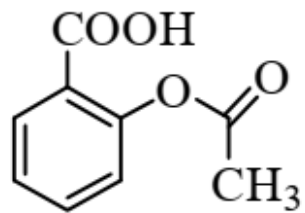
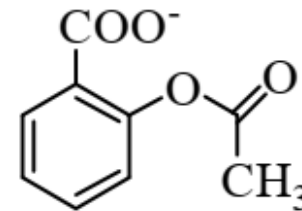


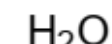
Valoración directa



+



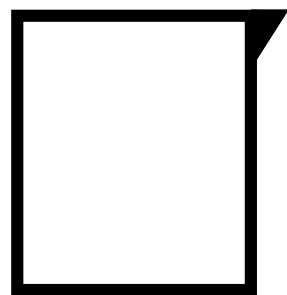
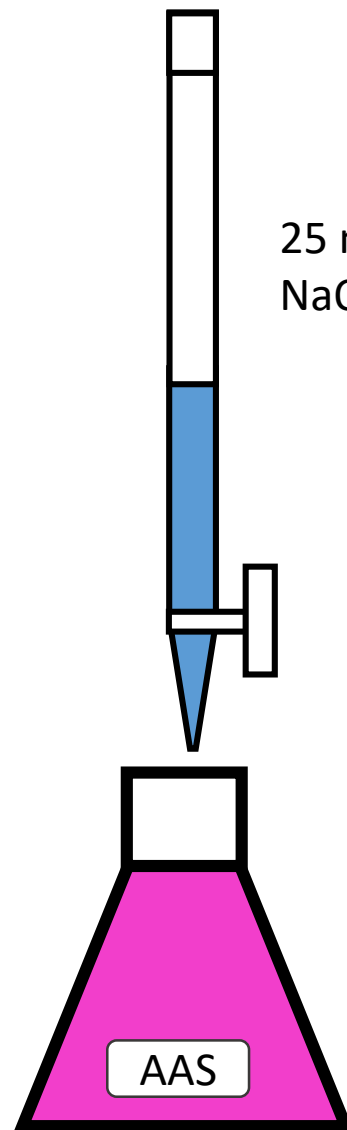
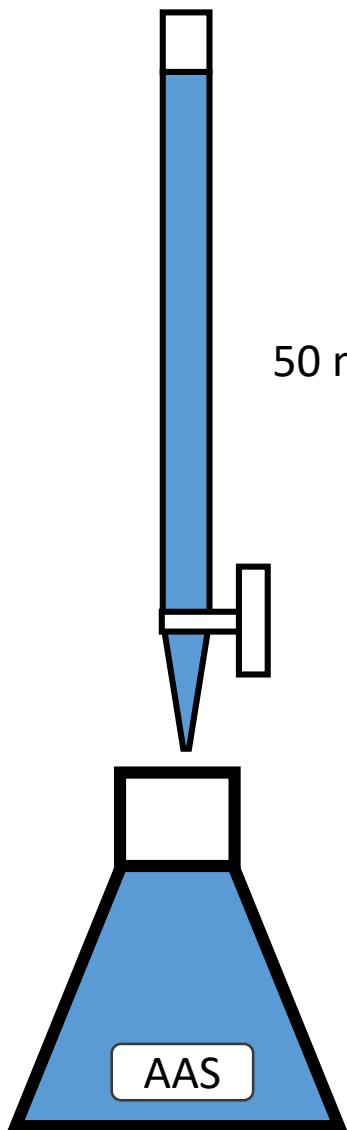
+



1 mol AAS \_\_\_\_ 1 mol NaOH \_\_\_\_ 1 mol eq (OH)

