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OPEN EDUCATIONAL RESOURCES @ DE MONTFORT UNIVERSITY, Leicester UK

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## STEPS TO SETTING UP A LIGHT MICROSCOPE

### ASSOCIATED RESOURCES

YOUTUBE VIDEO

<http://www.youtube.com/user/biologycourses>

#### 1. SETTING UP

Plug the microscope into the mains and switch on.

Select the low power objective (lens).

Select a glass slide ensuring it is the right way up (cover slip facing the objective).

Put the specimen onto the microscope stage clamping it gently into place.

Set the eye distance on the binocular piece of the microscope to suit your vision.

#### 2. FOCUS EYEPIECES AND CONDENSER

Locate the focus button, and focus the eyepieces by looking down both together.

Close your left eye and look down the right eyepiece and focus on the specimen by adjusting the button.

When this eyepiece is focused, close the right eye and look down left eyepiece and focus by adjusting the left eyepiece.

Next focus the condenser lens which is located above the light source

beneath the stage.

Take a pencil and hold the tip over the light source.

Look down the microscope focus by using the condenser button until see specimen and pencil tip are both in focus.

### **3. FINAL CONSIDERATIONS**

Always look down both the eyepieces to view a specimen to produce a single circular field of view.

Move between objectives carefully starting with lowest (x4 or x10) and then moving to a higher magnification lens (x40 or x100).

Change objectives by rotating the lenses and allowing them to click into place.

Be careful when focusing specimens using a high power lens – focus with a low power first and then rotate to high power and you will find you only need to focus slightly. This will avoid potentially cracking the glass specimen slide.

Ensure your microscope high power lens is not an oil immersion lens (it will say so on the lens) otherwise it will not focus and you may over-adjust and crack the slide.