



Microscopy Required Practical Activity

BRITISH MYCOLOGICAL SOCIETY FUNGAL EDUCATION & OUTREACH



INTRODUCTION

Microscopy is a technique used to visualize features not seen with the naked eye in biological organisms. Required practicals enable students to use a light microscope to observe, draw and label a selection of plant and animal cells. A magnification scale must be included. The visualization of fungal cells using a microscope stretches students to apply knowledge from throughout the curriculum.

Fungal slides of common fungi such as Rhizopus, Penicillium and Yeasts are readily available in a readymade form or you can make them yourself using aseptic techniques. Consultation of CLEAPPS guidelines on using fungi should be adhered to.

THIS ACTIVITY SUPPORTS THE FOLLOWING STATUTORY CURRICULUM REQUIREMENTS:

KS4 Curriculum Links

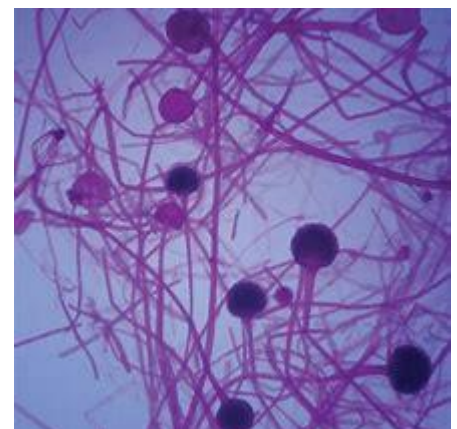
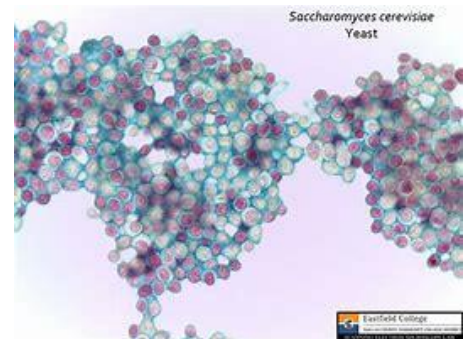
AQA Biology 8461 CELLS SOW
4.1.1.2 Required Practical Activity

Edexcel Level 1/Level 2 GCSE (9 - 1)
in Biology (1BI0) Paper 1 Topic 1 key
Concepts in Biology

OCR Gateway Science Suite - Biology
A (9-1) - J247 PAG

WJEC GCSE in BIOLOGY (From
2016) 1.1

Scottish Biology National 5 Cell
Biology



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METHOD AND RESOURCES:

Ensure that the lowest power objective lens is in position before placing your slide on the microscope stage.

- When you have prepared your slide place it in the centre of the stage over the opening that allows light from the light source through.
- Turn the coarse adjustment/rough focus wheel to get your specimen into position.
- Using the fine focus wheel Increase the distance between the objective lens and the slide until the cell(s) come into focus.
- Turn the nosepiece to use a higher power objective lens. You should only have to slightly rotate the fine adjustment knob to bring the cells into a clear focus.
- Make a clear, labelled drawing of some of these cells. Make sure that you draw and label any component parts of the cell. Record the magnification used.
- Use the eyepiece graticule (ruler) to record how many eyepiece units long and wide your cells are. Your eyepiece graticule should come with a conversion chart for you to figure out how long and wide in mm your cells really are. Record the actual length and width on your drawing also.
- Use this technique to draw a range of cells from prepared slides.