25 ml  
NaOH 0,5 N SV

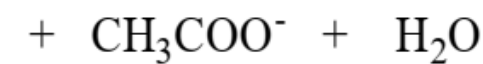
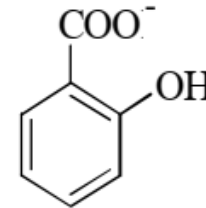
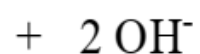
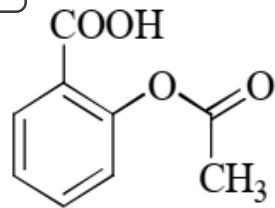
50 ml NaOH SV



Fenolftaleina  
- Acido incoloro  
- Basico Rosa

Valoración x retorno

AAS



Acetato

Salicilato

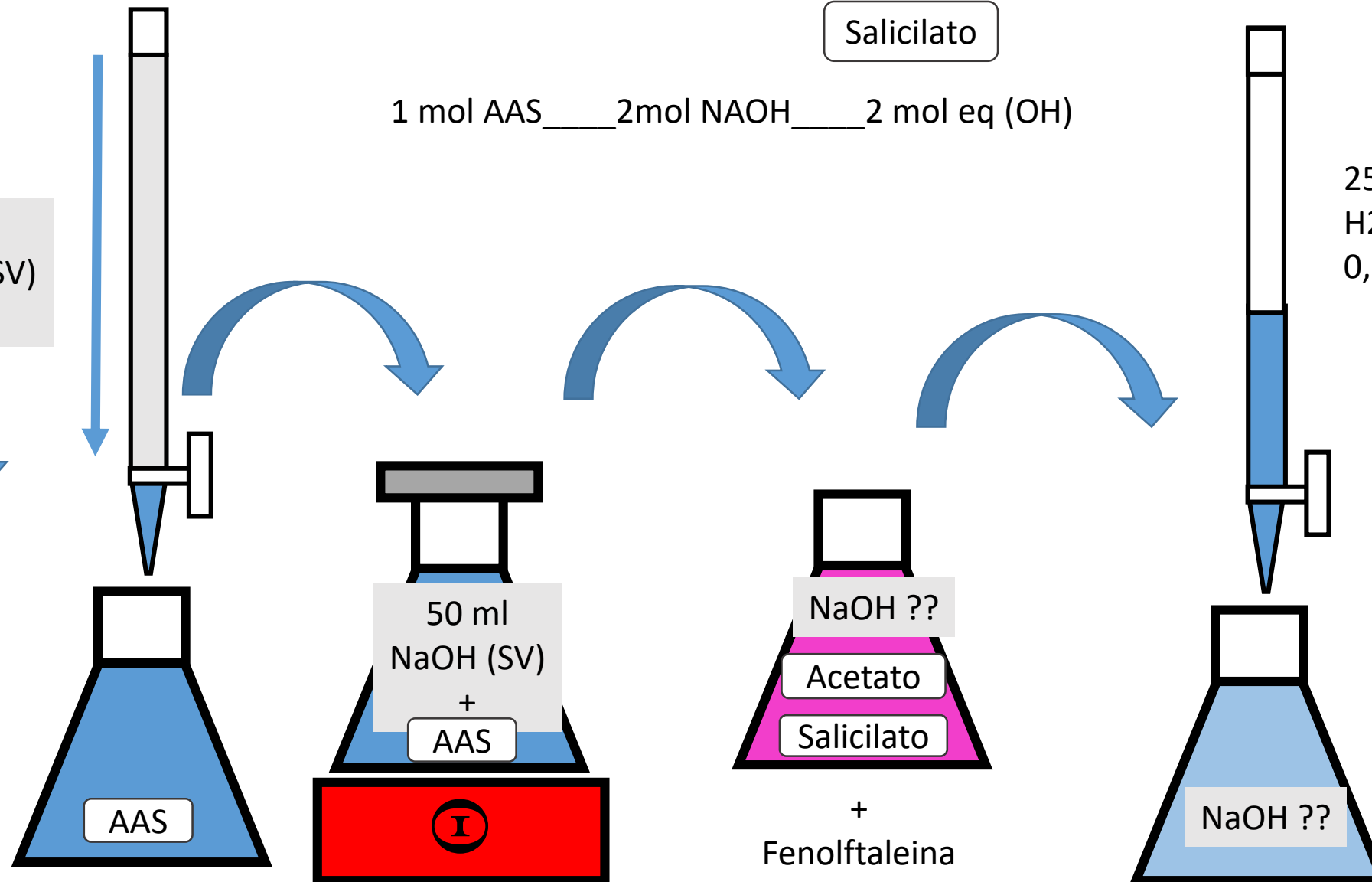
1 mol AAS \_\_\_\_ 2 mol NaOH \_\_\_\_ 2 mol eq (OH)

