

Rapid

e d u c a t i o n

SCIENCE



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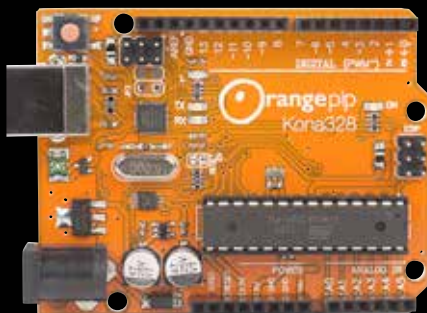


GIVES A ZEST FOR LEARNING!

WHAT IS ORANGEPIP?

See your projects grow with Orangepip – a distinctive range of open source boards which offer a colourful introduction to coding and prototyping. Based on the ATmega328 and ATmega2560 microcontrollers, the Orangepip boards are fully compatible with Arduino shields, sensors, accessories and software – giving users access to the global Arduino community of makers and projects.

The boards themselves are rich with features, including 16MHz oscillator, ATmega16u2 for serial conversion, 14 digital GPIO I/O pins (Kona328) and 54 I/O pins (Mega2560), quick reset buttons and machine screw holes. The high performance ATmega 8-bit AVR RISC-based microcontrollers give Orangepip users enough power and memory to store and run multiple lines of complex code.



Kona328

The Orangepip Kona328 is an Arduino UNO compatible development board that is based around the ATmega328 microcontroller. The board features 14x digital I/O pins (six of which may be used as PWM outputs), 6 analog inputs and a 16MHz crystal oscillator. The board is simple to use, just requiring connection to a computer via USB to get started.

Only
£11.95
Order code 75-0550
Individually

Only
£8.58
per board when
bought in a classpack
Almost half the price
of an Arduino Uno!

Only
£128.72
Order code 75-0592
Class Pack of 15

Mega2560

The Orangepip Mega2560 is an Arduino Mega2560 compatible development board that is based around the ATmega2560 microcontroller. The board features 54x digital I/O pins (14 of which may be used as PWM outputs), 16 analog inputs, 4x UARTs (hardware serial ports) and a 16MHz crystal oscillator. The board is simple to use, just requiring connection to a computer via USB to get started. The Orangepip Mega2560 is also compatible with shields designed for the Arduino Mega2560.

Only
£21.61
Order code 75-0551
Individually

Only
£195.86
Order code 75-0593
Class Pack of 10



What is Arduino?

Arduino is an open-source single board microcontroller platform. The boards are preassembled and the software can be downloaded for free. It makes using microcontrollers much easier by mapping the inputs/outputs and breaking them out to defined headers.

Who is it for?

It is intended for artists, designers, hobbyists, and anyone interested in creating interactive projects. The amazing community support on the Arduino forum means it's suitable for new and advanced users alike.

What can it be used for?

The Arduino can essentially act as the brain of your project. Use sensors to feed data into the Arduino's inputs and the outputs to trigger the required outcome. You could use a temperature sensor to monitor the temperature and have the Arduino activate an output such as a fan when the desired temperature has been reached.

How do I start?

The official Arduino Starter Kit (**73-4642**) is an ideal place to start. It contains a book with lessons to follow to teach you the basics. If you prefer to go your own way, why not grab the most popular board, the Uno (**73-4440**) and hit the Arduino forum and find something that inspires you!

Starter Kit including Uno Board

This starter kit serves as a hands-on introduction to the basics of the Arduino system. Using the accompanying 170-page project book and the comprehensive kit contents, you will learn to build useful, creative projects. Beginning with the basics of electronics and progressing to more complex projects, the kit will enable control of the physical world through sensors and actuators.

The projects that are covered in this kit, using the accompanying book, are:

- ☐ **Get to know your tools** - an introduction to the concepts you'll need to use this kit
- ☐ **Spaceship interface** - design a control panel for your spaceship
- ☐ **Love-o-meter** - measure how hot-blooded you are
- ☐ **Colour mixing lamp** - produce any colour with a lamp that uses light as an input
- ☐ **Mood cue** - clue people in to how you're feeling
- ☐ **Light theremin** - create a musical instrument you play by waving your hands
- ☐ **Keyboard instrument** - play music and make some noise with this keyboard
- ☐ **Digital hourglass** - a light-up hourglass that can stop you from working too much
- ☐ **Motorized pinwheel** - a colour wheel that will have your head spinning
- ☐ **Zoetrope** - create a mechanical animation you can play forward or reverse
- ☐ **Crystal ball** - a mystical tour to answer all of your tough questions
- ☐ **Knock lock** - tap out the secret code to open the door
- ☐ **Touchy-feel lamp** - a lamp that responds to your touch
- ☐ **Tweak the arduino logo** - control your personal computer from your arduino
- ☐ **Hacking buttons** - create a master control for all your devices!



Order code
73-4642
£59.16

Arduino shields, boards, Arduino Leonardo, Nano, Duo & Mega microcontrollers all available online

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N New lines added to existing range

SCIENCE BUNDLES

SAVE UP TO 30% OFF LIST PRICE
ON CLASS PACK BUNDLES

ALL NEW
PRODUCTS



Rapid

Thermal Energy Bundle

This money-saving thermal energy bundle provides a convenient way to buy four pieces of popular heat related apparatus.

Bundle contains one each of:

- Conductivity apparatus, with strips of iron, copper, aluminium and brass (order code 06-6008)
- Conductivity rods: 1 each of iron, copper, aluminium, lead, brass & zinc (order code 52-3352)
- Ball & ring apparatus: When the ball is heated, it expands and no longer fits through the ring (52-3445)
- Bimetallic strip demonstration: Strip bends when heated (52-3311)

Order code **78-7214**
Thermal energy bundle **£14.95**

Separately
£19.60



Rapid

Metal Block Calorimeter Bundle

This money-saving calorimeter bundle provides a convenient way to buy four metal block calorimeters, made from different metals, for specific heat capacity comparison experiments.

Each cylindrical block has a mass of 1kg adjusted to an accuracy of 2%. The blocks are drilled with two holes: a larger 12.5mm central hole for a heater and a smaller hole, 7.5mm in diameter, for a thermometer or temperature sensor.

Bundle contains one each of:

- Aluminium block calorimeter
- Brass block calorimeter
- Copper block calorimeter
- Steel block calorimeter

Order code **78-7207**
Calorimeter bundle **£54.62**

Separately
£78.03

Rapid

Biology Models Bundle - Teeth, Eye & Brain

This money-saving biology model bundle provides a convenient way to buy three popular anatomical models.

Bundle contains one each of:

- Teeth model, 530 x 170 x 70mm (order code 52-3503)
- Eye model: 120 x 120 x 170mm (order code 52-3381)
- Brain model: 190 x 150 x 150mm (order code 52-3506)



Order code **78-7212**
Teeth, eye & brain set

£63.90

Separately
£74.88

Rapid

Biology Organs Model Bundle Lungs, Heart & Kidney

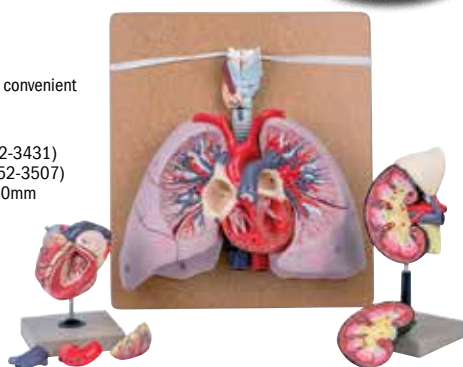
This money-saving biology model bundle provides a convenient way to buy three popular organ models.

Bundle contains one each of:

- Lungs model, 460 x 400 x 130mm (order code 52-3431)
- Heart model: Separates into 7 parts (order code 52-3507)
- Kidney and adrenal gland model: 120 x 120 x 280mm (order code 52-3390)

Order code **78-7213**
Lungs, heart & kidney set

£86.42



Separately
£123.46

Laboratory Retort Stand Set

This laboratory retort stand set from Eisco is made from high quality materials for a long service life and is an essential piece equipment for all science labs in schools, factories and research units.

The set consists of a heavy 200 x 125mm retort stand base, 600mm stainless steel rod, 75mm retort ring and 3-prong clamp. It is suitable for holding and supporting a wide variety of laboratory equipment used in physics and chemistry, including filtration, measurement, chemical experiments, etc.

Stand set includes:

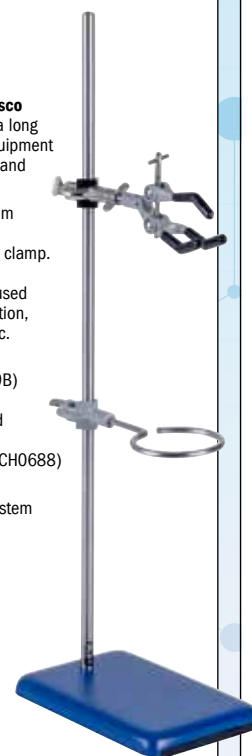
- Base 200 x 125mm, 1200g (CH0649B)
- Rod 600mm (CH0657B)
- Retort ring 75mm O.D. with boss-head (CH0627B)
- Clamp - three prong with boss-head (CH0688)

Retort ring:

- Plated mild steel with 8mm diameter stem
- Fitted boss-head with thumb-screw to accept rods from 8mm to 12.5mm dia.
- Distance from centre of support to centre of ring: 140mm
- ID of ring 75mm

Clamp:

- 3-prong universal retort clamp with built-in boss-head
- 210mm overall length
- Jaws open up to 90mm wide
- Distance from centre of support to centre of jaws (reach): 155mm
- Reach adjustable with thumbscrew
- Commonly used to hold irregularly shaped items
- Provides a firm grip to most commonly used glassware items in the lab



Order code **52-3705**
Retort stand set

£10.99





MAKERSPACE TROLLEY

Only
£445.00
Order code 14-0481

**"Ideal for
the Science
Lab too"**



PLEASE NOTE THE TROLLEY IS SUPPLIED EMPTY
Contact us for a fully loaded trolley equipped to your
specification – education@rapidonline.com.

The Gratnells MakerSpace trolley is perfect for classroom storage of tools and components used in many STEM and STEAM projects. The trolley holds standard Gratnells trays on StopSafe runners allowing easy and safe access to components and the tool hangers can be moved and changed to suit many objects.

- Robust steel frame and heavy duty lockable castors
- Side and back panels with industry standard holes and slots for wide range of accessories
- 3 deep (F2) trays
- 12 shallow (F1) trays
- 12 green mini bins
- 1 roll holder
- 5 single hooks and 5 double hooks
- Suitable for loads up to 85Kg

Tools and components not included



Class A v Class B

and other useful things to know ...

CLASS A

- ☐ Usually made from borosilicate glass
- ☐ Superior thermal and chemical resistance
- ☐ Accuracy retained over a longer period in comparison to Class B glassware
- ☐ Better accuracy compared to Class B

Beakers are simple cylindrical shaped containers used to hold reagents or samples.



Bottles are containers with narrow openings generally used to store reagents or samples. Small bottles are called vials.



Bell jars are used to contain vacuums.



Desiccators of glass construction are used to dry materials or keep material dry.



Glass Petri dishes are used to culture living cells.



Flasks are narrow-necked glass containers, typically conical or spherical, used in a laboratory to hold reagents or samples. Example flasks include the Erlenmeyer flask, Florence flask and Schlenk flask.



Jars are cylindrical containers with wide openings that may be sealed.



Test tubes are used by chemists to hold, mix, or heat small quantities of solid or liquid chemicals, specially for qualitative experiments and assays.



Glass evaporating dishes such as watch glasses are primarily used as an evaporating surface (though they may be used to cover a beaker).



Microscope slides are thin strips used to hold items under a microscope.



CLASS B

- ☐ Usually made from soda lime glass
- ☐ Not suitable for long term use with chemicals
- ☐ General purpose glassware with the same basic design as Class A
- ☐ Higher volumetric tolerances

EXAMPLES OF GLASSWARE USED FOR MEASUREMENTS INCLUDE:

Graduated cylinders are cylindrical containers used for volumetric measurements.



Volumetric flasks are for measuring a specific volume of fluid.



Burettes are used to disperse precise amounts of liquid reagents.



Glass pipettes are used to transfer precise quantities of fluids.



ACADEMY
Science Products

SIMAX® **LAB GLASS**®

KIMBLE CHASE



Low Form Beaker



Low Form Heavy Wall Beaker



Tall Form Beaker

Low Form Beakers

Academy				
Capacity	Order code	Unit Price	Pack Size	Price
5ml				
10ml				
25ml	N 52-1088	£0.43	12	£5.14
50ml	52-0949	£0.59	12	£7.13
100ml	52-0951	£0.60	12	£7.25
150ml				
250ml	52-0953	£0.69	12	£8.33
400ml				
500ml				
600ml	52-0955	£1.12	6	£6.71
800ml				
1000ml	52-0959	£1.47	6	£8.81
2000ml	N 52-1089	£4.57	4	£18.29
3000ml				
5000ml	N 52-1091	£15.90	1	£15.90
10,000ml				

ALL NEW PRODUCTS

LabGlass			
Order code	Unit Price	Pack Size	Price
52-4044	£0.85	10	£8.45
52-4034	£0.78	12	£9.35
52-4038	£0.82	12	£9.86
52-4043	£0.96	12	£11.49
52-4033	£1.02	12	£12.25
52-4035	£1.03	12	£12.35
52-4037	£1.09	12	£13.09
52-4040	£1.28	6	£7.65
52-4042	£1.64	6	£9.84
52-4045	£1.98	6	£11.85
52-4046	£2.36	6	£14.15
52-4032	£2.44	6	£14.65
52-4036	£4.85	1	£4.85
52-4039	£13.95	1	£13.95
52-4041	£21.45	1	£21.45
52-4031	£59.99	1	£59.99

Simax			
Order code	Unit Price	Pack Size	Price

Kimble Chase			
Order code	Unit Price	Pack Size	Price

52-0202	£0.99	10	£9.92
52-0204	£1.03	10	£10.33
52-0206	£1.07	10	£10.73
52-0208	£1.48	10	£14.80
52-0210	£1.77	10	£17.73
52-0212	£2.60	10	£25.95

52-2264	£3.01	12	£36.15
52-2265	£3.29	12	£39.45
52-2266	£3.59	12	£43.12
52-2267	£4.29	12	£51.42
52-2268	£5.46	6	£32.78
52-2269	£9.48	6	£56.88

Low Form Heavy Wall Beakers

Academy				
Capacity	Order code	Unit Price	Pack Size	Price
150ml	52-1063	£1.67	12	£19.99
250ml	52-1065	£2.00	12	£23.99
400ml	52-1067	£2.28	12	£27.36
600ml	52-1069	£3.81	6	£22.85
1000ml	52-1071	£4.81	6	£28.84
2000ml	52-1073	£6.93	4	£27.70

Kimble Chase			
Order code	Unit Price	Pack Size	Price
52-1896	4.75	1	£4.75
52-1898	6.92	1	£6.92

Tall Form Beakers

Academy				
Capacity	Order code	Unit Price	Pack Size	Price
25ml				
50ml	52-2242	£0.59	12	£7.13
100ml	52-2243	£0.68	12	£8.10
150ml	52-2244	£0.73	12	£8.75
250ml	52-2245	£0.97	12	£11.66
400ml	52-2246	£1.23	12	£14.74
500ml				
600ml	52-2247	£1.65	6	£9.88
800ml	52-2248	£2.11	6	£12.64
1000ml	52-2249	£2.39	6	£14.34
2000ml	52-2250	£7.25	4	£29.00
3000ml	52-2251	£10.72	1	£10.72

ALL NEW PRODUCTS

LabGlass			
Order code	Unit Price	Pack Size	Price
52-4051	£0.81	12	£9.74
52-4054	£1.03	12	£12.35
52-4048	£1.12	12	£13.45
52-4049	£1.27	12	£15.22
52-4050	£1.33	12	£15.98
52-4052	£1.54	6	£9.21
52-4053	£1.87	6	£11.22
52-4055	£2.04	6	£12.24
52-4047	£3.04	6	£18.22



Conical Flasks – Narrow Neck

ACADEMY



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Capacity	Academy				ALL NEW PRODUCTS LabGlass				Simax			
	Order code	Unit Price	Pack Size	Price	Order code	Unit Price	Pack Size	Price	Order code	Unit Price	Pack Size	Price
10ml					52-4155	£1.04	12	£12.42				
25ml					52-4158	£1.07	12	£12.78				
50ml					52-4162	£1.07	12	£12.78	N 52-1189	£2.58	10	£25.80
100ml	52-0969	£0.75	24	£17.92	52-4154	£1.05	12	£12.64	52-0214	£1.07	10	£10.73
250ml	52-0971	£0.97	6	£5.81	52-4157	£1.23	12	£14.74	52-0216	£1.25	10	£12.53
500ml	52-0973	£1.74	6	£10.42	52-4161	£1.91	6	£11.46	N 52-1191	£1.96	10	£19.58
1000ml	N 52-1075	£2.97	6	£17.79	52-4153	£3.22	6	£19.29	N 52-1193	£3.25	10	£32.48
2000ml	N 52-1077	£9.15	1	£9.15	52-4156	£9.56	1	£9.56	N 52-1201	£9.66	6	£57.99
3000ml					52-4159	£15.87	1	£15.87				
5000ml					52-4160	£24.66	1	£24.66				



Conical Flasks – Wide Neck

Capacity	ALL NEW PRODUCTS Simax			
	Order code	Unit Price	Pack Size	Price
25ml	52-1246	£3.89	10	£38.85
50ml	52-1247	£6.55	10	£65.45
100ml	52-1248	£1.43	10	£14.29
250ml	52-1249	£1.59	10	£15.85
300ml	52-1250	£2.99	10	£29.85
500ml	52-1251	£2.29	10	£22.85
1000ml	52-1252	£6.42	10	£64.19
2000ml	52-1253	£10.98	6	£65.90

SIMAX®



NEW LINES ADDED

Volumetric Flask Class B

Capacity	ALL NEW PRODUCTS LabGlass				Glassco			
	Order code	Unit Price	Pack Size	Price	Order code	Unit Price	Pack Size	Price
10ml 10/19	52-4180	£1.45	2	£2.90				
20ml 10/19	52-4182	£1.28	10	£12.78				
25ml 10/19	52-4184	£1.85	2	£3.70				
50ml 12/21	52-4186	£2.15	2	£4.29				
100ml 14/23	52-4179	£2.11	2	£4.21	52-0998	£3.46	2	£6.92
200ml 14/23	52-4181	£2.83	2	£5.66				
250ml 14/23	52-4183	£3.19	2	£6.38	52-0999	£4.64	2	£9.27
500ml 19/26	52-4185	£3.92	2	£7.83	N 52-1455	£6.34	2	£12.68
1000ml 24/29	52-4178	£5.37	2	£10.73	N 52-1457	£10.73	2	£21.45



LabGlass Volumetric Flasks with Stopper Class A

Volumetric flasks from LabGlass fitted with a chemical resistant polypropylene stopper.

- Available in a range of sizes
- Made from borosilicate glass with one graduation mark
- Blue graduation
- Conforms to DIN ISO 1042 standard

Capacity	ALL NEW PRODUCTS LabGlass				
	Order code	Unit price	Pack size	Socket size	Price
5ml	52-4177	£1.59	2	10/19	£3.18
10ml	52-4171	£1.59	2	10/19	£3.18
25ml	52-4174	£1.74	2	10/19	£3.48
50ml	52-4176	£1.96	2	12/21	£3.92
100ml	52-4170	£2.25	2	14/23	£4.50
250ml	52-4173	£3.48	2	14/23	£6.96
500ml	52-4175	£4.45	2	19/26	£8.89
1000ml	52-4169	£6.18	2	24/29	£12.36
2000ml	52-4172	£11.11	1	29/32	£11.11



Round Bottom Boiling Flasks, Narrow Neck

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LAB

LAB
CLASS

SIMAX

Capacity	Academy				LabGlass				Simax			
	Order code	Unit Price	Pack Size	Price	Order code	Unit Price	Pack Size	Price	Order code	Unit Price	Pack Size	Price
25ml					52-4146	£1.19	12	£14.26				
50ml	52-2252	£1.05	12	£12.56	52-4148	£1.49	12	£17.87	52-1990	£3.92	10	£39.15
100ml	52-2253	£1.20	12	£14.45	52-4143	£2.40	12	£28.76	52-1991	£7.91	10	£79.11
150ml					52-4144	£2.50	12	£29.99				
250ml	52-2254	£2.96	12	£35.52	52-4145	£3.34	12	£40.06	52-1992	£5.75	10	£57.51
500ml	52-2255	£4.29	8	£34.32	52-4147	£4.35	6	£26.10	52-1993	£6.97	10	£69.66
1000ml	52-2256	£5.62	6	£33.72	52-4142	£6.05	6	£36.27	52-1994	£9.44	10	£94.37



Round Bottom Boiling Flasks, Wide Neck

LAB
CLASS

Capacity	LabGlass			
	Order code	Unit Price	Pack Size	Price
25ml	52-4149	£1.65	12	£19.76
50ml	52-4150	£2.16	12	£25.96
100ml	52-4151	£2.70	12	£32.36
150ml	52-4152	£4.96	12	£29.78


ALL NEW PRODUCTS

Boiling Flasks, Flat Bottom Narrow Neck

ACADEMY
LAB

LAB
CLASS

SIMAX

Capacity	Academy				LabGlass				Simax			
	Order code	Unit Price	Pack Size	Price	Order code	Unit Price	Pack Size	Price	Order code	Unit Price	Pack Size	Price
25ml					52-4134	£1.05	12	£12.61				
50ml	52-2257	£1.19	12	£14.32	52-4136	£1.27	12	£15.24	52-1995	3.51	10	£35.10
100ml	52-2258	£1.25	12	£14.95	52-4131	£1.40	12	£16.84	52-1996	1.54	10	£15.39
150ml					52-4132	£1.71	12	£18.92				
250ml	52-2259	£1.63	12	£19.56	52-4133	£1.77	12	£21.32	52-1997	6.26	10	£62.64
500ml	52-2260	£2.33	12	£27.94	52-4135	£2.56	6	£15.36	52-1998	2.70	10	£27.70
1000ml	52-2261	£3.72	6	£22.32	52-4130	£6.42	6	£38.52	52-1999	12.46	10	£124.61



Boiling Flasks, Flat Bottom Wide Neck

Capacity	Academy			
	Order code	Unit Price	Pack Size	Price
50ml	52-4141	£1.26	12	£15.10
100ml	52-4138	£1.66	12	£19.89
250ml	52-4139	£2.89	12	£34.64
500ml	52-4140	£4.59	6	£27.53
1000ml	52-4137	£7.03	6	£42.19

ACADEMY
LAB


Round Bottom Flasks



Round Bottom Flasks with Two Necks

Round bottomed **borosilicate glass** flasks from **Glasco** with **two necks** - one jointed in the centre and one angled at the side. Ideal for use in a range of laboratory applications.

- Available in a range of sizes



Capacity	Centre socket	Side socket	Order code	Price
100ml	14/23	14/23	52-1545	£8.78
100ml	24/29	14/23	52-1547	£10.76
100ml	24/29	19/26	52-1549	£12.20
250ml	24/29	14/23	52-1551	£9.53
250ml	24/29	19/26	52-1553	£10.23
500ml	24/29	14/23	52-1555	£10.54
500ml	24/29	19/26	52-1557	£11.92
1000ml	24/29	14/23	52-1559	£12.57
1000ml	24/29	19/26	52-1561	£22.57



Round Bottom Flasks with Three Necks

Round bottomed **borosilicate glass** flasks from **Glasco** with **three jointed necks** - one in the centre and two angled at the side. Ideal for use in a range of laboratory applications.

- Available in a range of sizes



Capacity	Centre socket	Side socket	Order code	Price
100ml	19/26	14/23	52-1563	£13.41
100ml	24/29	14/23	52-1565	£13.41
100ml	24/29	19/26	52-1567	£15.30
250ml	19/26	14/23	52-1569	£13.41
250ml	19/26	19/26	52-1571	£16.62
250ml	24/29	14/23	52-1573	£16.62
250ml	24/29	19/26	52-1575	£16.62
500ml	24/29	14/23	52-1577	£14.05
500ml	24/29	19/26	52-1579	£17.25
500ml	29/32	14/23	52-1581	£15.53
1000ml	24/29	19/26	52-1583	£23.15
1000ml	24/29	19/26	52-1585	£23.44
1000ml	34/35	19/26	52-1587	£25.73
2000ml	24/29	19/26	52-1589	£35.87
2000ml	343/35	19/26	52-1591	£37.42



We bring STEM to life

Flat Bottom Flasks



Wide Neck Flat Bottom Flasks

These **flat-bottomed** flasks from **Simax** have a **wide neck** with a rim and are suitable for use in a range of laboratory applications.

- Made from borosilicate glass
- Meets ISO 24450 standard
- Available in range of sizes
- Supplied in **packs of 10**



Capacity	Overall dia.	Neck dia.	Height	Order code	Price
50ml	51mm	34mm	100mm	52-2001	£55.76
100ml	64mm	34mm	110mm	52-2003	£83.97
250ml	85mm	50mm	140mm	52-2005	£67.91
500ml	105mm	50mm	170mm	52-2007	£80.33
1000ml	131mm	50mm	200mm	52-2009	£104.09



Pear Shape Single Neck Flasks

Pear-shaped **flasks** from **Glasco** with a **single neck** suitable for use in a number of laboratory applications.

- Made from borosilicate glass
- Available in a choice of sizes
- Supplied in **packs of 10**



Capacity	Socket size	Height	Diameter	Order code	Price
50ml	14/23	115mm	50mm	52-1803	£36.18
50ml	19/26	130mm	50mm	52-1805	£83.30
100ml	14/23	135mm	60mm	52-1809	£36.99
100ml	19/26	140mm	60mm	52-1827	£205.74

ALL NEW PRODUCTS

Filtering Flasks



Conical Filtering Flasks with Plastic Screw and Integral Side Arm

These conical **filtering flasks** from **LabGlass** have an integral **plastic screw thread** side arm.

- Available in a choice of sizes
- Made from borosilicate glass

Capacity	Order code	Price
250ml	52-4167	£6.12
500ml	52-4168	£8.49
1000ml	52-4166	£9.47



Distilling Flasks



Round Bottom Distilling Flasks with Side Arm

These **distilling flasks** from **LabGlass** have a **round bottom** and a side arm.

