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ScienceBus

All the wonders of science in one mobile laboratory

wacebo

SCAN ME

Sciencebus

All the wonders of science in one mobile laboratory

ScienceBus reimagines every space as a place of discovery, where science comes to life through experience. An elegant, fully equipped mobile lab, designed to bring tools, materials and experimentation wherever they are needed. Every detail is thoughtfully crafted to balance functionality, organisation and design, shaping an environment that engages, inspires and sparks curiosity. Because with ScienceBus, science is not just observed — it is experienced, explored and remembered.

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Curiosity cannot be taught

it must be sparked

And it is modular.

ScienceBus is a mobile science lab designed to bring everything needed for hands-on experimentation into one complete solution. Equipped with a curated collection of thematic kits, it supports scientific learning in a way that is simple, practical and engaging. Each kit includes dedicated tools, materials and guides, neatly organised in trays and ready to use. A complete system that makes science accessible and tangible — because the best way to understand something is to experience it.

The main structure consists of a sink module with an integrated water filling and drainage system, along with a central unit featuring glass doors and a lock for securely storing equipment and kits

The configuration can be expanded with a side module featuring removable shelves, ideal for organising materials, tools or additional science trays.

Thanks to the removable shelves, the internal space can be reconfigured in moments — transforming from a simple storage compartment into a dedicated space for kits, tools and larger equipment. A modular solution designed to evolve alongside activities, making every experience more organised and effective.

+100 EXPERIMENTS

16 TRAYS 7 SMALL + 9 BIG

3 ADDITIONAL BOXES OF EQUIPMENT

10 DISCIPLINES

ULTRA-DURABLE PHENOLIC WORKTOP

SINK WITH 10-LITRE TANK

SWIVEL CASTORS WITH BRAKES

HANDLES FOR EASY MOVEMENT

Designed to last

Made to be experienced

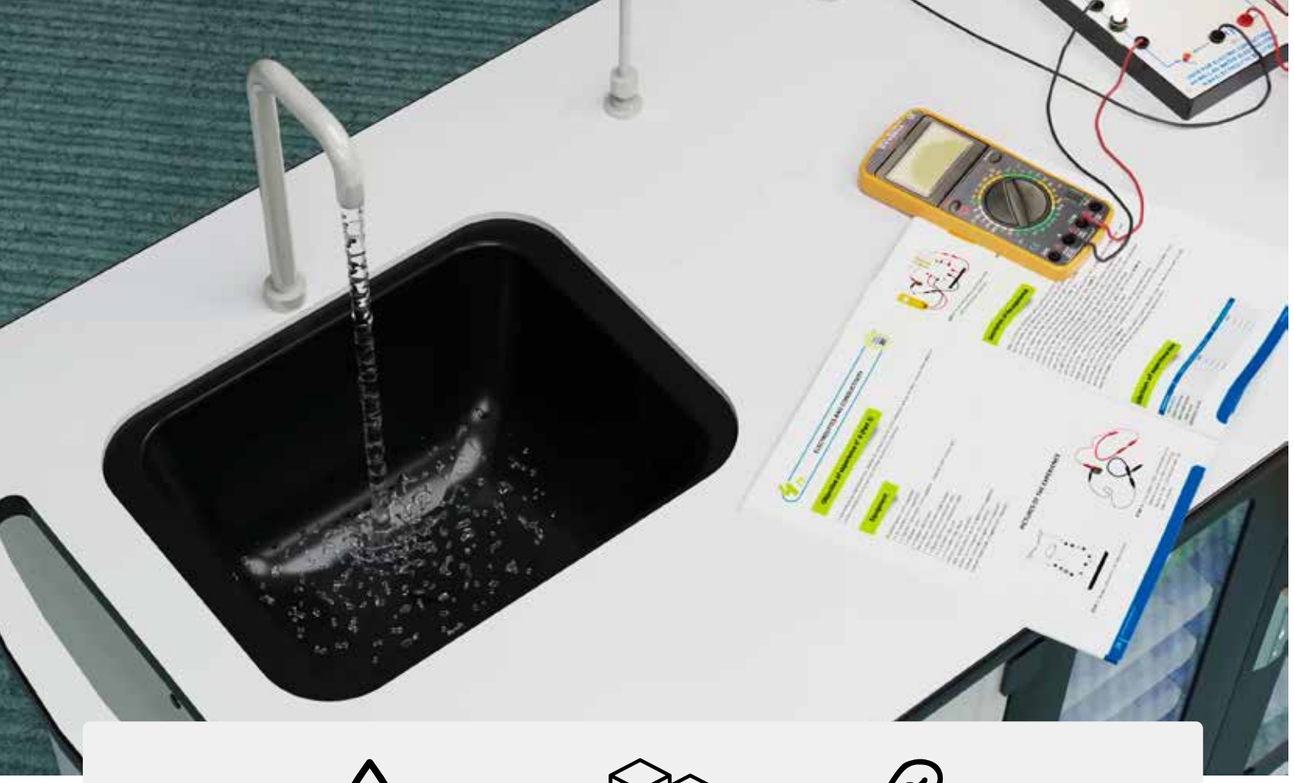
Every element of ScienceBus is designed to ensure durability, safety and long-term practicality. The top surface is made from high-resistance phenolic material, built to withstand impacts, chemicals, water and intensive daily use. Integrated ergonomic handles make movement easy, while swivel castors with brakes provide both stability and full freedom of movement. Glass doors allow the contents to be clearly visible at a glance, keeping tools and materials organised and protected at all times. Lockable compartments and dedicated storage spaces ensure all equipment is stored safely and securely.

With the dedicated top, the three modules can be seamlessly combined into a single configuration, transforming ScienceBus into a refined, compact laboratory.

