NaCl is added to a solution that is 1.0 X 10^{-4}M in Hg_2^{+2} so that the concentration of Cl^- is 0.010 M.

What happens?

1. $Hg_2Cl_2(s)$ forms.
2. NaCl(s) forms
3. No precipitate forms.
4. $HgCl_2(s)$ forms

Correct Answer: **1.**

Comments to the instructor: Students must know solubility rules, apply LeChatelier's Principle and be able to write the chemical formula for mercury(I) chloride.

When HCl is added to a saturated solution of AgCl
the solubility of AgCl:

1. increases
2. decreases
3. stays the same

Correct Answer: **2.**

Comments to the instructor: This tests understanding of LeChatelier's Principle.