Fenolftaleina  
- Acido incoloro  
- Basico Rosa

50 ml  
NaOH (SV)  
=0,5N

25 ml  
H2SO4 (SV)  
0,5N

AAS



AAS

50 ml  
NaOH (SV)  
+  
AAS

NaOH ??  
Acetato  
Salicilato

+  
Fenolftaleina

NaOH ??

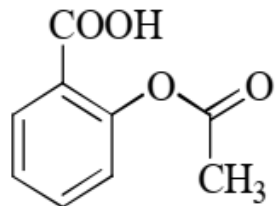
Valoración x retorno

1 mol AAS \_\_\_ 2 mol NaOH \_\_\_ 2 mol eq (OH)

Fenolftaleina  
- Ácido incoloro  
- Básico Rosa

50 ml  
NaOH (SV)

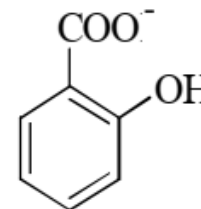
AAS



+ 2 OH<sup>-</sup>

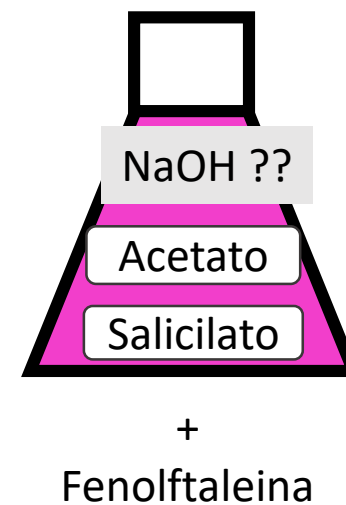
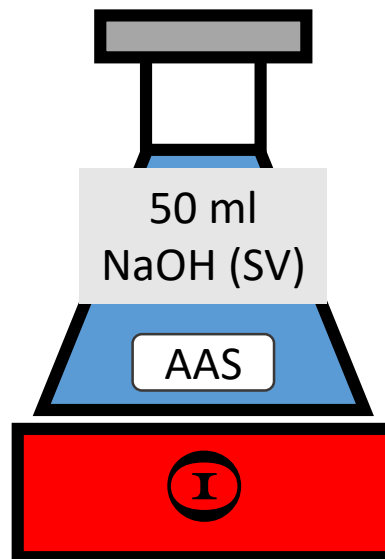
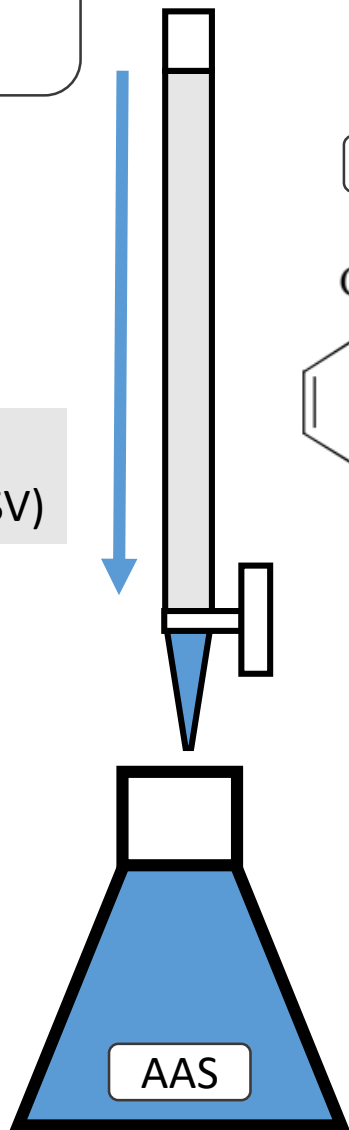
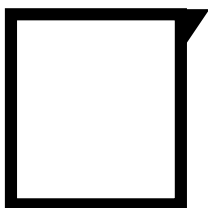


