

## MOUNTED COMPONENTS

Range of Resistors, Capacitors, Switches, LED, Battery Holder, Sensors etc. Suitable for electrical circuit in class room. All components mounted on a clear acrylic base with symbols printed. Connections are had with 4mm sockets.



### Resistors

Cat No.	Resistor
3046-01	10Ω
3046-02	22Ω
3046-03	47Ω
3046-04	100Ω
3046-05	220Ω
3046-06	470Ω
3046-07	1KΩ
3046-08	2.2KΩ
3046-09	4.7KΩ
3046-10	10KΩ
3046-11	22KΩ
3046-12	47KΩ
3046-13	100KΩ
3046-14	220KΩ
3046-15	470KΩ
3046-16	1MΩ

### Capacitors

Cat No.	Capacitors
3046-38	0.1μf-200V
3046-39	1μf-63V
3046-40	2.2μf-63V
3046-41	4.7μf-63V
3046-42	10 μf-63V
3046-43	100μ-63V
3046-44	470μf-63V
3046-45	1000μf-25V
3046-46	2200μf-25V
3046-47	4700μf-25V

### Components

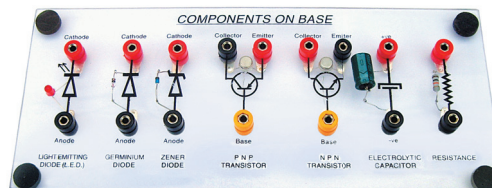
Cat No.	Components
3046-17	LDR
3046-18	Red LED
3046-19	Green LED
3046-20	Yellow LED
3046-21	Phototransistor
3046-22	Photodiode
3046-23	On/Off switch
3046-24	Magnetic reed switch
3046-25	SP C/O toggle
3046-26	SP press switch
3046-27	Buzzer
3046-28	Croc clip
3046-29	Diode
3046-30	MES lamp holder
3046-31	Thermistor, 5KΩ NTC
3046-32	D-cell holder
3046-33	C-cell holder
3046-34	Motor 3-6V
3046-35	Phototransistor
3046-36	Photodiode
3046-37	Reed relay

### Potentiometers

Cat No.	Potentiometers
3046-48	470Ω
3046-49	1KΩ
3046-50	5KΩ
3046-51	10KΩ
3046-52	50KΩ
3046-53	100KΩ
3046-54	500KΩ
3046-55	1mΩ

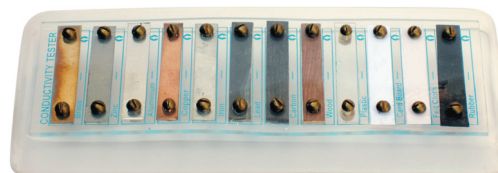
## MOUNTED COMPONENTS VARIOUS ON BASE

LED, Germanium Diode, Zener Diode, PNP Transistor, NPN Transistor, Capacitor and Resistance mounted on a single base. Connections are had with 4mm sockets.



3406-56

## CONDUCTIVITY SET



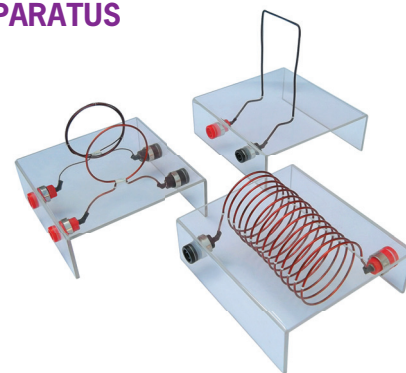
Consists of 12 conducting /non-conducting material strips, screwed on a plate with brass screw. Used for demonstrating electrical conduction properties of various material.

3408-00

## MAGNETIC FIELD APPARATUS

To determine magnetic field patterns around conductors using compass or iron filings. Consists of 3 units with distinct patterns:

- (1) Vertical wire field
- (2) Long solenoid of 15 turns
- (3) Twin coil



3108-61

## MAGNETIC FIELD DEMONSTRATION

It is designed to show magnetic field lines when used in conjunction with a magnet. Made of clear acrylic 225 X 150mm. The apparatus can also be used on an OHP.

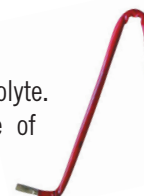


Supplied without the magnet.

3108-53

## ELECTRODE S-TYPE

May be hung from a beaker containing an electrolyte. The connections are with crocodile clip. Made of insulated brass and sold as a pair.



3151-50

**NEW  
PRODUCTS**

# NEW PRODUCTS

## EDSPOT GALVANOMETER

The movement enclosed in plastic case has a pre-twisted suspension with oil damping anti vibration stops. It is over-load protected. Read out is given by a bright circle of light on a 180mm scale marked 0-18 and 9-0-9 for left hand or centre zero operation.