Every discovery starts here

Curiosity becomes experience

ULTRA-DURABLE PHENOLIC WORKTOP



Water system with two 10-litre tanks for filling and drainage

Fully modular structure

Built to ensure maximum stability

Digital display for monitoring electrical parameters

Adjustable power supply included

Convenient side storage module

Lockable compartments for secure storage

2 cm thick worktop with handles

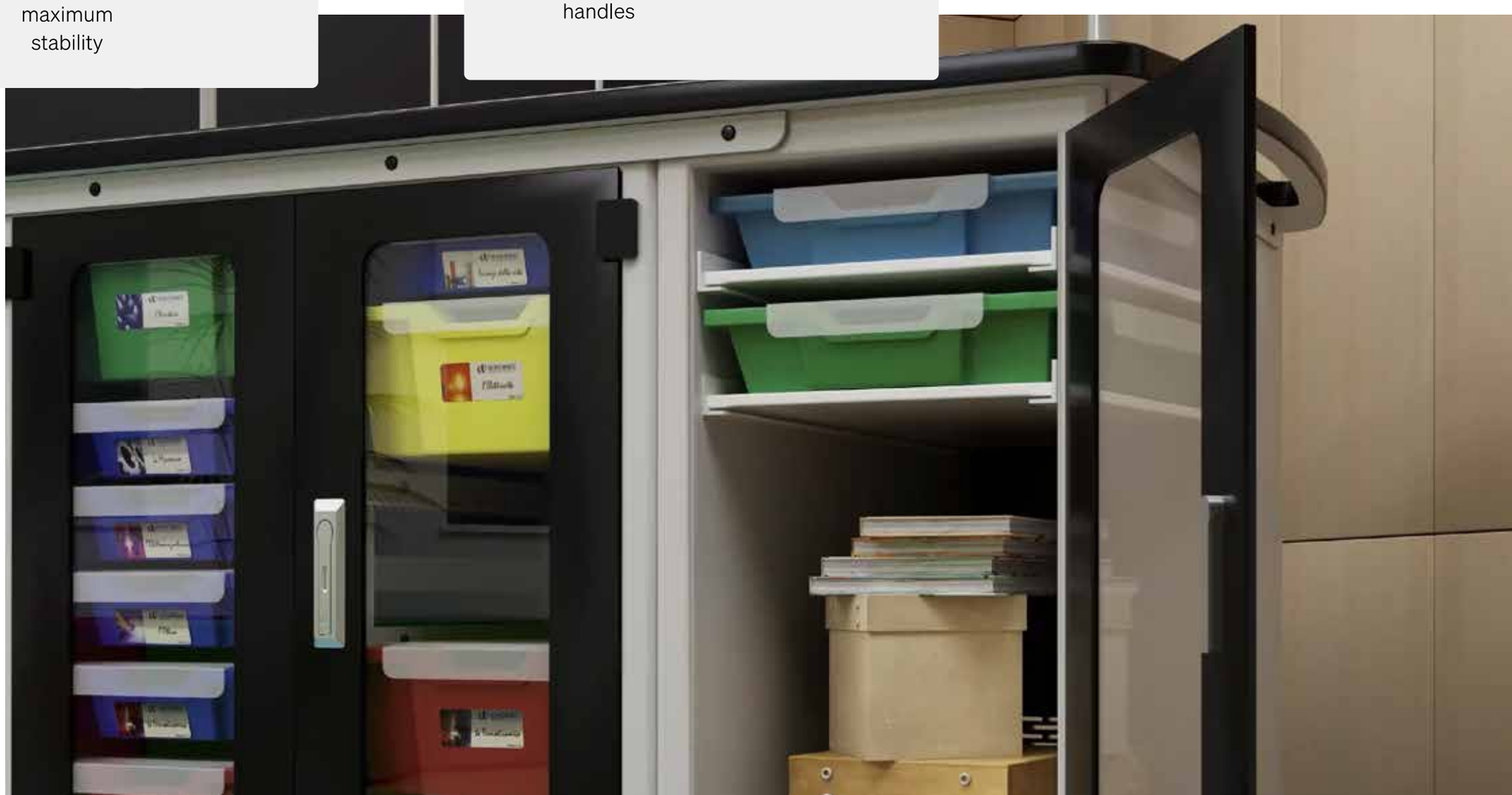
First aid kit included

Safety, control and precision

At the operational core of ScienceBus, every activity is supported by tools designed to observe, measure and understand what is happening — transforming each experiment into a true scientific learning experience. The integrated digital display allows key electrical parameters to be monitored in real time, while the adjustable power supply provides the flexibility to explore a wide range of experiments. The organisation of the workspace also contributes to safety and quality: robust, reliable power cables automatically retract after use, keeping the worktop clean, organised and free at all times.

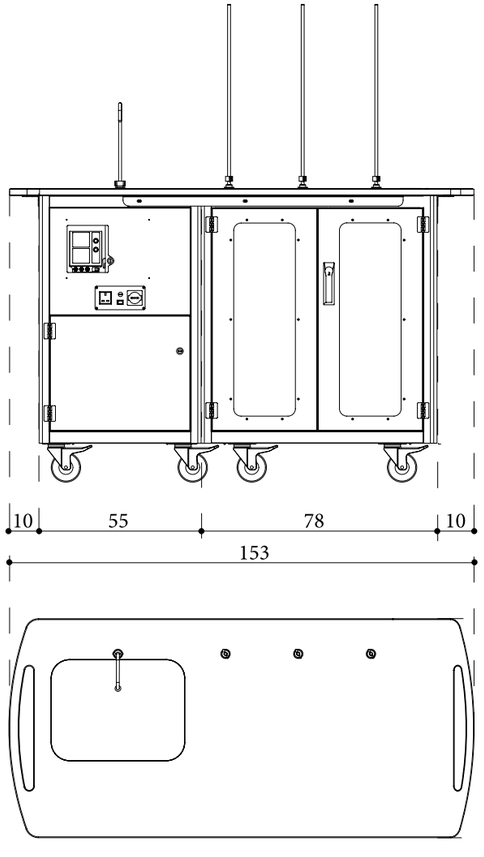
Modularity at the service of education

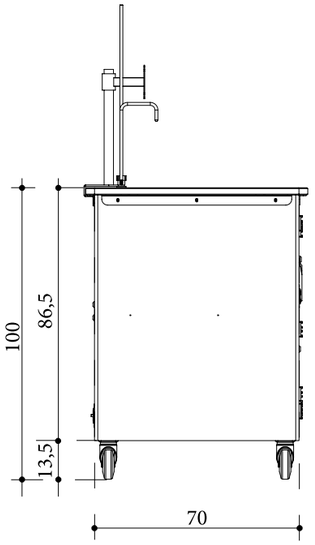
ScienceBus features an independent water system, with two 10-litre tanks for supply and drainage. This allows the sink to be used in any school environment, including classrooms without direct water connections, while maintaining cleanliness, organisation and full control.The mobile science lab is designed to adapt to the needs of secondary education. With a fully modular structure, it can be easily moved between different classrooms or learning spaces. Each module is equipped with lockable swivel castors to ensure maximum stability and smooth mobility, while the robust construction guarantees long-term durability.



