Scientific Drawings for Biology

Drawing a specimen requires you to pay attention to detail so that you can re-create it on the sheet. The act of drawing will help you remember what you have observed and learned. Simply observing pictures of specimens in a book or on a computer screen is less effective when it comes to remembering and understanding what you observed.

Guidelines:

1. Observe the sample specimen in the slide following the rules for microscope use.
2. Whilst you are observing, increase the magnification to observe more details and reduce the magnification to get a more general view. Use the focusing controls on the microscope to observe at different depths of the specimen.
3. Identify key components that you will include in your drawing. DRAW ONLY WHAT YOU SEE. Do not include what you think you should see.
4. Use a sharp pencil on unlined paper to make a large drawing (around half a page).
5. Use lines and stippling/dots. Do not shade or sketch. See examples below.
6. Keep looking back at your specimen whilst you are drawing. When drawing from a microscope it is useful to look down the eye piece with one eye and at the drawing paper with the other - it takes practice but it is possible.
7. Title your drawing and include the following in your diagram: the magnification, scale, and any annotations.
8. Label the diagram using straight neat lines. Lines should not cross. See examples below.

**Good example. DO THIS.**

**Bad example. Identify mistakes and avoid.**

![Figure 1: Onion Epithelial Cells](image)

- Magnification: 400x
- Annotations: Cells stained with iodine