Salicilato



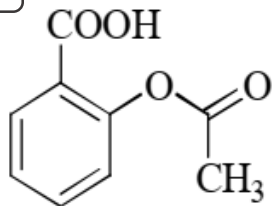
Acetato

+ CH<sub>3</sub>COO<sup>-</sup> + H<sub>2</sub>O



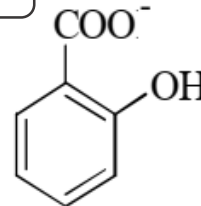
Valoración x retorno

AAS



+ 2 OH<sup>-</sup>

Salicilato



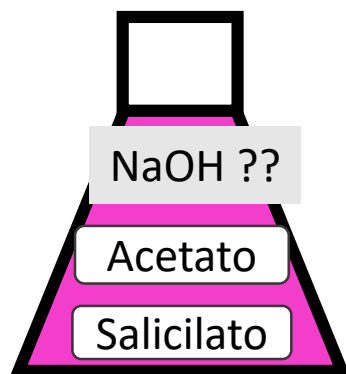
Acetato

+ CH<sub>3</sub>COO<sup>-</sup> + H<sub>2</sub>O

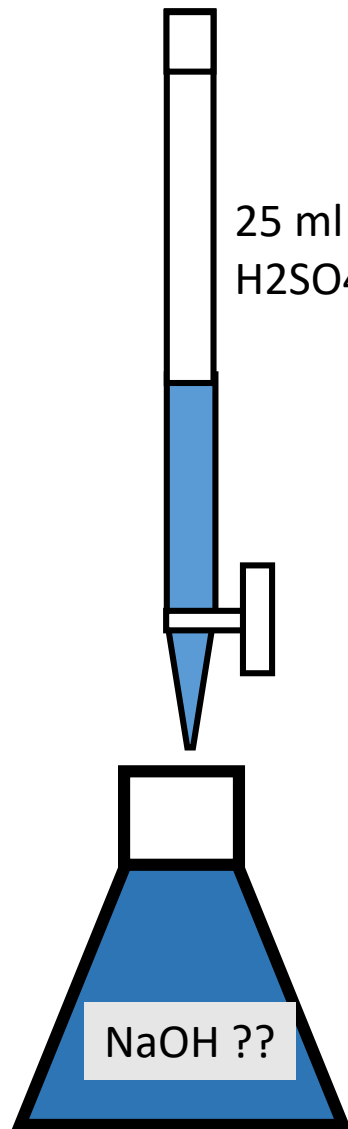
Fenolftaleina

- Acido incoloro
- Basico Rosa

25 ml  
H<sub>2</sub>SO<sub>4</sub> (SV)



+  
Fenolftaleina



Valoración x retorno  
Blanco

Fenolftaleina  
- Acido incoloro  
- Básico Rosa

50 ml  
NaOH (SV)

Aire  
:P

50 ml  
NaOH (SV)