ScienceBus

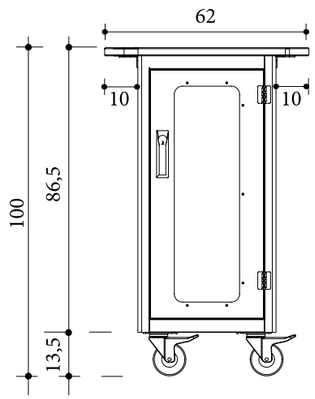
Technical dimensional drawings





Total gross weight: 234 kg

Side module (optional) - Total gross weight: 104.5 kg



ScienceSet kit

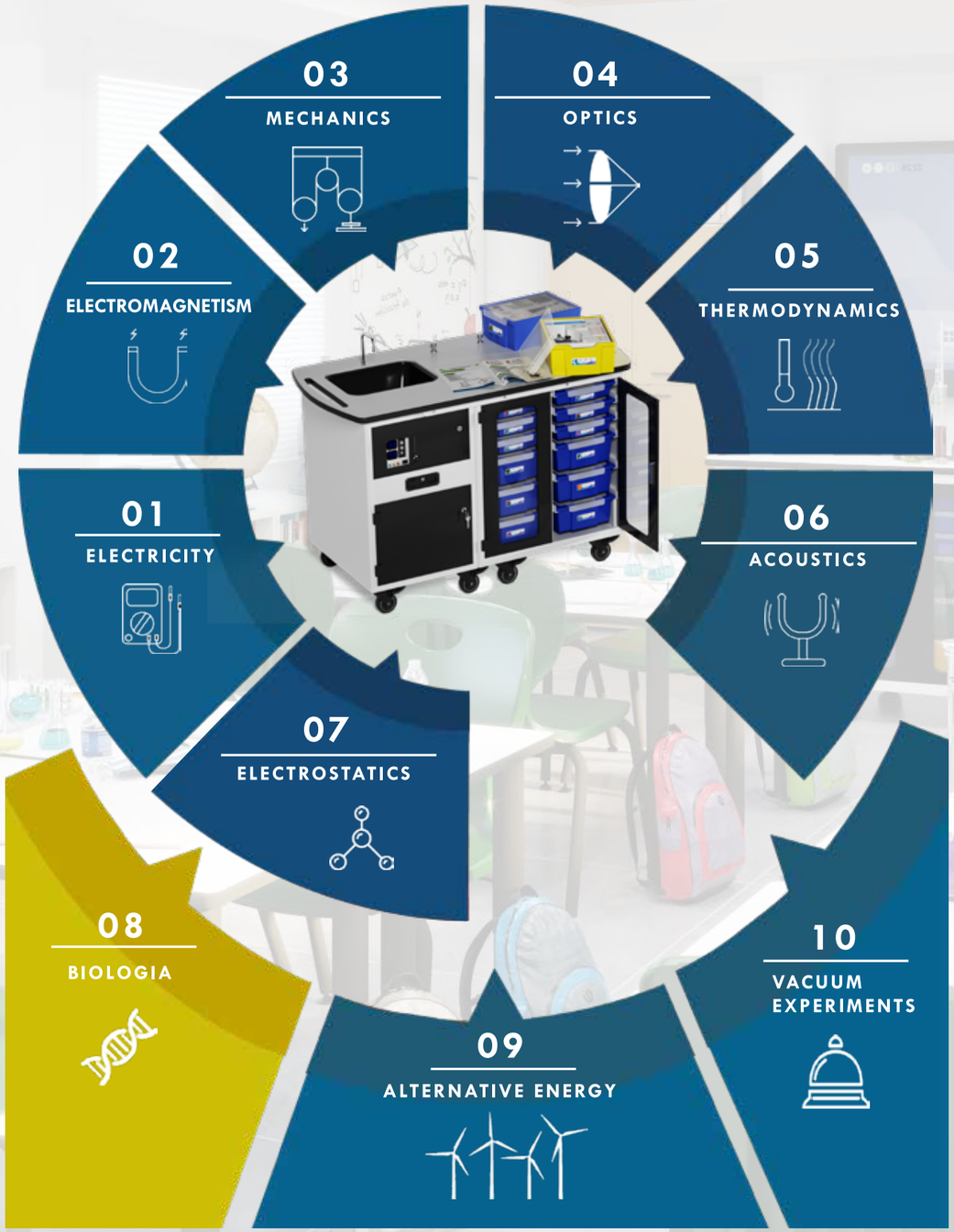
Inside every kit
a discovery ready to happen

- Optics
- Electromagnetism
- Electrostatics
- Thermodynamics
- Acoustics
- Alternative Energy
- Vacuum Experiments
- Mechanics
- Electricity

Something new begins with every kit

Every ScienceBus kit is an invitation to explore. A carefully curated set of tools, materials and guided experiences designed to bring science closer, making it tangible, engaging and meaningful. Across a wide range of disciplines — from optics and mechanics to electromagnetism and thermodynamics — each kit opens the door to discovery through direct interaction, observation and experimentation. Neatly organised in ready-to-use trays, everything is designed to simplify preparation and maximise time for learning.

Where every concept
becomes experience



Electricity

A complete kit designed to explore electricity in a practical and intuitive way. Circuits, voltage and resistance take shape through real, safe experiments. Each activity develops logical thinking, problem-solving skills and a deeper understanding of electrical phenomena. Energy becomes visible, controllable and accessible to all.

Where electricity becomes something you can control

One manual for each kit

ScienceBus manuals guide you through every experiment, step by step. Inside, you will find theoretical explanations, detailed instructions and practical tips to support simple and engaging learning.

The manuals are not included, but obtaining them is easy: simply request them at the time of purchase by emailing info@waceboeurope.com