- Available in a choice of sizes
- Made from borosilicate glass

Capacity	Diameter	Height	Arm length	Order code	Price
100ml	64mm	215mm	100mm	52-4163	£3.04
250ml	250mm	225mm	125mm	52-4164	£3.78
500ml	105mm	240mm	140mm	52-4165	£4.99



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Cylinders

Round Base Cylinder Class B

ACADEMY

Capacity	Academy			
	Order code	Unit Price	Pack Size	Price
10ml	52-1431	£0.96	1	£0.96
25ml	52-1433	£1.06	1	£1.06
50ml	52-1435	£1.16	1	£1.16
100ml	52-1437	£1.51	1	£1.51
250ml	52-1439	£2.51	1	£2.51
500ml				
1000ml				

ALL NEW PRODUCTS			
LabGlass			
Order code	Unit Price	Pack Size	Price
52-4122	£0.95	10	£9.47
52-4125	£1.10	2	£2.19
52-4127	£1.26	2	£2.52
52-4121	£1.56	2	£3.12
52-4124	£2.44	2	£4.87
52-4126	£4.00	2	£7.99
52-4123	£5.70	2	£11.40

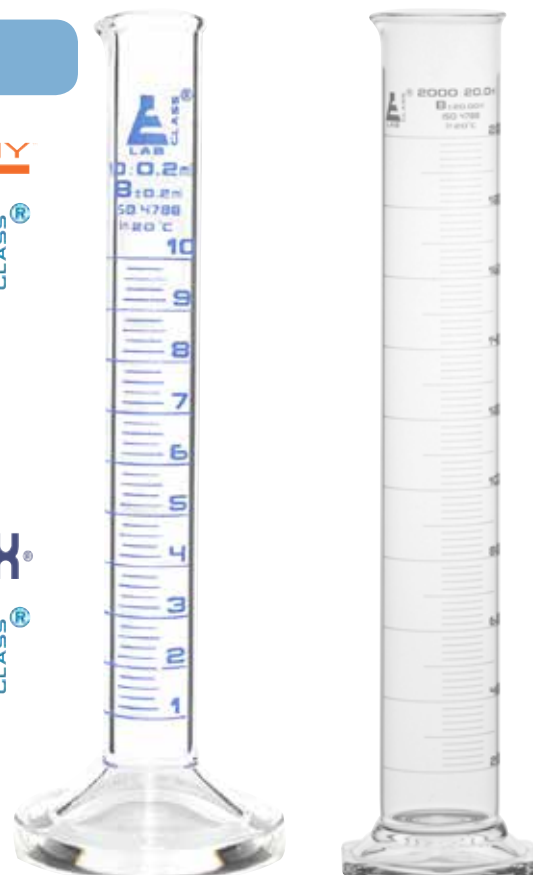


Hexagonal Base Cylinder Class B

SIMAX

ALL NEW PRODUCTS				
LabGlass				
Capacity	Order code	Unit Price	Pack Size	Price
5ml	52-4116	£1.22	2	£2.44
10ml	52-4117	£1.33	2	£2.65
25ml	52-4120	£2.34	2	£4.68
50ml	52-4115	£2.86	2	£5.71
100ml	52-4114	£2.95	2	£5.89
250ml	52-4119	£4.47	2	£8.93
500ml	52-4113	£6.72	2	£13.44
2000ml	52-4118	£17.15	1	£17.15

Simax			
Order code	Unit Price	Pack Size	Price
52-0192	£3.88	1	£3.88
52-0196	£3.95	1	£3.95
52-0198	£4.75	1	£4.75
52-0200	6.68	1	£6.68
N 52-1205	£11.32	1	£11.32



Round Base

Hexagonal Base



Hexagonal Base Cylinder with Spout Class A

These measuring cylinders from LabGlass have a hexagonal base and spout.

- Available in a choice of sizes
- White graduation
- Made from borosilicate glass
- Class A
- Complies with DIN EN ISO 4788 standard
- Supplied in packs of 2 (except 2 litre version)



Squat Form Hexagonal Base Cylinder with Spout Class B

Squat form measuring cylinders from LabGlass with a hexagonal base and spout.

- Available in a choice of sizes
- White graduation
- Made from borosilicate glass
- Class B
- Supplied in packs of 2



NEW LINES ADDED

NEW



SIMAX Desiccator

Desiccator from Simax with a knobbed lid and a perforated ceramic disc ideal for laboratory use.

- Made from borosilicate glass
- Size 200mm
- Overall diameter 269mm
- Base diameter 190mm
- Manufacturer's part 262D/200

Order code
52-1987
200mm

£82.28

ALL NEW PRODUCTS					
Capacity	Order code	Sub-division	Unit price	Pack size	Price
5ml	52-4108	0.1ml	£2.33	2	£4.66
10ml	52-4109	0.2ml	£2.24	2	£4.47
25ml	52-4110	0.25ml	£4.06	2	£8.12
50ml	52-4107	1ml	£4.57	2	£9.54
100ml	52-4099	1ml	£5.51	2	£11.02
250ml	52-4111	2ml	£7.62	2	£15.23
500ml	52-4098	5ml	£11.65	2	£23.30
1000ml	52-4097	10ml	£14.21	2	£28.42
2000ml	52-4112	20ml	£22.33	1	£22.33

ALL NEW PRODUCTS					
Capacity	Order code	Sub-division	Unit price	Pack size	Price
50ml	52-4096	1ml	£4.22	2	£8.43
100ml	52-4094	2ml	£5.30	2	£10.59
250ml	52-4095	5ml	£6.09	2	£12.18

568061

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Test Tubes

KIMBLE CHASE

NEW LINES ADDED

Test Tubes and Boiling Tubes with Rims

These **test tubes** from **Kimble Chase** are manufactured from borosilicate glass tubing and can be used for a wide range of applications. They are designed for **maximum heat transfer** and chemical resistance.

- Wall thickness between 0.8 to 1.0mm
- Smaller tubes are supplied in **packs of 100**
- 24 x 150mm tubes are supplied in **packs of 50**

Size	Quantity	Order code	1+
10 x 75mm	100	52-1895	£15.64
12 x 75mm	100	N 52-1254	£14.78
16 x 100mm	100	N 52-1255	£23.98
16 x 125mm	100	52-1900	£30.04
16 x 150mm	100	52-1897	£31.04
24 x 150mm	50	52-1902	£24.83



Culture Tubes

KIMBLE CHASE

NEW

Plain Disposable Culture Tubes

These plain disposable **culture tubes** from **Kimble Chase** have a rim top and are made from borosilicate glass.

- Available in a range of sizes
- Supplied in **packs of 1000** (500 for 18 x 150mm)

Size	Quantity	Order code	1+
10 x 75mm	1000	52-1257	£33.19
12 x 75mm	1000	52-1259	£35.45
13 x 100mm	1000	52-1261	£49.31
16 x 125mm	1000	52-1263	£74.93
16 x 150mm	1000	52-1276	£76.95
18 x 150mm	500	52-1279	£88.16



Drying Tubes

GLASSCO

NEW

Angled Glass Drying Tubes

These **angled drying tubes** from **Glassco** are suitable for use with other laboratory equipment.

- Made from borosilicate glass
- Available in a range of sizes

Size	Order code	1+
10/19	52-1873	£5.66
14/23	52-1877	£5.66
19/26	52-1879	£6.43
24/29	52-1881	£7.07
29/32	52-1883	£7.07



Test Tube Brushes

RVFM

Test Tubes with Side Arms

These test tubes are made from Borosilicate glass and feature a side arm.

- Available in various sizes

Length/diameter	Order code	1+
125 x 17mm	52-1282	£0.889
150 x 19mm	52-1284	£1.11
150 x 24mm	52-1286	£1.56



RVFM

Cleaning Brushes for Laboratory Glassware and Plasticware

Cleaning brushes for beakers, burettes, test tubes, measuring cylinders and many other items of other laboratory glassware and plasticware. The hard nylon bristles are mounted in twisted galvanised iron wire.

- Suitable for beakers, burettes, test tubes, measuring cylinders and many other items of other laboratory glassware and plasticware
- Hard nylon bristles, mounted in twisted galvanised iron wire

Type	Order code	MOQ 2
Beaker Brush	52-8053	£0.732
Burette Brush	52-8055	£1.00
Test Tube Brush	52-8057	£0.664



RVFM

Test Tube Brushes

Brushes for cleaning test tubes and other tubular equipment.

- High quality bristles mounted in heavy gauge twisted galvanised wire
- Wire handles can be bent to clean awkward shapes
- Available in a range of sizes
- Supplied **singly**

Type	Order code	MOQ 4
Small	52-8048	£0.256
Medium	52-8050	£0.363
Large	52-8052	£0.551



eisco

Absorption Tubes
150 x 20mm

A borosilicate glass U-form absorption tube, with strong walls and side tubes. Absorption tubes are commonly used with calcium chloride or other desiccants to remove moisture from gases passed through them.

- Length 150mm
- Diameter 20mm
- Supplied in **packs of 2**
- Eisco type CH0042C



Order code
52-3432
Absorption tube

£4.78

Need a product urgently?

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eisco

Flask, Bottle, Burette and Beaker Brushes

A range of brushes for cleaning laboratory equipment.

Type	Order code	1+
Flask/bottle brush	52-3451	£0.79
Burette brush	52-3452	£1.07
Economy beaker brush	52-3524	£0.95
Nylon beaker brush	52-3525	£1.97



Test Tube Holders

eisco

Wooden Test Tubes Holders with Spring

A 180mm long clothes peg-style, wooden test tube holder.

- Accepts 11 to 19mm diameter test tubes
- Jaws open to 32mm
- Made from wood with a metal spring
- Supplied in **packs of 10**
- Eisco type CH0726A



Order code
52-3386
Pack of 10

£4.69

RVFM

Metal Test Tube Holder

A Stoddard's pattern test tube holder ideal for students.

- Spring action clamps tubes in place
- Finger grips for safe holding
- Holds tubes up to 25mm diameter
- Nickel plated steel construction
- Overall length 130mm



Order code **52-8040**
MOQ 2+

£0.593

Expansion Adapters

Joints Size	Glassco			
	Order code	Unit Price	Pack Size	Price
14/23, 10/19	52-1611	£8.114	10	£81.14
19/26, 14/23	52-1613	£4.361	10	£43.61
24/29, 14/23	52-1615	£4.361	10	£43.61
24/29, 19/26	52-1617	£4.361	10	£43.61
29/32, 14/23	52-1619	£5.279	10	£52.79
29/32, 19/26	52-1629	£5.279	10	£52.79
29/32, 24/29	52-1631	£5.279	10	£52.79
34/35, 19/26	52-1633	£59.27	1	£59.27
34/35, 24/29	52-1635	£59.27	1	£59.27
34/35, 29/32	52-1637	£81.95	1	£81.95
40/38, 29/32	52-1639	£112.05	1	£112.05



A PLUS			
Order code	Unit Price	Pack Size	Price
52-1349	£10.55	1	£10.55
52-1387	£9.65	1	£9.65
52-1388	£9.65	1	£9.65
52-1389	£12.99	1	£12.99
52-1390	£13.19	1	£13.19



Reduction Adapters

Joints Size	Glassco			
	Order code	Unit Price	Pack Size	Price
10/19, 14/23	52-1641	£5.02	10	£50.22
14/23, 19/26	52-1643	£4.47	10	£44.69
14/23, 24/29	52-1645	£4.47	10	£44.69
14/23, 29/32	52-1647	£4.47	10	£44.69
19/26, 24/29	52-1649	£4.47	10	£44.69
19/26, 29/32	52-1651	£4.67	10	£46.71
19/26, 34/35	52-1653	£5.83	10	£58.32
19/26, 40/38	52-1655	£7.02	10	£70.20
19/26, 45/40	52-1657	£7.79	10	£77.90
24/29, 29/32	52-1659	£4.67	10	£46.71
24/29, 34/35	52-1661	£5.95	10	£59.54
24/29, 40/38	52-1663	£7.02	10	£70.20
24/29, 45/40	52-1665	£8.07	10	£80.73
24/29, 50/42	52-1667	£7.66	10	£76.55
29/32, 34/35	52-1669	£5.66	10	£56.57
29/32, 45/40	52-1671	£10.14	10	£101.39
34/35, 40/38	52-1673	£8.84	10	£88.43
34/35, 45/40	52-1675	£12.38	10	£123.80
34/35, 50/42	52-1677	£12.38	10	£123.80



A PLUS			
Order code	Unit Price	Pack Size	Price
52-1391	£7.48	1	£7.48
52-1392	£7.48	1	£7.48
52-1393	£7.48	1	£7.84
52-1394	£7.48	1	7.48



ALL NEW PRODUCTS



Jointed Adaptors with Drying Tube



Jointed glass adaptors from A PLUS with a drying tube set at a 75° angle.

- Available in choice of sizes

Joint	Order code	1+
14/23	52-1427	£11.85
19/26	52-1429	£12.65

56/19/2

Jointed Liebig Condensers and Connectors

These glass Liebig condensers from A PLUS have removable hose connections and can be used to cool and condense hot vapour as part of a laboratory distilling apparatus.

- Available in a choice of sizes



Technical specification

Order code	Overall height
52-1398	200mm
52-1397	280mm
52-1399	300mm

Jacket height	Top joint	Order code	1+
110mm	19/26	52-1398	£24.45
200mm	14/23	52-1397	£22.95
200mm	24/29	52-1399	£25.95

56/19/8

Liebig Condensers

These glass Liebig condensers from A PLUS are used to cool and condense hot vapour as part of a laboratory distilling apparatus.

- Available in a choice of sizes



Technical specification

Order code	Overall height
52-1395	280mm
52-1396	330mm

Jacket height	Top joint	Order code	1+
200mm	14/23	52-1395	£21.45
200mm	24/29	52-1396	£21.96

56/19/1

Glass Still Head Adaptors

These glass still head adaptors from A PLUS are suitable for use in connecting a flask with a condenser in a laboratory distillation assembly.

- Available in a choice of sizes



Technical specification

Order code	Top joint	Bottom joint	Side joint
52-1401	14/23	14/23	14/23
52-1403	19/26	19/26	19/26
52-1405	24/29	24/29	24/29
52-1407	14/23	24/29	19/26

Top joint	Bottom joint	Order code	1+
14/23	14/23	52-1401	£14.45
19/26	19/26	52-1403	£15.86
24/29	24/29	52-1405	£17.19
14/23	24/29	52-1407	£20.52

56/19/9

Vacuum/Inert Gas Adaptors



These glass vacuum/inert gas adaptors from A PLUS are ideal for use in a number of laboratory applications.

- Available in a choice of sizes

Technical specification

Order code	Hose diameter (OD)	Joint size
52-1346	8mm	14/23
52-1347	8mm	19/26
52-1348	10mm	24/29

Joint	Hose diameter	Order code	1+
14/23	8mm	52-1346	£9.11
19/26	8mm	52-1347	£9.59
24/29	10mm	52-1348	£9.67

56/19/5

Jointed Round Bottom Flask Single Neck

Capacity	Joint Size	Glassco				A PLUS			
		Order code	Unit Price	Pack Size	Price	Order code	Unit Price	Pack Size	Price
5ml	14/23	52-1467	£3.58	10	£35.75	52-1281	7.11	1	7.11
10ml	10/19	52-1469	£4.05	10	£40.50				
10ml	14/23	52-1471	£4.05	10	£40.50	52-1283	7.11	1	7.11
25ml	14/23	52-1473	£4.17	10	£41.72	52-1285	6.95	1	6.95
25ml	19/26	52-1475	£4.17	10	£41.72	52-1287	6.95	1	6.95
25ml	24/29	52-1477	£4.17	10	£41.72	52-1289	6.95	1	6.95
50ml	14/23	52-1479	£4.64	10	£46.44	52-1291	7.45	1	7.45
50ml	19/26	52-1481	£4.64	10	£46.44	52-1293	8.64	1	8.64
50ml	24/29	52-1483	£4.64	10	£46.44	52-1295	8.64	1	8.64
50ml	34/35	52-1485	£5.95	10	£59.54				
100ml	14/23	52-1487	£4.19	10	£41.85	52-1297	9.25	1	9.25
100ml	19/26	52-1489	£4.19	10	£41.85	52-1299	9.25	1	9.25
100ml	24/29	52-1491	£4.19	10	£41.85	52-1301	9.25	1	9.25
100ml	29/32	52-1493	£5.10	10	£51.03	52-1303	9.25	1	9.25
100ml	34/35	52-1495	£5.54	10	£55.35				
150ml	19/26	52-1497	£5.16	10	£51.57				
150ml	24/29	52-1499	£5.16	10	£51.57				
250ml	14/23	52-1501	£5.13	10	£51.30	52-1309	10.89	1	10.89
250ml	19/26	52-1503	£5.13	10	£51.30	52-1311	10.89	1	10.89
250ml	24/29	52-1505	£5.13	10	£51.30	52-1313	10.89	1	10.89
250ml	29/32	52-1507	£5.13	10	£51.30				
250ml	34/35	52-1509	£7.02	10	£70.20	52-1315	13.75	1	13.75
500ml	19/26	52-1511	£7.07	10	£70.74	52-1317	13.75	1	13.75
500ml	24/29	52-1513	£7.07	10	£70.74	52-1319	13.75	1	13.75
500ml	29/32	52-1515	£7.07	10	£70.74				
500ml	34/35	52-1517	£7.63	10	£76.28				
500ml	45/40	52-1519	£10.23	10	£102.33				
1000ml	19/26	52-1521	£9.77	10	£97.74				
1000ml	24/29	52-1523	£9.77	10	£97.74				
1000ml	29/32	52-1525	£9.91	10	£99.09				
1000ml	34/35	52-1527	£10.76	10	£107.60				
2000ml	24/29	52-1529	£17.24	10	£172.40				
2000ml	29/32	52-1531	£17.47	10	£174.69				
2000ml	34/35	52-1533	£18.12	10	£181.17				
3000ml	24/29	52-1535	£29.32	1	£29.32				
3000ml	34/35	52-1537	£29.92	1	£29.92				
5000ml	29/32	52-1539	£38.62	1	£38.62				
5000ml	34/35	52-1541	£39.38	1	£39.38				
5000ml	45/40	52-1543	£39.81	1	£39.81				



**ALL NEW
PRODUCTS**



Jointed Round Bottom Flask Two Necks

Capacity	Centre Joint	Side Joint	Glassco				A PLUS			
			Order code	Unit Price	Pack Size	Price	Order code	Unit Price	Pack Size	Price
100ml	14/23	14/23					52-1321	18.89	1	£18.89
100ml	14/23	14/23	52-1545	£8.78	1	£8.78	52-1323	18.95	1	£18.95
100ml	24/29	14/23	52-1547	£10.76	1	£10.76	52-1325	18.95	1	£18.95
100ml	24/29	19/26	52-1549	£12.20	1	£12.20	52-1327	18.95	1	£18.95
250ml	24/29	14/23	52-1551	£9.53	1	£9.53				
250ml	24/29	19/26	52-1553	£10.23	1	£10.23	52-1329	19.05	1	£19.05
500ml	24/29	14/23	52-1555	£10.54	1	£10.54				
500ml	24/29	19/26	52-1557	£11.92	1	£11.92				
1000ml	24/29	14/23	52-1559	£12.57	1	£12.57				
1000ml	24/29	19/26	52-1561	£22.57	1	£22.57				



Jointed Round Bottom Flask Three Necks

Capacity	Centre Joint	Side Joint
50ml	19/26	14/23
100ml	19/26	14/23
100ml	24/29	14/23
100ml	24/29	19/26
250ml	19/26	14/23
250ml	19/26	19/26
250ml	24/29	14/23
250ml	24/29	19/26
500ml	24/29	14/23
500ml	24/29	19/26
500ml	29/32	14/23
1000ml	24/29	14/23
1000ml	24/29	19/26
1000ml	34/35	19/26
2000ml	24/29	19/26
2000ml	34/35	19/26

Glassco			
Order code	Unit Price	Pack Size	Price
52-1563	£13.41	1	£13.41
52-1565	£13.41	1	£13.41
52-1567	£15.30	1	£15.30
52-1569	£13.41	1	£13.41
52-1571	£16.62	1	£16.62
52-1573	£16.62	1	£16.62
52-1575	£16.62	1	£16.62
52-1577	£14.05	1	£14.05
52-1579	£17.25	1	£17.25
52-1581	£15.53	1	£15.53
52-1583	£23.15	1	£23.15
52-1585	£23.44	1	£23.44
52-1587	£25.73	1	£25.73
52-1589	£35.87	1	£35.87
52-1591	£37.42	1	£37.42

A PLUS			
Order code	Unit Price	Pack Size	Price
52-1331	£27.14	1	£27.14
52-1333	£25.96	1	£25.96
52-1335	£25.55	1	£25.55
52-1337	£29.19	1	£29.19
52-1339	£31.59	1	£31.59
52-1344	£30.75	1	£30.75
52-1345	£45.57	1	£45.57



ALL NEW PRODUCTS

Pear Shape Jointed Flask

Capacity	Joint Size
25ml	14/23
50ml	14/23
50ml	19/26
100ml	14/23
100ml	19/26

Glassco			
Order code	Unit Price	Pack Size	Price
52-1803	£3.62	10	£36.18
52-1805	£8.33	10	£83.30
52-1809	£3.70	10	£36.99
52-1827	£20.57	10	£205.74

A PLUS			
Order code	Unit Price	Pack Size	Price
52-1421	£11.84	1	£11.84
52-1423	£8.57	1	£8.57
52-1425	£12.99	1	£12.99



Jointed Erlenmeyer Flask

Capacity	Joint Size
25ml	14/23
50ml	14/23
50ml	19/26
50ml	24/29
50ml	29/32
100ml	14/23
100ml	19/26
100ml	24/29
100ml	29/32
150ml	19/26
150ml	24/29
250ml	19/26
250ml	24/29
250ml	29/32
500ml	19/26
500ml	24/29
500ml	29/32
500ml	34/35
1000ml	24/29
1000ml	29/32
1000ml	34/35
2000ml	29/32
2000ml	34/35

Glassco			
Order code	Unit Price	Pack Size	Price
52-1759	£3.74	10	£37.40
52-1761	£3.90	10	£39.02
52-1763	£3.90	10	£39.02
52-1765	£3.90	10	£39.02
52-1767	£4.00	10	£39.96
52-1769	£4.00	10	£39.96
52-1771	£4.13	10	£41.31
52-1773	£5.66	10	£56.57
52-1775	£5.35	10	£53.46
52-1777	£5.35	10	£53.46
52-1779	£4.44	10	£44.42
52-1781	£4.44	10	£44.42
52-1783	£4.96	10	£49.55
52-1785	£5.86	10	£58.59
52-1787	£5.86	10	£58.59
52-1789	£5.89	10	£58.86
52-1791	£6.10	10	£61.02
52-1793	£9.77	10	£97.74
52-1795	£9.99	10	£99.90
52-1797	£10.34	10	£103.41
52-1799	£19.33	10	£193.32
52-1801	£20.57	10	£205.74

A PLUS			
Order code	Unit Price	Pack Size	Price
52-1409	25ml	1	£6.95
52-1411	50ml	1	£9.65
52-1413	50ml	1	£9.65
52-1415	50ml	1	£9.65
52-1417	250ml	1	£11.79
52-1419	500ml	1	£12.74



Bottles

Packs of 10

NEW LINES
ADDEDSee page 19
for our range of
Plastic BottlesNEW LINES
ADDED

NEW

RVFM

Reagent Bottles

Plain clear glass reagent bottles, with narrow neck and dustproof plastic stopper.

- Borosilicate glass
- Supplied in **packs of 10**

Order code
52-0226
50ml single

£8.37

Order code
52-0230
250ml single

£22.73

NEW

Order code
52-1061
500ml single

£35.75

RVFM

Clear Dropping
Bottles 50ml

These 50ml clear soda-lime glass dropping bottles have a stopper size of 14.5/23.

- Supplied **singly**

Order code
52-0837
50ml single

£2.07

SIMAX

Clear Graduated
Laboratory Bottles

Clear, graduated laboratory bottles with screw caps.

- Borosilicate glass
- Complete with blue screw cap and pouring ring
- Conform to ISO 4796 and ISO -GL 45
- Supplied in **packs of 10**

Capacity	Quantity	Order code	1+
50ml	10	N 52-1203	£28.75
100ml	10	52-0986	£18.73
250ml	10	52-0988	£19.43
500ml	10	52-0990	£26.73
1000ml	10	52-0992	£36.03

073137

ACADEMY

Science Products

Powder Glass Bottles

These clear glass **powder bottles** from Academy have an attached **black polypropylene cap** and EPE liner.

- Wide neck
- Made from soda-lime glass

Technical specification

Order code	Capacity	Diameter	Height
52-1989	30ml	38.9mm	58.7mm
52-1988	120ml	55.2mm	96mm

Order code
52-1989
30ml single

£0.31

Order code
52-1988
120ml single

£0.38

Gas Washing Bottles

SIMAX

Gas Washing
Bottles

Simax gas washing bottles manufactured from borosilicate glass.

- Capacity 100ml
- Overall height 250mm
- Height of bottle 200mm
- Inlet/outlet pipe diameter 8mm
- Supplied **singly**

Order code
52-0982
100ml single

£17.92

LAB GLASS

Distilling
Apparatus

A set of high quality borosilicate glassware ideal for distillation experiments.

- All joint sizes are 19/26
- **Set includes the following glass components:**
- Round-bottom boiling flask 500ml
- Still head
- Liebig condenser
- Receiver adapter
- Separating funnel with stopper
- Supplied as a set

Order code
52-3438

£54.89

Please note that no tubing, heat
source or stands are included.“ Distillation is the process of separating
the components or substances from
a liquid mixture by using selective
boiling and condensation. ”Free
Delivery*on all orders over £30
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(UK mainland only)* See Terms & Conditions for full details
www.rapidonline.com/terms

Crystallising Dishes

SIMAX

Glass Crystallising Dishes with Flat Bottom and No Spout

Crystallising dishes from Simax with a flat bottom but without a spout, ideal for use in laboratory applications.

- Conforms to PN 70 0121



Capacity	Diameter	Order code	1+
Packs of 10			
20ml	40mm	52-1207	£54.27
40ml	50mm	52-1209	£48.47
60ml	60mm	52-1211	£44.42
100ml	70mm	52-1213	£73.31
150ml	80mm	52-1215	£54.27
300ml	95mm	52-1217	£68.45
500ml	115mm	52-1219	£93.69
900ml	140mm	52-1221	£119.61
Packs of 4			
2000ml	190mm	52-1223	£100.17
3500ml	230mm	52-1225	£108.30

567970

Glass Funnels

RVFM

Long Stem Borosilicate Glass Filter Funnels

Borosilicate glass laboratory funnels with long stems. The longer, non-tapering stems of these funnels are useful when using funnels with tubing and when mounting them in bungs for use with flasks, bottles and retorts, etc.

- Can be used with folded circular filter paper
- Available in a range of diameters
- Supplied **singly**

Diameter	Stem diameter	Order code	1+
50mm	7mm	52-0909	£1.26
75mm	8mm	52-0911	£2.02
100mm	9mm	52-0913	£3.14
125mm	16mm	52-0915	£3.70
150mm	16mm	52-0917	£5.57

500177



GLASS LAB

Borosilicate Glass Filter Funnels

Borosilicate glass, plain filter funnels with 60° angled sides.

The shape of the funnels makes them ideal for use with a folded circular filter paper.

- Borosilicate 3.3 glass



Order code
52-3465
55mm

£1.19

Order code
52-3466
75mm

£1.25

Coplin Jars

ACADEMY

Glass Coplin Jar

This coplin jar from Academy can be used to stain cells and tissues on microscope slides.

- Made from soda-lime glass
- Height 115mm
- Diameter 90mm
- Supplied in **packs of 10**
- Manufacturer's part 2959

See page 33 for microscope slides

Order code
52-1093

£6.25

Packs of 10



eisco

Trust & Deliver & Learn

Watch Glasses

Watch glasses are highly functional items of glassware that have a variety of uses in the classroom or laboratory. They work well as lids for flasks and beakers, or for holding small samples for observation under a low-power microscope. They are also ideal for evaporating liquids from samples, such as when growing seed crystals, and can be used for making lenses from ice or other liquids.

Eisco watch glasses are manufactured with sturdiness in mind. Their 2mm thick construction resists shattering and as they have ground edges, as well as a polished surface.

Packs of 10

Watch Glasses



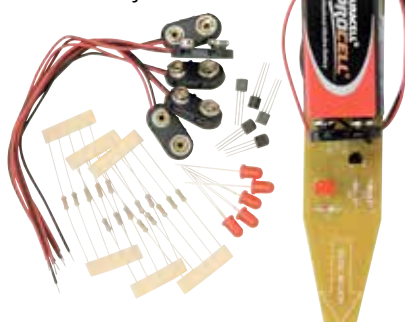
Diameter	Quantity	Order code	1+
50mm	10	52-3467	£1.73
60mm	10	52-3559	£2.03
75mm	10	52-3468	£3.36
90mm	10	52-3469	£3.93
100mm	10	52-3470	£4.28
125mm	10	52-3560	£7.45
150mm	10	52-3561	£9.18

565603

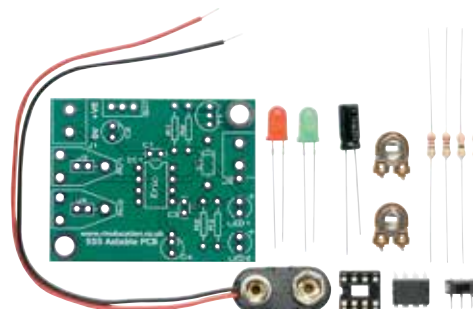
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70-0030 Moisture Test Project Kit



70-4056 Electronic Dice Kit



70-6017 555 Timer Astable Project

Rapid
education

We bring
STEM to life

Evaporating Dishes

eisco
Trust • Deliver • Learn

Porcelain Evaporating Dishes

Superior quality porcelain round-form evaporating dishes with pouring spout. The dishes are fully glazed except for the outside base.

