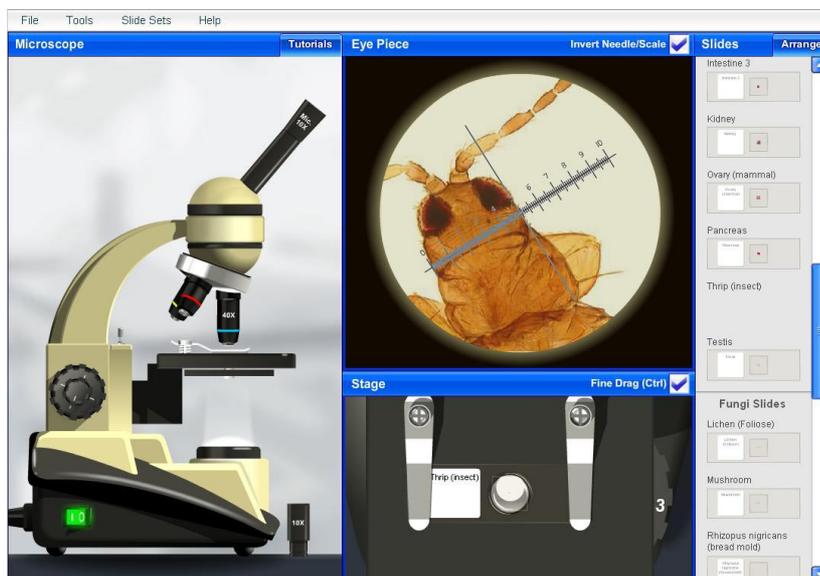




# Virtual Microscope



## Overview

This application is designed to provide learners with a sound understanding of how to use an optical microscope prior to lab practical tasks.

Used as an interactive whiteboard application it offers the teacher a simple and engaging means of demonstrating to the class, how to set up a microscope and how to view a wide range of genuine specimen slides to address a variety of biology focused topics.

The students can then use the application independently to practice their own skills and examine slides from the animal, plant and fungi sets provided. Once able to use the microscope, students can also use the tutorial mode to develop an understanding of how to prepare their own virtual slides, such as human cheek cells, onion skin cells or pollen.

Students will encounter the typical functions that a lab microscope offers. For example if they fail to set the end stop they will run the risk of breaking the virtual slide and have to start again, but with no consumable costs incurred.

Benefits include:

- Save lesson preparation time with ready made interactive tutorial lessons.
- Engage the whole class with and interactive demonstration on your whiteboard
- The bank of 26 pre-prepared slides helps reduce consumable costs.
- Improve lab productivity by allowing every student to practice their skills.

## Pre-prepared slides include:

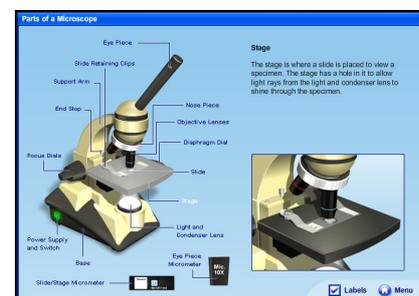
- Slide Micrometer
- Letter 'e' (reference)
- Blood smear (frog)
- Daphnia (crustacean)
- Hair (human, cat, sheep)
- Hydra (plain)
- Intestine 1
- Intestine 2
- Intestine 3
- Kidney
- Ovary (mammal)
- Pancreas
- Thrip (insect)
- Testis
- Lichen (Foliose)
- Mushroom
- Rhizopus nigricans (bread mold)
- Yeast
- Cork
- Indian rubber tree (leaf)
- Lily anther
- Lily anther (showing pollen)
- Lily ovary
- Tilia (Basswood)
- Pollen (5 types)
- Zea mays (corn) stem

## Student-prepared slides (demonstration of preparation) include:

- Onion skin (with stain)
- Human cheek cells (with stain)
- Pollen



## Tutorials



A series of tutorials are included to demonstrate the following:

- Parts of a Microscope
- Viewing a Specimen
- Setting the End Stop
- Measuring with a Microscope
- Calibrating a Microscope
- Preparing Slides (Onion skin, Human cheek cells, Pollen).

## Microscope Specification

The microscope includes the following features:

- Diaphragm Dial (6 Aperture settings)
- Light and Condenser Lens
- Rough Focus Dial
- Fine Focus Dial
- Eyepiece (10x)
- Micrometer Eyepiece (10x)
- Slide Micrometer
- 3 Objective Lenses (4x, 10x and 40x)
- Slide Retaining Clips

## Other Functions

- Slide Organiser
- Fine drag of slides for accuracy
- Eye pieces rotate



## Minimum Computer Requirements

- Windows® 2000 or later
- 50 MB free hard disk space
- Flash player v9 or later (supplied on CD)

## Order as:

VMS1/SL Virtual Microscope  
Site License (unrestricted number of computers)