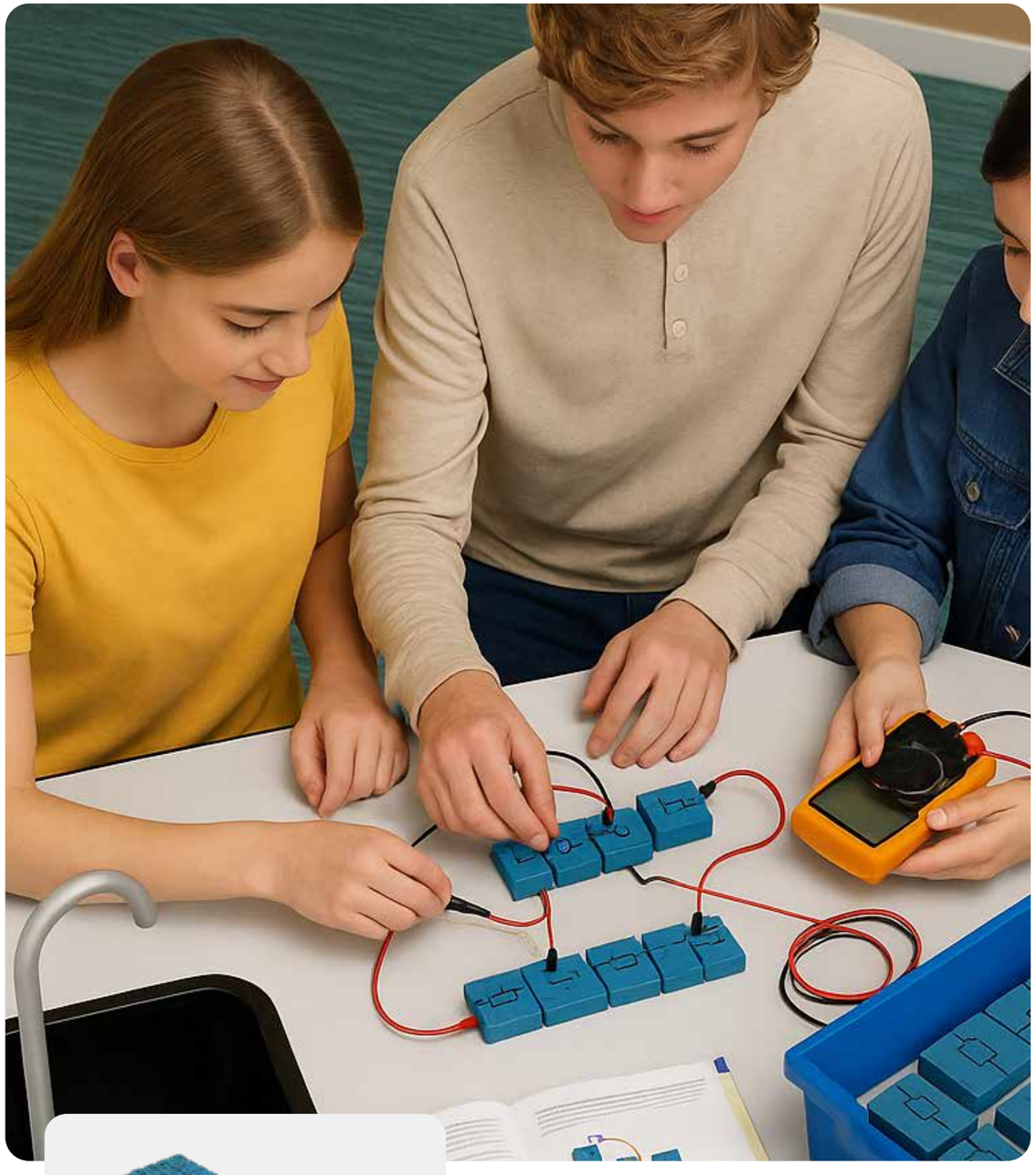
1 big tray

Experiences

- How to use a digital multimeter
- Electrical conductivity
- Resistors and colour coding
- Ohm's First Law
- Series and parallel resistor connections
- Circuit with push-button switch
- Circuit with toggle switch
- Circuit with push-button and toggle switches
- Series and parallel connections of loads
- Building a battery with a lemon
- Building a battery with a tomato
- Series and parallel connections of power sources
- Voltage divider
- Current divider

Equipment

Low-voltage bulbs (4 × 2.5 V, 4 × 6.2 V, 4 × 12 V) • Connecting leads with red and black connectors (25 cm and 50 cm) • 10 × crocodile clips in assorted colours • 1 × base board for electrical circuit connections • Box of connection links (straight, L-shaped, T-shaped, L-shaped with hole, straight with two holes) • 2 × 1.2 V battery holders • 4 × 12 V lamp holders • Switches (1 push-button, 1 toggle) • Box of 2 W resistors (100 Ω, 220 Ω, 470 Ω, 1 kΩ, 4.7 kΩ, 10 kΩ) • 1 × voltmeter (0–15 V and 0–1.5 V) • 1 × digital multimeter



The kit includes all the equipment needed to study electricity and electrical circuits

Students can explore the fundamental principles of electricity by building circuits with series and parallel resistors, becoming familiar with basic electronic components and measuring current and voltage using a multimeter

Cod. WCBSCSELC-N

Electromagnetism

A complete kit designed to explore electromagnetism in a practical and intuitive way. Magnetic fields, electric currents and forces come to life through real, safe experiments. Each activity develops logical thinking, problem-solving skills and a deeper understanding of electromagnetic phenomena. Energy becomes visible, controllable and accessible to all.

Where electricity meets magnetism

One manual for each kit

ScienceBus manuals guide you through every experiment, step by step. Inside, you will find theoretical explanations, detailed instructions and practical tips to support simple and engaging learning.

The manuals are not included, but obtaining them is easy: simply request them at the time of purchase by emailing info@waceboeurope.com

2 trays
1 small + 1 big

Experiences

- The magnet and its poles
- Magnets in contact with different materials
- Magnetic field lines
- How a compass works
- Magnetic tracking
- Interaction between magnets and ferromagnetic materials
- Interaction between a magnet and a compass
- Magnetic range
- Magnetic range in series and parallel configurations
- Properties of a broken magnet
- Magnetisation of a ferromagnetic object
- The electromagnet
- Charging by friction
- Positive and negative electric charge
- The electrostatic pendulum

Equipment

1 × acrylic base set for magnets • 1 × pair of small red/green magnets • 1 × magnetic needle with stem • 1 × aluminium ring • 1 × magnetic needle for Ørsted experiment • solenoids on base (linear, circular and spiral) • 1 × globe with internal aluminium tube • cylindrical magnets (2 pcs) • 1 × probe • 1 × aluminium tube • circular magnets (2 pcs) • 1 × demonstration compass with magnetic needle • 1 × red horseshoe magnet • iron filings • 1 × acrylic container for iron filings for 3D magnetic field study • 1 × magnetic field lines demonstrator • 1 × collection of magnetic and non-magnetic materials (iron, aluminium, brass, plastic, rubber, wood, fabric, cork, foam) • 1 × 9 V battery • 1 × set of connecting leads with crocodile clips (red and black)

The kit enables the study of electromagnetism through modules that can be quickly assembled

Students can explore the fundamental principles of electromagnetism, including the magnetic force generated by permanent magnets, the analysis of electromagnetic fields and the observation of attraction and repulsion between electrically charged objects. This experience provides a deeper understanding of the key concepts of electromagnetic physics.

Cod. WCBSCSETT-N

Mechanics

A complete lab designed to explore mechanics through direct, hands-on experience. Forces, balance, motion and levers take shape through real tools and guided activities. Theory becomes action, transforming the classroom into a true space for exploration.

2 trays
1 small + 1 big
and one box of equipment

Equipment

1 × graduated cylinder • 1 × tape measure • 5 × precision callipers • 1 × protractor • dynamometers (2 × 1 N, 2 × 5 N, 1 × 10 N) • 1 × measuring bar • 3 × coil springs • 1 × lever arm with support needle • 2 × balance pans with pivot • 1 × slider for inclined plane • 1 × spirit level • 1 × string • 1 × track with accessories (protractor and plumb line) • pulley system (1 with support, 1 with rod, 1 single) • 1 × numbered rod for dynamometer • 1 × trolley for inclined plane • 1 × slotted weights set • Archimedes' system (double cylinder, beaker, overflow vessel) • set of hooked weights (plastic and metal, various sizes and weights) • 1 × support base with rod • 2 × clamps • support rods (2 threaded 35 cm, 2 threaded 50 cm, 1 unthreaded with 3 holes) • 2 × balloons • 1 × funnel • 1 × silicone tube • 1 × set of needles (20 pcs)

See force, shape motion, understand balance

One manual for each kit

ScienceBus manuals guide you through every experiment, step by step. Inside, you will find theoretical explanations, detailed instructions and practical tips to support simple and engaging learning.

The manuals are not included, but obtaining them is easy: simply request them at the time of purchase by emailing info@waceboeurope.com

Experiences

- What callipers are and how to use them
- First-, second- and third-class levers
- Springs and Hooke's Law
- Working with a fixed pulley
- The block and tackle: combining fixed and
- movable pulleys
- Resolution of forces
- Friction on an inclined plane
- Equilibrium on an inclined plane
- The simple pendulum
- Mass and density of objects
- Surface tension principle
- Pressure in fluids
- The principle of communicating vessels
- The U-tube manometer and Stevin's law
- Archimedes' principle

Complete kit for mechanical experimentation with simple machines and mechanisms

Students can analyse and explore the fundamental principles of classical mechanics, studying levers, pulleys, springs and inclined planes.The kit includes all the necessary equipment and a practical manual to carry out a wide range of experiments, offering a hands-on and engaging approach to learning science.