- Eisco CH0071 series



Order code
52-3378
80ml

£0.72

Order code
52-3379
100ml

£0.81

eisco
Trust • Deliver • Learn

Porcelain Evaporating Basins - Flat Form with Spout

A range of porcelain flat-form evaporating basins.

- Glazed inside and outside except for rim
- Spout for easy pouring
- Eisco CH0070 series



Order code
52-3519
35ml

£0.81

Order code
52-3520
50ml

£0.92

Order code
52-3522
200ml

£1.19

Order code
52-3523
300ml

£2.44

Rapid

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1979-2019

Supplying Schools for 40 years

Funnels



eisco
Trust • Deliver • Learn

Porcelain Hirsch Separating Funnels

Hirsch funnels are used for straining and filtering liquids or for separating solids and liquids.

This range is made from porcelain for minimum contamination and ease of cleaning. They can be used in conjunction with filter paper for superior separation.

- Angled sides
- Glazed
- Perforated plate



Diameter	Order code	1+
30mm	52-3562	£0.92
40mm	52-3563	£1.07
50mm	52-3564	£1.48
75mm	52-3565	£2.22
100mm	52-3566	£2.36

Order code
52-1937
50ml

£2.42

Order code
52-1945
125ml

£7.59



RVFM

Porcelain Buchner Funnels

Buchner Funnels are used for straining and filtering liquids or for separating solids and liquids. This range is made from porcelain for minimum contamination and ease of cleaning. They can be used in conjunction with filter paper for superior separation.

- Straight sides
- Perforated plate
- Used for straining and filtering liquids or separating solids and liquids
- Made from porcelain for minimum contamination and easy cleaning
- Can be used in conjunction with filter paper for superior separation
- Available in a range of diameters

Mortar & Pestle Sets

eisco
Trust • Deliver • Learn

Porcelain Mortars & Pestles

A range of porcelain mortars and pestles with unglazed grinding surfaces.

- Supplied as a set containing one mortar and one pestle

Mortar capacity	Order code	1+
60ml	52-3571	£1.22
275ml	52-3572	£2.52
550ml	52-3573	£4.04
900ml	52-3574	£4.38
1500ml	52-3575	£7.55
2000ml	52-3576	£10.21



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Did you know
we also sell
robots?



Crucibles



Capacity	Order code	1+
10ml	52-3542	£0.61
25ml	52-3543	£0.73
40ml	52-3544	£0.86
50ml	52-3545	£0.99
100ml	52-3546	£1.22

eisco
Trust • Deliver • Learn

Crucibles - Tall

A range of tall-form porcelain crucibles and lids with ring handle.

- Glazed inside and outside except base
- Eisco CH0074 series

Funnels & Holders



Order code
52-3419
£0.36

eisco
Trust & Deliver & Learn

100mm Polythene Funnel

This unbreakable polythene laboratory funnel is unaffected by acids and alkalis, etc.

- Diameter 100mm; Stem length 80mm
- Eisco type CH0454D



Order code
52-1464
80mm **£2.07**

RVFM

Funnel Holder

Holders for suspending funnels on retort stands.

- Holds funnels 76 to 152mm
- Supplied with adaptor for 25 to 76mm funnels
- Corrosion free polypropylene construction
- Includes tapered wedges to ensure firm grip on both 9.5mm (3/8in.) and 12.7mm (1/2in.) retort stand rods

RVFM

Economy Plastic Funnels

A range of economical funnels suitable for a wide range of applications in the laboratory. The funnels are made from unbreakable plastic, making them ideal for younger scientists.

- Economical
- Unbreakable plastic
- Wide range of uses

MOQ 4		
Type	Order code	4+
50mm	52-0925	0.281
MOQ 3		
Type	Order code	3+
62mm	52-0927	0.327
75mm	52-0929	0.327
100mm	52-0933	0.484

MOQ 2		
Type	Order code	2+
80mm	52-1502	0.719
Price each		
Type	Order code	1+
100mm	52-1504	1.03
150mm	52-1506	2.02

RVFM

Powder Funnels

These polythene funnels have wide, parallel stems and are ideal for transferring powders.

- Corrosion free polypropylene construction



RVFM

Polypropylene Buchner Funnels

These 2-piece plastic funnels are lightweight, easy to clean and autoclavable. They are much less prone to breakage than the traditional porcelain types.

- Rugged construction
- Top part has perforated filter plate
- Parts snap together to give vacuum seal
- Corrosion free polypropylene construction

Order code
52-1498
70mm **£2.47**

Order code
52-1500
130mm **£5.24**

Order code
52-1466
£2.68

RVFM

Separator Funnel Holder

Holders for suspending separatory funnels on retort stands.

- Front opening gives clear view of solution
- Allows unobstructed placement of funnel
- Corrosion free polypropylene construction
- Includes tapered wedges to ensure firm grip on both 9.5mm (3/8in.) and 12.7mm (1/2in.) retort stand rods

Stopper & Bungs

eisco
Trust & Deliver & Learn

Laboratory Rubber Stoppers

A wide range of rubber stoppers.

- Wide range of sizes
- Available with or without holes

Order code **52-3420**
Pack 10 solid from only
£0.909

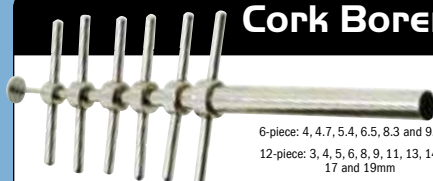
Order code **52-3421**
Pack 10 with hole from only
£1.01



MAJOR BRUSHES
Assorted Cork Tops

Order code
06-1310
100g **£2.12**

Cork Borers



6-piece: 4, 4.7, 5.4, 6.5, 8.3 and 9.3mm
12-piece: 3, 4, 5, 6, 8, 9, 11, 13, 14, 15, 17 and 19mm

Sets of cutters for boring holes into cork stoppers and bungs to allow the insertion of glass or plastic tubes, etc.

- Simply twist round using the handles while applying pressure
- A push rod is included for removing the waste material

Order code **06-6601**
Set of 6

£23.66

Order code **06-6605**
Set of 12

£56.18

eisco
Trust & Deliver & Learn

Cork Borer Sharpener

Superior quality cork borer sharpener from Eisco with a hinged brass cutter blade set into a slot and wooden handle.

- Plated metal cone
- Suitable for borers 4mm to 27mm diameter
- Manufacturer's part CH0324B

Order code
52-4093
130mm

£11.85

NEW

Reusable Syringes

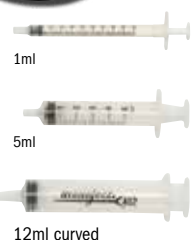
A range of re-usable syringes, ideal for precise application of glues, greases, pastes and two-part compounds, where a precise amount of each is to be mixed.

Order code
87-0346
20ml from only

£11.52

Packs of 10

MOQ 2		
Type	Order code	2+ 10+
1ml	87-0338	£0.571 £0.483
5ml	87-0343	£0.637 £0.555
Price each		
Type	Order code	1+ 10+
12ml curved	87-0345	£3.33 £3.13



Order code
52-2669
100ml Glass

£20.95

This glass syringe has a Luer fitting, interchangeable pistons and barrels.

- Supplied with metal tip

FOR FULL DETAILS VISIT WWW.RAPIDONLINE.COM

Measuring Jugs

eisco
Trust Education & Learning

Polypropylene Measuring Jugs

Order code
52-3373
250ml

£0.81



Order code
52-3374
500ml

£1.21



Order code
52-3375
1000ml

£1.37



A range of clear polypropylene measuring jugs with good chemical resistance.

- Graduations every 10ml
- Can be autoclaved
- Eisco CH0356 series

RVFM

Plastic Laboratory Measuring Beakers



Polypropylene measuring beakers with moulded graduations for ease of use.

Type	Quantity	Order code	1+
50ml	Pack of 12	52-0176	£3.59
100ml	Pack of 12	52-0178	£3.70
250ml	Pack of 12	52-0180	£5.94
500ml	Pack of 12	52-0182	£8.99
1 Litre	Pack of 6	52-0184	£7.74

Measuring Cylinders

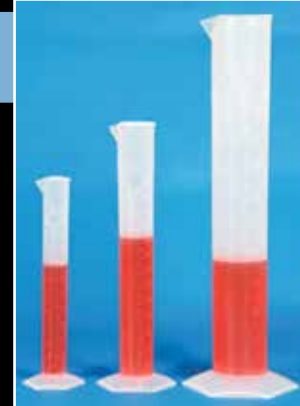
RVFM

Plastic Measuring Cylinders

High quality, laboratory grade measuring cylinders made from polypropylene.

- Clear graduation markings on the side
- 25ml and 50ml sizes **supplied in packs of 12**
- 10ml, 100ml and 250ml sizes **supplied singly**

MOQ 3			
Size	Quantity	Order code	3+
10ml	Single	52-0177	£0.439
Price each			
Type	Order code		1+
25ml	Pack of 12	52-0172	£6.74
50ml	Pack of 12	52-0174	£7.86
MOQ 2			
Type	Order code		2+
100ml	Single	14-2030	£0.777
Price each			
Type	Order code		1+
250ml	Single	14-2032	£1.52



Polypropylene Tubes



medline
scientific limited

Ultra-clear Polypropylene Tubes

These ultra-clear polypropylene tubes from Medline are ideal for use in rough environments where the use of glass tubes is not crucial. The tubes have greater crush resistance and are shatterproof.

- Autoclavable up to 121°C
- Matching natural coloured polyethylene caps available separately
- Supplied in **packs of 100**

Type	Quantity	Order code	1+
12 x 75mm	100	52-1901	£3.22
13 x 75mm	100	52-1903	£3.59
16 x 100mm	100	52-1905	£4.01
Cap for 52-1901	100	52-1909	£3.50
Cap for 52-1905	100	52-1913	£2.23

Coplin Jars

RVFM

Coplin Jar



A Coplin jar that can hold ten 1 x 3 inch slides back-to-back.

- Interior is grooved to hold slides upright
- Microwaveable
- Domed, shallow threaded screw cap protects slides
- Corrosion free polypropylene construction

Order code
52-1512

£1.34

Containers

medline
scientific limited

Polystyrene Containers



Medline polystyrene containers with polyethylene lids, ideal for the collection of biological samples or the storage of small amounts of chemicals.

- Non-sterile
- Supplied **singly**

MOQ 6			
Type	Order code	6+	
30ml	56-1517	£0.14	
60ml	56-1519	£0.162	
MOQ 2			
Type	Order code	2+	
200ml	56-1521	£0.545	

medline
scientific limited

Polypropylene Containers



Medline polypropylene containers with polyethylene lids, ideal for the collection of biological samples or the storage of small amounts of chemicals.

- Ideal for samples
- Non-sterile
- Supplied **singly**

MOQ 6			
Type	Order code	6+	
60ml	56-1523	£0.162	
150ml	56-1525	£0.227	
MOQ 4			
Type	Order code	4+	
200ml	56-1527	£0.311	



Wash Bottles

A high quality wash bottle with washing tube.

- Simply squeeze to provide jet of liquid
- Available in **250ml** and **500ml** capacities
- Supplied **singly**

Type	Order code	1+
Rd wash bottle 250ml	14-2022	£1.43
Rd wash bottle 500ml	14-2024	£1.87

034400



Wide Mouth Bottles with Sealing Cap

Strong, light, general-purpose wide-mouth bottles with sealing caps.

- Made from HD polythene
- Supplied **singly**

MOQ 2			
Type	Order code	2+	
300ml	14-2038	£0.626	
700ml	14-2008	£0.79	
Price each			
Type	Order code	1+	
1250ml	14-2040	£1.04	

034399



Round Wide Mouth Bottles

Round wide mouthed bottles for general-purpose storage.

- Made from high density polythene

MOQ 3			
Type	Order code	3+	
100ml	14-2012	£0.39	
250ml	14-2014	£0.391	
MOQ 2			
Type	Order code	2+	
500ml	14-2016	£0.546	
1000ml	14-2018	£0.724	
Price each			
Type	Order code	1+	
2500ml	14-2020	£2.18	

034398



Round Narrow Mouth Bottles

A range of lightweight general-purpose polythene storage bottles.

- 5 litre bottle has carrying handle
- Supplied **singly**

MOQ 4			
Capacity	Order code	4+	
125ml	14-2000	£0.323	
MOQ 3			
Capacity	Order code	3+	
250ml	14-2002	£0.435	
MOQ 2			
Capacity	Order code	2+	
1000ml	14-2006	£0.614	
MOQ 100			
Capacity	Order code	100+	
5000ml	14-2010	£13.85	
MOQ 9			
Capacity	Order code	9+	
Dispenser cap	14-2036	£0.13	

034396

Bottles



Rapid

Measuring Bottle Set

Set of five **graduated bottles** with lids, suitable for **measuring** and holding a wide range of liquids.

- Bottles in 5 sizes ranging from 200ml to 3000ml
- Capacities marked in metric and imperial scales on opposite sides of bottle
- Bottles nest for easy storage

Order code
06-9937
Set of 5

£13.84

RVFM

Wash Bottles

Translucent, unbreakable wash bottles with built-in delivery tubes.

- Graduations on outer surface
- Low density polyethylene (LDPE) construction
- Available in **125, 250 and 500ml** capacities

Type	Order code	1+
125ml	52-1462	1.34
250ml	52-1458	1.52
500ml	52-1460	1.88

122490

RVFM

Polypropylene Storage Vials

Storage vials for biological material, human and animal cells, etc.

- Leak-proof built-in seal
- Corrosion free polypropylene construction
- Available in 2ml and 5ml capacities

MOQ 6			
Type	Order code	6+	
2ml	52-1520	0.18	
MOQ 4			
Type	Order code	4+	
5ml	52-1522	0.259	

122504

Burettes

RVFM

Stopcock Burette with Rotaflow 50ml Capacity

A large borosilicate glass burette with a Rotaflow stopcock to accurately control the efflux of liquids.

Type	Order code	1+
Burette with Rotaflow	52-1260	£7.30

081791

RVFM

Straight Bore Burettes with PTFE Stopcocks - Class B

Graduated straight bore burettes.

Type	Order code	1+
50ml	52-1032	£11.49

073144

Order online

Save time, and place your order at:

www.rapidonline.com
24 hours a day

RVFM

Acrylic Burettes

Burettes with acrylic bodies and leakproof stopcocks fitted with self-lubricating PTFE plugs.

Type	Order code	1+
50ml	52-1454	£6.51
100ml	52-1456	£10.74

122489

ACADEMY

Straight Bore Burettes with PTFE Stopcock

These straight bore burettes from Academy have a PTFE key stopcock.

Capacity	Order code	1+
10ml	52-2011	£18.02
25ml	52-2013	£18.02
50ml	52-2015	£12.87
100ml	52-2027	£28.50

568015



Straight Bore Burettes with Glass Stopcock

Straight bore burettes from Glassco with a glass stopcock.

Capacity	Order code	1+
10ml	52-2031	£10.02
25ml	52-2033	£10.02
50ml	52-2035	£10.02
100ml	52-2037	£20.41

568016



Burettes with Detachable Stopcock

These burettes from Glassco have a detachable glass stopcock.

Capacity	Order code	1+
10ml	52-2039	£29.88
25ml	52-2041	£28.05
50ml	52-2043	£14.55

568017

For full product details visit

www.rapidonline.com



7

Modular Burette with PTFE Stopcock Class A

This Class A bureette from LabGlass has a PTFE stopcock.

Capacity	Order code	1+
50ml	52-4065	£8.49

568054



8

Burettes Glass Key Single Bore Class A White Graduation

These Class A burettes from LabGlass have a single straight bore and a glass key stopcock with white ceramic graduation.

Capacity	Order code	1+
10ml	52-4058	£6.75
25ml	52-4059	£8.25
50ml	52-4060	£8.92
100ml	52-4057	£9.75

568053



9

Burettes Glass Key Single Bore Class B Blue Graduation

Single bore burettes from LabGlass with a glass key stopcock.

Capacity	Order code	1+
10ml	52-4062	£4.65
25ml	52-4063	£5.95
50ml	52-4064	£7.48
100ml	52-4061	£11.22

568075



10

Burettes with PTFE Rotaflow Stopcock Class B Blue Graduation

These burettes from LabGlass have a PTFE Rotaflow stopcock.

Capacity	Order code	1+
10ml	52-4074	£5.62
25ml	52-4075	£6.87
50ml	52-4076	£7.45
100ml	52-4073	£8.12

568076



11

Burettes Single Bore with Pinch Clip Class B

Single bore Class B burettes from LabGlass with a detachable rubber tube and pinch clip.

Capacity	Order code	1+
10ml	52-4066	£4.68
25ml	52-4067	£4.99
50ml	52-4068	£5.06

568055



12

Burettes with Straight Bore PTFE Key Stopcock Class A

Class A burettes from LabGlass with a straight bore interchangeable PTFE key stopcock.

Capacity	Order code	1+
10ml	52-4082	£7.25
25ml	52-4083	£7.56
50ml	52-4084	£8.33
100ml	52-4081	£8.70

568058



13

Burettes with Straight Bore PTFE Key Stopcock Class B

Class B burettes from LabGlass with a straight bore interchangeable PTFE key stopcock.

Capacity	Order code	1+
10ml	52-4086	£5.80
25ml	52-4087	£6.53
50ml	52-4088	£7.25
100ml	52-4085	£7.98

568059



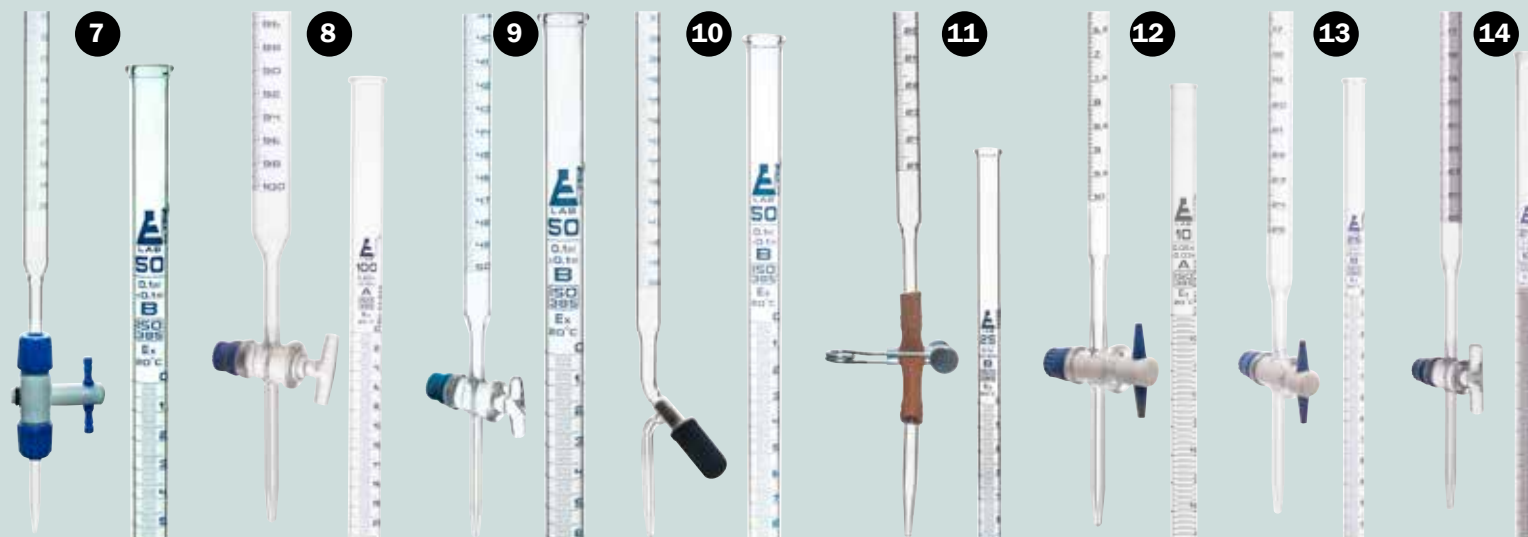
14

Schellbach Burettes Single Bore with Glass Stopcock Class B

Class B Schellbach glass burettes from LabGlass with a glass stopcock.

Capacity	Order code	1+
10ml	52-4078	£7.18
25ml	52-4079	£7.98
50ml	52-4080	£8.19
100ml	52-4077	£9.08

568057



Pipettes & Pipette Fillers

Pipettes Bulb Form One Mark Class A

One mark bulb form **pipettes** from **Glassco**, supplied in **packs of 5**.

- Made from alkaline resistant glass
- Class B
- Available in a choice of sizes

Technical specification

Order code	Capacity	Tolerance	Length
52-2237	2ml	±0.01ml	305mm
52-2238	5ml	±0.015ml	360mm
52-2239	10ml	±0.02ml	450mm
52-2240	20ml	±0.03ml	515mm
52-2241	25ml	±0.03ml	520mm

Capacity	Colour	Order code	1+
2ml	Orange	52-2237	£12.08
5ml	White	52-2238	£12.08
10ml	Red	52-2239	£12.08
20ml	Yellow	52-2240	£15.39
25ml	Blue	52-2241	£15.39

Pipettes Bulb Form One Mark Class B

One mark bulb form **pipettes** from **Glassco**, supplied in **packs of 5**.

- Made from alkaline resistant glass
- Class B
- Available in a choice of sizes

Technical specification

Order code	Capacity	Tolerance	Length
52-2045	5ml	±0.015ml	360mm
52-2047	20ml	±0.03ml	515mm
52-2236	25ml	±0.03ml	520mm

Capacity	Colour	Order code	1+
5ml	White	52-2045	£10.40
20ml	Yellow	52-2047	£11.75
25ml	Blue	52-2236	£11.75

Glass Bulb Form Pipettes Class A

Colour coded bulb form **pipettes** from **LabGlass**, made from **borosilicate glass**.

- Available in a range of sizes
- One graduation mark
- Class A
- Conforms to DIN ISO 648 standard

Technical specification

Order code	Capacity	Tolerance
52-4195	2ml	±0.01ml
52-4196	5ml	±0.015ml
52-4191	10ml	±0.02ml
52-4192	15ml	±0.025ml
52-4193	20ml	±0.03ml
52-4194	25ml	±0.03ml

Capacity	Colour	Order code	1+
2ml	Orange	52-4195	£1.62
5ml	White	52-4196	£1.55
10ml	Red	52-4191	£1.62
15ml	Green	52-4192	£1.65
20ml	Yellow	52-4193	£1.72
25ml	Blue	52-4194	£1.65

Glass Bulb Form Pipettes Class B

Colour coded bulb form **pipettes** from **LabGlass**, made from **borosilicate glass**.

- Available in a range of sizes
- One graduation mark
- Class A
- Conforms to DIN ISO 648 standard

Technical specification

Order code	Capacity	Tolerance
52-4201	5ml	±0.03ml
52-4197	10ml	±0.04ml
52-4198	15ml	±0.05ml
52-4199	20ml	±0.06ml
52-4100	25ml	±0.06ml

Capacity	Colour	Order code	1+
5ml	White	52-4201	£1.12
10ml	Red	52-4197	£1.17
15ml	Green	52-4198	£1.17
20ml	Yellow	52-4199	£1.17
25ml	Blue	52-4200	£1.27

Serological Pipettes Class B

Serological **pipettes** from **LabGlass**, designed so the last drop can be expelled by blowing.

- Available in a range of sizes
- Calibrated for delivery to jet
- Class B
- Colour coded
- Blue graduation
- Conforms to DIN ISO 835 standard
- Supplied in **packs of 5**

Technical specification

Order code	Capacity	Tolerance
52-4202	1ml	±0.01ml
52-4204	2ml	±0.01ml
52-4206	5ml	±0.05ml
52-4203	10ml	±0.05ml
52-4205	25ml	±0.2ml

Capacity	Colour	Order code	1+
1ml	Yellow	52-4202	£8.80
2ml	Black	52-4204	£8.43
5ml	Red	52-4206	£8.80
10ml	Orange	52-4203	£8.43
25ml	White	52-4205	£9.15



Dropping Pipettes

These dropping pipettes are useful for dispensing liquid from test tubes.

- Pipettes have soft rubber teats
- Glass body of 125mm length
- Supplied in **packs of 10**

Order code
52-1266
Pack of 10 **£6.00**



Plastic Pipettes Graduated to 3ml

A small plastic pipette, ideal for dispensing small amounts of liquid.

- Soft bulb is squeezed to suck up and dispense liquid
- Graduated up to 3ml

MOQ 16
Order code
06-6066 **£0.059**



Graduated Disposable Pasteur-type Pipettes

Disposable, graduated Pasteur-type pipettes from Medline, made from transparent, inert, low-intensity polythene.

- Volumetric tolerance $\pm 10\%$
- Not sterile
- Supplied in **packs of 500**

Technical specification

Nominal capacity	Length	Stem diameter	Total capacity	Bulb draw	Graduations
1ml	154mm	5mm	5ml	3.1ml	0.25ml
3ml	154mm	7.8mm	7ml	3.2ml	0.5ml

Size	Quantity	Order code	1+
1ml	500	06-7019	£7.39
3ml	500	06-7021	£7.82



Suction Pipette Filler

A suction type filler for measuring and volumetric pipettes.

- Rubber squeeze bulb with valves
- 50cc capacity
- Withstands acids and other hazardous chemicals
- Features 3 flow control valves, that are opened by squeezing

Colour supplied will vary.

Order code
52-8058
Pipette filler **£4.43**



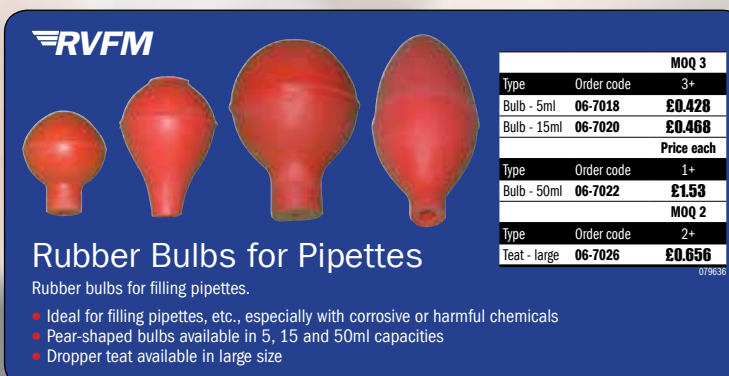
Pipette Pumps

A range of fast-release pipette pumps for precise and quick dispensing.

A knurled thumb wheel can be rotated to draw up or dispense liquids, or the release lever can be pushed in for quick emptying. The moulded chuck has a silicon rubber collet inside to hold various standard sized pipettes. The pump resists acids and alkalis and can be easily disassembled for thorough cleaning.

- Knurled thumb wheel
- Quick release lever
- Holds various standard sized pipettes
- Resistant to acids & alkalis
- Can be disassembled for cleaning

Capacity	Order code	1+
2ml	52-3426	£3.95
10ml	52-3427	£4.45
25ml	52-3428	£4.95



Rubber Bulbs for Pipettes

Rubber bulbs for filling pipettes.

- Ideal for filling pipettes, etc., especially with corrosive or harmful chemicals
- Pear-shaped bulbs available in 5, 15 and 50ml capacities
- Dropper teat available in large size

MOQ 3		
Type	Order code	3+
Bulb - 5ml	06-7018	£0.428
Bulb - 15ml	06-7020	£0.468
Price each		
Type	Order code	1+
Bulb - 50ml	06-7022	£1.53
MOQ 2		
Type	Order code	2+
Teat - large	06-7026	£0.656

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Petri Dishes & Racks

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Petri Dishes

Clear, economical unbreakable petri dishes.

