

## How to use the burette

### Instructions

1. Close the tap, and run some water into the top of the burette.  
*Swish* the burette up and down to let the water clean all the inside of the burette.  
Open the tap, and let the water drain out. **Repeat.**
2. Fix the burette into the clamp, taking care that it is vertical and stable.  
Put the beaker underneath the burette.
3. Close the tap and (using the funnel) run some of the acid into the top of the burette.  
Open the tap, and let the acid drain through into the beaker. **Repeat.**
4. Close the tap, and fill the burette to just above the  $0\text{cm}^3$  mark with the acid.  
Remove the funnel. Make sure that there are no air bubbles inside the burette.  
Slowly open the tap, and let the acid run down to the  $0\text{cm}^3$  mark. Close the tap.
5. Remove the beaker.  
Put a white tile under the burette, and put a conical flask on top of the white tile.  
Adjust the height of the burette so that the tip is just above the lip of the conical flask.  
The burette is now ready for use.

### Recording your results

1. Draw Results tables like the ones below. Before you start, record the reagents (chemicals) used.

Burette reagent	
Conical flask reagent	
Indicator	

	Run 1	Run 2	Run 3	Run 4
Final volume ( $\text{cm}^3$ )				
Initial volume ( $\text{cm}^3$ )				
Titre ( $\text{cm}^3$ )	<i>(final – initial)</i>			
Mean titre ( $\text{cm}^3$ )				

2. In the first run, you should overshoot the end-point a little.  
Indicate that you have done this by drawing a line through the Run 1 column and writing “overshot” against it.
3. In later runs, get a more accurate result by letting the acid run through more slowly as you reach the end-point. Record the Initial and Final volumes as you go.
4. If your three accurate runs are very different from each other, repeat until you get a more consistent result.
5. Work out the mean volume delivered (the titre) and record it in your table.

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Conical flask reagent	
Indicator	

	Run 1	Run 2	Run 3	Run 4
Final volume (cm <sup>3</sup> )				
Initial volume (cm <sup>3</sup> )				
Titre (cm <sup>3</sup> )				
Mean titre (cm <sup>3</sup> )				

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Conical flask reagent	
Indicator	

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Initial volume (cm <sup>3</sup> )				
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Mean titre (cm <sup>3</sup> )				

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Mean titre (cm <sup>3</sup> )				

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Conical flask reagent	
Indicator	

	Run 1	Run 2	Run 3	Run 4
Final volume (cm <sup>3</sup> )				
Initial volume (cm <sup>3</sup> )				
Titre (cm <sup>3</sup> )				
Mean titre (cm <sup>3</sup> )				