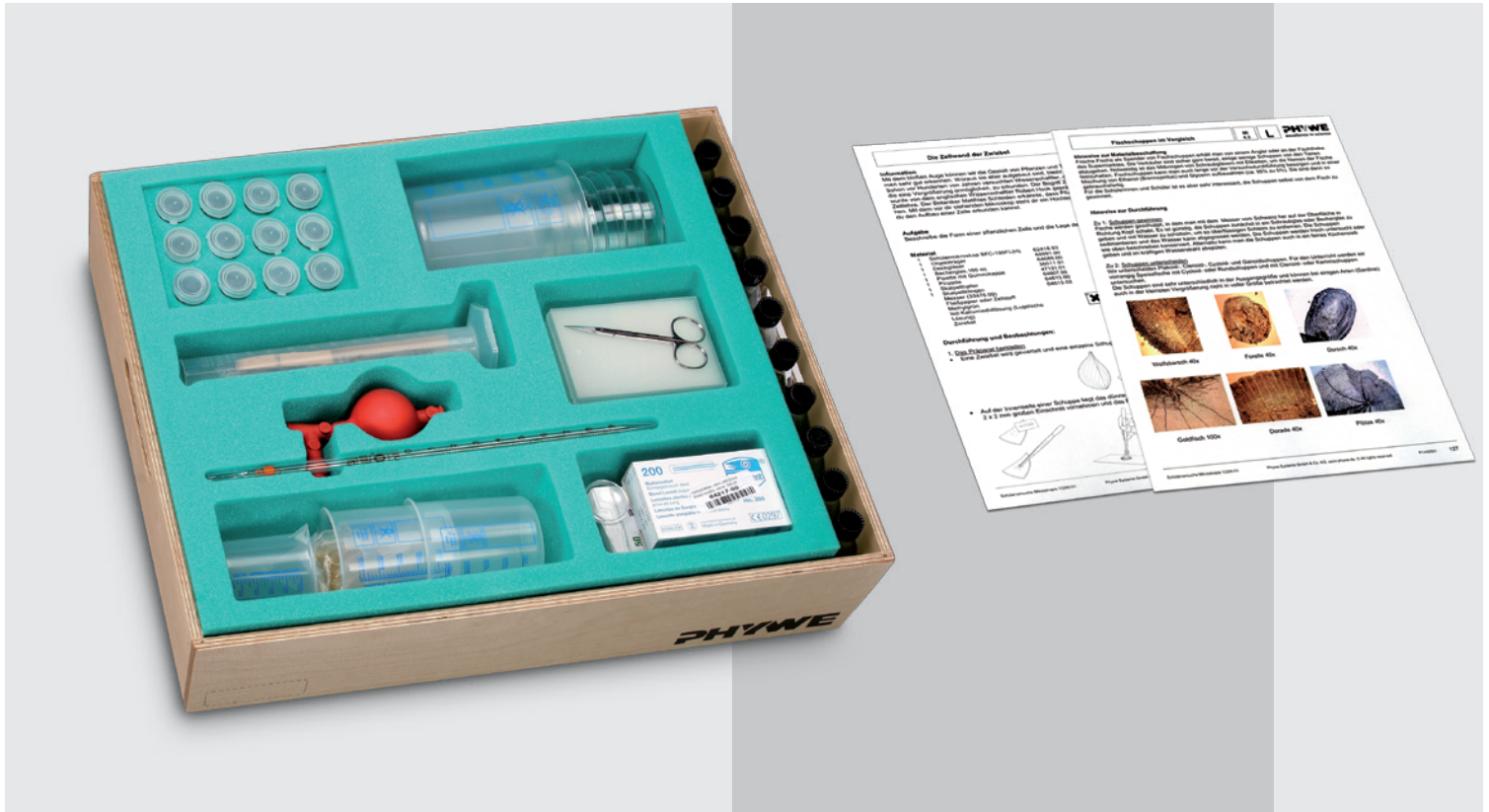


The experiment set

TESS Microscopy



The competent solution for school microscopy

In teaching biology at school microscopy plays a prominent role.

PHYWE's TESS Microscopy takes advantage of all didactic opportunities so that the microscope can be used successfully as a basic tool in biology teaching.

