**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 video game 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 “tricks”… How are you going to solve this logic problem?

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

“Einstein’s Riddle”

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Position** | **1** | **2** | **3** | **4** | **5** |
| **Colour** |  |  |  |  |  |
| **Nationality** |  |  |  |  |  |
| **Drink** |  |  |  |  |  |
| **Console** |  |  |  |  |  |
| **Pet** |  |  |  |  |  |

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

“Einstein’s Riddle”

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Position** | **1** | **2** | **3** | **4** | **5** |
| **Colour** |  |  |  |  |  |
| **Nationality** |  |  |  |  |  |
| **Drink** |  |  |  |  |  |
| **Console** |  |  |  |  |  |
| **Pet** |  |  |  |  |  |

“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 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.

“Einstein’s Riddle”

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **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.

“Einstein’s Riddle”

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **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.

“Einstein’s Riddle”

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **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.

“Einstein’s Riddle”

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **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.

“Einstein’s Riddle”

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **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…

“Einstein’s Riddle”

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **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.

“Einstein’s Riddle”

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **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.

“Einstein’s Riddle”

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **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”

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **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** | **Fish** | **Dogs** |

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.**15. The owner who has a PS4 lives next to the one who drinks water.

**1. The Briton lives in the red house.** ②  
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.   
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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.   
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13. The German has a Wii U.   
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3. The Dane drinks tea.   
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5. The green house's owner drinks coffee.**   
6. The owner who has a 3DS rears birds.   
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