

## Einstein's Riddle

Some people claim the following riddle was written by Einstein as a boy although there is no evidence for this. It's still a very tricky puzzle.

See if you can figure it out:

There are five houses in five different colours in a row.

In each house lives a person with a different nationality.

The five owners drink a certain type of beverage, have a certain type of videogame console and keep a certain pet.

No owners have the same pet, own the same type of console, or drink the same beverage.

Other facts:

1. The Briton lives in the red house.
2. The Swede keeps dogs as pets.
3. The Dane drinks tea.
4. The green house is on the immediate left of the white house.
5. The green house's owner drinks coffee.
6. The owner who has a Nintendo 3DS rears birds.
7. The owner of the yellow house has an Xbox One.
8. The owner living in the centre house drinks milk.
9. The Norwegian lives in the first house.
10. The owner who has a PS4 lives next to the one who keeps cats.
11. The owner who keeps the horse lives next to the one who has an Xbox One.
12. The owner who has a Sony Vita drinks orange juice.
13. The German has a Wii U.
14. The Norwegian lives next to the blue house.
15. The owner who has a PS4 lives next to the one who drinks water.

The question is: **who owns the fish?**

This is a logic problem which can be worked out... There are no "trick"... How are you going to solve this logic problem?

"Einstein's Riddle"

<b>Position</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Colour</b>					
<b>Nationality</b>					
<b>Drink</b>					
<b>Console</b>					
<b>Pet</b>					

"Einstein's Riddle"

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<b>Colour</b>					
<b>Nationality</b>					
<b>Drink</b>					
<b>Console</b>					
<b>Pet</b>					

"Einstein's Riddle"

Position	1	2	3	4	5
Colour		Blue			
Nationality	Norwegian				
Drink			Milk		
Console					
Pet					

Step 1: Statements 8, 9 and 14 are placed on the grid.

"Einstein's Riddle"

Position	1	2	3	4	5
Colour		Blue	Red	Green	White
Nationality	Norwegian		British		
Drink			Milk	Coffee	
Console					
Pet					

**Step 2:** Statement 4 has to go in position 4, as Green is also linked to statement 5, which stops green being in position 3. Therefore, Statement 1 has to be placed in position 3 as the only colour left has a nationality of British attached.

"Einstein's Riddle"

Position	1	2	3	4	5
Colour	Yellow	Blue	Red	Green	White
Nationality	Norwegian		British		
Drink			Milk	Coffee	
Console	Xbox				
Pet					

**Step 3:** We can now add yellow to position 1, as this is the only colour left and Statement 7 can be filled in.

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Position	1	2	3	4	5
Colour	Yellow	Blue	Red	Green	White
Nationality	Norwegian		British		
Drink			Milk	Coffee	
Console	Xbox One				
Pet		Horse			

**Step 4:** Statement 11 can now be filled in.

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Position	1	2	3	4	5
Colour	Yellow	Blue	Red	Green	White
Nationality	Norwegian	Dane	British	Swede	Swede Dane
Drink		Tea	Milk	Coffee	Tea
Console	Xbox One				
Pet		Horse		Dogs	Dogs

**Step 5a:** Now we have to play around and link statements until they fit- Colour codes for each Statement... We know that The Swede cannot fit in position 2 and the Dane cannot fit in position 4.

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Position	1	2	3	4	5
Colour	Yellow	Blue	Red	Green	White
Nationality	Norwegian	Dane	British	Swede	Swede Dane
Drink		Tea Juice	Milk	Coffee	Tea Juice
Console	Xbox One	Sony Vita			Sony Vita
Pet		Horse		Dogs	Dogs

**Step 5b:** We slot the possibilities for Statement 12 in positions 2 and 5.

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Position	1	2	3	4	5
Colour	Yellow	Blue	Red	Green	White
Nationality	Norwegian	Dane	British	Swede	Swede Dane
Drink		Tea Juice	Milk	Coffee	Tea Juice
Console	Xbox One	Sony Vita	3DS	3DS	Sony Vita 3DS
Pet		Horse	Birds	Birds Dogs	Birds Dogs

**Step 6:** We Slot the possibilities for Statement 6 in positions 3, 4 and 5.

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Position	1	2	3	4	5
Colour	Yellow	Blue	Red	Green	White
Nationality	Norwegian	Dane German	British	Swede German	Swede Dane German
Drink		Tea Juice	Milk	Coffee	Tea Juice
Console	Xbox One	Sony Vita Wii U	3DS	3DS Wii U	Sony Vita 3DS Wii U
Pet		Horse	Birds	Birds Dogs	Birds Dogs