Cod. WCBSCSTRK-N

Optics

A complete kit designed to explore light through direct, hands-on experience. Reflection, refraction and diffraction take shape before students' eyes.Each experiment encourages visual observation and a deeper understanding of optical phenomena. Physics becomes tangible, engaging and surprisingly intuitive.

See light, shape it, understand it

One manual for each kit

ScienceBus manuals guide you through every experiment, step by step. Inside, you will find theoretical explanations, detailed instructions and practical tips to support simple and engaging learning.

The manuals are not included, but obtaining them is easy: simply request them at the time of purchase by emailing info@waceboeurope.com

Experiences

- Rectilinear propagation of light
- Deflection of a light beam using a mirror
- Focal point formation with a biconcave lens
- Focal points formation with a plano-convex lens
- Focal point formation with a biconvex lens
- Deflection of a light beam using a triangular prism
- Symmetrical deviation of a light ray using a trapezoidal prism
- Anticlockwise shift of a light ray
- Clockwise shift of a light ray
- Total internal reflection and critical angle
- Optical prism system
- Calculating the focal length of a converging lens
- Image magnification study
- Image reduction study
- Galileo's telescope

2 trays
2 small trays + 1 box of equipment

1 × optical bench (64 cm, aluminium) • 1 × light source with slits and rod, integrated halogen lamp • 1 × goniometer disc • 1 × mirror with plastic frame • 1 × transparent water container • 1 × white plastic screen (12 × 12 cm) • 6 × sliders for optical bench • 4 × lens holders (plastic) • 1 × slider for optical bench • 1 × lens holder (plastic) • 1 × biconvex lens, FL = 100 mm (acrylic) • 2 × diffraction grating supports • 1 × biconcave acrylic lens, one frosted side (Ø 5 cm) • 1 × biconvex acrylic lens, one frosted side (Ø 5 cm) • 1 × plano-convex acrylic lens, one frosted side (Ø 5 cm) • 1 × plano-concave acrylic lens, one frosted side (Ø 5 cm) • 1 × semicircular acrylic lens, one frosted side (Ø 5 cm) • 1 × acrylic trapezoid, one frosted side • 1 × set of 3 slit diaphragms • 1 × single-slit diaphragm • 1 × triple-slit diaphragm • 1 × five-slit diaphragm • 6 × colour filters • 1 × triangular prism (30 × 30 × 30 cm) • 1 × circular measuring disc (range 0–360°, precision 1°) • 1 × set of 4 plano-concave lenses (50/100/150/200 mm) • 1 × set of 4 plano-convex lenses (50/100/150/200 mm) • 1 × set of 4 biconcave lenses (50/100/150/200 mm) • 1 × set of 4 biconvex lenses (50/100/150/200 mm) • 2 × connecting leads (red and black, 50 cm) • 1 × diffraction grating (100/300/600 lines/mm) • 1 × single-slit slide – type 1 • 1 × single-slit slide – type 2 • 1 × double-slit slide – type 1 • 1 × double-slit slide – type 2 • 1 × polarising filter (Ø 7.1 cm, aluminium frame) • 1 × single-beam laser • 1 × laser holder

This kit enables a wide range of experiments to explore key concepts in optics

Students can observe and analyse the fundamental principles of geometrical optics, studying phenomena such as the reflection and refraction of light, as well as the behaviour of lenses. The kit includes all the necessary equipment to support a practical and engaging learning experience.

Cod. WCBSCSOPT-N

Thermodynamics

A complete kit designed to understand heat, energy and the transformations of matter. Hands-on experiments make temperature, heat transfer and energy balance visible. Each activity encourages observation, measurement and scientific reasoning. Thermodynamics comes to life through direct experience.

Where energy transforms into knowledge

One manual for each kit

ScienceBus manuals guide you through every experiment, step by step. Inside, you will find theoretical explanations, detailed instructions and practical tips to support simple and engaging learning.

The manuals are not included, but obtaining them is easy: simply request them at the time of purchase by emailing info@waceboeurope.com

