

Logic Puzzles Challenge

#3



The Birthday Party Puzzle



Four friends (Alice, Bob, Charlie, and David) have their birthdays in different months: January, March, May, and July.

Use the clues to figure out each friend's birthday month.

- Alice's birthday is not in May or January.
- Bob's birthday is earlier in the year than Charlie's.
- David's birthday is in the middle of the year.

The Birthday Party Puzzle



Solution:

- **Clues Breakdown:**
 - a. **Alice \neq May, Alice \neq January**
 - b. **Bob $<$ Charlie**
 - c. **David = Middle of the year**

Deductions:

- Alice's birthday must be in March or July.
- David's birthday must be in May (middle of the year).
- Bob's birthday is earlier in the year than Charlie's, so it must be in January or March.
- Since David's birthday is May, Charlie's birthday cannot be in May and must be July.
- This leaves Bob with January and Alice with March.

Final Placement:

- **Alice: March**
- **Bob: January**
- **Charlie: July**
- **David: May**

