cards to another friend. How many remain? _____

Score: _____ / 4

ANSWER KEY

Answers for activities 1–9

1. Multiplication Maze
12 → 18 → 24 → 30 → 36 → 42 → 48 → 54 → 60 → 66 → 72 → 78 → 84.

2. Prime Maze
2 → 3 → 5 → 7 → 11 → 13 → 17 → 19 → 23 → 29 → 31 → 37 → 41 → 43 → 47 → 53.

3. Seating Logic
Seat order: Daniel, Ava, Ben, Chloe, Emma. Seat 3 = Ben.

4. Mystery Activities
Liam = chess/yellow; Maya = coding/blue; Noah = football/green; Sofia = drawing/red.

5. Number Detective
636. Tens digit = 3; hundreds digit = 6; ones digit = 6; digit sum = 15.

6. Maths Bingo
The caller-card answers are 12, 18, 24, 30, 36, 42, 48, 54, 60, 66, 72 and 81. Students choose any 8 distinct answers for the 8 empty squares.

7. Brain Teaser Blast
7; 36; 4:35; 34 cm; 36 and 49.

8. Think Sideways
Second place; 5; 2; survivors are not buried; equal weight.

9. Pattern Detective
35, 42; 48, 36; 48, 96; 37; 4, 2.

ANSWER KEY • CONTINUED

10. Probability: Red; green; 3/10; 8/10 (4/5); 2/9.
11. Number Grid: 8 1 6 / 3 5 7 / 4 9 2. Magic total = 15.
12. Ultimate Brain Challenge: 45; 7; 6 cm; 12 cards.

PUZZLE MASTER

Awarded to: _____

for completing the Puzzle Fun Challenge!