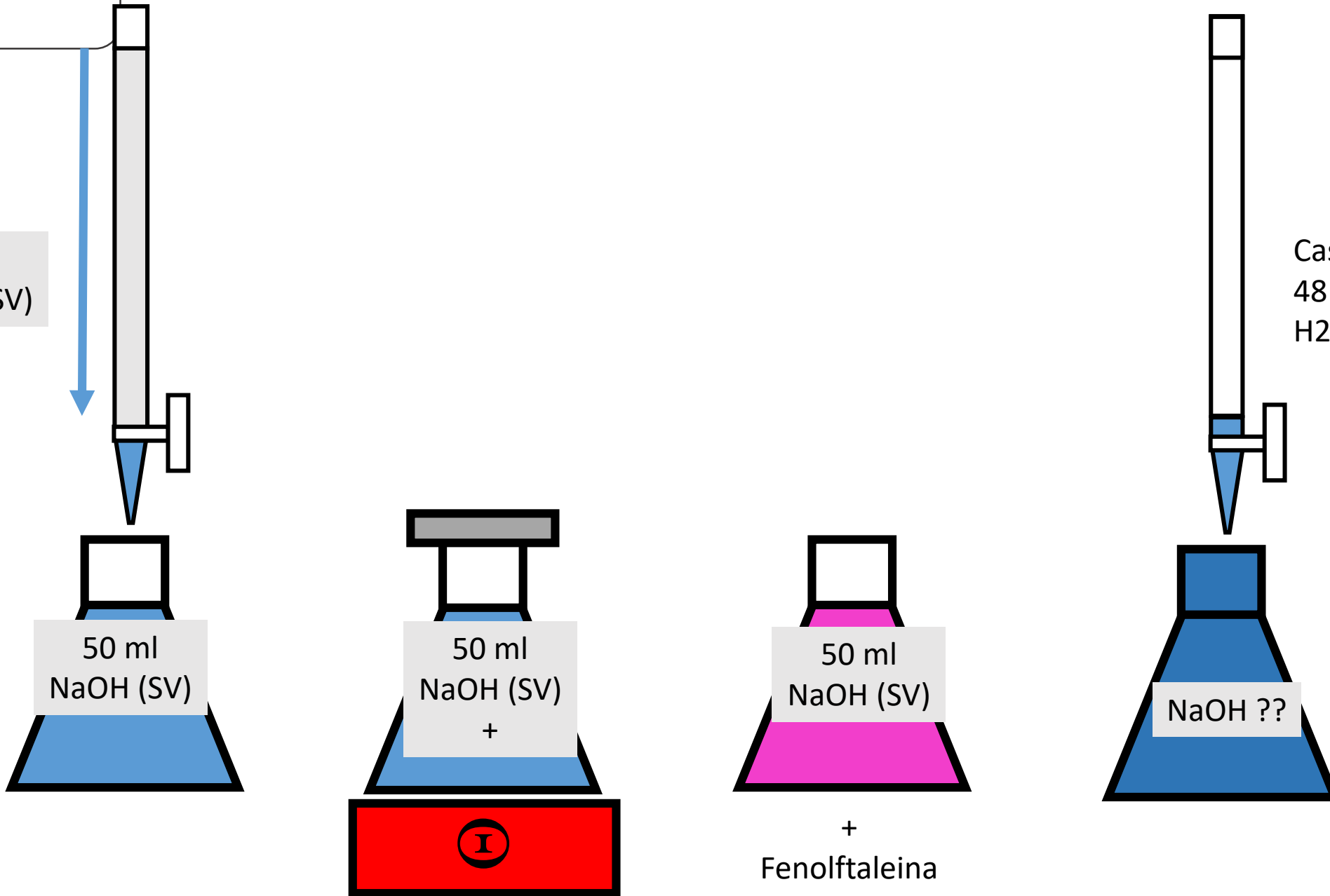
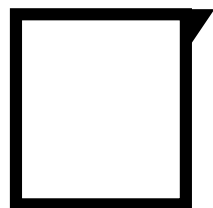
50 ml  
NaOH (SV)  
+

50 ml  
NaOH (SV)

+  
Fenolftaleina

NaOH ??

