MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

1) Based on the solubility rules, which one of these compounds is *soluble* in water? 1) _____

A) Hg_2Cl_2 B) Na_2S C) $BaCO_3$ D) Ag_2S E) Ag_2CO_3

2) Determine the molarity of a solution made by dissolving 11.7 g of $NaNO_3$ in water where the final volume of the solution is 250.0 mL. 2) _____

A) 0.0311 *M*
B) 0.138 *M*
C) 0.0468 *M*
D) 0.214 *M*
E) 0.551 *M*

3) What mass of lithium phosphate is needed to prepare 500. mL of a solution having a lithium ion concentration of 0.125 *M*? 3) _____

A) 21.7 g B) 43.4 g C) 7.24 g D) 2.41 g E) 14.5 g

4) Determine the volume of a 0.0246 *M* Li_3PO_4 solution that contains 11.8 grams of Li_3PO_4. 4) _____

A) 4.80 L B) 2.41 L C) 3.19 L D) 2.08 L E) 4.14 L

5) How many sodium ions are present in 325 mL of 0.850 *M* Na_2SO_4? 5) _____

A) 5.12×10^{23} Na ions
B) 3.33×10^{23} Na ions
C) 1.66×10^{23} Na ions
D) 1.02×10^{24} Na ions
E) 8.32×10^{22} Na ions

6) A 50.0 mL sample of 0.436 *M* NH_4NO_3 is diluted with water to a total volume of 250.0 mL. What is the ammonium nitrate concentration in the resulting solution? 6) _____

A) 0.523 *M*
B) 2.18 *M*
C) 0.174 *M*
D) 0.0872 *M*
E) 0.349 *M*

Answer Key
Testname: MINI-PRAC CH9.

1) B
2) E
3) D
4) E
5) B
6) D