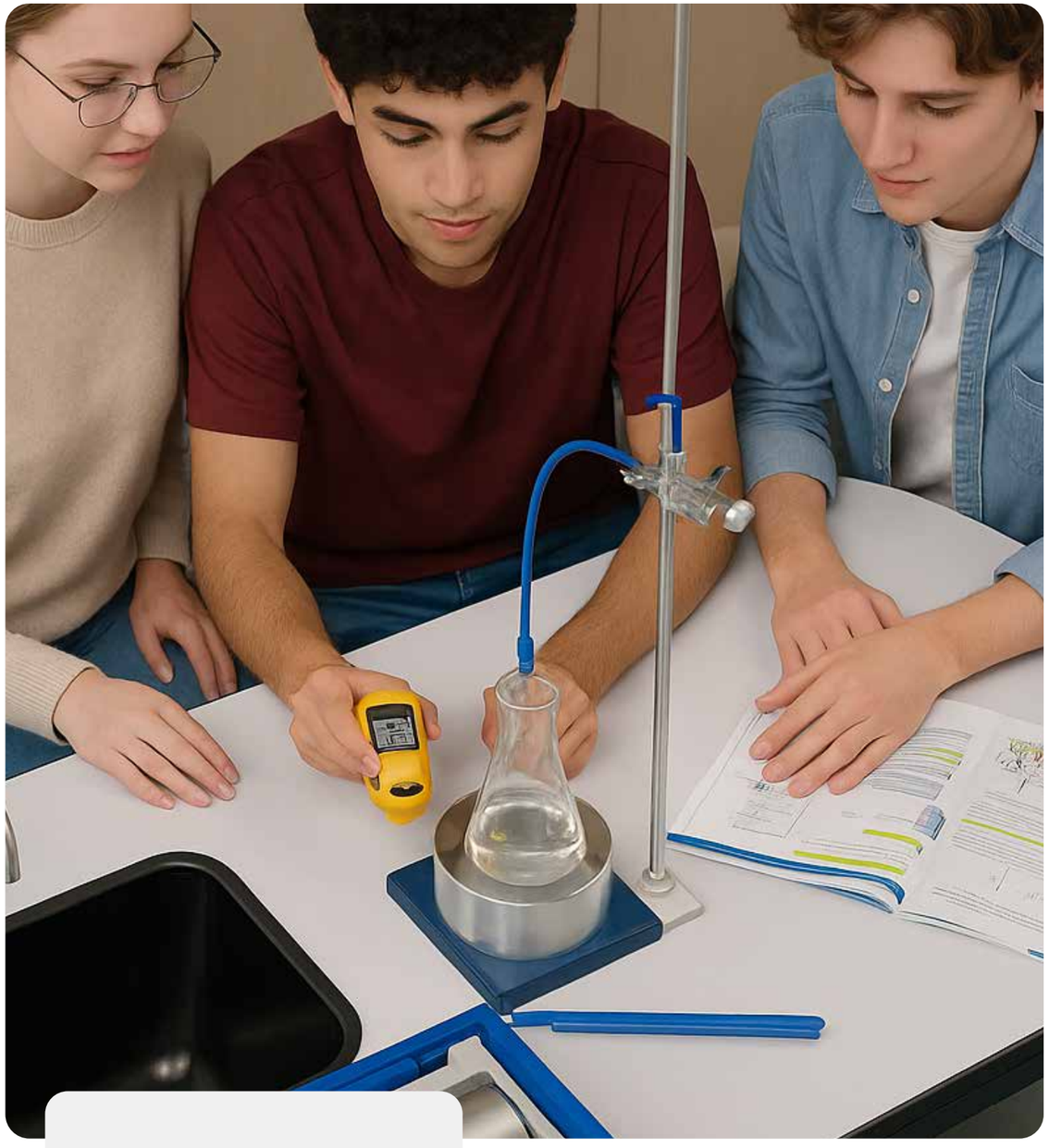
Experiences

- Measuring temperature: the thermometer
- Heat and temperature
- Heat transfer: conduction
- Heat transfer: convection
- Heat transfer: radiation
- Thermal expansion of gases
- Thermal expansion of liquids
- Thermal expansion of solids
- Boiling
- The condenser
- The distillation apparatus
- Building an alcohol thermometer
- The calorimeter and thermal insulation
- Water equivalent of the calorimeter
- Calculating the specific heat capacity of metals

2 trays
1 small + 1 big

Equipment

1 × digital stopwatch • communicating vessels system in borosilicate glass • food colouring • set of borosilicate glass beakers (100 ml, 250 ml, 500 ml) • 1 × U-shaped drying tube • 1 × alcohol thermometer • 2 × stainless steel cylinders • 1 × Franklin boiler with ether-filled sphere • 1 × aluminium calorimeter • metal blocks for calorimeter (brass, copper, iron – 500 g each) • 2 × four-prong universal clamps • silicone grease • 4 × paraffin blocks • 1 × silicone tube • 5 × pairs of latex gloves • 1 × Bunsen burner with rubber hose • 1 × tripod stand • 2 × wire gauze with ceramic centre



The kit enables a range of practical experiments in thermodynamics

Students explore the fundamental principles of thermodynamics, studying phenomena such as thermal expansion and thermal conductivity. The kit includes all the necessary equipment and a detailed practical manual, making the learning of thermodynamics accessible and engaging.

Cod. XWCBSCSTRD-N

Acoustics

A complete kit for exploring acoustics through hands-on experience. Waves, frequencies and vibrations come to life through real experiments. Each activity connects what students hear with what they observe, making acoustic phenomena clear and accessible. Sound becomes something they can hear, explore and truly understand.

One manual for each kit

ScienceBus manuals guide you through every experiment, step by step. Inside, you will find theoretical explanations, detailed instructions and practical tips to support simple and engaging learning.

The manuals are not included, but obtaining them is easy: simply request them at the time of purchase by emailing info@waceboeurope.com

Experiences

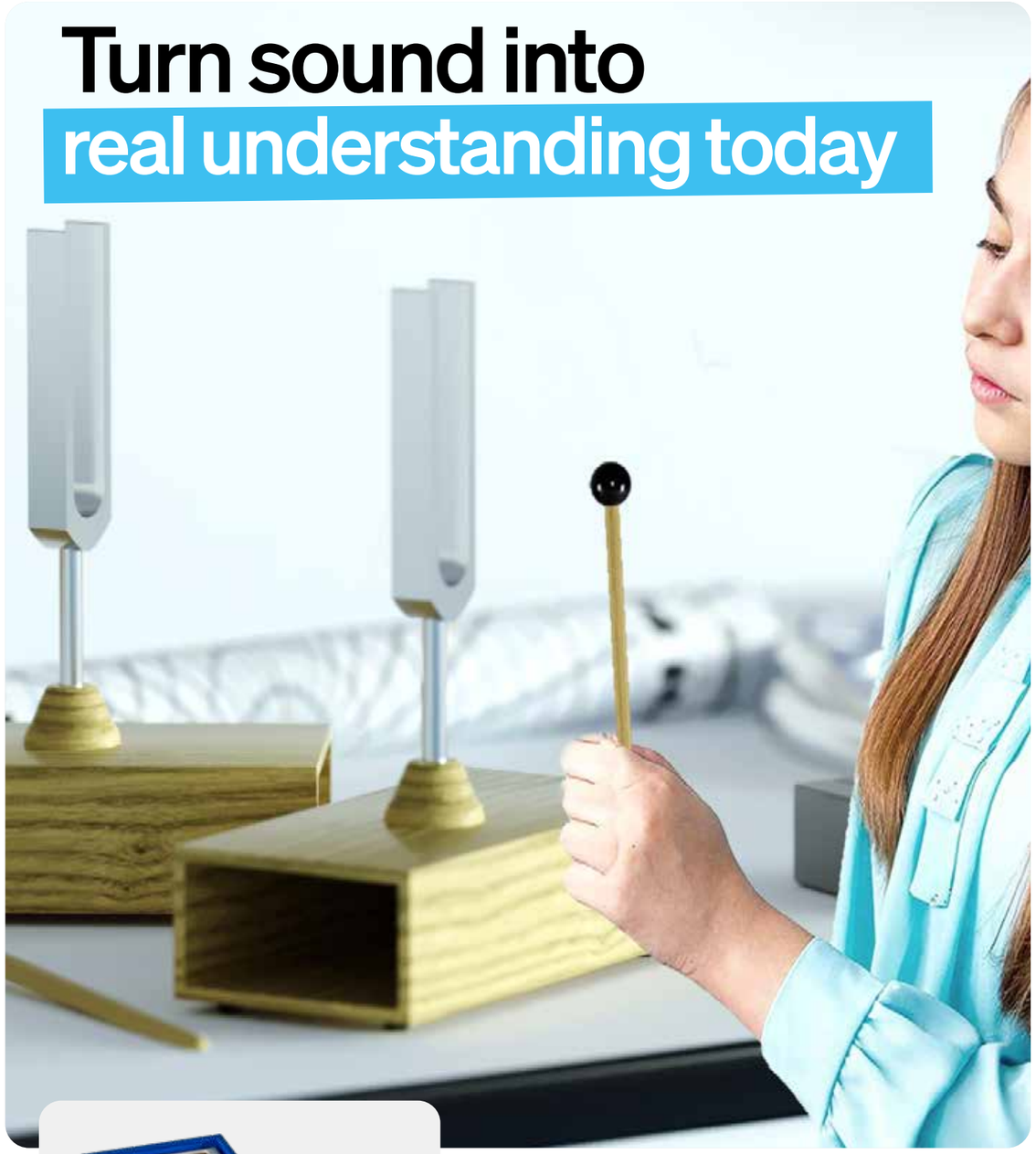
- Wave generator: the tuning fork
- Propagation of sound waves
- Frequency and sound intensity
- The phenomenon of acoustic resonance
- Acoustic beats

