Name: _____ Class: _____

Now that you have been trained on what to look for in drinking water, please apply that knowledge to the two scenarios below. Be thorough in your answers!

Scenario 1: You have found a bottle of water left on the lab table with a note stating “test me”. Curiosity gets the better of you and so you record your qualitative observations and then proceed to analyze chemical parameters. Lastly, you test to see if coliform bacteria is present. Next to each test result, please indicate if this meets the recommended levels.

	Results of Chemical Analysis:	Analysis (too low, meets, too high):
Alkalinity	50 mg/L	
Ammonia	1.0 mg/L	
Chloride	30 mg/L	
Chlorine	0.2 mg/L	
Chromium	0.3 mg/L	
Copper	3 mg/L	
Dissolved Oxygen	8 mg/L (recommended minimum)	
Hardness	80 mg/L	
Iron	0.4 mg/L	
Nitrate	12 mg/L	
pH	8.0	
Phosphate	0.2 mg/L	
Turbidity	2 NTU	
Coliform bacteria	1 CFU/ 100 mL	

Would you recommend drinking this water? Justify your answer with at least 4 specific reasons.

Scenario 2:
In a different sample you've recently collected you have determined several items are present. Please indicate below what the best method would be to remove these from the drinking water sample.

Substance:	Preferred Method:
Dog hair	
Coliform bacteria	
Leaf litter	
Fertilizer	
Chlorine	
Pesticide	
Sand	