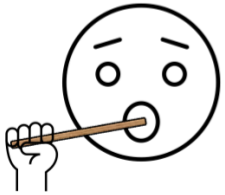
Integrated Instructions

Aim: To stain cheek epithelium cells and use a microscope to study them

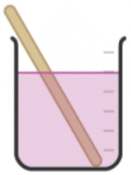
START

1. Use a new soft-ended stick to rub the inside lining of both cheeks. This should remove some cheek epithelial cells.

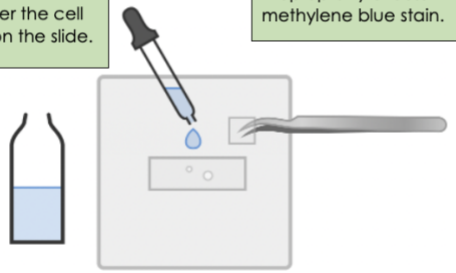


2. Place a slide on a white tile and smear your cells onto the centre.

3. Dispose of your used stick in the beaker of disinfectant.



4. Place a single drop of 0.1% methylene blue stain over the cell smear on the slide.



5. Gently place a cover slip over the cells and use a paper towel to mop up any excess methylene blue stain.

6. Place your slide onto the microscope's stage.

7. Without looking through the eyepiece yet, turn the course adjustment knob until the lens is almost touching the slide.

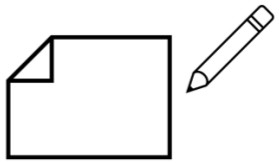
8. Look through the eyepiece and turn rotate the course adjustment knob slowly to increase the distance between the lens and the slide. Stop when the cells come into focus. A typical eyepiece lens x10 magnification combined with a x4 objective lens would result in a x40 magnification.

9. Use the fine adjustment knob to bring the slide into focus.

10. Move the slide until you find a good group of cells, then rotate the nose piece to switch to a higher power lens.

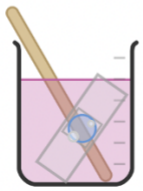
11. Again use the fine adjustment knob to bring the cells into focus.

12. Using a pencil, make a clear and labelled drawing of what you can see. All component parts of the cell should be drawn and labelled.



13. Multiply the objective magnification by the eyepiece magnification to find the total magnification. Write this underneath your drawing.

14. Dispose of your slide in the beaker of disinfectant.



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