- Corrosion free polypropylene construction
- Autoclavable
- Available in 50, 125 and 150mm diameters

Order code
52-1528
MOQ 4 50mm

£0.248

Order code
52-1530
125mm

£1.11

Order code
52-1532
150mm

£1.52


RVFM

Autoclaveable Glass Petri Dishes

Clear glass petri dishes with lids. Can be autoclaved at a temperature of 120°C.

- Supplied in **packs of 18**



Order code
52-0240
Pack 18 60x12mm

£14.38



Order code
52-0242
Pack 18 100x15mm

£18.58



Order code
52-0179
Pack 10 55x14mm

£1.06

medline

55mm 4-Vent Petri Dishes

These Aseptic 55mm Petri Dishes from Medline are made from polystyrene and have 4 vents. They are supplied in packs of 10 and are suitable for use with automatic filling machines.

- Diameter 55mm
- Height 14mm
- Supplied in **packs of 10**



Order code
52-0173
Pack 20 90x14mm

£1.81

medline

90mm Triple Vent Petri Dishes

These Aseptic Petri Dishes from Medline are made from polystyrene and have 3 vents. They are supplied in packs of 20 and are suitable for automatic filling machines.

- Diameter 90mm
- Height 14mm
- Side mark for orientation
- Writing area on bottom
- Supplied in **packs of 20**

Order code
52-0169
Pack 20
90x14mm

£3.53


medline

Triple Compartment Petri Dishes 90mm

Aseptic polystyrene Petri Dishes with 3 compartments and 3 vents from Medline. The dishes are supplied in packs of 20, packed in heat-sealed bags. They are suitable for use in automatic filling machines.

- 90mm diameter x 14mm high
- Aseptic polystyrene
- 3 compartments
- 3 vents
- Suitable for use in automatic filling machines
- Supplied in **packs of 20** in heat-sealed bags

Order online

Activate your account for online ordering.

For further information:

www.rapidonline.com/activate

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Clear Acrylic Petri Dish Racks

Clear acrylic racks with white polycarbonate posts for holding and transporting petri dishes.

The racks can be very useful during inoculation, incubation and storage as the excellent visibility from all sides enables the culture to be seen and checked during incubation.

- Available in sizes to suit 60mm and 90mm dishes

Order code
52-3578
Suit 60mm dishes

£18.98

Order code
52-3577
Suit 90mm dishes

£19.98


RVFM

Petri Dishes Rack for 90mm Dishes

These holding racks for 90mm Petri dishes are manufactured from clear acrylic and have white polycarbonate posts.

- Useful during inoculation, incubation and storage
- Visibility from all sides
- Size: (L x W x H) 285 x 203 x 206mm

Order code
52-1308
Suit 90mm dishes

£15.06

Chromatography



Chromatography Columns with Sintered Disc

Chromatography columns from **Glassco** with sintered disc.

- Made from borosilicate glass
- Porosity 0
- Available in a range of sizes

NEW

Diameter	Length	Socket size	Order code	1+
10mm	100mm	14/23	52-1699	£38.14
10mm	200mm	14/23	52-1701	£38.14
10mm	300mm	14/23	52-1703	£38.15
10mm	400mm	14/23	52-1705	£38.12
20mm	100mm	19/26	52-1707	£40.04
20mm	200mm	19/26	52-1709	£40.01
20mm	300mm	19/26	52-1711	£40.01
20mm	400mm	19/26	52-1713	£40.04
20mm	500mm	19/26	52-1715	£40.04
26mm	300mm	24/29	52-1717	£46.87
26mm	400mm	24/29	52-1719	£46.87
26mm	500mm	24/29	52-1721	£49.02
30mm	400mm	34/35	52-1723	£51.54
30mm	500mm	34/35	52-1725	£61.51
30mm	400mm	40/38	52-1727	£62.02
30mm	500mm	40/38	52-1729	£64.41

527994



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Chromatography Paper Rolls

NEW

This **chromatography paper** can be used to separate and analyse coloured chemicals and other substances.

- Ideal for use by schools and colleges
- Grade 1
- Supplied in rolls

Order code
52-1959
40mm x 100m

£31.99

Order code
52-1981
50mm x 100m

£36.70



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Chromatography Paper

This **chromatography paper** is supplied on reels of 100m.

- Width 40mm
- Whatman Grade 1

Order code
52-2759
40mm x 100m

£17.61

Order online

Save time, and place your order at:

www.rapidonline.com

24 hours a day



NEW

Chromatography Paper

This **chromatography paper** can be used to separate and analyse coloured chemicals and other substances.

- Ideal for use by schools and colleges
- Grade 1
- Supplied in **packs of 100 sheets**

Order code
52-1982
100 x 300mm

£25.35

Order code
52-1983
200 x 200mm

£32.65

ACADEMY
Science Products

Chromatography Glass Tank and Lid

NEW

Chromatography **tank** and **lid** from **Academy** for use in the appropriate laboratory work.

- Made from soda-lime glass
- Length 230mm
- Width 90mm
- Tank and lid available separately

Order code
52-1984
Tank

£43.95

Order code
52-1985
Lid

£9.39





Indicator Test Paper

Filter Paper

ACADEMY
Science Products

Professional Filters

These professional **filter papers** from **Academy** are suitable for a wide range of routine applications in the **laboratory**.

- Available in a range of sizes
- Supplied in **packs of 100**

Diameter	Pack size	Order code	1+
55mm	100	52-1095	£3.21
70mm	100	52-1097	£3.72
90mm	100	52-1098	£4.44
110mm	100	52-1099	£5.47
125mm	100	52-1109	£5.56
150mm	100	52-1185	£7.49
185mm	100	52-1187	£11.32

567969



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Test & Analysis Products

Premium Filter Paper Packs of 100

Qualitative filter paper for use in the chemistry laboratory.

- Range of diameters
- Supplied in **packs of 100**
- Eisco CH0390 series**

Diameter	Pack size	Order code	1+
90mm	100	52-3549	£1.12
110mm	100	52-3550	£1.32
125mm	100	52-3551	£1.78
150mm	100	52-3552	£2.91

565630



Did you know we also sell test equipment?

Johnson
TEST PAPERS

Indicator Papers

Indicator papers available in a range of types and pack sizes.

- Supplied in convenient plastic dispensers
- Universal pack includes pH indicator scale
- Pack of 200** contains 10 books of 20 strips 10mm wide
- Pack of 100** contains 100 loose strips 10mm wide
- 5m pack** contains a single continuous strip 7mm wide

		Price each	
Type	Order code	1+	
Blue litmus 200	52-8000	£2.93	
Blue litmus 100	52-8002	£1.25	
Blue litmus 5m	52-8004	£2.16	
Red litmus 200	52-8006	£2.93	
		MOQ 10	
		In Multiples of 10	
Type	Order code	10+	
Red litmus 100	52-8008	£1.25	
		Price each	
Type	Order code	1+	
Red litmus 5m	52-8010	£2.16	
Ph 1-11 univ. 200	52-8012	£3.18	
Ph 1-11 univ. 5m	52-8016	£2.27	
Ph 1-14 univ. 200	52-8018	£3.41	
Ph 1-14 univ. 100	52-8020	£1.87	
Ph 1-14 univ. 5m	52-8022	£2.27	

075339

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Clinical Test Strips

These **clinical test strips** are suitable for use in testing for glucose or protein.

- Supplied in **packs of 50**

Order code **52-2611**
Diastix Pack of 50

£7.09

Order code **52-2612**
Albustix Pack of 50

£9.93

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Absorbent Cotton Wool

This absorbent white **cotton wool** is suitable for use in the laboratory, classroom, first aid kit, workplace and the home.

- Hospital quality
- Supplied in **packs of 500g**

Order code **52-2756**
500g

£6.04

Spatulas, Spoons, Scoops, Tongs, Rods & Tweezers

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Metal Spatulas/Spoons

Size	Material	Quantity	Order code	1+
120mm	Stainless Steel	1 (MOQ 2)	52-1275	£0.77
150mm	Stainless Steel	1	52-1277	£0.47
200mm				

Metal Pick Scook

160mm

Metal Chattaway Spatula

100mm	Stainless Steel	1 (MOQ 2)	52-9033	£0.844
130mm	Stainless Steel	1	52-9031	£1.00
150mm	Stainless Steel	1	52-9035	£0.50
200mm	Stainless Steel	1	52-9037	£1.55

Polypropylene Spatulas/Spoons

150mm

200mm

Nuffield Spatulas

140mm	Polished steel	1	52-0164	£2.13
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Material	Quantity	Order code	1+
Stainless Steel	1	52-3429	£0.478
Stainless Steel	Pack of 5	52-3372	£3.39

Stainless Steel	Pack of 6	52-3570	£3.33
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Polished	1	52-3528	£0.55
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Polished	1	52-3529	£0.61
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Polypropylene	1	52-3583	£0.24
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Polypropylene	1	52-3584	£0.337
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GENERAL PURPOSE LABORATORY SPATULAS, SPOONS AND SCOOPS, IDEAL FOR USE IN THE CHEMISTRY LABORATORY
For full details visit www.rapidonline.com



Crucible Tongs

200mm crucible tongs available in economy and stainless steel models. These tongs are essential for the safe handling of hot crucibles.

Order code **52-0515**
Economy

£1.02

Order code **52-0517**
Stainless Steel

£2.01

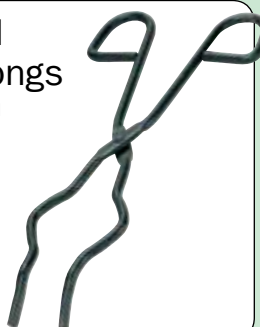
Bowed Jawed Laboratory Tongs

High quality polished mild steel crucible tongs.

- Length 200mm
- Supplied in **packs of 5**

Order code **52-0158**
Bowed mild steel

£7.20



Economy Beaker Tongs with Plastic Jaws

240mm long nickel-plated steel tongs with non-slip plastic-coated jaws, ideal for handling laboratory utensils like beakers, large crucibles, evaporating dishes and other round labware.

- Holds 50 to 2000ml beakers

Order code **52-0461**
Economy beaker tongs

£2.24

Deflagrating Spoon and Cap

A deflagrating spoon consisting of a steel cup and rod held by a cork in the aluminium cap.

- Steel cup and rod
- Aluminium cap
- Length 350mm
- Diameter of cap 90mm
- Diameter of cup 18mm

Order code **52-3418**
Deflagrating Spoon

£1.42



Radioactive Source Handling Tongs

These custom designed stainless steel tongs are ideal for handling radioactive sources.



Order code **52-2698**
Radioactive tongs

£11.27

Disposable Plastic Tweezers

Disposable plastic forceps/tweezers for general purpose use in the laboratory.

- Length 110mm
- Serrated jaw tips
- Supplied in **packs of 12**

Order code **52-3703**
Pack of 12

£8.88



Laboratory Stirring Rods

Order code **52-3580**
Policeman rod

£0.34

Order code **52-3581**
Glass stirring rod

£1.58

Order code **52-3582**
Button end glass rod

£2.87



Glass Stirring Rods

6mm diameter glass stirring rods.

- Simax Borosilicate glass
- Supplied in **packs of 10**

Type	Order code	1+
125mm	52-1006	£5.14
150mm	52-1008	£5.92
200mm	52-1010	£6.25
300mm	52-1012	£6.72

073141



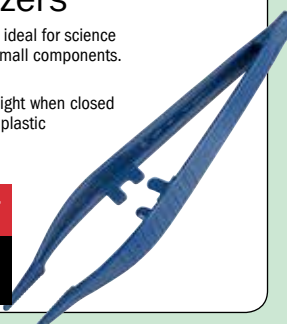
Plastic Tweezers

Economical, plastic tweezers, ideal for science and as an assembly aid for small components.

- Serrated tips
- Locating lugs hold tips straight when closed
- Made from recyclable ABS plastic
- Length approx. 110mm

Order code **06-6064**
Plastic tweezers

£0.18



Burners & Stands

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Tall Triangular
Tripod
120 x
210mm

Order code
52-3387

£3.48


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Pipe Clay Triangles

Type	Order code	1+
50mm	52-3380	£0.32
60mm	52-3537	£0.36
75mm	52-3538	£0.51


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Wire Gauze
Squares

Size	Ceramic centre	Order code	1+
Packs of 10			
125 x 125mm	Yes	52-3327	£3.98
150 x 150mm	Yes	52-3328	£5.18
125 x 125mm	No	52-3567	£3.40
150 x 150mm	No	52-3568	£4.37


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Laboratory Alcohol/
Spirit Lamps

Order code
52-3518

£2.22


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Tripod Stand and
Stainless Steel
Alcohol Burner

Type	Order code	1+
Alcohol burner	52-3325	£4.42
Tripod	52-3326	£1.83


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300x300mm Heat-Resistant
Asbestos-Free Bunsen
Burner Mats

Order code
52-0127
Supplied singly

£2.23

Order code
52-0125
Pack of 10

£13.64


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230x230mm
Calcium Silicate
Bench Mats

Order code
52-4056

£1.81

NEW


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11mm Natural Gas
Bunsen Burner

A Laboratory Bunsen
Burner for use with
natural gas. The burner
has a nickel-plated
burner tube with a
rotatable air regulator
and an enamelled cast
base for good stability.

- Barrel diameter 11mm
- Height: 125mm
- Base diameter 80mm
- Nickel-plated burner tube
- Rotatable air regulator
- Enamelled cast base
- Cylindrical rifflid connector
- 8mm gas inlet



Order code
52-0153

£4.75

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13mm Bunsen
Burners

A range of Bunsen burners consisting
of a nickel-plated burner tube
mounted on a die-cast base.

- Rotating air regulator
- Base diameter 80mm
- Tube diameter 13mm
- Height 142mm
- Weight 280g
- Eisco CH0088 series

See order code 52-3590 for
suitable rubber tubing.



Order code
52-3365
Natural gas

£6.74

Order code
52-3366
LPG

£6.74

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Melting Point Apparatus

NEW

This **melting point apparatus** from **Eisco** has been designed with safety in mind. A single control knob on the front panel incorporates the mains On/Off switch and a rapid heat switch allows higher temperatures to be obtained quickly. Sample tubes are illuminated from behind and magnified through a lens.

- Selector at rear of the instrument allows a light or dark background
- Ceramic insulation around aluminium heating block minimises heat transfer to the casing
- Rating 230V, 50 to 60Hz
- Manufacturer's part **CH0801**

Order code
52-4189

£239.92



Full range of rubber tubing, connectors
and clamps available online



Retort Stands & Clamps

eisco
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NEW

Laboratory Jacks

This **scissor jack** from **Eisco** provides strong and stable support for a range of **laboratory equipment**.

- Screw-operated scissor action mechanism
- Platform size 150 x 135mm
- Minimum height 60mm
- Maximum elevation 250mm
- Finished in blue
- Maximum load 25kg
- Manufacturer's part **CH0642A**



Order code
52-4188
Scissor jack

£28.99

eisco
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Retort Stand Clamps and Bossheads

A range of retort stand clamps including boss-head clamps and tube clamps with rubber or cork lined jaws.

- Clamps for use with retort stands

Type	Order code	1+
4-prong Clamp, Cork Jaws and Bosshead	52-3313	£3.78
2-prong Clamp, Rubber Jaws and Bosshead	52-3314	£5.51
3-prong Clamp, PVC coated Jaws with Bosshead	52-3305	£3.78
3-prong Clamp, Rubber Jaws	52-3367	£2.42
Economy Bosshead Pack of 10	52-3368	£10.99
Bosshead Clamp - single	52-3391	£5.47

RVFM

Burette Clamps

These burette clamps attach to retort stands and have rounded steel jaws that open from 10 to 35mm diameter.

- Jaws can be rotated through 360° and locked in any position
- Fits support rods up to 15mm diameter
- Available with or without plastic coated jaws



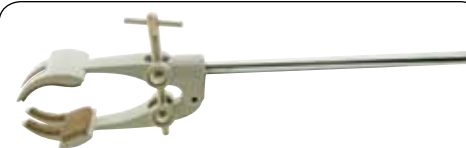
Order code
06-2129
Metal jaws

£5.04



Order code
06-2130
Plastic coated jaws

£5.72



RVFM

4-prong Retort Stand Clamp

This universal retort stand clamp is made from aluminium and has 4 jaws.

- The jaws allow objects from 2-90mm in diameter to be clamped securely
- The design of the jaws ensures a firm grip at all angles of opening
- The four interlocking jaws are cork lined
- Overall length is 24cm

Order code
52-0518
Retort stand clamp

£4.48

RVFM

3-prong Clamps

A range of 3-prong clamps with rods that can be attached to a retort stand by means of a boss-head clamp.

- Retort stands and boss-head clamps available separately

Type	Order code	1+
3-prong Clamp, Adjustable Zinc Alloy	06-2126	£7.44
3-prong Clamp, Adjustable Aluminium Casting	06-2127	£5.95
3-prong Clamp, Adjustable Die Cast Aluminium	06-2128	£5.95

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Retort Stand Rings

A range of supporting rings for use with retort stands.

The 50 and 75mm rings have built-in boss-head clamps, whereas the 150mm ring uses a separate boss-head clamp (not included) that allows the distance of the ring from the stand rod to be varied.

- **Eisco CH0672 & CH0668 series**

Diameter	Boss-head	Order code	1+
50mm	Yes	52-3462	£2.11
75mm	Yes	52-3463	£2.25
150mm	No	52-3371	£2.05



RVFM

Vertical Burette Rack

A polished hardwood rack for storing burettes vertically.

- Upper tier has recesses to locate burettes
- Can take up to 12 burettes
- Size (H x W x D): 455 x 400 x 77mm
- Wall mountable

Order code
06-6914
Burette rack

£14.61



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Wooden Test Tube Racks

Wooden test tube stands with 22mm diameter holes.

- Width 65mm
- Height 115mm
- **Eisco CH0704 series**

Test tubes not included.

Order code
52-3449
6 holes

£4.14

Order code
52-3448
12 holes

£6.36



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Funnel Stands

Polished wooden funnel stands with clamping screws.

- Rod is approx. 460mm tall x 16mm diameter
- **Eisco CH0689 series**

Funnels not included.

Order code
52-3600
Single

£7.55

Order code
52-3601
Double

£11.56



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Funnel and Burette Stand

A polished wooden funnel and burette stand with clamping screws for adjusting the height and securing the burette.

- Rod approx. 460mm tall x 16mm diameter
- Base size 290 x 110mm
- **Eisco type CH0690**

Funnel and burette not included.

Order code
52-3599
Funnel/burette

£10.92



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Wooden Burette Stands

Stands, designed to support up to two burettes. The stands are made from polished seasoned hardwood, and have a separate clamping screw for each burette.

- For one or two burettes
- Rod is approx. 460 x 16mm
- **Eisco CH0264 series**

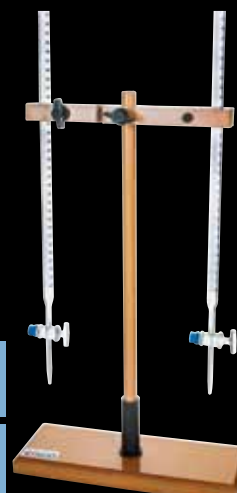
Burettes not included.

Order code
52-3430
Single

£7.69

Order code
52-3598
Double

£11.56



Calorimeters



Aluminium and Copper Calorimeters

A range of calorimeters with parallel sides and a rolled rim.

- Available in aluminium or copper
- Eisco PH0438 & PH0440 series



Stirrer not included.

Metal	Size	Order code	1+
Aluminium	75 x 50mm	52-3645	£1.52
Aluminium	100 x 75mm	52-3644	£2.34
Copper	75 x 50mm	52-3647	£3.15
Copper	100 x 75mm	52-3646	£5.11



Metal Block Calorimeters

A range of metal block calorimeters that can be used for the experimental determination of the specific heat capacity of various metals.

Each cylindrical block has a mass of 1kg adjusted to an accuracy of 2%. The blocks are drilled with two holes: a larger 12.5mm central hole for a special immersion heater and a smaller hole 7.5mm diameter for a thermometer or temperature sensor.

- Eisco PH0435 series



Material	Order code	1+
Aluminium	52-3651	£13.62
Brass	52-3652	£20.42
Copper	52-3653	£23.32
Steel	52-3654	£6.47



Joule's Calorimeter

A Joule's Calorimeter for experimenting with the conversion of electrical energy into heat energy. The calorimeter consists of a nickel-plated copper outer vessel with a lagged copper inner vessel. The cover has terminals for the 3 to 6V heating coil, a built-in stirrer and a hole for a thermometer to record the temperature changes.



- Apparatus for experimenting with the conversion of electrical energy into heat energy
- Nickel-plated copper outer vessel
- Copper inner vessel
- Felted wool cloth lagging
- Outer vessel is 100mm tall and 75mm in diameter
- Inner vessel is 75mm tall and 50mm in diameter
- 3 to 6V heating coil, Max. current 1A
- Built-in stirrer
- Hole for a thermometer (not included)

Order code
52-9535
Joule's calorimeter

£10.50

Measuring



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Leicester Height Measure

An accurate portable free standing height measure, complete with case.

- Quickly assembled
- Measuring range 210cm dual reading both metric and imperial
- Graduation 1mm and 1/8in
- Fun and easy to use

Order code
52-0579
Height measure

£65.98



Order code
52-9854

£6.23

Metric Calliper

Measures most shapes from 1mm to 30cm by simply reading measurements through a single viewing window.

- Designed for calculating areas and volumes
- Able to measure depth, width and diameter
- Size: 420 x 195mm

Trundle Wheel Counter

Order code
52-9848

£10.07



Clinometer Mk1

A traditional lightweight angle-measuring instrument to calculate heights.

- Complete with product guide
- Wheel size: 130mm diameter

Order code

52-9856

Clinometer Mk 1

£10.06



Clinometer Mk2

A compact Clinometer with no external moving parts and a combined sighting angle-reading eyepiece

- A window on the side allows a second person to check a reading
- All angles in degrees followed by a plus or minus to indicate an upward or downward slope
- Complete with product guide
- Size: 140mm diameter

Order code

52-9858

Clinometer Mk 2

£12.51



Trundle Wheel

Measure intermediate distances with this robust and durable Trundle wheel.

- Clicker can be adjusted to one of three positions: off, click every 10cm or click every metre
- Splits into two parts for easy storage
- Length 83cm
- Supplied with carry bag and product guide
- Ideal primary school resource
- Suitable for Key Stages 1 & 2 (ages 5 to 11)

Order code

52-0656

Trundle wheel

£9.68



Ticker Tape Timer

This **ticker tape timer** from Eisco is housed in a tough moulded plastic case. The timer operates on 12V AC supply and produces 50/60 dots per second, depending on the main frequency. The case has a tape guide and a carbon disc plug which can be moved to maximise the use of the discs.

- Supplied with 1 x 50m paper tape roll and box of 100 carbon discs
- Manufacturer's part PH0353A

Order code
52-4213
Ticker tape timer

£28.45



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products



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Health & Safety

JSP Stealth 7000 Safety Spectacles

Sports style safety spectacles offering excellent protection combined with a modern design.

- Ultra lightweight
- Contour design fits well onto smaller faces, suitable for children
- Clear polycarbonate frame and scratch-resistant lens
- Conforms to **EN166.1.F**
- Available in clear and smoke versions

Type	Order code	1+	5+	10+
Stealth 7000 clear	87-3114	£3.85	£3.69	£3.25
Stealth 7000 smoke	87-3122	£3.85	£3.69	£3.25

066179



Rapid

A classpack of 20 Junior Stealth Safety Spectacles in a deep Grannell's Tray with lid. See order code **87-3114** for full details of the JSP Stealth 7000 Safety Spectacles.

- Perfect storage solution for safety spectacles

Order code
87-3113
Classpack of 20

£64.10



JSP Martcare Indirectly Ventilated Safety Goggles

These Martcare indirectly-ventilated goggles from JSP are ideally suited for general-purpose eye protection due to their economical pricing and simplicity of use. The indirect ventilation system of the JSP Martcare goggles means that dust or liquid cannot directly fall into the goggles and gives additional protection over goggles which simply have perforated frames to allow air flow.

- Clear PVC lens
- Comfortable soft body
- Adjustable elasticated head-strap
- Conforms to **EN 166-1.B.3.4**

Type	Order code	1+	5+
Martcare goggles	87-3104	£1.40	£1.24

061349



Rapid

A classpack of 20 JSP Indirect Vent Martcare Goggles in a deep Grannell's Tray with lid.

See order code **87-3104** for full details of the JSP Martcare goggles.

- Perfect storage solution for laboratory goggles

Order code
87-3103
Classpack of 20

£31.11



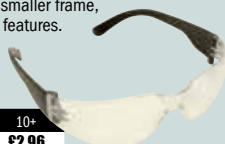
JSP Stealth 7000 Junior Safety Spectacles

High quality lightweight junior spectacles with smaller frame, ideal for children and people with small facial features.

- Scratch resistant lens
- Can be worn over most glasses
- Conforms to **EN166**

Type	Order code	1+	10+
Junior spectacles	87-0914	£3.14	£2.96

072695



Rapid

A classpack of 20 Junior Stealth Safety Spectacles in a deep Grannell's Tray with lid.

See order code **87-0914** for full details of the JSP Junior Stealth Safety Spectacles.

- Perfect storage solution for safety spectacles

Order code
87-0913
Classpack of 20

£63.76



Order code
52-3596

£1.52

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Clear Vented Safety Glasses

These safety glasses can be worn alone, or are perfect for fitting over most prescription spectacles.

- Vented to prevent fogging
- UV protected
- Lightweight polycarbonate
- Impact resistant lens
- CE marked
- Conform to ANSI Z87.1 2010 side-shield protection
- Eisco type **CH0619A**

RVFM

Economy Junior Goggles

Economy junior goggles especially designed for younger people and people with small facial features.

- General purpose protection against splashes, dust, fumes etc
- Frame made from soft PVC for a comfortable fit and adjustment to individual's faces
- Conforms to **EN166**

Type	Order code	1+	10+
Economy junior goggles	87-1016	£1.67	£1.56

067742



BLUE DOT™

Emergency Eye Wash

Sterile sodium chloride 0.9% w/v sterile water for ocular and topical irrigation and wound cleansing.

- Available in packs of 25 single-use 20ml pods and in 500ml bottles

Type	Order code	1+
Pack of 25x 20ml	87-4221	£8.58
500ml bottle	87-4225	£1.44

300559

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Trust • Delivery • Value

Black Rubber Bib Aprons

Basic black rubber aprons, perfect for the chemistry laboratory.

The aprons are comfortable and flexible, waterproof and resistant to most chemicals likely to be used by students.

- Available in medium or large sizes
- Medium: width 685mm (27in.), length 915mm (36in.)
- Large: width 685mm (27in.), length 1065mm (42in.)
- Eisco RBAP series

Size	Order code	1+
Medium	52-3595	£6.12
Large	52-3594	£6.12

565638



sempercure®

Powder-free Latex Gloves

Powder-free latex gloves providing higher protection than vinyl, and maintaining integrity under prolonged use. Ideal for protecting the hands against degreasing and cleansing solvents, ferric chloride etchant, caustic soda based products and most other chemicals associated with the electronics industry.

These gloves will not provide 100% protection under all working conditions and the user should establish suitability prior to use.

- Non-sterile
- Beaded cuff
- High tensile strength
- Recommended for use with blood, blood stained fluids and harsh chemicals
- Supplied in dispenser boxes of 100



Size	Order code	1+	5+	10+
Large	87-0951	£5.77	£5.66	£5.43

300538

microplast®

Blue Detectable Plasters

Bright blue sterile catering plasters.

- Blue colour stands out if accidentally lost in foodstuffs
- Occlusive material provides integral barrier to bacteria
- Metal detectable for food production facilities
- Supplied in an assorted pack of 100



Order code
87-4195
Blue plasters

£3.79

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40 years

BenchVent

The Bench Ventilation Company

BenchVent bench top units help protect pupils and staff from the fumes associated with GCSE, A Level, and higher education classroom experiments.