**Step 7:** Now we slot in Statement 13 into positions 2, 4 and 5. Time to make a decision...

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Position	1	2	3	4	5
Colour	Yellow	Blue	Red	Green	White
Nationality	Norwegian	Dane German	British	Swede German	Swede Dane German
Drink		Tea Juice	Milk	Coffee	Tea Juice
Console	Xbox One	Sony Vita Wii U	3DS	Wii U	Sony Vita Wii U
Pet		Horse	Birds	Dogs	Dogs

**Step 8:** Let's keep Statement 6 as it is. This means position 3 is complete. It is also the only place for it, without interfering with the other statements.

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Position	1	2	3	4	5
Colour	Yellow	Blue	Red	Green	White
Nationality	Norwegian	Dane German	British	Swede German	Swede German
Drink		Tea Juice	Milk	Coffee	Juice
Console	Xbox One	Sony Vita Wii U	3DS	Wii U	Sony Vita Wii U
Pet		Horse	Birds	Dogs	Dogs

**Step 9:** If we now look at Statement 3, let's try the Dane in position 2, which means the Juice has to be in position 5, which in turn means the German and Swede have to be in positions 4 and 5.

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Position	1	2	3	4	5
Colour	Yellow	Blue	Red	Green	White
Nationality	Norwegian	Dane	British	German	Swede
Drink		Tea	Milk	Coffee	Juice
Console	Xbox One		3DS	Wii U	Sony Vita
Pet		Horse	Birds		Dogs

**End of step 9:** Now our grid looks like this. And we can colour code them the same, as they are now "set".

"Einstein's Riddle"

Position	1	2	3	4	5
Colour	Yellow	Blue	Red	Green	White
Nationality	Norwegian	Dane	British	German	Swede
Drink	Water	Tea	Milk	Coffee	Juice
Console	Xbox One	PS4	3DS	Wii U	Sony Vita
Pet	Cats	Horse	Birds		Dogs

**Step 10:** We can now fill in PS4 in position 2 as this is the only Computer Console we have to complete. Which means that we can fill in Statement 10 and 15. Which leaves only one box...



Name: \_\_\_\_\_ Date: \_\_\_\_\_ Class: \_\_\_\_\_

“Einstein’s Riddle”

<b>Position</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Colour</b>	<b>Yellow</b>	<b>Blue</b>	<b>Red</b>	<b>Green</b>	<b>White</b>
<b>Nationality</b>	<b>Norwegian</b>	<b>Dane</b>	<b>British</b>	<b>German</b>	<b>Swede</b>
<b>Drink</b>	<b>Water</b>	<b>Tea</b>	<b>Milk</b>	<b>Coffee</b>	<b>Juice</b>
<b>Console</b>	<b>Xbox One</b>	<b>PS4</b>	<b>3DS</b>	<b>Wii U</b>	<b>Sony Vita</b>
<b>Pet</b>	<b>Cats</b>	<b>Horse</b>	<b>Birds</b>	<b>Fish</b>	<b>Dogs</b>

Now we know, by process of elimination, who owns the Fish.

The following sheets are a list of the statements and which order they are negotiated. They are colour coded for the ease of the TEACHER, to see where their students may have gone wrong, without having to do the whole logical process themselves, as are the tables above.

I personally feel the children should create their own chart to make this logic problem be truly rewarding, but as a supply teacher, appreciate that some children may need the chart to get straight to the logic problem, without dealing with presentation.

1. The Briton lives in the red house. ①
2. The Swede keeps dogs as pets.
3. The Dane drinks tea.
4. The green house is on the immediate left of the white house.
5. The green house's owner drinks coffee.
6. The owner who has a 3DS rears birds.
7. The owner of the yellow house has an Xbox.
- 8. The owner living in the centre house drinks milk.**
- 9. The Norwegian lives in the first house.**
10. The owner who has a PS4 lives next to the one who keeps cats.
11. The owner who keeps the horse lives next to the one who has an Xbox.
12. The owner who has a Sony Vita drinks Orange Juice.
13. The German has a Wii U.
- 14. The Norwegian lives next to the blue house.**
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