Hear sound, see waves, understand everything

1 tray
1 big tray + 1 box of equipment

1 × optical bench (64 cm, aluminium) • 1 × light source with slits and rod, integrated halogen lamp • 1 × goniometer disc • 1 × mirror with plastic frame • 1 × transparent water container • 1 × white plastic screen (12 × 12 cm) • 6 × sliders for optical bench • 4 × lens holders (plastic) • 1 × slider for optical bench • 1 × lens holder (plastic) • 1 × biconvex lens, FL = 100 mm (acrylic) • 2 × diffraction grating supports • 1 × plano-concave acrylic lens, one frosted side (Ø 5 cm) • 1 × biconvex acrylic lens, one frosted side (Ø 5 cm) • 1 × plano-convex acrylic lens, one frosted side (Ø 5 cm) • 1 × plano-concave acrylic lens, one frosted side (Ø 5 cm) • 1 × semicircular acrylic lens, one frosted side (Ø 5 cm) • 1 × acrylic trapezoid, one frosted side • 1 × set of 3 slit diaphragms • 1 × single-slit diaphragm • 1 × triple-slit diaphragm • 1 × five-slit diaphragm • 6 × colour filters • 1 × triangular prism (30 × 30 × 30 cm) • 1 × circular measuring disc (range 0–360°, precision 1°) • 1 × set of 4 plano-concave lenses (50/100/150/200 mm) • 1 × set of 4 plano-convex lenses (50/100/150/200 mm) • 1 × set of 4 biconcave lenses (50/100/150/200 mm) • 1 × set of 4 biconvex lenses (50/100/150/200 mm) • 2 × connecting leads (red and black, 50 cm) • 1 × diffraction grating (100/300/600 lines/mm) • 1 × single-slit slide – type 1 • 1 × single-slit slide – type 2 • 1 × double-slit slide – type 1 • 1 × double-slit slide – type 2 • 1 × polarising filter (Ø 7.1 cm, aluminium frame) • 1 × single-beam laser • 1 × laser holder

Turn sound into real understanding today



This kit enables a wide range of experiments to explore key concepts in acoustics

Students can observe and analyse the fundamental principles of acoustics, studying phenomena such as the propagation of sound waves, frequency, resonance and vibration. They explore how mechanical waves travel through air and interact with surrounding objects. The kit includes all the necessary equipment for a practical and engaging learning experience.

Cod. WCBSCSACT-N

Electrostatics

A complete kit designed to explore electrostatics in a simple and engaging way. Electric charges, attraction and repulsion take shape through clear and safe experiments. Each activity helps students understand how electric charges interact and distribute. Invisible phenomena become observable, controllable and intuitive.

Where attraction
and repulsion take shape

One manual for each kit

ScienceBus manuals guide you through every experiment, step by step. Inside, you will find theoretical explanations, detailed instructions and practical tips to support simple and engaging learning.

The manuals are not included, but obtaining them is easy: simply request them at the time of purchase by emailing info@waceboeurope.com

2 trays
1 small + 1 big

Experiences

- Charging phenomena (by friction, contact and induction)
- Electrostatic machine (Wimshurst machine)
- Electric field lines
- Faraday cage

Equipment

1 × electrostatic pendulum on base • 1 × insulating rod (plastic) • 1 × glass rod • 1 × ebonite / PVC rod • 1 × conducting sphere on insulating stand • 1 × pair of lightweight spheres for attraction and repulsion demonstrations • 1 × multifunction insulating stand • 1 × base plate for electrostatic experiments • 1 × transparent insulating sheet • 1 × thin metal sheet (aluminium) • 1 × set of small lightweight objects (confetti / insulating fragments) • 1 × cloth for charging by friction • 1 × Wimshurst electrostatic machine • 1 × educational electroscope • 1 × pair of connecting leads with terminals

The kit enables the study of electrostatic phenomena through simple and immediate experiments

Students explore the fundamental principles of electrostatics, including charge generation, attraction and repulsion, and charge distribution on materials. Through guided activities, the kit makes electrostatic phenomena clear and easy to understand.

Cod. WCBSCSELS-N

Biology

A complete kit designed to explore life, biological systems and living processes. Hands-on experiments make cells, structures and vital functions visible. Each activity encourages observation, analysis and scientific thinking. Biology comes to life through direct experience.

See life, explore systems
Understand everything

One manual for each kit

ScienceBus manuals guide you through every experiment, step by step. Inside, you will find theoretical explanations, detailed instructions and practical tips to support simple and engaging learning.

The manuals are not included, but obtaining them is easy: simply request them at the time of purchase by emailing info@waceboeurope.com

Experiences

- Comparing plant cells
- Plant DNA extraction
- Microscopic observation of invertebrate
- microorganisms
- Aliens under the microscope: tardigrades
- Comparing plant and animal cells
- Observation of the mitosis process

1 big tray

Equipment

1 × monocular biological microscope • 5 × microscope slides (smooth surface, ground edges, box of 50 pcs, 25.4 × 76.2 mm) • 5 × cover slips (box of 100 pcs, 20 × 20 mm) • 1 × prepared slides set – advanced biology (30 slides in plastic box) • 1 × prepared slides set – insect anatomy and zoology (30 slides in plastic box) • 1 × dissection set (8 pcs: straight needle, curved needle, scalpel handle, scalpel, straight scissors, curved scissors, straight tweezers, curved tweezers) • 2 × glass beakers (50 ml) • 2 × glass beakers (100 ml) • 1 × dropper • 1 × pair of transparent PVC gloves • 2 × filter papers (Ø 90 mm) • 1 × spatula (125 mm)

The kit enables a range of practical experiments in biological sciences

Students explore the fundamental principles of biology, studying cells, tissues and living organisms through observation and experimentation. The kit includes all the necessary equipment and a detailed practical manual, making the study of biology accessible and engaging.

Cod. XWCBSCSTRD-N

Alternative energy

A kit designed to explore how energy is generated and transformed from alternative sources. Mechanics, electricity and renewables come together through practical and engaging experiments. Each activity stimulates curiosity, experimentation and critical thinking. Energy becomes experience, understanding and awareness.

See energy, create it and understand

One manual for each kit

ScienceBus manuals guide you through every experiment, step by step. Inside, you will find theoretical explanations, detailed instructions and practical tips to support simple and engaging learning.