Casi 50 ml  
48 ml  
H<sub>2</sub>SO<sub>4</sub> (SV)



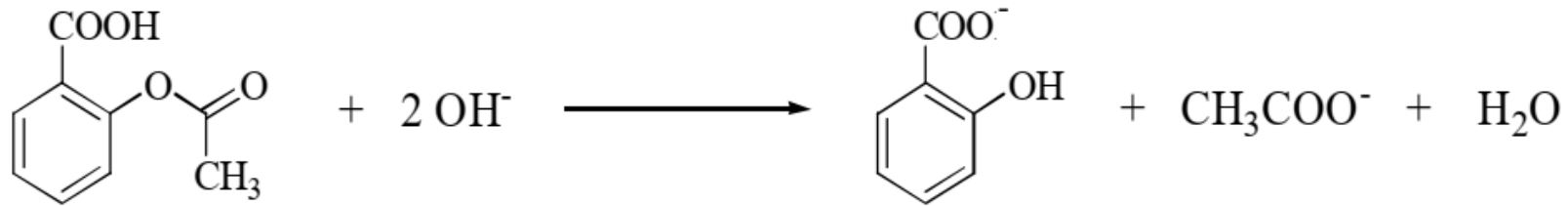
# Cálculo Eq de AAS por Retorno

$$\text{Eq AAS} = \text{Eq Muestra} - \text{Eq Blanco} =$$

$$\begin{aligned} \text{EqMuestra} &= \text{EqNaOH} - \text{Eq H}_2\text{SO}_4 = \\ &= 50 \text{ ml} \times 0,5 \text{ eq/ 1000ml} - 25 \text{ ml} \times 0,5 \text{ eq/ 1000ml} = \end{aligned}$$

$$\begin{aligned} \text{EqBlanco} &= \text{EqNaOH} - \text{Eq H}_2\text{SO}_4 = \\ &= 50 \text{ ml} \times 0,5 \text{ eq/ 1000 ml} - 48 \text{ ml} \times 0,5 \text{ eq/ 1000ml} = \end{aligned}$$

# Cálculo masa con Eq de AAS por Retorno



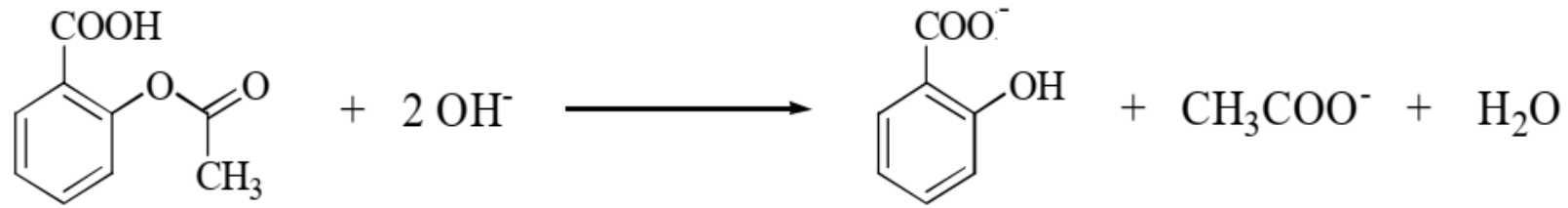
1 mol AAS \_\_\_ 2 mol NaOH \_\_\_ 2 mol eq (x el OH)

