

Names: \_\_\_\_\_

*Post Lab Questions: 7-Solution Problem*  
*<http://chemconnections.org/general/chem120/solutions-mixes.108.html>*

1. If the maximum concentration of a saturated sodium chloride solution is 5.9M, how many liters of water would a Peruvian salt farmer need to process in order to produce one 50.0 kilogram bag of salt. (Assume that there are no other salts present. Show your calculation.)
2. If the Peruvian water has a TDS of 10.0 grams per liter of water, would it be within the safe limits of drinking water by U.S. standards? (Explain your answer.)
3. The following table includes chemicals that may be found in tap water. Complete the table for allowable limits.

	<i>Allowable Limit</i>
Nitrate	
Fluoride	
Mercury	
Lead	

4. What were the highest tested levels of lead in Flint Michigan's drinking water during the crisis?
5. What was the length of time that Flint residents were exposed to higher than allowable levels of lead?
6. What are the neurological effects of lead exposure particularly on children and infants?