Problem-Solving Strategy: Use Logical Reasoning

**Problem** For lunch, Emma, Rosa, and Vanya each bring a sandwich (a tuna roll, a turkey wrap, or a veggie wrap) and a drink (water, milk, or apple juice). Both Rosa and Emma bring wraps. Vanya does not drink juice. Emma does not eat fish or meat and is allergic to apple juice. The person who brings tuna doesn’t bring water. What does each person bring for lunch?

**UNDERSTAND**

What is the question? __________________________________________

What are the sandwiches and drinks? ________________________________

What do you know about:  
   a. Emma? __________________________
   b. Rosa? __________________________  
   c. Vanya? __________________________

What other fact do you know? ____________________________________

How can logical reasoning help you solve the problem?               

_______________________________________________________________

**PLAN**

**SOLVE**

Fill in the table with person’s name, sandwich and drink. 
Then write yes or no.

<table>
<thead>
<tr>
<th>Name</th>
<th>Sandwich</th>
<th>Drink</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>tuna roll</td>
<td>no</td>
</tr>
<tr>
<td></td>
<td>turkey wrap</td>
<td>yes</td>
</tr>
<tr>
<td></td>
<td>veggie wrap</td>
<td>no</td>
</tr>
<tr>
<td></td>
<td>water</td>
<td>yes</td>
</tr>
<tr>
<td></td>
<td>milk</td>
<td>yes</td>
</tr>
<tr>
<td></td>
<td>juice</td>
<td>no</td>
</tr>
</tbody>
</table>

What is the solution?___________________________________________

**LOOK BACK**

How did the table help you to solve the problem?                  

_______________________________________________________________