

PHYSICS

CHEMISTRY
BIOLOGY

ENGINEERING



LD DIDACTIC

STUDENT EXPERIMENTS



PHYSICS, CHEMISTRY & BIOLOGY

LEYBOLD®

ADVANCED SCIENCE KITS BIOLOGY

SELECT EXPERIMENT SETUPS

With about 400 experiments, both basic and advanced aspects of biology are handled in the areas of Botany, Ecology, Microbiology, Sensory physiology, Chromatography.

ECOLOGY

Topics	Experiments
Physical-chemical effects (abiotic factors)	3
Effects of soils (edaphic factors)	5
Biotic factors	4
Synecology, population ecology	4
System analysis	4
Measurements and simulations	5

Number of Experiments **24**

BOTANY

Topics	Experiments
Germination and growth	15
Water balance of plants	11

Number of Experiments **26**

MICROBIOLOGY

Topics	Experiments
Ecological aspects	2
Technological aspects	6
Medical and hygienic aspects	11

Number of Experiments **19**

SENSORY PHYSIOLOGY

Topics	Experiments
Hearing	5
Somatosensory (touch)	4
Vision	4

Number of Experiments **34**

150
EXPERIMENTS

CHROMATOGRAPHY

Topics	Experiments
Historical retrospect	8
Column chromatography	11
Paper chromatography	9
Thin-layer chromatography	17

Number of Experiments **45**



ADVANCED SCIENCE KITS BIOLOGY

SELECT EXPERIMENT
SETUPS



- Ideal for the student's hand: great stability and functionality
- Experimental instructions have enough space for the students' answers. The modular setup allows for different possibilities to further studies and accounts for different working speeds



Microscopes are essential for biology lessons and to conduct student experiments. In our program, you will find a multitude of tough, easy-to-use microscopes specially made for students.

*Pictured experiment:
Microscopic viewing of preparations*

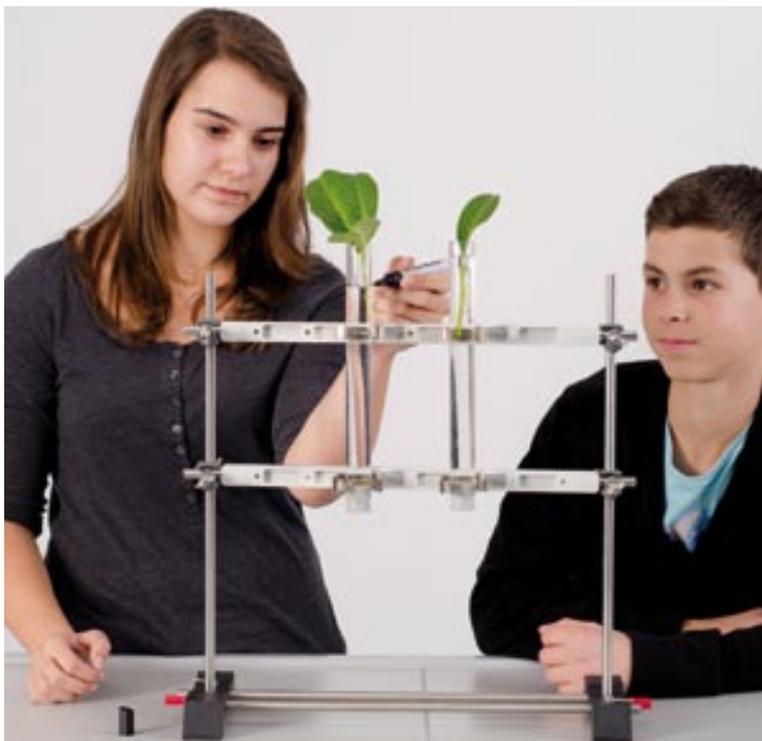


Simple, solid and clear stand-mounted assemblies with special stands materials. Spring clips hold plastic receptacles on two base rails. Students can easily attach and remove these.

*Pictured experiment:
Water-holding capacity of soil samples*

Many experiments in the area of vision within sensory physiology use special-purpose goggles and a series of different color filters, along with colored images.