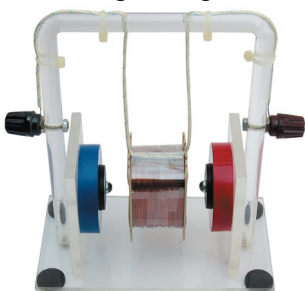


3027-11

## FLEMMING'S RIGHT HAND RULE

Also known as the Generator Rule. This is a way of determining the direction of the induced emf of a conductor moving in a magnetic field.

The apparatus consists of a rectangular coil made of insulated copper wire wound on a bobbin. This assembly is suspended between the pole pieces of two circular magnets. The ends of the coil are used for connection to the galvanometer.

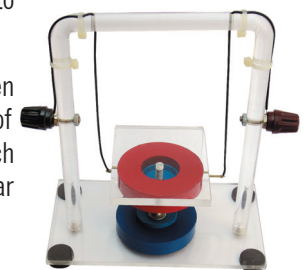


3061-11

## FLEMMING'S LEFT HAND RULE

When a wire carrying an electric current is moved in a magnetic field of a magnet, the magnetic field induced by the wire reacts with the magnetic field of the magnet causing the wire to move outwards. Fleming's left hand rule helps you to predict the movement.

A brass bar is suspended between two circular magnets by means of connecting wires through which current is passed. Mounted on a clear acrylic stand



3061-12

## LOW VOLTAGE POWER SUPPLY

A low voltage, unregulated, general purpose power supply, A.C./D.C.

Switched output voltage 2 to 12 volts in steps of 2 volts.

- Max current 4 Amps
- Overload protected.
- Housed in a robust case

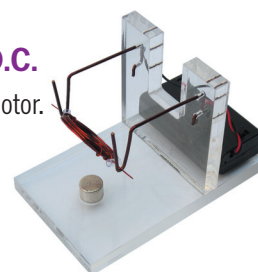


3052-00

## MOTOR DEMONSTRATION D.C.

To demonstrate the principle of a D.C. motor. Uses 2 "AA" batteries (not included)

3167-02



## WATER TURBINE APPARATUS

Operational model which by means of water (or Air jet) is capable of producing electricity to light a LED.

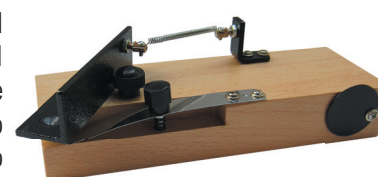
3572-60



## FALLING BODIES

To show that a body impelled horizontally will fall vertically at the same rate as a similar body allowed to fall freely. Supplied with two solid balls, 19mm in dia.

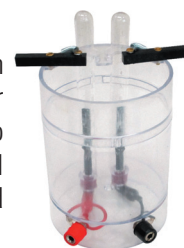
3557-05



## GAS VOLTAMETER

Consists of a plastic container fitted with carbon electrodes and 4mm sockets for connection. The electrodes are designed to support the gas collecting tubes leading all evolved gas in the collecting tubes. Intended for individual student use.

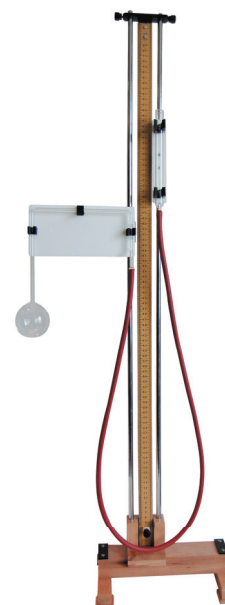
3155-20



## CHARLES LAW (CONSTANT VOLUME THERMOMETER)

This apparatus is useful in performing the standard experiments relating to gas temperature & pressure. Consist of a Jolly bulb mounted on a stand as shown. Supplied without mercury

3548-23



# NEW PRODUCTS

NEW  
PRODUCTS

## PULLEY BENCH CLAMP

For clamping to bench top or boards up-to 25mm thickness. Consists of a 37mm aluminum pulley with V-groove.

3465-11



## OPISOMETER (MAP MEASURE)

For measuring the length of curved lines. Comprises of a knurled wheel, 12.5mm diameter, with index mark. Overall length 100mm. Made of brass.

3433-21



## STEAM GENERATOR- COPPER

Cylindrical copper vessel capacity 1.5 liters with riffled side tube and water gauge.

