

## Ionic Lab Simulation

- Google: javalab precipitation simulation
- Click on: Precipitation Reaction – JavaLab or [https://javalab.org/en/precipitation\\_reaction\\_en/](https://javalab.org/en/precipitation_reaction_en/)

### Investigating Precipitation Reactions

Combine the following substances (two at a time) while pressing Reset in Between.

In the table below, fill out whether a solid was formed by writing “ppt” for precipitate, write the name of the precipitate (solid), and write the formula for the precipitate (solid).

Example: We want to combine  $\text{AgNO}_3$  with  $\text{Na}_2\text{SO}_4$  (one of the positive ions  $\text{Ag}^+$  with the negative ions  $\text{SO}_4^{2-}$ ). On the simulation, click on  $\text{AgNO}_3$  and  $\text{Na}_2\text{SO}_4$ . You will see that nothing was formed, so in our table we will put “no ppt”.

If we made a solid, you would put in “ppt” and then give the name and formula for the solid.

Let’s say by an example that you were combining  $\text{AgNO}_3$  with something like  $\text{NaBr}$ . If the  $\text{Ag}^+$  and the  $\text{Br}^-$  came together to make a solid, you would put “ppt” and “AgBr” and “silver bromide” in your table.

Each space in your table either needs “no ppt” or “ppt” and it’s name and formula.

		$\text{AgNO}_3$	$\text{BaCl}_2$	$\text{CaCl}_2$
		$\text{Ag}^+$	$\text{Ba}^{2+}$	$\text{Ca}^{2+}$
$\text{Na}_2\text{SO}_4$	$\text{SO}_4^{2-}$	No ppt		
$\text{NaCl}$	$\text{Cl}^-$			
$\text{Na}_2\text{CO}_3$	$\text{CO}_3^{2-}$			