

OCR (A) Biology GCSE

PAG 01: Cheek Cell Slides

Practical Notes

Cheek Cell Slides

Aim

Use microbiological techniques to prepare and view cheek cell slides.

Equipment list

- Cotton bud
- Beaker of disinfectant
- Microscope slide
- Cover slip
- Mounted needle
- Methylene blue solution
- Light microscope

Method

1. Place a drop of methylene blue solution on the microscope slide.
2. Gently wipe the inside of your cheek with a cotton bud (you do not need to press hard here).
3. Wipe the cotton bud in the methylene blue solution on the slide and place the cotton bud in the beaker of disinfectant.
4. Lay one edge of the cover slip on the slide, and use the mounted needle to gently lower the opposite edge of the cover slip onto the slide to avoid the formation of air bubbles.
5. Remove any excess stain by soaking it with paper towels.
6. Place the slide on the stage of the microscope.
7. Turn the nosepiece to select a low power objective (x10).
8. Set up the microscope - don't look into the eyepiece yet. Instead, use the coarse adjustment knob to raise the stage until the cover slip just touches the objective.
9. Now look into the eyepiece and turn the coarse adjustment knob to move the stage away until the image comes into focus (doing this helps avoid you breaking the slide).
10. Turn the nosepiece to select a high power objective.
11. Repeat the same process as above and then look into the eyepiece and turn the fine adjustment knob until the image comes into focus.
12. View using high power (40X) on the light microscope. Identify the features of the cells (nucleus, cell membrane, cytoplasm). Draw a cell diagram of 3-4 cells.

Risk Assessment

Methylene blue is an irritant. Avoid contact with skin.

Broken or cracked slides constitute a broken glass hazard.