BenchVent is one of the first British companies to design and manufacture products specifically addressing the fume extraction requirements of school science laboratories.

Built in the UK, BenchVent offers an industry-leading lifetime guarantee for complete peace of mind. All units conform to the guidance of the Health and Safety Executive CoSHH regulations.



Order Code	Model	Description	Air Volume cap	Size	1+
87-5500	BV300S	Glue Spray Air Filtration Unit	325m³/hr	A3	£272.83
87-5501	BV200S	Glue Spray Air Filtration Unit	325m³/hr	A2	£332.10
87-5504	BV300S-D	Air Extraction Unit	355m³/hr	A3	£253.11
87-5502	BV200H	Air Filtration Hoods & Spray Booth	325m³/hr	A2	£595.35
87-5503	BV100H	Air Filtration Hoods & Spray Booth	650m³/hr	A1	£809.19
87-5505	BV200H-D	Air Extraction Spray Booth	355m³/hr	A2	£676.14
87-5506	BV100H-D	Air Extraction Spray Booth	710m³/hr	A2	£1033.35
87-5521	BV550S-D	Fume and Vapour Extraction Unit	355m³/hr	510x360mm	£628.22
87-5517	BV570H-C	Small Desktop Fume Cabinet	202m³/hr	570x465mm	£805.95
87-5513	BV500S-C	Desk/Bench Top Fume Cabinet	325m³/hr	575x385mm	£1056.32
87-5514	BV700S-C	Desk/Bench Top Fume Cabinet	650m³/hr	515x785mm	£1563.30
87-5519	BV660H-D	Fume Extraction Hood & Cabinet	355m³/hr	680x600mm	£854.55
87-5520	BV930H-D	Fume Extraction Hood & Cabinet	710m³/hr	960x740mm	£1308.15
87-5515	BV660H-C	Fume Filtration Hood & Cabinet	355m³/hr	A2	£1141.29
87-5516	BV930H-C	Fume Filtration Hood & Cabinet	710m³/hr	A2	£1701.00



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www.rapidonline.com

medline

scientific limited

Hot Stirrers

MS-300 Hot Plate Stirrers

The Medline MS-300 Hot Plate Stirrer offers a large heating area of 180 x 180mm and is ideal for use with flat-bottomed vessels. With safe, controlled heating up to 400°C, the Medline MS300 provides a safer, more accurate heat source than the conventional Bunsen burner arrangement. The speed of the built-in magnetic stirrer of the Medline MS-300 Hot Plate Stirrer can be controlled between 100 and 1500rpm.

Also available are two sizes of octahedral stirring bars 15 x 8mm or 25 x 8mm. Both types feature pivot rings.

- Heating area 180 x 180mm
- Temperature up to 400°C
- Stirrer speed 100 to 1500rpm
- Operating voltage 220V AC
- **Medline type MS-300**



Order code
52-0449
Hot plate stirrer **£187.46**



Order code
52-1029
16mm stirring bar **£2.90**

Order code
52-1031
25mm stirring bar **£3.40**

Heating Mantles



E Series Temperature Controlled Heating Mantles

Medline E Series Temperature Controlled Heating Mantles have Nichrome wire heating elements and woven glass fibre mat mantles. An important addition to any science laboratory, the Medline E Series mantles benefit from rugged steel construction and can heat up to 450°C.

- Steel case construction with chemical-resistant coating
- Nichrome wire heating element
- Mantle made from woven glass fibre mat
- Moulded silica powder thermal insulation
- Temperature range up to 450°C (Max.)
- Power Supply: 220V AC

Capacity	Order code	1+
50ml	52-0451	£102.95
100ml	52-0835	£124.21
250ml	52-0453	£48.27
500ml	52-0455	£154.95
1 litre	52-0457	£149.95

500332

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CELESTRON GLOBAL LIMITED

Cannot see the microscope or instrument you require?

Celestron's entire range can be ordered with us, simply contact our Education team on +44 (0)1206 751166.

Optical Microscope Beginners Kit

This **beginners kit** from Celestron features a quality microscope suitable for any budding scientist taking their first steps into the world of microscopy. Whether it's at home, school or college, this entry-level kit with **magnification from 40x to 600x** provides the perfect tool.

Order code
52-9641

£31.25



PentaView LCD Digital Microscope

This **digital microscope** from Celestron is a quality instrument suitable for both hobbyists and students, providing superb images for educational and research institutions. The microscope has been designed with a host of rich features, including a **5MP CMOS sensor**,

5 x fully achromatic lens objectives, fine and coarse focus, mechanical stage and a **4.3in colour LCD touchscreen**, which rotates 180° for sharing your view with others.



Order code
52-9677

£295.09

Labs Compound and Stereo Microscopes

These **compound and stereo microscopes** from Celestron are made from high-quality parts and remain durable enough for use in the classroom or a professional lab. They provide sharp views with excellent detail and include prepared slides or 3D bug specimens to get you observing right away.

Order code
52-9643
20x

£26.65

Order code
52-9651
200x

£399.99



Handheld Digital Microscope

This **handheld microscope** from Celestron is a quality instrument suitable for both hobbyists and students, allowing images of microscopic specimens to be captured. It is easy-to-use and features up to **5 megapixels of resolution**, so you can record videos or create time-lapse movies. The microscope includes an **adjustable stand** to help you get the perfect angle on stamps, coins, circuit boards, and more.



Order code
52-9653

£101.49

Labs Compound Microscopes

These **compound microscopes** from Celestron are strong, stable quality instruments suitable for both hobbyists and students. They are manufactured with an all-metal construction and are ideal for the home, school or college. The lab-ready microscopes have 10x and 20x/25x eyepieces with 4x, 10x and 40x objective lenses. View specimens at 40x, 100x, 250x, 400x, 800x/1000x magnification.

Order code
52-9645
800x

£86.66

Order code
52-9647
1000x

£125.99



For full details visit www.rapidonline.com



Optik Biolux CEA USB Microscope Set 40-1024x

This Bresser Optik Biolux CEA USB Microscope Set 40-1024x is more than just your normal classic microscope, as it is manufactured from robust solid die cast metal, while the entire set comes in a hardened carrier case. Designed with a number of versatile uses and can be conveniently connected to your computer. Suitable from 8 years and above.

System requirements: Windows® 2000/XP/Vista/Seven (for software and driver).

Order code **49-0140** **£98.52**



Optik Biolux USB Microscope with 4x Digital Zoom

This Bresser Optik Biolux USB Microscope with 4x Digital Zoom has been designed so that several people are able to view your findings simultaneously via the high quality 8.9cm (3.5in) LCD Monitor.

Order code **49-0525** **£176.02**

For full details and to see more Bresser products visit www.rapidonline.com

Dino-Lite Digital Microscope The Industry Standard



DinoEye Microscope Eyepiece Cameras

A range of eyepiece cameras that add digital camera facilities to optical microscopes. There are cameras to suit most eyepiece types, including 23, 30 or 30.5mm oculars, a universal type to fit oculars up to 36mm and also cameras that attach to C-mount adaptors for endoscopes, etc.

- Software suitable for Windows 10, 8, 7, Vista, XP, MAC OS 10.4 or later

Magnification	Compatibility	Order code	1+
Resolution 1280 x 1024			
72.5x	23mm oculars	19-5884	£194.74
72.5x	23, 30 or 30.5mm	19-5885	£202.95
0x	C-Mount adaptor	19-5886	£174.00
7.2x	Universal =36mm	19-5887	£229.95

549690



Basic Series USB Digital Hand-Held Microscopes

These microscopes are cost-effective models that are suitable for basic use. There is a choice of models, a 4x LED version suitable for hobbyist and school use and a better spec'd version for basic industrial, scientific and business use.

A set of Windows or Mac compatible software is provided that can display and capture, from the microscope, the still image or video output.

- Software suitable for Windows XP, Vista, 7, 8 and recent Mac OS

Type	Order code	1+
Microscope 4x LEDs	19-5879	£94.81
Microscope 8x LEDs	19-5880	£197.16

549731

RVFM

Pocket Zoom Microscope

A simple, yet robust LED illuminated pocket microscope that allows you to see things under high magnification even in poor light conditions.

- 20x to 40x zoom
- Super bright LED illumination
- Includes a sample slide
- Size: 100 x 80 x 30mm

Takes 3x LR44 button cell batteries, included.



Order code **06-7089** **£6.59**

ACADEMY

Microscope Slides Frosted One End

NEW

Pre-washed microscope slides from Academy, frosted at one end on either one or both sides.

- Slides have 45° ground edges
- Supplied with internal cellophane wrapping and easy-to-open tear strip
- Dimensions 76 x 26mm
- Thickness 1 to 1.2mm
- Supplied in packs of 50

Order code **52-1079**
One-sided
£1.75

Order code **52-1081**
Two-sided
£1.75



eisco

Prepared Slides

Sets of 12 prepared microscope slides featuring bacteria or an assortment of specimens, ideal for beginners.

- Supplied as boxed sets of 12 prepared slides

Order code **52-3435**
Bacteria
£9.14

Order code **52-3473**
Beginners
£7.65



CELESTRON

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Prepared Microscope Slides

Order code **52-9671**
25-pieces
MQQ 3+
£16.65



These **3D specimen kits** from Celestron are a quality collection of insect, plant and animal specimen slides, ideal for assisting students in school projects and research. The glass slides come in a beautifully presented wooden case for storage and protection, while each of the slides has a descriptive label.

- Supplied in 25 pieces
- Ideal for any classroom or science lab
- Supplied in a protective case

medline

medline scientific limited

Plain Slides with Cut Edges

Standard sized, clear, pre-washed glass microscope slides from Medline, supplied in vacuum sealed packs of 50.

These low-cost, standard slides have normal 90° edges and are ideal for routine microscopic analysis.

- Standard size: 25.6 x 75.6mm (±0.2mm)
- Clear, pre-washed glass
- Thickness: 1.05 ± 0.05mm
- 90° edges
- Supplied in vacuum sealed packs of 50
- Medline type D100001

Order code **52-0277**
50 slides
£1.60



medline

medline scientific limited

Microscope Coverslips 22 x 22mm

These Medline coverslips are ideal for protecting microscopic samples and help keep the microscope lenses clean in case of accidental touching. They are made from pre-washed glass and are thickness No. 1: 0.13 to 0.16mm. Medline coverslips are supplied in packs of 200 in vacuum sealed packets.

- Clear, pre-washed glass
- Supplied in vacuum packs of 200
- Medline type D102222

Order code **52-0283**
200 coverslips
£5.99



eisco

eisco

Microslides

These Eisco micro-slides are strips of 8 subject-related 35mm photo-micrograph images of real slides photographed through a microscope.

- Wide range of topics
- Film strips are mounted in a clear plastic folder, for excellent protection
- Supplied in packs of 10 strips containing the same 8 images

Type	Order code	1+
Cells of your body	52-3394	£23.81
Digestive	52-3395	£35.70
Circulatory system	52-3396	£23.81
Nervous system	52-3397	£35.70
Respiratory system	52-3398	£35.70
Human blood system	52-3399	£35.70

565567



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microscopes online



Magnifiers



BRESSER

Junior 6 x 21mm Binoculars

These Bresser Optik Junior 6 x 21mm Binoculars have been specially designed for children, courtesy of the large view field and magnification, allowing a fatigue-free observation for youngsters. Manufactured with fully tempered glass finish and equipped with a roof prism system, BK-7 glass material with full tempering and short focus from 5m, these binoculars are an ideal first pair for any child. Includes a strap, pouch and user manual.

- Compact dimensions suitable for children
- Conspicuous colouring
- Blue-green colour
- 145 x 100 x 55mm (L x W x H)
- 120m/1000m field of vision
- 21mm lens diameter
- 6x magnification
- 180g weight
- Manufacturer's part **8810621**

Order code
49-0171
6x21mm

£15.38



Order code
52-3115
Large magnifier

£11.59

INVICTA
EDUCATION

Large Magnifying Set

The Invicta Large Magnifying Set is ideal for inspecting specimens from nature trips. The base of the pot has a millimetre grid enabling the actual size of specimens to be easily recorded. The included stands turn the magnifier into an excellent free-standing desk-top magnifier.

- Ideal for inspecting specimens from nature trips
- Millimetre grid on base of pot for measurement of specimens
- Can also be used as a free-standing desk-top magnifier (stands included)
- Lens magnification: x 2.3
- Size: 10cm x 11cm
- Complete with product guide
- Content not included

80mm Large Magnifier



Order code
06-9961
80mm magnifier

£3.53



eisco
Trade & Retailer

Magnifier Glasses

High quality laboratory magnifiers.

- Chrome-plated metal frames
- Bakelite handles

Order code
52-3674
50mm

£2.03

Order code
52-3675
60mm

£2.54

Order code
52-3676
75mm

£2.95

RVFM

Jewellers Eye Glass

A watchmaker's eye glass with a plastic lens in a black ABS housing.

- 3½ x magnification
- Focal length 90mm



Order code
86-3200
From only

£1.41

RVFM

Large Magnifier Sheet



Order code
06-8430
Magnifier sheet

£3.26

A magical sheet of plastic less than half a millimetre thick which acts as a magnifier with good resolution. This Magnifier sheet is low cost, easy to use and store, and gives between 2 and 3 times magnification.

Ideal for use in the classroom to investigate in detail object from nature, maps, graphs or to assist visually impaired students with day-to-day classroom activities.

This magnifier sheet is also perfect to use for reading the small print in newspaper or books, to read historical documents whilst investigating family history, or when working with small and detailed diagrams or cross stitch patterns.

- Viewing Area: 225 x 145mm



RVFM

Folding Pocket Magnifier

This small, pocket magnifying glass has a chrome surround and a chrome swivel cover.

- 10x magnification
- 21mm diameter glass lens
- Dimensions 33 x 24 x 24mm
- Weight 80g
- Supplied complete with plastic case

Order code
52-9015
10x magnification

£2.31

Rapid

Hand Lens



Order code
06-9959
Pack of 10

£6.51

These durable 45mm diameter high-quality magnifying glasses offer dual magnification - 3x and 6x.

PSU

Base.co.uk

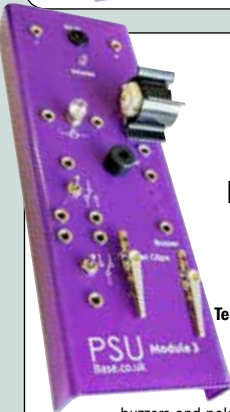


Order code **53-6911**

£24.95

M2PSUB Electricity Teaching Modules Module 2

Module 2 of the **PSU Base Electricity Teaching Modules** is a teaching aid that is great for teaching switching; introduction to LEDs; polarity of LEDs; series circuits; parallel circuits, etc.



Order code **53-6912**

£26.95

M3PSUB Electricity Teaching Modules Module 3

Module 3 of the **PSU Base Electricity Teaching Modules** is a teaching aid that is great for teaching 2-way switching (such as at the top and bottom of stairs); reverse voltage switching (motor spins in opposite direction); buzzers and polarity of buzzers; electronic components such as resistors (by mounting in the clips), etc.

For full details and to see more **PSU Base products** visit www.rapidonline.com

LEDPSUB 5V DC LED Array

This versatile **LED Array** from **PSU Base** enables students to investigate the link between wavelength and colour. The unit has 10x coloured LEDs plus a white LED fitted into a vertical steel tower. There is a selector switch that allows each individual colour to be selected or all colours simultaneously.

Order code **53-6921** **£31.95**



Order code **53-6920** **£95.95**

VEMPSU Volt E-M Westminster 16A LV AC/DC - Single

A **Volt E-M Westminster** type high current, low voltage power supply that has been specifically designed for electromagnetic experiments. Various experiments may be performed including powering electromagnets (AC or DC), the force on a current carrying conductor (DC), homemade electric motors (DC) and immersion heaters.

- Output 2V AC/DC
- Can supply up to 16A
- Maybe short-circuited without harm

Order code **53-6903** **£99.95**



VSPSU Volt Switch Single - 5A AC/DC Selectable Output

The **PSU Base Volt Switch** is a low voltage power supply that can output AC and DC at 5A with selectable voltages of 2, 4, 6, 8, 10 or 12V. The PSU features an electronic cut-out system to protect against short circuits and overloading.

- Low voltage 5A power supply
- Unregulated output
- AC and DC outputs may be used simultaneously
- AC Voltages will be approx. 2V higher than the DC values
- 5-year warranty

Order code **53-6899**

£95.95



Also available as a money saving Classpack of 4 PSUs supplied in a Grattells tray.



Order code **53-6900** **£335.95**

AUPSUB Amplifier Unit 10W with Speaker & Mobile Phone Input

The **PSU Base Amplifier Unit** is a 10W audio amplifier with a speaker. The speaker has an On/Off switch and there are top panel connections for output, speaker input and audio input (including input for tablet/mobile phone).

- Ideal for powering Ruben's tube
- Overall voltage gain of 60
- Output via 4mm sockets
- Input via 4mm sockets or 3.5mm jack (for mobile phone/tablet input)
- Input power 9 to 12V DC
- Power in via 4mm sockets or plug top PSU

Order code **53-6914**

£45.95



PEMSUB Power/Energy Meter 20A 6.5 to 100V DC

This power/energy meter from **PSU Base** can measure and display four important electrical parameters, load voltage; load current, load power dissipation, and load energy conversion. The results are displayed on a large backlit display.

- Input voltage 6.5 to 100V DC
- Maximum load 20A
- Connection via 4mm terminals

Order code **53-6916** **£39.95**



PEMMSUB Power/Energy Meter 13A 230V Mains Supply

This mains power/energy meter from **PSU Base** can measure and display four important electrical parameters, load voltage; load current, load power dissipation, and load energy conversion. The results are displayed on a large backlit display.

- Used to study the power consumption of any mains appliance
- Input voltage 13A 230V AC
- Supplied with 13A input socket and mains cable

Order code **53-6917** **£55.95**

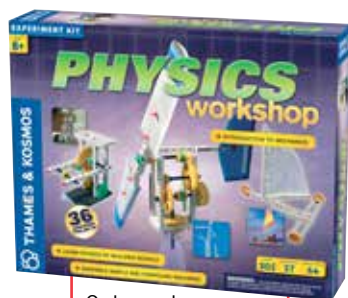


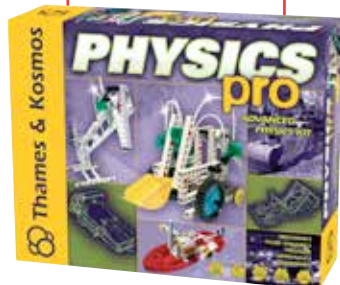
DCMPSUB Digital Colour Mixer + Screens & PSU

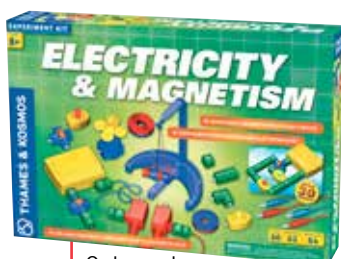
This **Colour Mixing** apparatus is designed to demonstrate a variety of colour concepts. The colour mixer features clear and bright red, green and blue lights, whose intensity may be individually adjusted to produce virtually any colour.

With the primary and secondary masks and screen you can use the colour mixer to demonstrate additive colour mixing, show how white light is produced, and explore the secondary colours of cyan, magenta and yellow. The setup is great for demonstrating how a television produces a full range of colours. With the use of home made coloured filters (e.g. sweet wrappers) investigations into colour transmission and reflection may be performed, as well as Investigations of coloured shadows.

- Power supply included

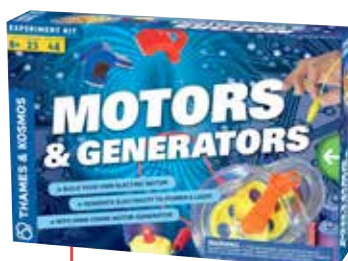

**THAMES
KOSMOS**

 Order code
70-0359

£29.55

 Order code
70-0361

£50.34

 Order code
70-0354

£42.99

 Order code
70-0363

£51.41

 Order code
70-0342

£21.99

 Order code
70-0387

£30.99

 Order code
70-0357

£31.99

 For more details and to see our
full range of Thames & Kosmos
products visit
www.rapidonline.com

Rapid
LED Pack

 A considerable range of LEDs and LED
related products are neatly packaged
in this classroom kit.

Order code 13-0122

£47.58

**Components
Spares Kit**

 A comprehensive range of essential
electronic consumables offering a huge
saving over individually purchased items.

Order code 13-0108

£66.61

Wire Starter Pack

 A substantial kit containing a wide array of
wire related consumables.

Order code 13-0112

£40.87

Electrical Kit

 This respectable sized kit contains a
wide range of high quality electrical
consumables suitable for even the
most ambitious students.

Order code 13-0114

£30.00

**Electricity
Class Pack**

 A cost-saving classpack containing a
selection of commonly used electrical
accessories.

Order code 70-1012

£40.52

 For full contents and to see our full range
of Rapid money saving Classpacks visit
www.rapidonline.com

Forces, Pressure & Gravity

RVFM Spring Balances with Metal Scales

A range of spring balances with rectangular plastic bodies and metal scales.

- Zero adjuster
- Suspension ring and load hook
- Graduated in both grams and Newtons

Type	Order code	MOQ 2
0 to 100g/1N	06-2169	£0.844
0 to 250g/2N	06-2170	£1.09
0 to 500g/5N	06-2171	£1.09
0 to 1000g/10N	06-2172	£1.09



Brass Weight Hangers

A range of individual brass mass weight hangers for use with slotted masses.

- Made from solid brass
- Each hanger is marked for easy identification
- Eisco PH0258H series

We recommend using these hangers with only Eisco slotted masses as other brands of slotted masses may not fit.

Mass	Order code	1+
10g	52-3409	£0.664
20g	52-3410	£0.909
50g	52-3411	£1.52
100g	52-3412	£3.16



Brass Slotted Mass Weights

A range of individual brass mass weights with slots, allowing them to be used on suitable mass hangers.

- Made from solid brass
- Each mass is marked for easy identification
- Eisco PH0258G series

We recommend using these masses with only Eisco mass hangers as other brands of mass hanger may not fit.

Mass	Order code	1+
1g	52-3402	£0.39
2g	52-3403	£0.429
5g	52-3404	£0.46
10g	52-3405	£0.501



Mass	Order code	1+
20g	52-3406	£0.807
50g	52-3407	£1.52
100g	52-3408	£2.65



Pendulum Bobs for Simple Pendulums

A range of bob weights ideal for use as simple pendulums.

- Range of diameters
- Range of materials

Diameter	Material	Order code	MOQ 2
13mm	Lead	06-2218	£0.551
19mm	Lead	06-2219	£0.777
Diameter	Material	Order code	Price each
13mm	Brass	06-2221	£0.873
19mm	Brass	06-2222	£1.55

Diameter	Material	Order code	MOQ 3
13mm	Steel	06-2224	£0.427
Diameter	Material	Order code	MOQ 2
19mm	Steel	06-2225	£0.615
25mm	Steel	06-2226	£0.819

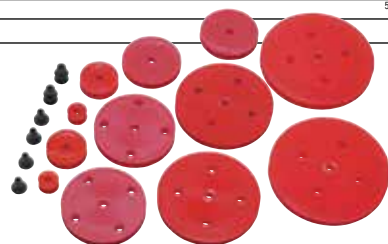


RVFM Plastic Spring Balance Scales

These colour-coded spring balances have a robust transparent plastic body with chrome-plated rings at the top and hooks at the bottom. Capacities range from 100g up to 5kg. They are graduated in both grams and Newtons.

- Can be used for both force and mass measurements
- Bevelled top for use on an inclined plane
- Zero adjustment
- Clear plastic tube allows students to see the action of the spring
- Fitted with chrome plated hooks and rings
- Overall length 285mm
- Length of tube: 160mm
- 20mm diameter

Capacity	Colour	Order code	1+
100g/1N	Dark brown	06-2177	£2.02
250g/2.5N	Blue	06-2178	£2.02
500g/5N	Green	06-2179	£2.02
1000g/10N	Light brown	06-2180	£2.02
2000g/20N	Red	06-2181	£2.16
3000g/30N	White	06-2182	£2.16
5000g/50N	Yellow	06-2183	£2.57



RVFM Pulley Starter Pack

- 2 each of 10, 20, 30, 40, 50 and 60mm diameter
- 2x miniature pulleys
- 4x pulley stops
- Supplied in packs of 18

Order code
37-0391
Packs of 18
£9.88

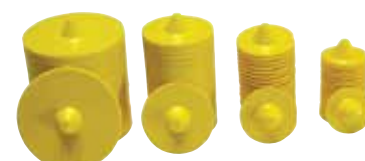


Stackable Weights

- Set of 80 clearly marked stackable weights.
- Supplied with 20 each of 1g, 2g, 5g and 10g
- Suitable for Foundation and Key Stages 1 & 2 (ages 4 to 11)

Order code
52-1592
Set of 80

£8.94



Expandable Springs - Hooke's Law

These expandable springs are ideal for demonstrating Hooke's Law.

- Ideal for showing resolution of forces, kinetic energy measurement, etc.
- Expandable springs are 50mm x 15mm dia., and will recover from a 400mm approx. stretch

Order code
37-0416
Pack of 25

£2.17

Order code
06-6022
Pack of 100

£8.14



Rubber Bands

A choice of popular sizes of rubber bands, ideal for general use in the home, office, school, or workshop.

- Supplied in boxes weighing 454g



Size	Dimensions (mm)	Order code	1+
No 10	31.75 x 1.6	34-9970	£5.81
No 14	50.8 x 1.6	34-9972	£5.34
No 16	63.5 x 1.6	34-9973	£5.34
No 18	76.2 x 1.6	34-9974	£5.34
No 19	88.9 x 1.6	34-9975	£5.39
No 24	152.4 x 1.6	34-9977	£5.34
No 30	50.8 x 3.2	34-9978	£5.33
No 32	76.2 x 3.2	34-9979	£5.34
No 33	88.9 x 3.2	34-9980	£5.34
No 34	101.6 x 3.2	34-9981	£5.39

Size	Dimensions (mm)	Order code	1+
No 35	114.3 x 3.2	34-9982	£3.49
No 36	127 x 3.2	34-9983	£5.13
No 38	152.4 x 3.2	34-9984	£5.34
No 63	76.2 x 6.3	34-9985	£5.34
No 64	88.9 x 6.3	34-9986	£5.34
No 65	101.6 x 6.3	34-9987	£5.33
No 69	152.4 x 6.3	34-9988	£5.34
No 75	101.6 x 9.5	34-9989	£7.85
No 89	152.4 x 12.7	34-9990	£7.27

Polypropylene Twine

- Ideal for design and pulley projects
- Supplied in balls of 2.25kg

Order code
14-0999
2.25kg ball

£22.35

White Cotton String

- Approximate thickness 1.2mm (thin), 2.2mm (medium), 3.5mm (thick)
- Sold by reel weight

Type	Weight	Order code	1+
Thin	250g	06-9272	£2.24
Medium	500g	06-9274	£4.50
Thick	500g	06-9276	£4.50



Forces, Pressure & Gravity

RVFM

Force Table

Order code 06-2193

£112.40

This apparatus can be used to demonstrate the verification of the laws of composition and resolution of forces. It is comprised of a machined aluminium table 40cm in diameter, on a heavy vertical support rod and tripod base.

A ring has four cords attached to it that can have masses hung from them. When the forces are balanced, the ring rests in the centre of the table. Each of the 4 cords pass over a pulley which guides them at the required angle and reduces friction on the edge of the table.

- 360° graduated scale
- 4 pulleys can be positioned at varying angles around the perimeter of the table



See our full range of Science products online at www.rapidonline.com

RVFM

Air Powered Rocket Launcher

This Rocket Launcher is a working device that helps students to visualise the principle of action and reaction forces.

A 2 Litre plastic bottle (not included) is used as a rocket. Students can create a variety of rocket designs using empty fizzy drink bottles as part of a design and make project. The launch pad has a solid, durable metal base and is equipped with a simple triggering mechanism. It is powered by an ordinary bicycle pump and can launch the rocket to surprising heights.