1 mol AAS \_\_\_ 2 Eq AAS

1 mol AAS \_\_\_ 2 Eq AAS \_\_\_ 180 g AAS

1 Eq AAS \_\_\_ 90 g AAS

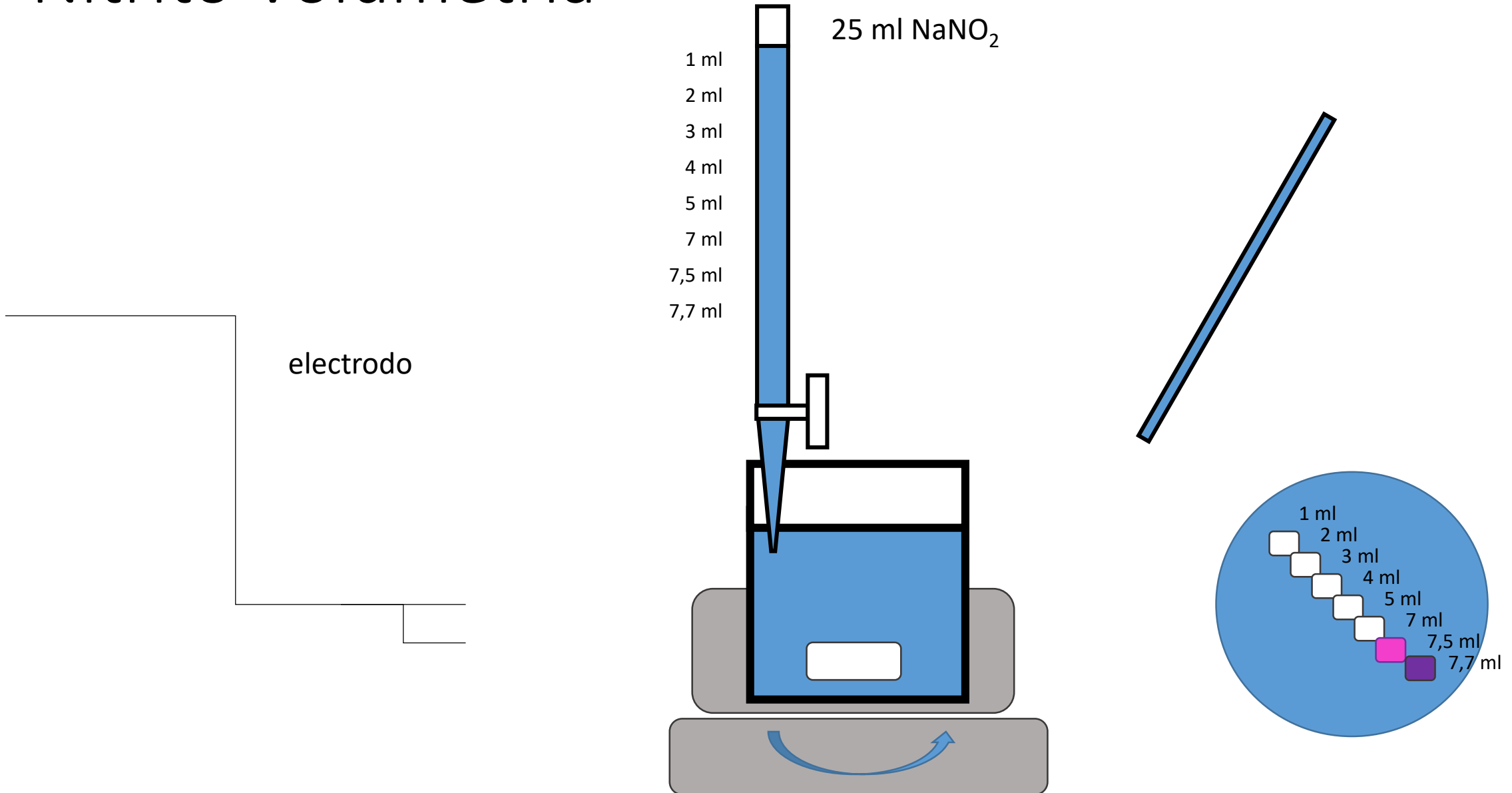
# Cálculo masa con Eq de AAS por Retorno



1 Eq AAS \_\_\_ 90 g AAS

Eq Muestra corregida= XXX Eq AAS \_\_\_ =XX g

# Nitrito Volumetría



# Volumetría $\text{Ca}^{2+}$

35 ml  
EDTA

30 ml EDTA 0,05M

+

5 o mas ml EDTA 0,05M

NaOH (SR)