The manuals are not included, but obtaining them is easy: simply request them at the time of purchase by emailing info@waceboeurope.com

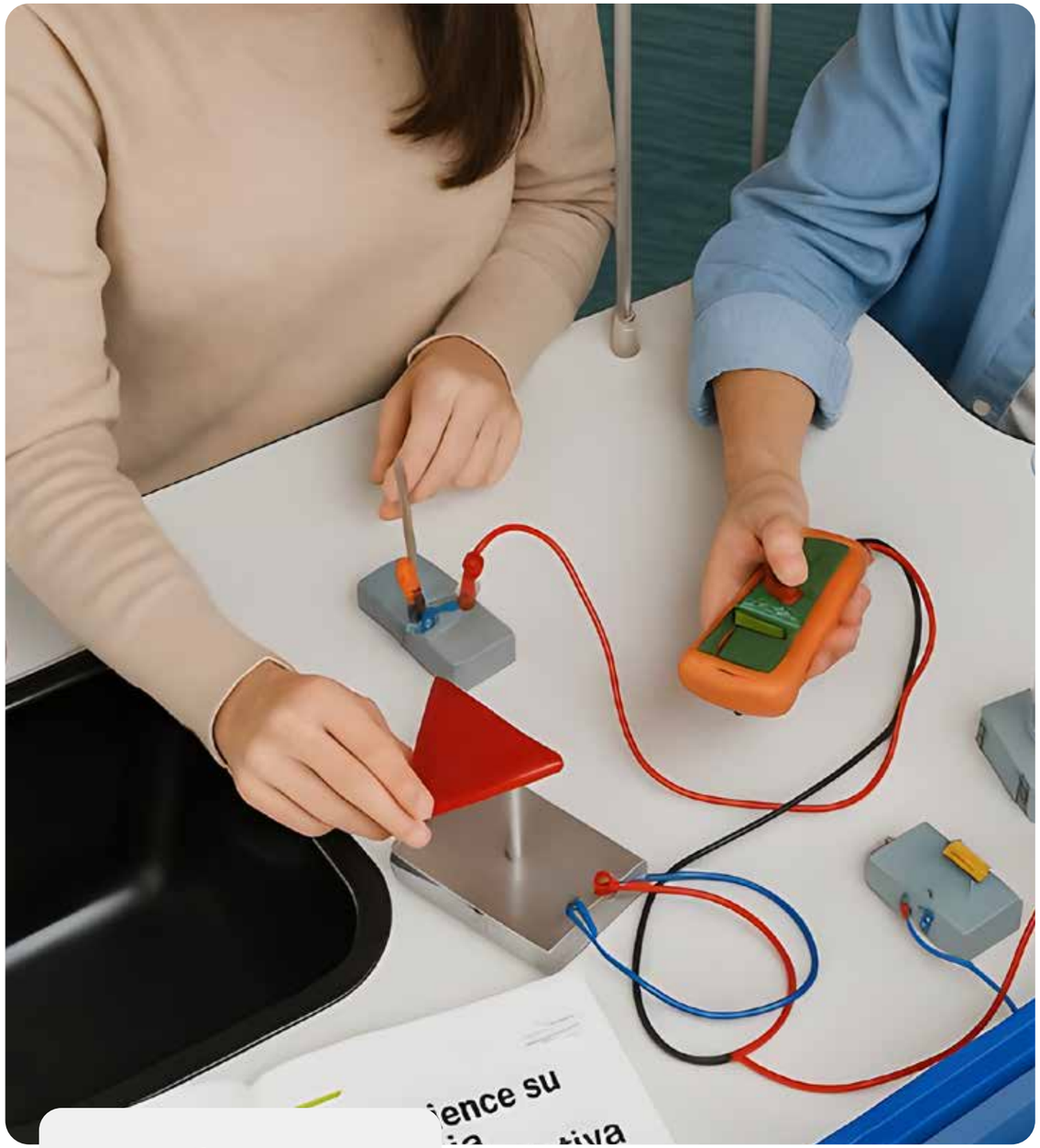
Experiences

- Fuel energy: how an internal combustion engine works
- Electric generator: production and consumption of electrical energy
- Electric propulsion: principles of electric mobility
- Energy recovery: regenerative braking in electric vehicles
- Wind generator: harnessing wind energy
- Hydroelectric generator: harnessing water energy
- Electro-pneumatic generator
- Photovoltaic generator: solar energy
- Photovoltaic system: capacity and energy efficiency
- Storage and use of alternative energy

2 trays
1 small + 1 big

Equipment

1 × spray bottle (for alcohol) • 1 × calorimeter with heating resistor • 1 × perforated plexiglass cylinder with sponge cap • 1 × piston–cylinder system with threaded ends (Diesel cycle) • 1 × base and threaded knob for piston–cylinder system (Diesel cycle) • 1 × hand-crank electric generator • 1 × electric car model • 5 × bulbs in protective container • 2 × spare rubber gaskets • 1 × gas lighter • 1 × cotton wool in protective container • 1 × twin-core cable with male–female connector • 2 × cables with banana connectors (L 25 cm) • 2 × cables with banana connectors (L 50 cm) • 2 × cables with banana connectors (L 75 cm) • 1 × adjustable inclined plane with protractor • 1 × lamp holder box • 1 × fan drive box with fan • 1 × box with dual solar panel • 1 × transparent box with turbine • 1 × charge storage box



The kit enables experiments to understand the importance of alternative energy

Students explore sustainable technologies and the principles behind clean energy generation. They analyse how direct current generators operate when powered by different sources, including mechanical drive, wind, hydrodynamic, pneumatic and solar energy. An excellent opportunity to understand how these technologies can contribute to a more sustainable energy future.

Cod.WCBSCSENA-N

Vacuum experiments

A complete kit designed to explore the behaviour of air and vacuum through engaging experiments. Atmospheric pressure becomes visible, measurable and easy to understand. Each activity stimulates curiosity, observation and scientific thinking.

Where the invisible becomes real

One manual for each kit

ScienceBus manuals guide you through every experiment, step by step. Inside, you will find theoretical explanations, detailed instructions and practical tips to support simple and engaging learning.

The manuals are not included, but obtaining them is easy: simply request them at the time of purchase by emailing info@waceboeurope.com

Experiences

- High-vacuum pump
- Magdeburg hemispheres
- Measuring pressure: the pressure gauge
- Relationship between force and pressure
- Effects of pressure differences
- Pressure and temperature: the pressure
- cooker
- Free-fall tube: effects of high vacuum
- Sound waves in a vacuum
- Boyle's Law
- The weight of air: experimental
- measurement

1 big tray

Equipment

1 × glass beaker (100 ml) • 1 × rubber gasket Ø52 mm • 1 × rubber gasket Ø135 mm • 1 × vacuum pump kit with 1000 ml chamber and lid with pressure gauge • 1 × sound-absorbing foam • 1 × short vacuum tube Ø50 mm / H 70 mm • 1 × Magdeburg hemispheres • 1 × syringe (80 ml) • 1 × plastic syringe cap • 1 × flexible rubber tube Ø4–6 mm / L 310 mm • 1 × plexiglass tube for high-vacuum free-fall experiments (H 350 mm) • 1 × pressure gauge with syringe connector • 1 × plastic clip • 1 × plastic connector for syringe • 1 × rubber balloon • 1 × fabric ball • 1 × plastic ball • 1 × metal ball • 1 × rubber ring Ø54 mm • 1 × plastic bag • 1 × feather • 1 × acoustic signal device (powered by 3 × LR44 batteries, not included)

The kit enables experiments for creating a high vacuum and exploring its practical applications

Students can observe how a vacuum is created, how it interacts with surrounding forces, and which technologies are used to harness it. A practical learning experience that enables the exploration of complex physical phenomena in a clear and direct way, providing all the necessary tools for experimental activities.

Cod. WCBSCSVCC-N

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