- Visualise the principle of action and reaction forces
- Design and make rockets using empty 2 litre fizzy drink bottles
- Solid, durable metal base
- Simple triggering mechanism
- Powered by a standard bicycle pump
- Can launch rockets to surprising heights

Order code 06-2234

£40.56



eisco

Young's Modulus Apparatus

Young's modulus apparatus from Eisco, complete with ceiling bracket, two self-centering chucks and tension weight. The apparatus includes a spirit level mounted in two rectangular cast iron frames with one end resting on the point of a micrometer screw fitted in one frame, the second end of the spirit level pivoted in the second frame.

The micrometer is provided with a vertical scale 10mm on either side of the zero and vernier reading 0.01mm.

NEW

Order code 52-4215

£34.90



RVFM

Wooden Inclined Plane Apparatus

An inclined wooden plane ideal for experimenting with friction. The plane is hinged to the wooden base and has a pulley at one end.

- Size 600 x 75mm
- Metal linear scale fixed to edge of plane
- Vertical linear and angular 0 to 45° scale fixed to base
- Clamp also serves as an index

Supplied complete with:

- Metal roller 75 x 25mm (length x dia.)
- Wooden block
- Scale pan with cord

Order code 06-2212

£29.04



Order code 06-2153

£12.69



RVFM

Projectile Apparatus/ Falling Body Apparatus

This apparatus demonstrates that horizontal and vertical motion are independent of each other. It consists of a wooden block with a pivoted 'L' section spring-loaded metal launching bar with a trigger catch. When the catch is released, one ball drops vertically while the other is projected horizontally. Observation will show that both balls will hit the floor at the same time.

- Wooden block 190 x 58 x 30mm approx.
- Supplied with 2 steel balls
- Storage recess in the wooden block

RVFM

Hooke's Law Demonstration Apparatus

This Hooke's Law apparatus consists of a stand supporting a spring with provision to hang masses from it.

- Extension can be measured on the 12cm long mirror scale for a range of masses

Supplied without masses.

Order code 06-2227

£9.88



Motion, Motors & Accessories

eisco
Trust & Deliver Education

 Order code
52-3442
 Advanced tank

£213.51

Basic and Advanced Ripple Tank Kits

These ripple tank kits are supplied complete with all accessories needed for wave investigations.

Each water wave behaves similarly to a curved lens. The crest of the wave is seen as a bright region and the trough is seen as a dark region.

The ripple tanks have a mechanical vibrator attached to a wave generator that produces either point wavelets or parallel wave fronts.

- Advanced model is supplied complete with a power supply and wave controller
- Basic model requires additional power supply and controller

 Order code **52-3383**
 Basic tank

£68.98

 Order code **52-3704**
 Controller (for Basic tank) 52-3383

£10.99
RVFM

Refraction/Wave Tank

Study the concept of refraction and the pattern of transverse waves with this Refraction/Wave tank.

Place different materials into the tank and demonstrate the refraction/internal reflection of those materials and how they vary from one another.

- Transparent acrylic tank
- Wooden handle

 Order code
06-2246
£48.72
RVFM

Newton's 2nd Law of Motion Demonstration Apparatus

This apparatus demonstrates that 2 bodies will strike the floor at the same time even when their paths of flight and horizontal velocity components are different. The 2 balls are released simultaneously - 1 ball is released to drop vertically, the other is projected horizontally.

- Base
- Spring plunger
- 2 steel balls (1 solid, 1 pre-drilled)
- Instruction sheet

 Order code
06-2201
£11.24
RVFM

Vibration Generator and Accessories Set

A set of basic equipment for the study of vibration and resonance. The set includes a vibration generator, resonant vibration strips and a longitudinal wave spring.

The Vibration Generator is essentially a loudspeaker. A coil wound on a thin aluminium tube moves within a permanent magnetic field when an alternating current is applied to it, e.g., from your laboratory signal generator. The coil is supported by 2 guide control mechanisms for optimum performance.

Coupling the Vibration Generator to external equipment is facilitated by an 8 mm dia. aluminium pin connected to the coil. The pin is equipped with a 4mm hole for a banana plug connector to which various plates and springs, etc., can be attached.

Set includes:

- Vibration generator
- Longitudinal spring for wave demonstrations
- Resonant vibration strips

The vibration generator is powered by a laboratory signal generator, not included.

 Order code
52-2696
£9.40
RVFM

Chladni Resonance Pattern Plate - Square

Used in conjunction with a vibration generator, this plate can be used to study sound waves and resonance.

See 52-2675 (above) for a suitable vibration generator set.

 Order code
52-3634 **£22.82**
eisco
Trust & Deliver Education

Electrostatics Kit

Kit includes:

- 1x electroscope with top plate and hook electrode
- 1x packet of gold leaves
- 4x metallised polystyrene spheres
- 1x reel of very fine nylon thread
- 2x polythene plate, 75mm square
- 1x electrophorus plate, 50mm diameter with insulating handle
- 1x proof plane
- 2x aluminium calorimeters
- 1x cellulose acetate strip
- 1x polythene strip with woollen rubber
- 1x stirrup for suspending strip

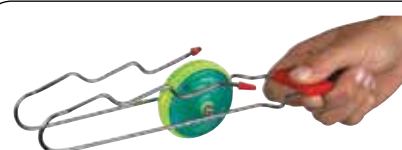
eisco
Trust & Deliver Education

Kinetic Gas Theory Demonstration Apparatus

This apparatus allows students to study the motion and behaviour of molecules in gases.

An electric motor running at 4 to 12V DC vibrates a small platform inside a transparent tube, so that a number of small steel balls is vibrated violently inside the tube.

- Demonstrates kinetic gas theory
- Supplied with balls and 2 floats
- Includes instruction manual
- CE approved

 Order code
52-3415
£27.88


Light-up Kinetic Wheel

- LED flashing light effect
- Pleasing, therapeutic motion
- Length 26cm

 Order code
52-9864
£3.42

Gyroscope

- Supplied with pull-cord and strand
- Detailed explanation and instructions
- Display box
- Height 11cm

 Order code
52-9890
£11.29

 Order code
52-0059
£4.82

Springy Toy (Slinky)

Classic metal toy that stretches, recoils and stretches again.

- A helical coil, suitable for use in the study of sound and waves in the physics lab
- 75mm diameter (50mm long when closed)


 Order code
70-1516 MQQ 3
£0.35

Tornado in a Bottle

A simple plug-in plastic joiner enables water to pour from one bottle into another creating an impressive vortex if the top bottle is shaken with an orbital movement.

- Joiner fits most fizzy drinks bottles



Magnetics



Experiments for Magnetism Set

This is the perfect set for children to develop magnetic investigation. 16 experiments linked to **QCA Science Curriculum for Key Stage 1**. Supplied with an A4 background information booklet.

The kit is supplied with:

- Four wands
- 20 magnetic marbles
- Two plastic cased magnets
- A super magnet
- Set of floating ring magnets
- Small horseshoe magnet
- Compass magnet
- Supplied in a purpose made plastic moulded carry box for easy counting in and out
- Suitable for **Key Stage 1** (ages 5 to 7)

Order code
06-5984
Experiments set

£34.88



Order code
06-0590
Magnet kit

£29.15

Magnet Kit

Kit contains: alnico bars, alnico button magnets, ferrite blocks and rings, chrome steel horseshoe magnet, alnico horseshoe magnet and coloured squares of magnetic rubber.

Horseshoe and Ceramic Magnet Sets

A range of magnets and magnetic products, a must for every classroom.

- Horseshoe magnets supplied in **sets of 3**
- Super magnets supplied in **sets of 300**



Order code
06-0504
Horseshoe set

£13.57

Order code
06-0508
300-piece set

£15.50



eisco
Training & Education

Electromagnet

The Eisco PH0800A electromagnet consists of a U-shaped iron core of circular section, with armature and carrying hook. It is wound with insulated copper wire and provided with colour-coded 4mm connectors.

- For use on 4 to 6V DC

Order code
52-3310

£7.20

Magnetic Floating Ring Set

A set of five coloured magnetic rings with a plastic stand.

- Create a floating magnetic trick
- Children will achieve this by simply stacking the rings with like poles facing each other so they repel
- Dimensions 24mm diameter x 5mm width
- Suitable for **Key Stages 1 & 2** (ages 5 to 11)

Order code
06-5980

£4.65



Magnetic Marbles

These magnetic marbles are ideal as a basic introduction to magnetism for young children.

- Supplied in **tubs of 100** assorted colours

Order code
06-6296

£13.18



Colour Magnetic Wands

These plastic **magnetic wands** from **Shaw Magnets** are ideal for use with primary school classes. Supplied in a range of bright colours, these wands can be used in conjunction with metallic chips and magnetic marbles to display the forces of magnetism.

- Wand length 190mm
- Supplied in **pack of 6**

Order code
06-9991

£6.20



Wands and Marbles Set

This **magnetic wand** and marbles set from **Shaw Magnets** is ideal for use with primary school classes. This set includes 2 magnetic wands and 20 coloured plastic marbles.

- Wand length 190mm
- Marble diameter 15mm

Order code
06-9992

£4.65



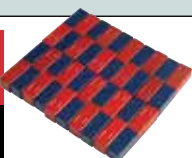
Ferrite Block Magnets

These ferrite, painted bar magnets are illustrated with red and blue poles, stamped with N and S.

- Their low-cost, reliability and durability in use make them an ideal general purpose classroom resource
- Small: 9 x 9 x 40mm
- Large: 14 x 10 x 50mm
- Supplied in **packs of 20**

Order code
06-0584
Small

£6.60



Order code
06-0586
Large

£7.85



Order code
06-0592
Electromagnet

£36.43



'Hercules' Demonstration Electromagnet

This electromagnet offers an amazing demonstration of how powerful magnetism can be. Powered by just one 9V PP3 battery, this small magnet has incredible lifting power of approximately 50kg.

- When switched on, an iron plate locks itself solidly to the bottom of the electromagnet core. Turning the switch off will release the load or hold it in the air, as required
- Karabiners are situated at the top and bottom of the device to make it easy to clip into position
- Battery and instructions included

Order code
06-6302
Box of 20

£12.82

Ceramic Magnets

Colour-coded bar magnets in a neat storage box.

- Size of each magnet 14 x 10 x 50mm
- Easy to see if all magnets have been returned after use
- Supplied as a **box of 20**



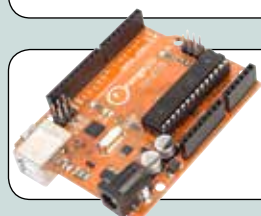
Alnico Bar Magnets

Shaw Magnets Bar Magnets are made from Alnico magnetic material. Alnico is an alloy of iron, Aluminium, Nickel and Cobalt and has a high resistance to loss of magnetism. The magnets are supplied in pairs, complete with keepers which further help to 'keep' the magnetism without gradual loss and to protect their magnetic surfaces. North poles are denoted by a dimple or a notch.

- Red paint finish
- Complete with keepers
- Notch or dimple denotes North pole
- Supplied in **pairs**

Type	Order code	1+
12 x 5 x 40mm	06-5981	£4.46
15 x 5 x 60mm	06-5975	£7.37
15 x 10 x 50mm	06-5977	£10.99
15 x 10 x 75mm	06-5979	£14.72

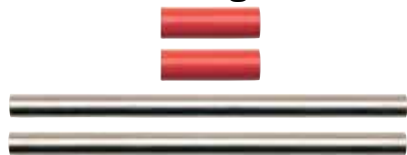
501036



Did you know we also sell
OrangePi and Arduino boards?
See online for more details



Alnico Rod Magnets



Permanent rod magnets with north end painted red.
• Supplied in pairs

Order code **06-5954** **£1.94**

Alnico Horseshoe Magnets

This Alnico **horseshoe magnet** from **Shaw Magnets** is painted red.

• Length 25mm



Order code **06-9979** **£3.14**

Alnico Strong U Magnets

Red-painted strong Alnico cast U-shaped magnets from **Shaw Magnets**.

• Size: 30 x 20 x 20 mm



Order code **06-9982** **£6.20**

Ferrite Block Magnets

These ferrite **block magnets** from **Shaw Magnets** are ideal for use with **reed switches** or for general tasks.

• Size 50 x 19 x 6mm
• Supplied in **pack of 10**



Order code **06-9986** **£1.94**

Ceramic Square Magnets

Multipole magnets with one strongly attractive face, ideal for attaching to metal surfaces.

• Ideal for fridge magnets, etc.
• Attach dimpled side to object to be held
• Dimensions: 19x19x5mm
• Supplied in **pack of 10**

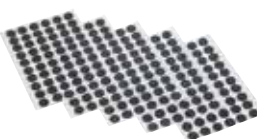


Order code **06-5978** **£3.49**

Magnetic Dots

Packs of self-adhesive round magnetic dots.

• Ideal for art and craft, design and technology and science projects
• Dimensions 12mm diameter
• Supplied in **packs of 300**



Order code **06-5992** **£3.88**

45mm Compass

Tough plastic cased compass with lanyard.

• Marked with four compass points
• Full 360° scale around edge



Order code **06-5996** **£1.32**

RVFM

Electric Field Apparatus

This apparatus is ideal for demonstrating **electric fields** between various electrodes. Liquid paraffin is placed in the 90mm diameter petri dish and semolina or fine grass seed is sprinkled on the surface. Various electrode configurations can be arranged in the liquid and when a high voltage is applied via the 4mm terminals the **field pattern** is generated. The see-through base allows the pattern to be projected via an overhead projector system.

• Supplied without paraffin or semolina
• Dimensions (L x W x H): 150 x 150 x 60mm
A low current 0 to 5kV EHT supply is required (not supplied).



Order code **52-2660** **£69.09**
150x150x60mm

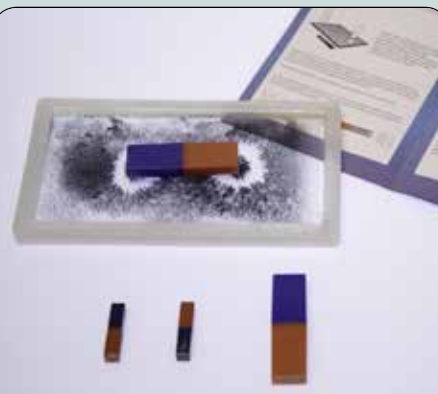
Science Magnetism Tube

This giant magnet tube has a double wall with iron filings between two layers to show a 3 dimensional view of the magnetic field around the supplied magnet.

• The magnet is removable and the filings are safely encased
• Size: 130 x 90mm



Order code **06-0598** **£10.42**
Magnet tube



Magnetic Field Display

These magnetic field windows contain magnetic powder in a water based solution for showing magnetic field patterns.

• When a magnet is present the particles of iron inside become slightly magnetised, so they attract each other and cluster into the lines that show the magnetic field patterns
• Size 225 x 130 x 15mm
• Includes 2x plastic cased magnets, 2x ferrite magnets and an information/instruction booklet
• Available with white background (**06-0680**) or transparent background (**06-0282**) for use with an overhead projector

White (**06-0680**) or transparent (**06-0282**) backgrounds
Price each

£25.58

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Gold Leaf Electroscope

This gold-leaf electroscope is great for hands-on experience with electrostatic principles in physics classrooms and labs.

When an electrostatic charge is induced or transferred to the electroscope, the charge causes a thin piece of gold leaf to be repelled away from its mount. The resultant deflection of the leaf shows the presence of an electrostatic charge and the angle of the leaf can be used as a measure of the charge.

The solidly constructed sheet anodised aluminium frame of the electroscope is mounted on a plastic base. Front glass window slides up to allow the insertion of ionizing material into chamber. A transparent scale is attached inside the chamber to measure the deflection of the gold leaf.

• Supplied with two gold leaf sheets
• Fitted with 4mm socket
• When assembled, the electroscope measures 165 x 95 x 71mm
• Eisco type **PH0916B**

Note: The gold-leaf does not come pre-attached to the electroscope. Instructions on how to properly attach the gold-leaf to the conducting rod are included in the Experiment Guide. Replacement gold leaf is available separately in a pack of 6.



Order code **52-3640**
Electroscope

£18.45

Order code **52-3641**
Gold leaves pack

£3.49



Magnetic Needle Stand and Needles

A range of magnetic needles and a suitable low-friction stand for use in the study of magnetic fields and compasses.

• Stand height 110mm
• Range of needle sizes
• All parts sold separately

Type	Order code	1+
Stand	52-3318	£2.97
50mm needle	52-3319	£0.807
75mm needle	52-3320	£0.92
100mm needle	52-3321	£1.32



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(UK mainland only)

* See Terms & Conditions for full details

www.rapidonline.com/terms

medline
Professional • Reliable

Octahedral Pivot Stirring Bars

This octahedral stirring bar is designed for use with hot plate stirrers.

• Size 25 x 8mm
• Features pivot ring

Order code **52-1031** **£3.40**



Gases & Liquids

For full details on these and many more Science products visit www.rapidonline.com

Order code
06-6838

£5.49

RVFM

Drinking Bird

The bird demonstrates the cooling effect caused by evaporation of water on its beak. The cooling causes a volatile liquid in the bird's body to condense, then evaporate again as it warms up, constantly changing the balance of the bird's body.

- Push the bird's head into water to begin the bobbing motion
 - Continues to 'drink' as long as there is water in the container
- The bird works best in warmer areas as it relies on there being a sufficient temperature difference between the bird's beak and its surroundings. Should the bird fail to bob, gently heating the glass bulb in the bird's tail with a hair-dryer on a low setting should suffice.

A classic toy that is really a heat engine!

RVFM

Pascal's Vases Apparatus

Pascal's Vases Apparatus shows that the pressure of a liquid varies with depth and not with the shape of the vessel.

- Apparatus includes 4 vessels of different shapes and a stand
- Pressure is measured by placing weights in the scale pan
- Repeating the experiment with each 'vase' proves the theory

Order code
06-2159

Pascal's vases

£39.30

eisco

Pascal's Law Syringe Equality of Liquids Apparatus

An apparatus consisting of a glass flask with holes in the bulbous part and a glass piston that slides in the straight part.

When filled with liquid, the piston is pushed into the apparatus, causing liquid to exit each hole with equal pressure regardless of the hole's position or direction.

- Also known as Pascal's Law syringe
- Eisco type PH0194

Order code
52-3330

Pascal's Law syringe

£5.74

Planck's Constant Apparatus

This apparatus is designed to determine the approximate value of Planck's constant, using a range of LEDs of known wavelength, to allow the electron/photon energy to be calculated. The apparatus includes 7 LEDs, covering the light range from deep blue at 470nm to near IR at 940nm, mounted on a box with 4mm sockets for attachment to a voltmeter and ammeter for voltage and current measurements.

eisco

Order code
52-2639

£34.35

RVFM

Magdeburg Pressure Disks

Order code
06-2236

£22.29

eisco

Jolly Bulb with Gauge

Order code
52-3700

£32.33

RVFM

Vacuum or Pressure Apparatus

Order code
06-2245

£13.71

eisco

Cast Iron Bursting Bottles

Order code
52-4089

£4.99

Order code
52-3414

£127.69

eisco

Boyle's Law Apparatus

This high quality Boyle's law apparatus comes complete with accessories, including a 405mm pump with braided hose.

The apparatus is 685mm tall with a powder-coated metal base approximately 205 x 125mm. Experiments can be carried out with water or by simply adding any food colouring to the water. High quality pressure gauge.

- 200mm braided nylon flexible hose
- Hand operated pump
- 2 bottles of coloured mineral oil
- PPE funnel
- Instruction manual
- Eisco type PH0150A

Cochranes of Oxford

Hyman Fire Piston

The Hyman Fire Piston demonstrates the rise in temperature that is produced when a fixed mass of gas is compressed. In this apparatus the contained air is compressed by a hand-operated piston. The heat generated is sufficient to ignite a small quantity of tinder supported inside the transparent cylinder. Suitable tinder is included, but almost any organic material will work if dry enough, i.e. cotton, charcoal, tissue paper, etc.

The Hyman Fire Piston can also be used to demonstrate the need for oxygen to support combustion, by attempting to re-ignite a piece of part-burned tinder. Combustion will only occur if the piston is completely removed from the cylinder allowing a supply of fresh air to be introduced.

Order code
06-7791

£24.08

eisco

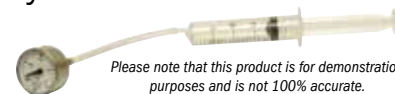
Boyle's Law Simple Form

A simple apparatus for the demonstration of Boyle's law, consisting of an airtight graduated plastic syringe with a lubricated piston, mounted between two wooden blocks. Weights can be stacked on the top platform, compressing the gas. The corresponding measurement of volume can be read from the syringe scale.

- Weight on the upper block produces pressure that compresses the gas
- Eisco type PH0145A

RVFM

Boyle's Law Indicator



Please note that this product is for demonstration purposes and is not 100% accurate.

This simple low-cost apparatus provides a means of demonstrating Boyle's law.

- Ideal for demonstrations
- Gives students literally a 'feel' for increase in pressure against volume

Order code
06-6068

£11.89

eisco

Whitley Bay Smoke Cell

The Whitley Bay smoke cell is used for the observation of 'Brownian' or random motion in smoke particles.

It consists of a box with flanges that allow it to be easily attached to a standard microscope. The box contains a smoke cell, a cylindrical condensing lens and a 12V, 3W festoon bulb. The apparatus is pre-set to focus the light at the correct height.

Order code
52-3425

£14.98

RVFM

Searles Surface Tension Balance

This Searles Surface Tension Balance can be used to demonstrate the surface tension of a liquid by allowing it to be shown on a graduated scale.

A horizontal frame is mounted on a rod fitted to a base and carries a steel wire stretched across it, the tension of which can be adjusted by a tightening screw. A lightweight metal pointer with a counterpoise is attached to the centre of the wire by a clamp. A pan is hung from a notch in the pointer and has a hook at its underside from which can be suspended a light weight rectangular frame or a metal clip to hold a microslide edge. The tip of the pointer moves over the graduated scale.

Order code
06-2160

£38.18

Materials & Properties & Classifying Materials



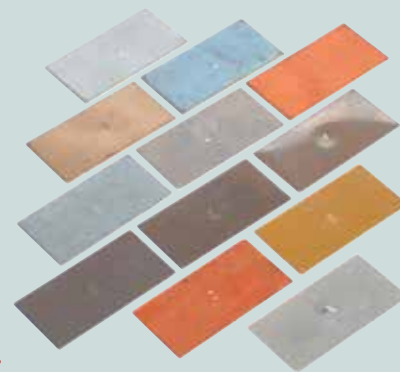
eisco
Trust | Deliver | Learn

Solid Materials Set

A selection of materials in the form of rectangular blocks, intended to familiarize students with the appearance, feel, texture, hardness and density of a range of common substances.

Order code **52-3346**
£92.87

- Blocks, 50 x 40 x 30mm: softwood, hardwood, paraffin wax, aluminium, iron, foamed polystyrene
- Blocks, 20 x 20 x 100mm: Perspex, glass, slate, aluminium, softwood, marble
- Lead 50 x 50 x 20mm
- Aluminium 50 x 50 x 80mm
- Hardwood 50 x 50 x 200mm
- Brass 20 x 20 x 50mm
- Iron 40 x 40 x 20mm
- Supplied as a set of 34 blocks, 2 of each material
- Eisco type PH0114



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12-Piece Science Metal Strips Set

This 12-piece metal strip set includes a strip of each of aluminium, brass, copper, bronze, nickel, mild steel, galvanized iron, magnetic and non-magnetic stainless steel, zinc, chrome and lead.

- All strips are marked with a letter to identify each metal
- Ideal for experiments to demonstrate magnetic properties and classifications of metals
- Strip size: 50 x 25mm
- Supplied as a set of 12 strips

Code letter	Metal	Code letter	Metal
A	Aluminium	G	Galvanized iron
B	Brass	H	Stainless steel - non-magnetic
C	Copper	I	Stainless steel - magnetic
D	Bronze	J	Zinc
E	Nickel	K	Chrome
F	Mild steel	L	Lead

Order code
06-0595

£5.83



Complete Rock and Fossil Collection

12-piece rock sets:

- Include an educational identification chart and activity guide
- Igneous rocks are produced by hot volcanic magma action
- Metamorphic rocks are transformed by intense heat and pressure
- Minerals combine with each other to make rocks
- Sedimentary rocks are formed by layers of deposited matter

Fossil set:

- Contains 9 fossils in a handy divided tray
- Includes guide, 4-colour insert card of photographed fossils, foam sheet and die-cut sheet of circle labels for fossils
- Average fossil length approximately 2.5cm
- Fossils included are: brachiopod, bryozoa, crinoid stem, gastropod, colony coral, ammonite, shark's tooth, fossil fern/plant matter and petrified wood



Order code
52-9948

£49.98

Supplied as a cost-saving set containing 4 rock sets plus a fossil set

RVFM
Slime

Slime is a polymer with very unusual characteristics worth investigating.

- Pack contains ingredients for making a useful quantity of slime

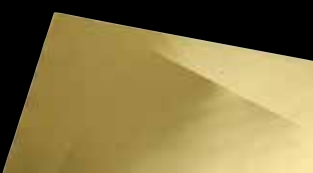


Quantity is sufficient for two whole class experiments

Order code
06-8110

£23.94

RVFM
Brass Sheets



Economical brass sheets, ideal for cutting, shaping and bending.

- Superb rich brass finish
- 0.1mm thick sheets

Order code
06-0744
A4

£3.90

Order code
06-0746
A3

£6.40

RVFM
Copper Sheets



These economical 0.1mm thick copper sheets are perfect for embossing, bending and cutting.

- Basic Design & Technology and Science resource

Order code
06-0752
A4

£4.86

Order code
06-0754
A3

£6.40

RVFM
Mole Set

The four specimens in this set will help explain to students the concept of mole.

The Mole Set contains four element specimens: Copper, Iron, Zinc and aluminium. Each sample contains one mole (6.02 x 10²³ atoms) of the element.

- Helps to explain the concept of mole
- Each sample contains 1 mole (6.02 x 10²³ atoms)
- Set contains specimens of Copper, Iron, Zinc and Aluminium

Order code
06-2161
Mole set

£15.77

RVFM
Density Identification Set

This set consists of specimens of 15 different types of materials. Its aim is to challenge students to identify materials by measuring their mass, length and volume to determine their density.

1 sample each of:

Walnut, oak, maple, polypropylene, polyethylene, polyamide, acrylic, polyurethane, phenolic, polyvinylchloride (PVC), acetyl, teflon, aluminium, brass and copper



Order code
06-2164
Density ID set

£22.81

Conductivity & Energy

RVFM

Leslie's Cube

This **Leslie's Cube** has dull black, shiny black, white and copper sides and is ideal for use in experiments to show how objects emit heat.

- Dimensions (L x W x H): 100 x 100 x 100mm



Order code
52-2671
100x100x100mm

£14.20



Order code
52-3650
100mm Copper

£14.25

eisco

Leslie's Cubes

These Leslie's cubes have sides with different surface finishes. They are ideal for use in experiments to show how objects emit and absorb heat. In use, the apparatus is filled with water which is maintained at boiling point by a low Bunsen burner flame. Infra-red sensors, etc., can be used to compare the relative radiant heat output from each of the four faces.

- Top hole for filling and emptying
- Bung for thermometer
- Eisco PH0411 series



Order code
52-3649
130mm tin

£8.16

eisco

Crookes Radiometer

This radiometer consists of a partly evacuated glass bulb approximately 70mm in diameter, containing a fine pivot which supports four light weight metal arms. One side of each vane is blackened, the reverse side is bright.

On exposure to sunlight, or a sufficiently bright incandescent light source, the vanes turn. The absorption of radiant energy by the blackened side of the vanes sets up a temperature differential with respect to the bright sides, causing net force to be exerted by the air molecules on the blackened side which makes the vanes rotate with their bright faces leading.