*Pictured experiment:
Total color blindness*



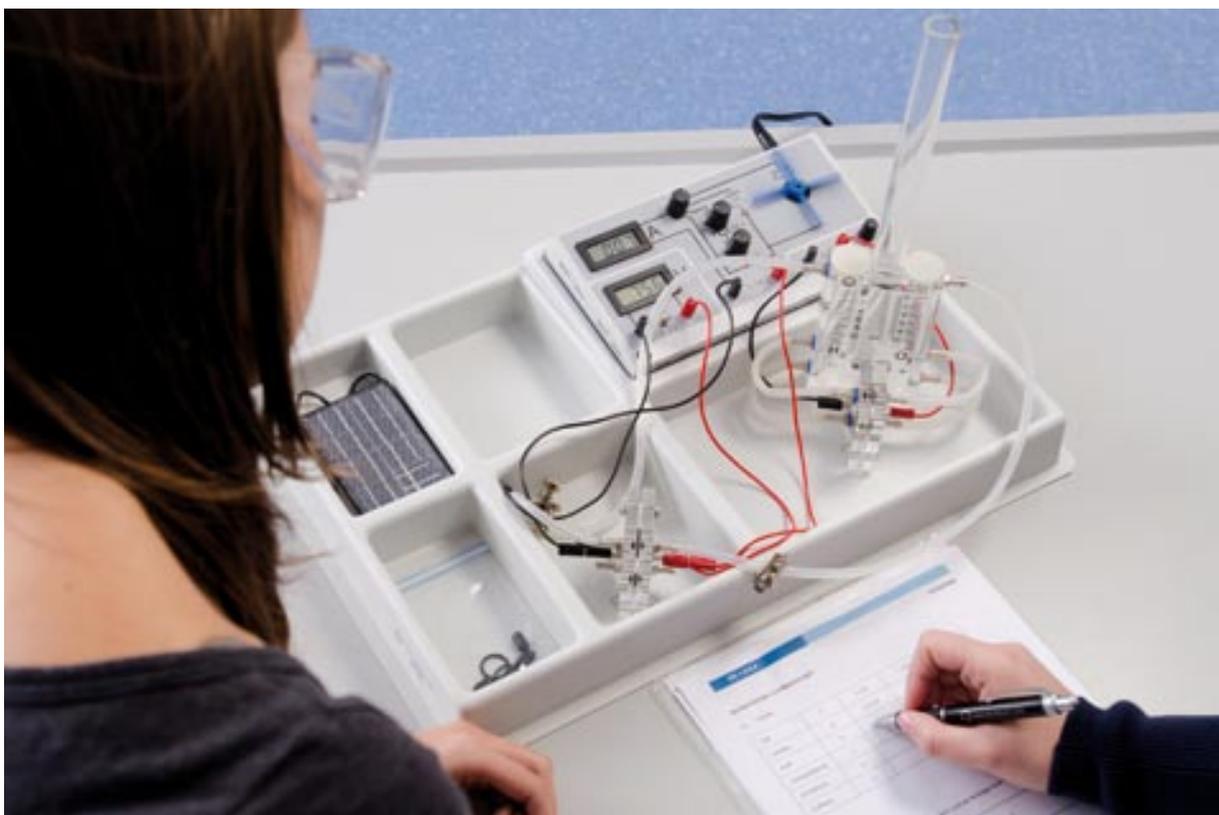
The fields of botany and ecology use the same stand-mounted equipment, allowing for a quick setup. Plastic tubes are easy to mount, using spring clips. Assemblies are clearly laid out, so that students can focus on the substance.

*Pictured experiment:
Water supply for plants*



ADVANCED SCIENCE KITS SYSTEM EXTENSIONS

Technical innovations will soon be incorporated into the curricula of the final years of secondary school. We are therefore consistently expanding our successful Advanced Science Kits system to adapt to these special demands.



WORKSTATION FUEL CELLS

The fuel cell workstation is ideal for student experiments throughout secondary schooling, featuring ease of use of circuitry for the experiments.

Experiment examples:

- Investigation of the mode of operation of solar cells, electrolyzers and fuel cells
- Solar power's dependence on illuminance and angle of installation
- Characteristic curves and effectiveness of electrolyzers and fuel cells