Features

Teach microscopy – even without previous knowledge

All-in-one solution with student worksheets, teacher answer sheets, microscopy accessories and reagents

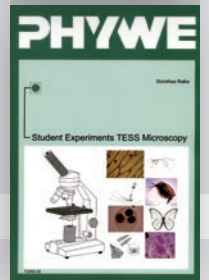
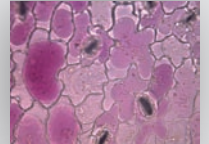
50 student experiments to choose from

Covers all topics relevant for school microscopy

Wide range of topics: basics of microscopy, work techniques, cell components, plants, vertebrates and other animals, fungi, protists, prokaryotes

TESS Microscopy introduces numerous proven methods which are described in the complementary literature manual for the 50 experiments. The manual includes both student worksheets and teacher answer sheets. Self-explanatory drawings instead of descriptive texts are used to allow for the reading habits of today's students. This helps leading them to safe experiment results. The teacher answer sheets include a multitude of supportive tips, e.g. about sourcing the material to

be analysed or how to cope with difficult work steps. Each teacher answer sheet comes with several photos of the microscopic specimen, exactly as prepared with the methods detailed in the student work sheets. The teacher answer sheets provide you with a clear idea about what to expect from a given sample and how your students' results should look like. This helps you conduct microscopy classes even without previous knowledge.



The following topics are available:

1. Basics of microscopy	4.8 Protoplasm streaming	7. Other animals under the microscope
1.1 The components of the microscope	5. Seed plants	7.1 Insect wings
1.2 Working with the microscope	5.1 Upper epidermis of a deciduous leaf	7.2 The mouthparts of insects
1.3 Magnification of the microscope	5.2 Lower epidermis with guard cell	7.3 Planarians
2. Work techniques	5.3 Cross-section of a deciduous leaf	7.4 Nematodes
2.1 Preparation of temporary microscopic slides	5.4 Cross-section of a coniferous (gymnosperm) leaf	7.5 Brine shrimp (<i>Artemia salina</i>)
2.2 Manual cutting technique	5.5 The stem of a dicotyledonous plant	7.6 Water flea (<i>Daphnia</i>)
2.3 Staining of living organisms	5.6 The stem of a monocotyledonous plant	7.7 The ciliated epithelium of mussels
2.4 Rapid staining technique	5.7 Root with trichoblasts	8. Other plants under the microscope
2.5 Fixation and staining	5.8 Cross-section of a plant ovary	8.1 The spore capsules of ferns
2.6 Embedding into Canada balm	5.9 Starch as a nutritional reserve substance in plants	9. Fungi
3. Preparation of reagents	6. Investigating vertebrates	9.1 Molds growing on food
4. Cell components	6.1 Flight feathers of birds	10. Protists
4.1 The cell wall of the onion	6.2 Raw milk in comparison with homogenized milk	10.1 Ciliates in a hay infusion
4.2 The cell membrane of animal cells	6.3 Fish scales in comparison	10.2 Colony-forming ciliates in the aquarium
4.3 Chloroplasts in moss leaflets	6.4 Skeletal muscle	10.3 Volvox
4.4 Chromoplasts	6.5 Blood cells	10.4 Diatoms in bog water
4.5 Nucleus and chromosomes	6.6 The kidney	10.5 Rotifers
4.6 Vacuole	6.7 Liver cells (hepatocytes)	11. Prokaryotes
4.7 Plasmolysis and deplasmolysis	6.8 Fish gills	11.1 Bacteria

Products

TESS Microscopy

The TESS set includes all accessories necessary to perform the experiments described in the handbook TESS Microscopy. In addition, a microscope with 400x magnification and halogen or LED illumination is required.

TESS Biology Set Microscopy	13290.88
Set TESS Microscopy plus literature (incl. CD-ROM) and microscope Motic SFC-100FL(H)	13290.33
TESS Biology manual Microscopy, 200 pages incl. CD-ROM (13290.12)	13290.02
CD-ROM for TESS Microscopy with experimental literature and microscopic images (PDF files)	13290.12
Chemical set for TESS Microscopy	13290.10

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