- Approx. 70mm diameter
- Mounted on round plastic moulded base
- Eisco type PH0418A



Order code
52-3332

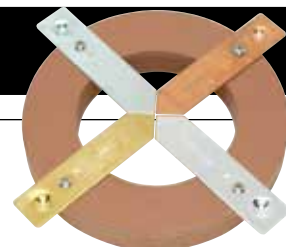
£7.28

shaw magnets

Conductivity Apparatus

Apparatus for demonstrating the thermal conductivity of different materials.

- Apparatus includes strips of iron, copper, aluminium and brass
- All metals stamped with their name
- Robustly mounted on a wooden ring
- Supplied complete with full teacher's notes



Order code
06-6008

£4.46

RVFM

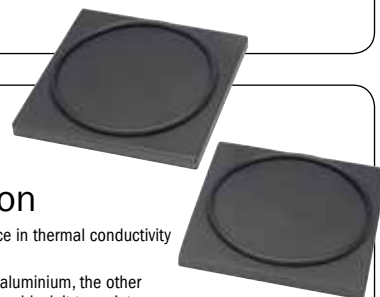
Ice Melting Kit - Thermal Conductivity Demonstration

This ice melting kit can be used to demonstrate the difference in thermal conductivity and thermal capacity between two different materials.

The kit consists of two identically sized blocks, one made of aluminium, the other made of plastic. When an ice cube is placed on the aluminium block it turns into water in seconds, while an ice cube placed on the plastic block melts slowly.

This is due to the aluminium block having a larger heat capacity and a higher thermal conductivity than the plastic block.

- Supplied complete with instructions



Order code
06-2237

£13.62

eisco

Carbon Rod

A 140mm long carbon rod with a brass terminal for electrical connection.

- Length 140mm; Diameter 15mm



Order code
52-3605

£1.52

RVFM

Iron Conductivity Rods

Rods of Iron for comparison of thermal conductivity.

- Approximate size: 300mm x 3mm diameter
- Supplied in **packs of 10**

Order code
06-6993

£4.82

eisco

Thermal Conductivity Rods

These metal rods are ideal for thermal conductivity experiments.

- Approximately 300mm long x 3mm diameter
- Individual metal types supplied in **packs of 10**, copper in **packs of 3**
- Assorted metal types supplied in **packs of 6** 1 each of iron, copper, aluminium, lead, brass & zinc

Material	Order code	1+
Assorted (6)	52-3352	£5.63
Aluminium (10)	52-3656	£5.93
Brass (10)	52-3657	£9.14
Copper (3)	52-3351	£7.88
Iron (10)	52-3659	£6.32
Lead (10)	52-3660	£8.47

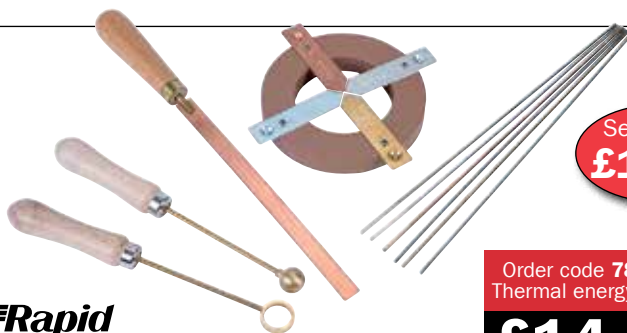
Rapid

Thermal Energy Bundle

This money-saving thermal energy bundle provides a convenient way to buy four pieces of popular heat related apparatus.

Bundle contains one each of:

- Conductivity apparatus, with strips of iron, copper, aluminium and brass (order code **06-6008**)
- Conductivity rods: 1 each of iron, copper, aluminium, lead, brass & zinc (order code **52-3352**)
- Ball & ring apparatus: When the ball is heated, it expands and no longer fits through the ring (**52-3445**)
- Bimetallic strip demonstration: Strip bends when heated (**52-3311**)



Separately
£19.60

Order code **78-7214**
Thermal energy bundle

£14.95

Solar & Wind Power



Renewable Energy Kit

Enable Teachers to demonstrate the generation of electricity using Wind, Solar and Water power.

- This portable unit comes in an easy to assemble kit format and includes four interchangeable dials to demonstrate the power being generated – meter, moving cogs, flashing lights and a siren
- The unit can be used indoors and outdoors
- Applicable to both Science and Geography studies
- This teaching resource is relevant to the National Curriculum and helps pupils understand the process of renewable and sustainable energy, and the environmental issues surrounding these forms of energy generation
- Suitable for **Key Stages 2, 3 & 4** (ages 7 to 16)
- Supplied as a **kit**

Order code **52-0376**

£69.45



RVFM

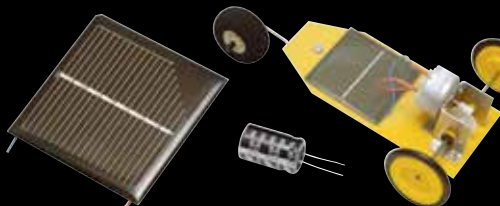
Wind Turbine

This Wind Turbine model can be used to carry out a wide range of experiments with wind power. The blades of the turbine can be easily adjusted, attached and removed. This allows students to investigate the effects of changing the number, pitch, size and shape of the blades. Some of the effects can be quite counter-intuitive and will provoke students into thinking and discussing the concepts of energy and power.

- Corrugated plastic blades
- DC output
- Supplied assembled

Order code **06-1573**

£18.94



Order code **70-1526**

£12.90

RVFM

Solar Power Project Pack

Contains project ideas and investigations based around a high-quality, low-cost solar module. Also in the pack are all the components required to build a solar powered buggy similar to the one shown here, plus an astonishing 10F super capacitor, which can be charged up from the solar panel and used to power lamps, motors, etc.

- Includes a photocopyable information booklet full of ideas and suggestions for using the solar module
- Buggy will run outdoors in sunlight or indoors with a bright lamp

eisco
Teach & Demonstrate Science

Solar Cell and Motor Demo Set

Conduct practical experiments with this solar-energy demonstration set.

The set consists of two plastic boxes. One contains a solar panel, the other houses a low-consumption motor with fan, a buzzer and an LED. All are readily available for conducting a series of solar-powered activities.

- Learn solar energy basics
- Includes: solar panel, motor with fan, buzzer, LED & connecting leads
- **Eisco type PH1321**

Order code **52-3353**

£25.99



Malvern Solar Motor with Fan

This small motor with a fan blade is a good choice for a variety of electronics experiments. It operates from 1.5 to 4.5 volts DC and can be used with a solar cell.

- Operates from 1.5 to 4.5 volts DC
- 4mm terminals
- Base is approximately 100 x 70mm
- Can be used with a solar cell
- Made from durable plastic
- **Eisco type PH1319**

Order code **52-3355**

£9.55



RVFM

Educational Solar Energy Kit

A complete kit of parts which provides the student or child with an introduction to solar energy. The kit comprises:

- 8x 500mV, 100mA solar cells in one panel
- Miniature DC motor
- Small fan
- Plus all tools and cables enabling the user to construct a working kit
- The solar cells provide an output of 3.2V and may be employed to drive a variety of other small components
- The kit also comes complete with an informative twelve page booklet explaining solar energy in considerable detail

Type	Order code	1+	10+	40+
Solar energy kit	37-0420	£10.63	£10.00	£9.61

031204

RVFM

1V, 150mA Solar Panel



Use these solar panels to build your own robots or other solar energy powered applications. Ideal for use for solar cars, solar motor kits and school projects.

- Solid, almost-unbreakable module
- Polycrystalline type, suitable for outdoor use
- Great for low power consumption projects
- Supplied with flying leads
- Output approximately 1V @ 150mA
- Can be wired in series or parallel to increase voltage or current
- Dimensions 60(L) x 30(W) x 2(D)mm
- Weight approx. 8g

Type	Order code	1+	25+
60 x 30mm solar panel	37-0438	£3.22	£3.04

080724

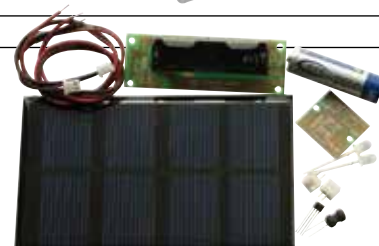
TruOpto

Solar Powered Light Module Kit

Demonstrates how solar panels can convert the sun's energy into electricity, how it can be stored and how that energy can be released and used when required.

The module is available both ready-assembled or as a kit of parts that can be assembled by students as part of a Design and Technology project.

- Practical demonstration of solar power
- Rechargeable battery: 1000mAh
- More than 20 hours illumination from fully charged battery
- Over-discharging protection
- Automatic light level detection
- Ideal for educational
- Available ready assembled or in kit form



Order code **55-0005**
Assembled

£14.25

Order code **55-0006**
Unassembled

£12.82

Sound

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Resonance Apparatus with Telescopic Brass Tube

This resonance apparatus is comprised of two brass tubes that can telescope into each other, allowing the column of air within the tube to be varied between 300 and 530mm.

- Outer tube fits into base
- Eisco type PH0718B

Order code **52-3436**
Resonance tube

£26.51



eisco
Trust • Deliver • Learn

Resonance Tuning Forks with Hammer

This apparatus can be used for demonstrating the production of beat frequencies.

It is comprised of two nickel-plated tuning forks mounted on individual sound boxes. The two forks both produce an 'A' note (440Hz) when struck with the mallet.

One fork is provided with an adjustable mass, by means of which the frequency of that fork may be shifted from the nominal 440Hz. When both forks are sounded at the same time, a clearly audible 'beat' is produced, its rate depending upon the difference in frequency between the two forks.

- Used to hear dissonance
- One fork adjustable
- Supplied complete with 2x tuning forks, 1x adjustable mass, 2x bases and mallet
- Eisco type PH0742A

Order code **52-3446**
Resonance apparatus

£15.02



RVFM

Transistor Oscillator Buzzers

A 1.5V miniature transistor oscillator buzzer with flying leads.

Type	Order code	1+	25+	100+
1.5V buzzer (leads)	35-0086	£1.20	£0.964	£0.913

030204



RVFM

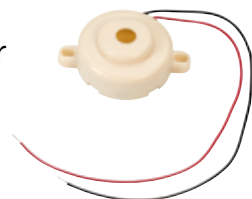
Piezo Buzzer Miniature

A miniature piezo buzzer available with flying leads.

- Offers a high output with low power consumption

Type	Order code	1+	25+	100+
Piezo buzzer	35-0115	£1.55	£1.19	£1.06

030205



RVFM

Electronic Buzzers



A range of compact, low-cost electronic buzzers.

- Available with either flying leads (10cm long) or PCB mounting pins
- 3V, 6V or 12V operating versions
- Resonant frequency is 400Hz
- Black ABS case material

Suitable for education and hobbyist use only.

Type	Order code	1+	25+	100+
3V Buzzer + lead	35-3592	£1.12	£0.935	£0.834
3V PCB Mount buzzer	35-3594	£1.12	£0.935	£0.834
6V Buzzer + lead	35-3596	£1.12	£0.935	£0.834
6V PCB Mount buzzer	35-3598	£1.12	£0.935	£0.834
12V Buzzer + lead	35-3610	£1.19	£1.00	£0.937
12V PCB Mount buzzer	35-3612	£1.07	£0.914	

030772



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Tuning Forks Set 8

An eight-piece set of nickel-plated tuning forks with plain shanks. The forks are marked with their individual frequencies: C (256Hz), D (288Hz), E (320Hz), F (341Hz), G (384Hz), A (426Hz), B (480Hz) and C (512Hz).

- 8-piece set
- Supplied in wooden storage case
- Eisco type PH0738B

Order code **52-3342**
Set of 8

£15.33



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Tuning Forks

A range of superior quality aluminium tuning forks with plain shanks and round stems.

- Ideal for school, college and laboratory use
- Eisco PH0737 series

Note	Frequency	Order code
C	256Hz	52-3453
D	288Hz	52-3454
E	320Hz	52-3309
F	341Hz	52-3455
G	384Hz	52-3456
A	426Hz	52-3457
B	480Hz	52-3458
C	512Hz	52-3459

365598

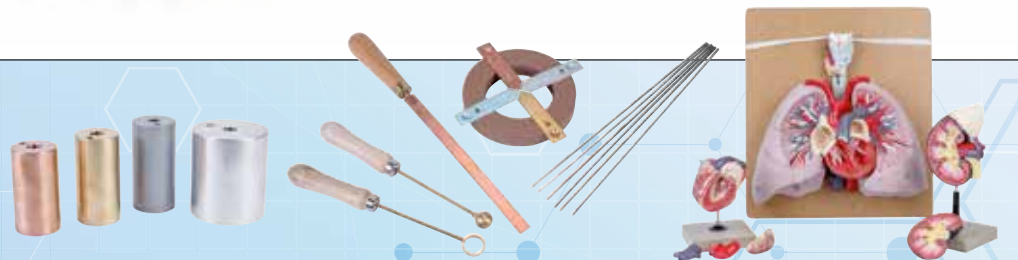
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Light & Optics



RVFM

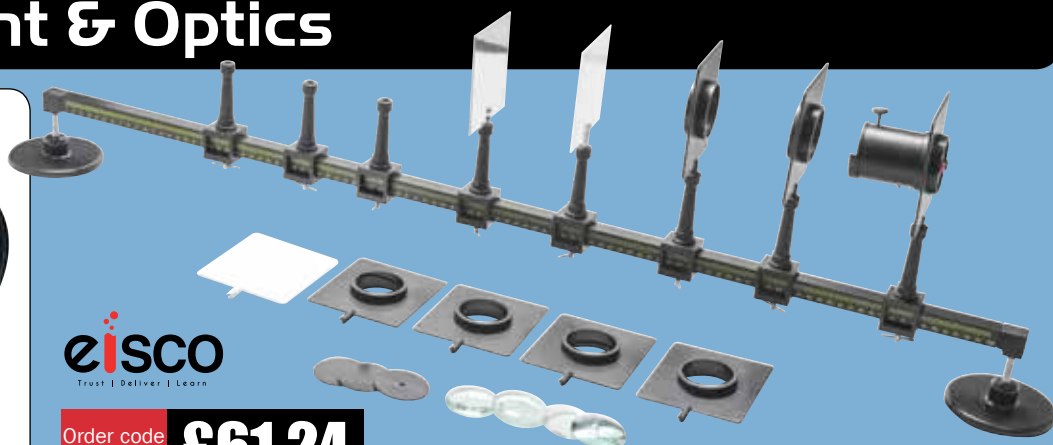
Digital Xenon Stroboscope

This **digital xenon stroboscope** is a lightweight, sturdy and compact instrument which features a digital, variable flashing rate adjustment and external triggering facility. The bright xenon tube makes it ideal for educational uses for such as wave, motion and vibration experiments.

- Specifications 60 to 18,000rpm, 1 to 300Hz
- External triggering signal
- Power supply 240V AC, 50 Hz
- Dimensions (L x H x W): 215 x 140 x 150mm
- Supplied with mains lead

Order code
52-2677

£236.25



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Order code
52-3679

£61.24

Enhanced Optical Bench Set

This optical bench kit includes an enhanced set of accessories allowing the user to perform more experiments than other more basic kits. The bench is 1m long and is graduated on one side.

Set includes:

- 1x 1m optical bench with end supports and graduation scale
- 8x riders with tightening screw
- 1x lamp housing with 12V, 24W halogen bulb
- 6x lens holder for 50mm dia. lenses
- 3x biconvex lenses: +10, +20 & +50
- 1x biconcave lens -20
- Set of diaphragms
- 1x plain mirror 100 x 100mm
- 1x translucent screen 100 x 100mm
- 1x transparent screen 100 x 100mm
- 1x object screen white 100 x 100mm
- Eisco type PH0649

Power source for lamp not included.



Order code
06-2242

£14.26

Complete Optical Bench Set

An economical, yet effective Optical Bench Set that provides accurate demonstrations of basic optical principles. The complete system includes:

- 1x Optical bench-double-sided
- 2x Lens supports: 4cm and 7.5cm
- 5x White board screens, each 10 x 12.5cm with a millimeter scale along one side
- 1x Object and marker
- 1x Screen support
- 1x Candle holder
- 12x paraffin candles



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Light Box and Optical Set

This set of optical equipment is ideal for a wide range of reflection, refraction and colour-mixing experiments.

The light box consists of a 12V, 24W light source that can produce convergent, divergent or parallel beams. On one end, the light box has an adjustable cylindrical convex lens for producing a parallel beam. On the other end, there is a triple aperture system for colour mixing experiments. The box also has lateral apertures with adjustable hinged mirrors. All apertures in the box have vertical channels to hold slit plates and colour filters, etc.

The optical set includes acrylic blocks, a set of three mirrors, two slit black plates and a set of seven mounted colour filters.

Order code
52-3673

£42.78

- Supplied with experiment guide
- Eisco type PH0615

Note: power supply for lamp not included.

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Spectrum Tubes, Holder & Power Supplies

A range of spectrum tubes, associated holders and power supplies, for use in spectral analysis experiments.

- Wide range of materials
- Power supplies and tubes are sold separately

Note: The spectrum tubes are intended for intermittent use only and are not suitable to be used as a lamp source. They should be used for periods of 30 seconds on/30 seconds off. Their expected life will vary depending on the gas they contain. Their useful life will be reduced if they are not used as recommended or allowed to overheat. Use tubes only with the Eisco power supply, 52-3613.



Type	Order code
Spectrum tubes	
Argon	52-3615
Carbon dioxide	52-3616
Helium	52-3617
Hydrogen	52-3618
Iodine vapour	52-3619
Krypton	52-3620
Neon	52-3621
Nitrogen	52-3622
Oxygen	52-3623
Sulphur	52-3624
Xenon	52-3625

Only

£13.27
Each



Order code
52-3612

£22.42
Tube holder

Order code
52-3613

£133.98
PSU 240V AC

Newton's Colour Disc

Order code
06-2243

£13.29

This apparatus demonstrates the discovery, made by Newton, that white light is made up of seven individual colours. The apparatus consists of a pulley mounted on a metal stand. The seven-coloured disc is driven by a belt connected to a hand-driven wheel. When the disc is rotated fast, the eye is unable to distinguish between individual colours and perceives it as white.

- Demonstrates that white light is made up of 7 individual colours
- When rotated fast, the eye is unable to distinguish colours and sees white



Colour Paddles

The paddles are ideal for colour identification and for demonstrating the effects of mixing colours.

- Length of each paddle 150mm
- Supplied as a pack of 6

Order code
52-0887

£2.66

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on all orders over £30 (excl. VAT)
(UK mainland only)

* See Terms & Conditions for full details - www.rapidonline.com/terms

Light & Optics

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Premium Quality Diffraction Gratings

A range of premium quality transmission type diffraction gratings mounted in 50 x 50mm frames.

• Eisco PDG19 series

Lines per mm	Order code	1+
80	52-3045	£13.50
100	52-3046	£13.50
300	52-3047	£13.50
600	52-3048	£17.25
1200	52-3049	£17.25



See our full range of Physics products
at www.rapidonline.com

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Wooden Lens Holder

A wooden holder with a V-shaped slot for supporting lenses or mirrors up to 76mm in diameter.

The holder consists of an upright 100mm high, mounted on a 100 x 50mm rectangular base. An index mark is engraved on each end of the base for easy distance measurements.

- Holds convex or concave lenses
- Dimensions: 100 x 100 x 50mm
- Eisco type PH055A



Order code
52-3682
£1.32

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Plastic Mirrors 150 x 100mm

These Eisco plastic mirrors are ideal for science experiments dealing with reflection, symmetry and other light-related topics.

- Size 150 x 100mm
- Safe and durable
- Ideal for use by younger children
- Supplied **singly**
- Eisco type PH0517A



Order code
52-3363
£0.83

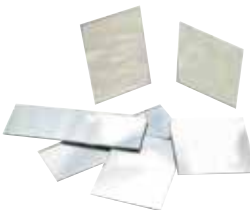
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Unmounted Plane Glass Mirrors

Silvered plane glass mirrors with a protective coating.

- Range of sizes
- Supplied in **packs of 10**

Size	Order code	1+
75 x 25mm	52-3688	£1.15
75 x 50mm	52-3689	£1.89
100 x 75mm	52-3690	£1.42



Size	Order code	1+
150 x 25mm	52-3691	£2.05
150 x 50mm	52-3692	£2.40
150 x 100mm	52-3693	£4.88

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Acrylic Prisms Set of 7

A set of seven clear acrylic blocks. The blocks are 25mm thick and are fully polished on all faces.

- Rectangle 75 x 50mm
- Semi circle 75mm dia.
- Triangle 60° x 60° x 60°, 58mm side
- Triangle 90° x 45° x 45°, 75mm hypotenuse
- Triangle 90° x 60° x 30°, 75mm hypotenuse
- Bi-convex 75mm long, curved faces 100mm radius
- Bi-concave 75mm long, curved faces 100mm radius
- Wooden storage box
- Eisco type PH0571



RVFM

S-Shape Acrylic Block

Order code
52-2691
£5.10



This **acrylic block**, in the form of a shallow **S-shape**, is ideal for demonstrating total internal reflection as part of an optical or other physics project.

- Dimensions (L x W x D): 220 x 20 x 20mm

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Pin Hole Camera

The concept of the pin-hole camera is centuries-old. This model consists of a telescopic wooden box with a pinhole in one end. Light rays passing through the pinhole are projected as an image on a translucent plate. Students view this image through a hole in the other end and can change the image size by changing the length of the box.

Order code
52-3687
£17.14



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Spectroscope Kit

This industry standard spectroscope can be used for measuring light wavelengths and colours from various light sources. The spectroscope measures wavelengths from 400 to 700nm for detailed examination.

- Measures wavelengths from 400 to 700nm
- Eisco type PH100QA

Order code
52-3382
£5.99



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Ray Box

This traditional ray box has three openings, two of which can be used simultaneously by two sets of pupils. Only a minimum of accessories are needed to cover a wide range of optics experiments.

The two side openings each have two slots for blanking plates or 50mm slide accessories. The front opening has seven grooves for accessories and lenses. The front opening has been designed so that when used with a biconvex cylindrical lens of 75mm focal length, divergent or convergent rays are obtained through the slit plate.

Set includes:

- Ray box with 2m flex and two 4mm plugs
- 12V, 24W, B15 bulb
- 1x slit plate

- 2x aluminium blanking plates
- Supplied with instructions
- Eisco type PH0602A

Power supply not included.



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Coloured Filters

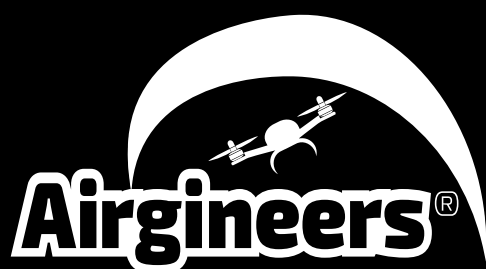


Sets of six coloured plastic sheets. Three sheets feature primary colours, three feature secondary colours.

- Coloured plastic sheets with or without mounts
- Supplied as **sets of 6**

Type	Order code	1+
50x50mm, mounted	52-3686	£5.12
100x100mm, unmounted	52-3694	£4.28

Flight



in partnership with **AUTODESK**

Airineers is a STEM challenge for secondary school aged students who will need to design, build and learn to fly their own radio-controlled quadcopter, often referred to as a drone.

It was created to provide a cutting-edge design and manufacture project that would allow students to learn CAD skills and apply them to manufacturing techniques such as 3D printing, laser cutting and vacuum forming as well as hand-made prototypes.

Micro Drones are just about the easiest way to learn how to make and fly a radio controlled multirotor. Teams will need to design and build an efficient and manoeuvrable micro-sized flying machine that will compete in team games, individual challenges and time trials. And just in case making your own drone wasn't amazing enough, you'll experience all the action from First Person View or FPV via a tiny camera mounted on the drone itself.

www.airineers.co.uk



Tutorials and safety

Video tutorials for every aspect of Airineers Micro Drones can be found at **www.airineers.co.uk**

If you are new to CAD, learn how to use Fusion 360 or TinkerCAD to design your drone frame. Our tutorials also show you how to assemble a Micro Drone, use BetaFlight to configure your flight controller and help you understand the principles behind how a drone flies. You'll also find a wealth of information regarding the safe use of different types of drones, including Micro Drones.

Starter kits

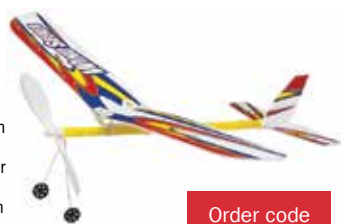
Airineers Starter Kits contain everything you need to build a Micro Drone. The only thing that is not included is the frame as this is designed and manufactured by the students.

Visit **www.rapidonline.com/airineers** for kit details.



Wind Seeker Rubber Band Glider

It takes just a few minutes to put together the **Estes Wind Seeker** rubber band-powered glider - and then the sky is the limit. Suitable for use indoors or outdoors in calm weather.



- Length 19.7in (50cm)
- Wingspan 20in (50.8cm)
- Suitable for age 8 and up
- Manufacturer's part **A-ES4018**

Order code
70-0309

£3.17



Hand Glider

Model glider from Powerglow made of lightweight Flexipor, easily launched by hand.

- Suitable for age 6 and over
- Extremely robust and flexible
- Gliding flight and looping can be set by reconnecting the elevator
- Ready to fly in a few seconds
- No adhesive necessary
- Many different colour combinations
- Made in Germany



Order code
51-2310

£14.56

Order code
51-2271

£12.14

Felix 60 V2 Free Flight Glider

This lightweight free flight Felix 60 V2 Glider from Powerglow is virtually indestructible, so you can launch it into the air time after time for flight after swooping flight. Made from a very lightweight and flexible foam the Felix 60 V2 can be assembled and made ready to fly within seconds. You can colour your glider with almost any commercially available, water-resistant fibre pen.

- Launched by hand
- 600mm wingspan
- Suitable for age 3 and over



Rockets



Order code
70-0337

£7.92

Rocket Star Air-Powered Rocket

These Estes Rocket Star Air-Powered Rockets will give hours of enjoyment to kids of all ages!

Simply attach the foam launch legs to the foam launch base, apply the colourful decals to the two pre-assembled Rocket-Star air rockets, and you're ready to blast off!

- Includes 2 foam rockets 229mm (9in.) and 160mm (6.3 in.) tall
- Air-powered, no batteries needed
- Ready to Fly, just apply the colourful decals
- Sturdy rubber ball and air hose for launching
- Can reach heights of up to 15.2m (50 ft.)
- Estes type **D-ES1908**



Firestreak SST - E2X Rocket

Prepare for lift-off. The **Estes Firestreak SST** rocket can be assembled in just 15 minutes and can soar to heights of more than **350 feet** - time after time. SST stands for Simple Snap Together - and that's all you need to do to get this model ready for the launchpad, making this one of the quickest model rocket kits you will ever build. At just over 10 inches, this **rocket** features an aerodynamically clean design and is sure to be one of the most reliable rockets in your fleet. This rocket is moulded in a bright purple colour and features easy to apply self-stick decals. A bright orange recovery streamer makes it easy to track and retrieve after launching.

- Part of the Estes E2X - Easy to Assemble - rocket series
- No painting or glueing necessary
- Length 10.2in (25.9cm)
- Diameter 0.86in (22mm)
- Plastic fins
- Recommended for ages 10 and up, with adult supervision for those under 12
- Manufacturer's part **D-ES0806**

Launch system, model rocket engines, igniters and recovery wadding are required - sold separately.

Order code
70-0311

£7.14



Riptide Rocket Launch Set

The **Estes Riptide Launch Set** contains almost everything you need for hours of high flying fun! This shiny rocket is completely assembled by specially trained craftsman, is ultra aerodynamic and has totally awesome highly reflective blue chrome coloured fins and nose cone.

Order code
70-0313

£23.80

The Riptide stands 45.7cm (18in.) tall. When launched on our standard engines, it can reach heights of over 180m (650ft.) and returns smoothly on a colourful 30cm (12in.) preassembled parachute.

