|  |  |
| --- | --- |
| **Session 2** | **THE USE OF THE GRADUATED PIPETTE** |

## Assessed criteria

**LAB SKILLS:**

* Identify equipment
* Use of pipette bulb and graduated pipette
* Measure volume accurately
* To practice reading meniscus

Criteria E: AIE

**Objectives**

* To learn how to use the bell-bulb pipette.
* To practice reading the meniscus.
* To learn about errors in measurements.
* To develop self-management skills such as reflection.

**Background**

**To be done before coming to the lab**

What is a graduated pipette and for what do we use it?

Include a picture, a diagram, or a drawing of the graduated pipette**.**

**Materials**

* 2 mL, 5 mL and 10 mL pipette and pipette bulbs
* A small beaker (100 mL) or glass container
* Water

**Procedure**

* 1. Pay attention to the teacher’s instructions on how to use the pipette and pipette bulb.
  2. Practice taking the following volumes with the pipette: 5 mL, 3.5 mL, 7.4 mL, 1.5 mL, 8 mL, and 1.8 mL. Make sure you use the proper pipette for each measurement. You can place the water from the pipette in the beaker.
  3. The teacher will come around asking you to withdraw a particular water volume.

**Questions**

* + 1. Of the pipettes you have worked with today, which pipette would you use in order to take 4 mL of a liquid?
    2. If you had to measure 8 mL of a liquid, would you use a 5 mL pipette and use it twice or would you use a 10 mL pipette? Do you think it would make any difference? Give a brief explanation, referring to errors.
    3. Explain which is more precise a graduated cylinder or a graduated pipette.
    4. Reflect on yo**u**r lab work today and think about whether or not you feel confident with the use of the pipettefor future practices or if you need more practice. Share your reflection with your partner.

**Include 5 key words / new vocabulary you have learned**