



OPEN EDUCATIONAL RESOURCES @ DE MONTFORT UNIVERSITY, Leicester UK

TYPES OF LABORATORY PIPETTE

BY DR GRAHAM BASTEN

ASSOCIATED RESOURCES ON YOUTUBE

[Part 1 of 3: Types of pipette](#)

<http://www.youtube.com/watch?v=PoYvQTxaBk>

[Part 2 of 3: The pi-pump pipette](#)

http://www.youtube.com/watch?v=m6zi_wJBVZc

[Part 3 of 3: Micropipettes](#)

<http://www.youtube.com/watch?v=-WBRW2cwGiY>

Quiz questions relating to the resources above written by Biomedical Science students for release as open educational resources (OERs).

[QUESTIONS](#)

[QUESTIONS AND ANSWERS](#)

QUESTIONS

1

You are in the laboratory and you need to dispense approximately 1ml of liquid quickly. Which pipette will you use?

- a. Bulb or Pasteur pipette
- b. Micropipette
- c. Pi-pump pipette
- d. Gilson pipette

2

Which type of pipette is the least accurate in dispensing liquids?

- a. Bulb or Pasteur pipette
- b. Micropipette
- c. Pi-pump pipette
- d. Gilson pipette

3

Which type of pipette is reasonably accurate and useful for dispensing sequential samples?

- a. Bulb or Pasteur pipette
- b. Micropipette
- c. Pi-pump and graduated pipette
- d. Gilson pipette

4

Which type of pipette is the most accurate but most costly?

- a. Bulb pipette
- b. Pasteur pipette
- c. Pi-pump and graduated pipette
- d. Gilson or micropipette

5

Gently squeezing the pipette tube on the side of the test tube can improve the accuracy of dispensing by which of the following forces?

- a. Surface tension
- b. Cohesion
- c. Gravity
- d. Friction

6

When using a Gilson micropipette, what should you do first?

- a. Empty the air
- b. Gently attach the tip
- c. Dispense the liquid
- d. Expel the tip

7

When using a pi-pump and graduated pipette, why is it important not to dispense the final volume of liquid?

- a. Because air bubbles may be present
- b. Because you cannot see the meniscus
- c. Because it is hard to see what you are doing
- d. Because the scale is not very accurate

8

Which of the following statements is TRUE?

- a. When using a bulb pipette, it is important not to squeeze the bulb and dispense quickly
- b. When using a pi-pump pipette, you do not need to look at the fluid meniscus
- c. When using a micropipette, you insert the plastic tip by force
- d. When using a pi-pump pipette, you can draw fluid past the zero point on the scale

9

When using a Gilson micropipette which of the following is NOT an important consideration?

- a. Select the size of micropipette nearest to the volume of fluid you wish to dispense
- b. Dispose of the tip into the correct waste disposal bin or receptacle
- c. You don't have to look out for air bubbles because the pipette is accurate
- d. To dispense the liquid from the tip press the plunger down to the second point or as far as it goes

10

If you have air bubbles in your pipette and do not dispense the correct volume of fluid for an assay that requires accuracy, what should you do?

- a. Leave it because nobody would ever know
- b. Just add the volume liquid missing
- c. Remember to adjust the final figures on the results to accommodate the mistake
- d. Do not worry and start again

QUESTIONS AND ANSWERS

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