

Data Table 1

	AgNO_3	BaCl_2	Na_2CO_3	$(\text{NH}_4)_2\text{SO}_4$	$\text{Pb}(\text{NO}_3)_2$	$\text{Ca}(\text{NO}_3)_2$	K_3PO_4	
A	1 White ppt $\text{Ba}(\text{NO}_3)_2$ AgCl	2 ●	3 ●	4 ●	5 ●	6 ●	7 ●	8 ●
B	BaCl_2	●	●	●	●	●	●	●
C	$(\text{NH}_4)_2\text{SO}_4$	●	●	●	●	●	●	●
D	$\text{Pb}(\text{NO}_3)_2$	●	●	●	●	●	●	●
E	$\text{Ca}(\text{NO}_3)_2$	●	●	●	●	●	●	●
F	K_3PO_4	●	●	●	●	●	●	●

Record detailed observations inside the circles on the table. Record all colors that form. If any solid precipitates form, use the abbreviation ppt. If no reaction at all occurs, use the abbreviation NR. ● represents empty wells. Write the two possible products in each circle, as shown in well A1.

Data Table 2

	1	2	3	4	5	6	7	8
A	FeCl_3 Rust ppt NaCl $\text{Fe}(\text{OH})_3$	NaOH	MgBr_2	K_2CO_3	$\text{Pb}(\text{NO}_3)_2$	Na_2SO_4	Na_2CrO_4	
B								
C								
D								
E								
F								

Record detailed observations inside the circles on the table. Record all colors that form. If any solid precipitates form, use the abbreviation PPT. If no reaction at all occurs, use the abbreviation NR. ● represents empty wells. Write the two possible products in each circle, as shown in well A1.

Table 3 — Categories of Substances

Soluble Substances	Insoluble Substances	Unknown Substances

Table 4 — General Solubility Rules

Substances	Soluble or Insoluble	Exceptions
Carbonates		
Chlorides and Bromides		
Chromates		
Hydroxides		
Nitrates		
Phosphates		
Sulfates		
Ammonium, Potassium and Sodium Compounds		