# Calibrating

## Pipette

To calibrate the pipette you need to measure out 25ml of water into the pipette and weigh the water into a beaker. From this you use the density of water at 20®C to then calculate the mass of water:

|  |  |
| --- | --- |
| Mass of 25cm3 of water from pipette |  |
| Actual volume of water:$$=\frac{mass of water}{density of water at 20℃ (0.9982gcm^{-3})}$$ |  |
| Difference |  |

## Balance

Use the perfect mass given to record the weight given by the balance

|  |  |
| --- | --- |
| Actual mass given | …………………………g |
| Mass recorded on balance  | ………………..………g |
| Difference | ………………..………g |

## pH meter

To calibrate the pH meter you need to use the buffer solutions given (at pH7 and pH4). Record the pH when you initially put it into the solutions and after you have adjusted the meter by rotating the screws.

|  |  |  |
| --- | --- | --- |
|  | pH4 solution | pH7 solution |
| Initial reading |  |  |
| Final reading |  |  |