## **Back To The Queer Future #2: Dapper Style Dilemma**

One way you may want to solve this puzzle is using a **logic grid,** such as this:

	White	Black	Gold	Ethel Black	Harry White	Alberta Gold	Chair	Shelf	Closet
Top Hat									
Tuxedo									
Trousers									
Chair									
Shelf									
		:	:						
Closet									
Closet Ethel Black									

## Walkthrough Using The Logic Grid:

- 1. The grid is made up of items in different categories (in this case: piece of clothing, colour, position and gifter). Each item is matched to one, and only one, other item in each category.
- 2. The grid is laid out so that you can note down relationships between each items. For example, the first clue states that the item from Alberta Gold is on a shelf, which we'll mark with a **O.** That means Alberta can't be associated with the chair or closet, and the shelf isn't associated with Ethel or Harry, so we'll mark those relationships with an **X:**

	White	Black	Gold	Ethel Black	Harry White	Alberta Gold	Chair	Shelf	Closet
Top Hat									
Tuxedo									
Trousers									
Chair						Х			
Shelf				Х	Х	0			
Closet						Х			
Ethel Black									
Harry White									
Alberta Gold									

3. The second clue says the trousers are on the chair, so we can mark that down:

	White	Black	Gold	Ethel Black	Harry White	Alberta Gold	Chair	Shelf	Closet
Top Hat							Х		
Tuxedo							Χ		
Trousers							0	Χ	Χ
Chair						Χ			
Shelf				Х	Х	0			
Closet						Χ			
Ethel Black							•		
Harry White									
Alberta Gold									

4. We've noted that Alberta can't have gifted the item on the chair, so we can infer she can't have gifted the trousers, which we'll mark with another **X**:

	White	Black	Gold	Ethel Black	Harry White	Alberta Gold	Chair	Shelf	Closet
Top Hat							Х		
Tuxedo							Χ		
Trousers						Χ	Ο	Χ	Χ
Chair						Χ			
Shelf				Χ	Χ	О			
Closet						Χ			
Ethel Black							•		
Harry White									

- 5. We'll skip over the clue about Ethel's item being 50 cents for now, as it doesn't yet tell us anything.
- 6. The clue stating "the white item is in better condition than the tuxedo" tells us the tuxedo can't be white:

	White	Black	Gold	Ethel Black	Harry White	Alberta Gold	Chair	Shelf	Closet
Top Hat							Х		
Tuxedo	Χ						Х		
Trousers						Χ	О	Χ	Χ
Chair						Х			
Shelf				Χ	Χ	0			
Orien				<b> </b>	^	: ~			
Closet					^	X			
					^				
Closet									

7. The next clue is: "The person that gifted the trousers spent exactly three times as much money on them as the tuxedo." We know Ethel's item cost 50 cents. 50 cents isn't exactly divisible by 3, which means Ethel can't have gifted the trousers:

	White	Black	Gold	Ethel Black	Harry White	Alberta Gold	Chair	Shelf	Closet
Top Hat							Х		
Tuxedo	Χ						Χ		
Trousers				Χ		Χ	0	Χ	Χ
Chair						Χ			
Shelf				Х	Χ	0			
Closet						Χ			
Ethel Black									
Harry White									
Alberta Gold									

8. There's only one person left that could have bought the trousers, which is Harry:

	White	Black	Gold	Ethel Black	Harry White	Alberta Gold	Chair	Shelf	Closet
Top Hat					Χ		Х		
Tuxedo	Х				Χ		Χ		
Trousers				Х	0	Χ	Ο	Χ	Χ
Chair						Χ			
Shelf				Х	Χ	0			
Closet						Χ			
Ethel Black							•		
Harry White									
Alberta Gold									

9. Because we know the trousers are on the chair, that means we can link Harry to the chair. That leaves the only option for Ethel's item to be in the closet:

	White	Black	Gold	Ethel Black	Harry White	Alberta Gold	Chair	Shelf	Closet
Top Hat					Χ		Х		
Tuxedo	X				Χ		Χ		
Trousers				Х	0	Χ	0	Χ	Χ
Chair				Х	0	Χ			
Shelf				Х	Χ	Ο			
Closet				0	Χ	Χ			
Ethel Black									
Harry White									
Alberta Gold									

10. The final clue is: "The colour of the trousers is the same as surname of the person who gifted the item in the closet." We've just worked out that Ethel Black gifted the item in the closet, so we can mark the trousers as being black:

	White	Black	Gold	Ethel Black	Harry White	Alberta Gold	Chair	Shelf	Closet
Top Hat		Х			Х		Х		
Tuxedo	Х	Χ			Χ		Х		
Trousers	Χ	0	Χ	Х	0	Χ	О	Χ	Х
Chair				Х	0	Х			
Shelf				Х	Χ	0			
Closet				0	Χ	Χ			
		:	:				•		
Ethel Black									
Ethel Black Harry White									

11. We're now only left with one option for the top hat: white!

	White	Black	Gold	Ethel Black	Harry White	Alberta Gold	Chair	Shelf	Closet
Top Hat	0	Χ	Χ		Х		X		
Tuxedo	Х	Χ			Χ		Х		
Trousers	Χ	0	Χ	Χ	Ο	Χ	0	Χ	Х
Chair				Х	0	Χ			
Shelf				Х	Χ	0			
Closet				0	Χ	Χ			
Ethel Black							-		
Harry White									
Alberta Gold									

12. That's given us enough information to solve the particular question we were trying to answer. Although we can fill a bit more of the grid in, we don't actually have enough information to complete it. How cruel!

For a thorough guide on solving logic grid puzzles, try: <a href="https://logic.puzzlebaron.com/how-to-solve-a-logic-puzzle.php">https://logic.puzzlebaron.com/how-to-solve-a-logic-puzzle.php</a>