

## Introduction

Microscopes make small things larger. They are found in teaching laboratories, research laboratories and in industry. There are different kinds of microscopes. The microscope being used depends on the type of specimen and type of information the scientist needs. The source of illumination is the major distinguishing characteristic of microscopes and the primary determinant of the range of effective magnification. Electron microscopes use electrons focused by magnets as the source of 'illumination'. Electron microscopes can magnify images hundreds of thousands of times. Variations of the electron microscope have the ability to allow visualization of chemical bonds. Other specialized microscopes use ultraviolet light or polarized light. However, in teaching laboratories the most commonly encountered microscopes are the compound light microscope and stereo microscope. These both use visible light as the source of illumination. They differ in the type of specimens that can be viewed using them and the maximum level of magnification achieved.