

Fun Practice Problem!

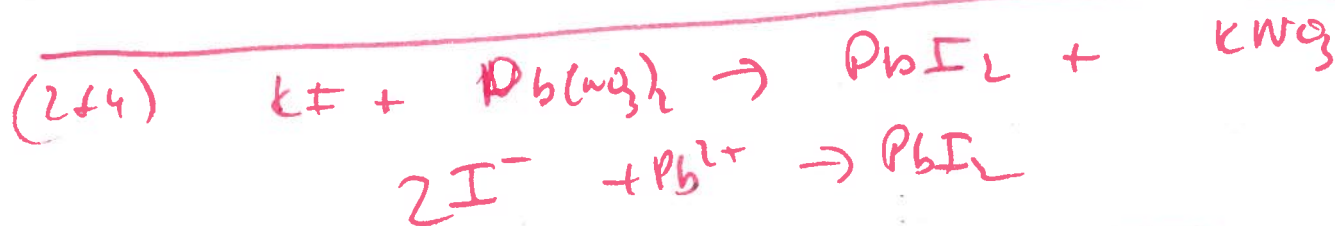
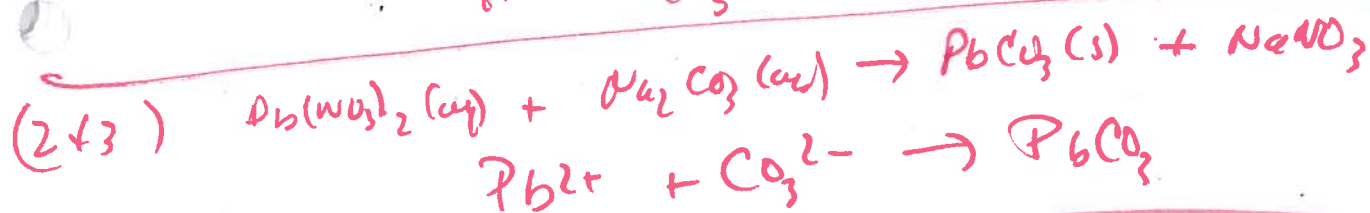
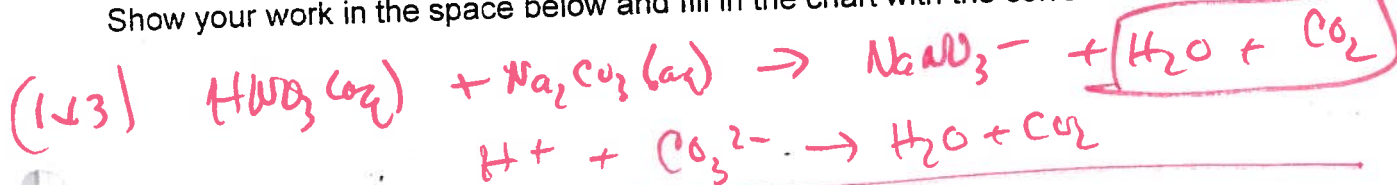
A chemist found four bottles of aqueous solutions numbered 1-4. She knew that the identities were KI, $\text{Pb}(\text{NO}_3)_2$, HNO_3 , and Na_2CO_3 . She just didn't know which chemical was in each bottle. The chemist mixed the chemicals together in all possible combinations and her results are below. It's your job to analyze her results and determine the identity of the chemical in each bottle.

	1	2	3	4
1	X	No reaction	Bubbles	No reaction
2	X	X	White precipitate	Yellow precipitate
3	X	X	X	No reaction
4	X	X	X	X

$\text{HNO}_3 \rightarrow$
 $\text{Pb}(\text{NO}_3)_2$
 Na_2CO_3
 KI

Na_2CO_3 KI

Show your work in the space below and fill in the chart with the correct identities!



Identities of the chemicals:

Number	Identity
1	HNO_3
2	$\text{Pb}(\text{NO}_3)_2$
3	Na_2CO_3
4	KI