Water for the People and the Planet

Directions: Answer each question to the best of your ability.

1. Why is it important to learn about the water use of other cultures?
   
   __________________________________________________________________________
   __________________________________________________________________________
   __________________________________________________________________________
   __________________________________________________________________________
   __________________________________________________________________________

2. How much of the Earth’s water is available for humans and other land animals to drink? You do not have to give an exact number, but you must explain your estimation.
   
   __________________________________________________________________________
   __________________________________________________________________________
   __________________________________________________________________________
   __________________________________________________________________________
   __________________________________________________________________________

3. Number the following places in order to show how water gets to and leaves your house. The smallest number is the where the water originates. The largest number will be the place the water ends. You house will be somewhere in the middle. Some place could have more than one number.

<table>
<thead>
<tr>
<th>Number</th>
<th>Place</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Your house</td>
</tr>
<tr>
<td></td>
<td>Waste water treatment plant</td>
</tr>
<tr>
<td></td>
<td>Well</td>
</tr>
<tr>
<td></td>
<td>River</td>
</tr>
<tr>
<td></td>
<td>Your facet</td>
</tr>
<tr>
<td></td>
<td>Sewer</td>
</tr>
<tr>
<td></td>
<td>Drinking water treatment plant</td>
</tr>
<tr>
<td></td>
<td>Water pipes to and from your house</td>
</tr>
<tr>
<td></td>
<td>Your drain</td>
</tr>
</tbody>
</table>
4. Below is a picture of a groundwater system. A drop of water enters the system at point X and ends up being pumped out of the well at point Y. Draw on the diagram a potential path of the water molecule.

Cross Section

In the space below, explain why you drew the path the way that you did.

_______________________________________________________________________
________________________________________________________________________
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________________________________________________________________________
5. Answer the following questions based on the map of a watershed above.

a. If a pollutant was put into the river at town A, which towns (if any) would be affected by the pollutant? Explain why you chose the towns you did.
   Towns: __________________
   Explanation:__________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

b. If a pollutant was put into the river at town C, which towns (if any) would be affected by the pollutant? Explain why you chose the towns you did.
   Towns: __________________
   Explanation:__________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
6. The map below shows the town of Middleton. Choose one of the following locations and complete the table below. Explain how the location you choose might be a source of groundwater pollution for the Middleton drinking water wells.

- Soybean Field
- Shopping Mall
- Gas Station

<table>
<thead>
<tr>
<th>Location</th>
<th>Source of Pollution</th>
<th>How it gets to the Middleton Drinking Water Wells</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example: Highway 151</td>
<td>Example: Salt used to melt ice &amp; snow in the winter.</td>
<td>Example: Snow melt includes dissolved salt. Snow melt infiltrates into the ground and contaminates the ground water. The contaminated groundwater travels to the Middleton Drinking Water Wells.</td>
</tr>
</tbody>
</table>
7. Wetlands and wastewater treatment plants both clean up water. Explain how a wastewater treatment plant is similar to a wetland.

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________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

8. When thinking about water as a resource, would you consider it a resource that we:
   a. could run out of
   b. can be used over and over again
   c. will never use up
   d. some combination of these three.

Circle your choice above then explain your choice.
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________