3252-11



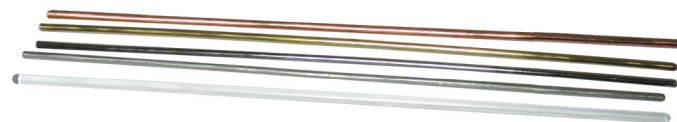
## RIVETS

For specific heat capacity experiments. In form of rivets and sold in pack of 500g

Metal	Aluminum	Brass	Copper	Iron	Lead (Pellets)
Cat No.	3215-01	3215-02	3215-03	3215-04	3215-05



## CONDUCTIVITY ROD SET



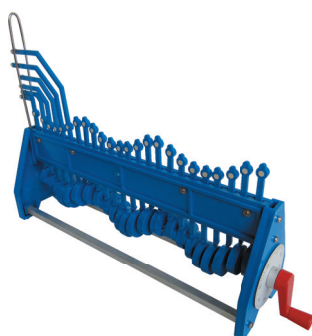
For demonstration of heat conduction. Set of 5 rods, copper, brass, aluminum, steel & glass. Size 250 X 3mm

3216-00

## WAVE DEMONSTRATION

Used for demonstrating longitudinal and transverse oscillation. A 360° scale is mounted by the turning handle so that the phase angle can be read.

3640-53



## YOUNG'S SLIT

For measurement of wave length of light by observing fringes produced by the interference between the two beams of light from a common source. Photographically re-produced double slit 10mm long and 1mm separation. Mounted between two glass plates 50 X 50mm.

4309-20



## SPECTRUM TUBE STAND

A simple apparatus to hold & clamp securely a spectrum tube. The height of the clamp can be adjusted as per the length of the spectral tube. External power source required.

3376-81



## ADJUSTABLE SLIT ON STAND

Symmetrically adjustable slit from 0-6mm by means of knurled screw. Length of slit 30mm and screen diameter 120mm. Supplied with a universal stand

3315-53



## SEMI CIRCULAR MIRROR METAL

A curved SS sheet, polished both sides and can act like a convex and / or a concave mirror. Size 150 x 25mm

3364-03



## MAGNIFIER FOLDING, TRIPLE LENS MODEL

Comprised of three convex lenses, each of which is mounted individually in black plastic rings of diameter approximately 30mm. Magnification is 15X when all lenses are used. The lenses fold compactly in a black plastic frame.

1017-03





**NEW  
PRODUCTS**

# NEW PRODUCTS

## DIAL TYPE HUMIDITY TEMPERATURE INDICATOR (HYGROMETER)

The 100mm dia. thermo-hygrometer lets you read the temperature and humidity indoor. Reading 20°C to 50°C and 0-100%.

3051-40



## INOCULATING LOOP

The wire at the tip is made of Nichrome and forms a small loop with a diameter of about 5mm. The inoculation loop is sterilized in fire until it becomes hot before and after each use. By doing this, the same tool can be reused in different experiments without fear of cross-contamination.

2032-10

## THERMOMETER HOLDER

This can rotate 360° and lock in position at any angle. The length of the clamp is adjustable

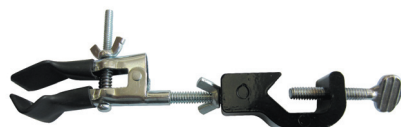
2032-15



## BURET CLAMP

The plastic-covered jaws of this Buret Clamp open up to 35 mm, rotate 360° and lock in position at any angle. Fits rods up to 16 mm in diameter. The length of the clamp is adjustable

2032-19



## COTTON ROLL

Roll of 500g  
(Minimum order quantity applies)



Type	Cat No.
Absorbent	6400-01
Non Absorbent	6400-02

## DISH TONG

They can be used to hold or pick up many items, but work best as tongs for picking up a hot evaporating dish up to dia. 125mm

2024-40



## SPOTTING PLATE

With 12 numbered depressions. Made of clear plastic and handle.

2200-02



## TRIANGULAR FILE



Size	Cat No.
100mm	6315-01
150mm	6315-02

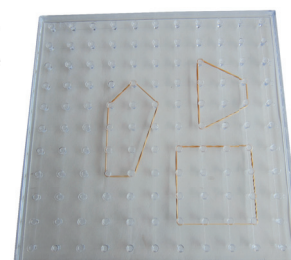
## GEOBOARD

A transparent geoboard, used to explore basic concepts in plane geometry like shapes, designs.

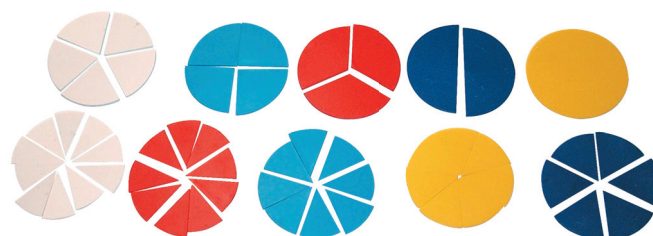
With 11 x 11 peg grid (total 121 pins). Can be used with an OHP. Supplied with 10 rubber bands.

Size: 23 x 23cm.

M100-02



## FRACTION CIRCLE SET



Non-magnetic fraction disk, 14cm dia. Fraction from 1/1 upto 1/10. Packed in plastic container.

M100-04