The Launch System includes Astron II Launch Controller and Astron II Launch Pad.

- Includes Astron II launch controller and Astron II launch pad
- Length 18in (45.7cm)
- Diameter 1.35in (34mm)
- Plastic fins
- Self-stick decals
- Chrome components
- Recommended engines: B6-4 and C6-5
- Maximum altitude 675ft (183m)
- Recommended for ages 10 and up with adult supervision for those under 12
- Manufacturer's part **001403**

In order to launch, model rocket engines, starters and wadding are required.



RVFM

Paper Rocket Launcher



The launcher system comes as an unpainted flat-pack, needing only a screwdriver and pliers for assembly. Once set up, the launcher becomes the most popular piece of equipment in the school!

- Quick assembly
- Fantastic opportunity to engage pupils in designing and making
- Tested by hundreds of children (and adults)
- Can launch paper rockets up to 50 ft into the air
- Nose cones available separately in **packs of 30**
- Paper-rolling mandrels are available separately

Type	Order code	1+
Rocket launcher	70-1518	£39.90
Nose cones (30)	70-1522	£7.35
Paper-rolling mandrel	70-1524	£1.29

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Bottle Rocket Launcher

This unique plastic moulding turns a fizzy drink bottle into a squeeze or 'stomp rocket' launcher.

- Enables students to design and make educational kits
- Ideal for use in graphics and packaging projects
- The tubes also serve for rolling the paper rocket
- Rocket joiners are supplied complete with launch-tubes and nose cones in **sets of 10**

Bottles not included.

Order code
70-1514

£12.90



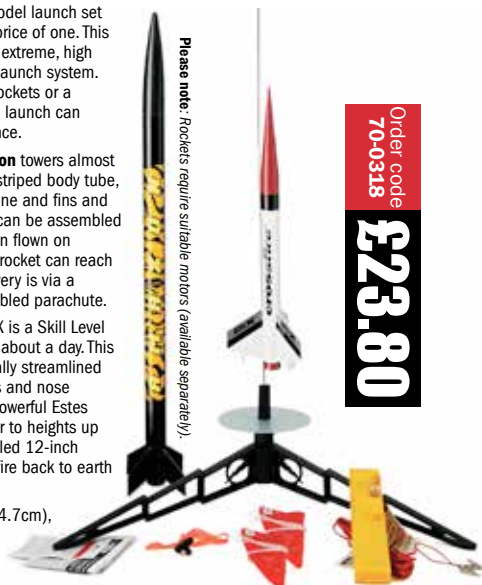
Tandem-X - E2X/Skill 1 Rocket Launch Set

With the **Estes Tandem X** model launch set you get two **rockets** for the price of one. This exceptional set features two extreme, high performance rockets with a launch system. So whether you are new to rockets or a seasoned veteran, a tandem launch can be an unforgettable experience.

The easy-to-assemble **Amazon** towers almost three feet high. With a tiger-striped body tube, pre-coloured plastic nose cone and fins and self-stick decals this rocket can be assembled easily in about an hour. When flown on standard engines, this huge rocket can reach heights over 650 feet. Recovery is via a colourful 18-inch pre-assembled parachute.

Meanwhile, the **Crossfire ISX** is a Skill Level 1 rocket that can be built in about a day. This 15.6in rocket features a totally streamlined shape with aerodynamic fins and nose cone. When launched with powerful Estes standard engines, it can soar to heights up to 1,200 feet. A pre-assembled 12-inch parachute returns the Crossfire back to earth to launch again and again.

- **Amazon** Length 29.4in (74.7cm), diameter 1.33in (34mm)
- Plastic fins
- Self-stick decals
- Recommended engines: B4-2 (first flight), B4-4, B6-2, B6-4, C6-3, C6-5
- Maximum altitude 600 feet (183m)
- **Crossfire ISX** Length 15.6in (39.6cm), diameter 0.98in (25mm)
- Laser cut wood fins
- Self-stick decals
- Recommended engines: A8-3 (first flight), B4-4, B6-4, C6-5, C6-7
- Maximum altitude 1150ft (350m)
- Includes Astron II launch controller and Astron II launch pad
- Recommended for ages 10 and up with adult supervision for those under 12
- Manufacturer's part **D-ES1469**



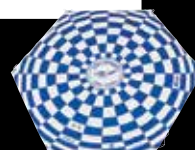
Order code
70-0318

£23.80



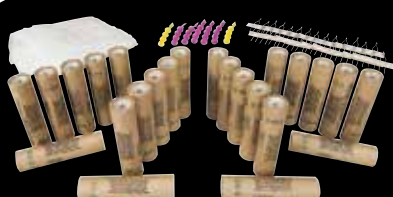
Order code
70-0369

£25.80



Parachutes

Diameter	Order code	1+
12 inch	70-0370	£2.57
18 inch	70-0371	£3.37

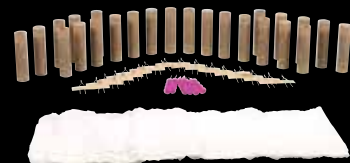


Order code
70-0381

Blast-Off Flight Pack

£53.61

Rocket Motor Packs



Type	Order code	1+
A8-3	70-0382	£53.61
B6-4	70-0383	£53.61
C6-5	70-0384	£58.09

Order code
70-0339

Astron II Rocket Launch Pad with Controller

£19.83



Order code
70-0374

Solar Starters pack of 6

£2.99



Order code
70-0366

Altitude tracker

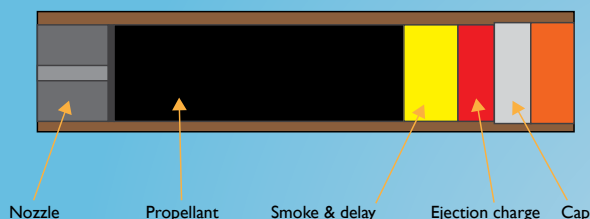
£14.27



HOW DOES A MODEL ROCKET MOTOR WORK?

A rocket motor provides thrust which is the force required to move a rocket off the launchpad and into the sky. It's a practical demonstration of Newton's Third Law of Motion which states that "for every action, there is an equal and opposite reaction". In the case of a rocket motor, the gas being forced from the back pushes the rocket in the opposite direction, up into the air.

Cut away drawing of a rocket motor



- 1) To launch a rocket motor, an igniter is inserted into the **nozzle**. When an electric current is passed through the igniter, it heats up and ignites the solid-fuel **propellant** inside.
- 2) As the **propellant** burns up, it produces rapidly expanding gas which creates pressure inside the motor body. This pressure escapes through the **nozzle** creating thrust.
- 3) Once the **propellant** is used up, the **smoke & delay** section is ignited. This produces smoke but no thrust and allows you to see the path of the rocket in the sky. The delay is usually denoted in seconds on the rocket motor – for example, a B6-4 motor has a 4 second delay.
- 4) Finally, once the **smoke & delay** is used up the **ejection charge** fires which produces hot gases that expand and push the **cap** out of the top of the motor. This force can be used to eject a recovery system such as a parachute.

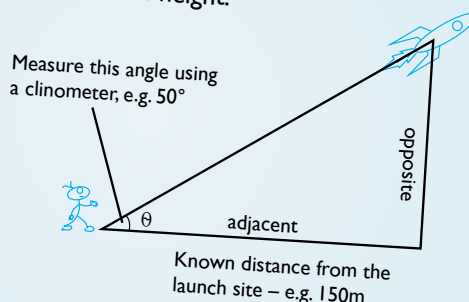
The rocket motors provided by Rapid are permitted for use in the UK Youth Rocketry Challenge. This competition requires students to build and launch a rocket which must keep a predetermined payload in the air for a defined amount of time.

To find out more about the UK Youth Rocketry Challenge, visit

www.ukayroc.org.uk

How high did it go?

You can estimate the maximum altitude that your rocket reaches (known as the apogee) using trigonometry. All you need to know is the approximate distance from yourself to the launch pad and the approximate angle when looking up to the rocket as it reaches its maximum height:



We know the adjacent and we want to find the opposite:

$$\tan \theta = \frac{\text{opposite}}{\text{adjacent}}$$

so ...

$$\text{opposite} = 150 \times \tan 50 = 178\text{m}$$

The Estes AltiTrak (70-0366) is a type of clinometer and is a really useful tool for helping you to quickly check the altitude.



Only
£14.27
Order code
70-0366

Order code	Estes type	pack size	Price	Impulse Newton-sec	Delay (sec)	Propellant weight (g)	Diameter (mm)	Notes
70-0382	A8-3	24	£53.61	2.5	3	3.12	18	All motor packs include igniters, igniter plugs and recovery wadding
70-0383	B6-4	24	£53.61	5	4	6.24	18	
70-0384	C6-5	24	£58.09	10	5	12.48	18	

Astronomy



Helios Orrery and Star Dome

This Helios Orrery and Star Dome model from Cochranes's can be set up as either a basic orrery or an orrery with a star dome. Look through the dome to see the stars visible from earth for your latitude and the time of year. See how the stars and constellations have fixed locations in space and how the planets orbit the Sun. The dome shows all the major stars and constellations around the ecliptic and over the Northern hemisphere.

The following subjects can be studied with the Orrery and Star Dome model:

- The Planets in their orbits (length of a year, inferior and superior planets and more)
- The Moon and its phases
- Eclipse basics
- Time - solar, sidereal and G.M.T. The ecliptic and the Zodiacal constellations
- How the planets appear to move against the night sky
- Use of the Helios outside at night - where should the stars appear in the sky?

Takes 4x D size batteries, not included.

Order code **52-7145**

£450.78



Orbit Tellurium 2

This attractive hands-on Tellurium model from Cochranes of Oxford shows the Sun, Earth and Moon, correctly geared to show each month as the Earth orbits the Sun.

The flexible design instantly engages pupils and illustrates complex relationships more easily. The Orbit Tellurium 2 is an ideal model to aid lessons on: day and night, seasons of the year, the Sun's movement across the sky, changing length of daylight, shadows, the phases of the Moon, the crescent Moon from different latitudes, Eclipses of the Moon and Sun, the use of sundials and shadow sticks, lunar months and festivals linked to the Moon.

- Rotate the model and watch as the Earth orbits the Sun, the Moon orbits the Earth and the Earth spins on its axis
- Shine the light from the Sun onto the Earth to model night and day, the seasons and eclipses and create shadows
- Use the small-scale Earth and Moon on an inclined orbit to give an accurate demonstration of the phases of the Moon and show why eclipses do not happen every month
- Contains: Tellurium model with accessory tidy, two sizes of Earth and Moon, stick-on model person, sundial, date, eclipse and phase of the moon indicator cards plus teacher guide with suggested activities
- Power transformer included (No batteries required)
- Size: 65cm long, 25cm high



Order code **52-7141**

£212.91

Bresser Optik Junior Astro Planetarium with Motor

This Bresser Optik Junior Astro Planetarium with Motor does an ideal job in displaying the beauty of the night sky on your wall or ceiling.

The two projection discs show more than 8000 constellations and celestial bodies, while the super-bright LED can project from a distance of up to 3m. By setting the date and the time, you can simulate the sky at night exactly as it was from a past date or special occasion. Equipped with two motors to rotate the projected image onto the ceiling, sending shooting stars flying through the room.

- More than 8000 celestial objects
- With 2 motors for a moving image
- Shooting star function
- 3x 1.5V DC (AA battery)
- Clock adjustable to day and time
- More than 8000 celestial objects stored on two projection screens
- Moving projection image with two built-in motors
- Shooting star function in 40 second cycles
- Very bright LED projector
- Projection angle and distance adjustable (up to 3m)
- Automatic power off after 30, 60 or 120 minutes
- Includes batteries and user manual
- Manufacturer's part **8847100**



Order code **49-0173**

£55.99



Bresser Optik Visomar 60/700 Junior Lens Telescope

If you've always wanted to know more about the night sky but can't tell the difference between the Plough and the Pleiades, then the Bresser Optik Visomar 60/700 Junior Lens Telescope could be just what you need.

This telescopic lens means you can study the stars wherever you go. Conveniently packaged in a box, it is ideally suited for use on the go. Also included is a handy tripod, perfect for mounting your telescope.

- Impressive 262 x magnification
- Refracting telescope with 60mm lens diameter and 700mm focal length
- Includes three eyepieces

Product includes: 3 eyepieces (H-20/H-12, 5 and SR-4mm); height adjustable aluminum tripod; diagonal mirror for terrestrial operation; compass; erecting lens 1.5 x viewfinder; 5 x 24 Astronomy software; hard case.

Order code **51-2647**

£61.88



Giant Magnetic Solar System



Order code **06-8960**

£15.99



Solar Powered Solar System

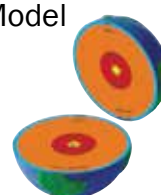


Order code **06-9346**

£13.48



Cross-Section Foam Earth Model



Order code **52-9932**

£9.99



Inflatable Solar System Set



Order code **06-5936**

£27.47

Electricity



NEW

Order code **52-4092**
Comprehensive Basic
Electricity Kit

£125.99

eisco
Trust | Deliver | Learn

Basic Electricity Kits

These basic **electricity kits** from **Eisco** are ideal for teaching various topics related to electricity.

NEW

Order code **52-4292**
Primary Basic
Electricity Kit A

£27.55

Electricity Kit

NEW



This **electricity kit** from **Eisco** provides the perfect starter platform to conduct a range of **physics experiments**, particularly those involving electricity and magnetism.

- Set includes 37 pieces
- Batteries not included
- Manufacturer's part **ELEM2**

Order code **52-4128**

£39.86



Magnet Electricity Kit

Covering the needs of the National Curriculum Science for **Key Stages 1 & 2**, this unique set uses the force of magnets to make all connections between bulbs, switches, motors and buzzers.

- Connections are made using transparent wires, to show the copper core and bases are clear, allowing pupils to observe the path of electricity, right to the component
- Kit includes 6x bases, 2x MES bulbs and holders, 1x festoon bulb, 1x buzzer, 1x push-to-make switch, 1x motor, 10x Magleads, 2x crocodile clips, length of resistance wire, battery magnets and teachers notes
- Suitable for **Key Stages 1 & 2** (ages 5 to 11)
- Supplied as a **pack**

Requires 3x C cells, (not included).

Order code **17-1506**

£38.75

Electricity Class Pack

A cost-saving classpack containing a selection of commonly used electrical accessories.

- Cost saving over buying parts separately
- Popular parts can be topped up
- Packed in a Grattells storage tray with lid
- Please see individual product descriptions for full details
- Supplied as a **pack**

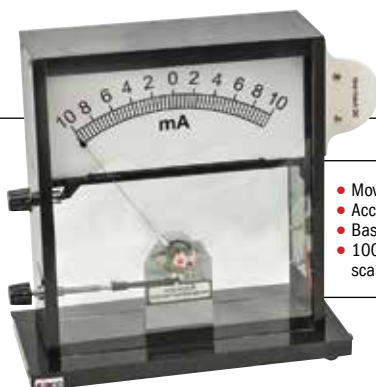


Order code **70-1012**

£40.52

Technical specification

Order code	Qty	Description	Order code	Qty	Description
41-0125	10	3.5V bulbs	75-0180	5	Toggle switch
18-0125	5	2x AA battery holders	76-0100	5	Slide switch
41-0070	5	Bulb holders	78-0115	5	Push on/off switch
37-0140	5	Motors	78-0112	5	Push to make switch
18-0105	5	Battery snaps	35-3610	5	Buzzer
17-0350	1	Crocodile leads (Pack of 10)	14-0430	1	Grattells tray
01-0102	5	Wire	14-0436	1	Lid for tray



- Moving coil type
- Accuracy of $\pm 2.5\%$
- Basic sensitivity 5mA
- 100mV f.s.d. (full scale deflection)

Demonstration Moving Coil Meter

No scales are included with the meter. Exchangeable scales with built-in shunts are available separately that allow the meter to measure higher voltage and current.

Type	Order code	1+
Demonstration meter	52-3338	£43.88
Scale - 1V	52-2999	£6.90
Scale - 0 to 1A	52-3339	£6.90

565528



Order code **52-3416**
Motor or hand

£137.98

Order code **52-3636**
Hand only

£112.36

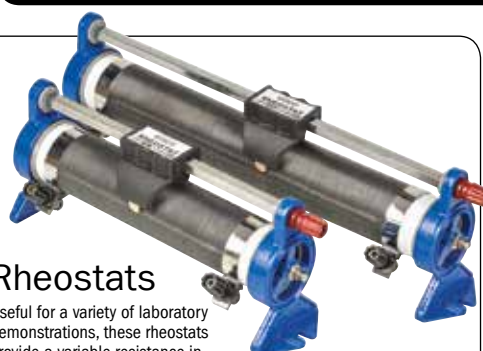
eisco
Trust | Deliver | Learn

Van De Graaff Generator Motor Or Hand Driven

These Van De Graaff generators have been specially designed for electrostatic experiments, and where a source of high voltage is required.

The generators are mounted on a stable base along with a choice of a hand-cranked pulley or a smooth-running AC motor.

- Develop voltage up to 200kV, depending on ambient conditions
- Spark length up to 60mm
- Sphere: aluminium
- Charge collecting belt: silicon rubber with excellent insulation resistance
- Belt-tracking easily adjusted
- Acrylic shaft allows for full visibility
- Charge collecting combs: aluminium mesh, clearly visible
- Connections: 4mm sockets in dome and base
- Discharger: spherical 100mm dia., with insulated handle and 4mm sockets
- **52-3416** can be operated by hand, or from a 110 or 220V AC mains supply
- **52-3636** is operated by hand only



Rheostats

Useful for a variety of laboratory demonstrations, these rheostats provide a variable resistance in electrical circuits.

Oxidized constantan wire is wound on a vitreous enamelled tube. A sliding contact carriage, mounted on the slide bar, carries a phosphor bronze contact for long life. The rheostats have three binding posts with 4mm sockets for electrical connections: one at each end

of the winding and another at the end of the slide bar.

- Available in a range of resistance values

Resistance in Ohms	Order code	1+
20Ω	52-3337	£27.55
37Ω	52-3336	£27.55
55Ω	52-3334	£21.68
125Ω	52-3335	£27.55

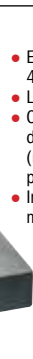
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Demonstration Dynamo with Hand Pulley

Order code **52-3443**

£37.18

- Electrical output via 4mm terminals
- LED output indicator
- Can be used as a demonstration motor (requires 6 to 8V DC power supply)
- Includes instruction manual



eisco

565529

LEDs

Rapid

Education LED Pack



Order code 13-0122

£47.58

A considerable range of LEDs and LED related products are neatly packaged in this classroom kit.

- All the pieces come in re-sealable polythene bags
- Offers a significant saving over separately bought items
- Storage box with compartment tray and lid
- Dimensions of the box: 43cm x 31cm x 7cm
- Suitable for all ages
- Total number of components = 680
- Supplied as a pack

Contents:

1x 5mm red LED (pack 100)	55-1790	1x 3mm green LED (pack 100)	55-1772
1x 5mm green LED (pack 100)	55-1792	1x 3mm yellow LED (pack 100)	55-1774
1x 5mm yellow LED (pack 100)	55-1794	1x LED tester	55-0000
25x Flashing 5mm red LED	55-0140	1x Miniature LDR	58-0134
25x Flashing 5mm green LED	55-0142	1x Shallow tray	14-0430
25x Flashing 5mm yellow LED	55-0144	1x Tray lid	14-0436
1x 3mm red LED (pack 100)	55-1770	1x Insert 8 compartment	14-0443

TruOpto

Miniature 3mm LEDs

A range of industry standard 3mm round LEDs housed in a diffused coloured package.

- Viewing angle 60°
- Supplied in packs of 100 or 1000

Technical specification

Colour	Wavelength (nm)	Lum. int. (mcd) @ I _f (20mA)	I _f max. (mA)	V _f typ. (V)	V _f max. (V)	Order code
Red	690	10	50	2	2.4	55-1770/55-1778
Bright red	643	100	30	1.7	2.6	55-1776/55-1784
Yellow	590	50	50	2	2.4	55-1774/55-1782
Green	572	28	20	2.2	2.5	55-1772/55-1780
Blue	470	80	30	3.3	3.8	55-1762
White	x: 0.31, y: 0.30*	120	30	3.3	3.8	55-1766

* Chromaticity coordinates

Price per pack of 100				
Colour	Order code	1+	10+	25+
Red	55-1770	£9.05	£7.00	£6.20
Bright red	55-1776	£7.90	£6.07	£5.36
Yellow	55-1774	£10.07	£7.90	
Green	55-1772	£10.50	£7.90	£6.96
Blue	55-1762	£16.61	£13.39	
White	55-1766	£16.61	£13.39	
Price per pack of 1000				
Colour	Order code	1+	5+	
Red	55-1778	£64.14	£54.02	
Bright red	55-1784	£54.02	£45.92	
Yellow	55-1782	£72.60	£59.08	
Green	55-1780	£72.60	£59.08	



Order code 13-0130

£31.45

Rapid

Essential Tool Pack

Your chance to buy a selection of essential hand tools, whilst also making a substantial saving.

- Supplied in a handy Grattell's storage tray with clip-on lid
- Total number of tools = 18

Contents:	Order code
3x Economy side cutter	85-0205
3x Economy snipe nose plier	85-0225
3x Light duty wire stripper	86-0350
3x Flat blade screwdriver 100 x 3mm	86-0405
3x Slotted screwdriver 100 x 5.5mm	86-0416
3x Pozidriv screwdriver 75mm x Pz1	86-0424
1x Shallow tray	14-0430
1x Tray lid	14-0436

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Magileads Magnetic Leads

Order code 17-1500
150mm MagiLeads

£6.19

Order code 17-1502
300mm MagiLeads

£6.60

Magileads are electrically conductive wires, with tiny magnets fitted at either end, which are used to provide an instant and effective electrical connection. For children presented with a battery, bulb and a couple of Magileads, making a circuit could not be easier.

- No stripping, cutting or use of any sort of mechanical joint is required
- Great primary school product
- Supplied in packs of 10

RVFM

Crocodile Lead Pack



A pack of 460mm long crocodile clip leads. Available in either a pack of 10 leads in 5 colours, or a pack of 20 leads in red and black.

- Terminated at each end with a vinyl covered crocodile clip
- Ideal for use as test clips

Type	Order code	1+	10+
Assorted pack 10	17-0350	£2.66	£2.16
Red/black pack 20	17-0345	£5.00	£4.33

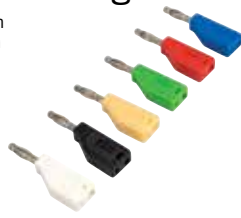
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TruConnect

4mm Stackable Plugs

These 4mm plugs have a 4mm socket in the rear providing an in-line stacking facility.

- The lead wire is clamped in position by a screw
- Nickel plated brass insert with stainless steel plug spring
- 10A rating
- Spare screws are available



MOQ 2 - In Multiples of 2				
Type	Order code	2+	100+	500+
Black stackable plug	17-0400	£0.745	£0.559	£0.491
Blue stackable plug	17-0405	£0.745	£0.559	£0.491
Green stackable plug	17-0410	£0.745	£0.559	£0.491
Red stackable plug	17-0420	£0.745	£0.559	£0.491
White stackable plug	17-0425	£0.745	£0.559	£0.491
Yellow stackable plug	17-0430	£0.745	£0.559	£0.491

Price each				
Type	Order code	1+	5+	10+
Spare screws (Pack of 25)	17-0398	£1.19	£0.971	£0.885

06.3885

TruOhm

Preset Potentiometer Kit



A pack containing a total of 110 miniature horizontal preset potentiometers.

- Each value individually packed
- A total of 13 different values

See www.rapidonline.com for suitable storage cabinets.

Contents:				
5 x 100R	10 x 1K	15 x 10K	15 x 100K	10 x 1M
5 x 200R	10 x 2K	5 x 20K	5 x 200K	
5 x 500R	10 x 5K	10 x 50K	5 x 500K	
Type	Order code	1+	5+	
Preset potentiometer kit	13-0225	£12.30	£10.27	

06.3257

SCI PARTS

Standard Toggle Switches



Low-cost standard size toggle switches.

- Complete with On/Off plate
- Rated at 250V 1.5A
- Panel cut-out 12mm
- These switches are not recommended for industrial applications

MOQ 5 - In Multiples of 5					
Type	Body dim.	Order code	5+	10+	100+
SPST	25 x 14 x 14	75-0180	£0.763	£0.726	£0.753
Price each					
Type	Body dim	Order code	1+	10+	100+
DPDT	28 x 18 x 14	75-0185	£0.863	£0.799	£0.756

03.0255

RVFM

Miniature Slide Switches

A miniature slide switch with solder tag connections and break before make DPDT contacts.

- Suited to a wide range of miniature electronic equipment
- Contacts rated at 0.3A, 125V AC
- Fixing centres 19mm
- 2x M2 fixing holes



MOQ 10 - In Multiples of 10					
Type	Order code	10+	100+	500+	1000+
DPDT slide switch	76-0100	£0.263	£0.184	£0.145	£0.117

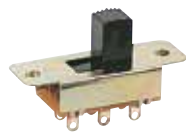
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RVFM

Standard Slide Switches

Standard slide switches with solder tag connections and break before make DPDT contacts.

- Also available in centre off
- Suited to a wide range of miniature electronic equipment
- Contacts rated at 0.3A, 125V AC
- Fixing centres 28mm



MOQ 5 - In Multiples of 5					
Type	Order code	5+	100+	500+	1000+
DPDT Std. slide	76-0105	£0.304	£0.254	£0.211	
DPDT Centre off slide	76-0110	£0.284	£0.222	£0.184	£0.174

03.0267

RVFM

Miniature Push-button Switches



A range of low-cost, miniature push to make and push to break switches that are available in various button colours.

- Ideal for school projects and prototyping
- Non-locking
- Rated 125V AC 250mA
- Panel cut-out 7mm
- Dimensions 28mm long, ø10.5mm

Note: These switches are not recommended for industrial applications.

MOQ 10 - In Multiples of 10				
Colour	Order code	10+	100+	500+
Push to make				
Black	78-0118	£0.210	£0.185	£0.170
Red	78-0100	£0.210	£0.185	£0.170
Blue	78-0119	£0.210	£0.185	£0.170
Green	78-0120	£0.210	£0.185	£0.170
White	78-0121	£0.210	£0.185	£0.170
Yellow	78-0122	£0.210	£0.185	£0.170
Push to break				
Black	78-0105	£0.210	£0.185	£0.170
Red	78-0123	£0.210	£0.185	£0.170



NTC Disc Thermistors

A range of miniature disc thermistors for general purpose applications such as temperature measurement and thermal compensation circuitry.

- The thermistors are clearly coded and have a wide working temperature range of -30°C to +125°C and a tolerance of 10%

Technical specification					
Resistance at 25°C	Approx. resistance @ 100°C	Max. current @ 25°C	B-Constant	Thermal time constant	Order code
100Ω	11Ω	-	3200°K	20s	61-0398
300Ω	24Ω	115mA	3500°K	22s	61-0400
1kΩ	90Ω	70mA	3800°K	22s	61-0405
5kΩ	30Ω	30mA	3950°K	21s	61-0410
20kΩ	1kΩ	20mA	4250°K	23s	61-0415
100kΩ	5kΩ	10mA	4400°K	24s	61-0420

MOQ 5					
Type	Order code	5+	25+	100+	500+
100Ω	61-0398	£0.40	£0.299	£0.239	£0.201
300Ω	61-0400	£0.264	£0.204	£0.151	£0.14
1kΩ	61-0405	£0.299	£0.239	£0.173	£0.149
5kΩ	61-0410	£0.299	£0.239	£0.173	£0.149
20kΩ	61-0415	£0.299	£0.239	£0.173	£0.149
100kΩ	61-0420	£0.264	£0.204	£0.151	£0.14



Laboratory Resistance Units



Single resistors encased in easy-to-use plastic enclosures with 4mm terminals. These resistance units are useful for physics classroom demonstrations or experiments in electricity and electronics laboratories.

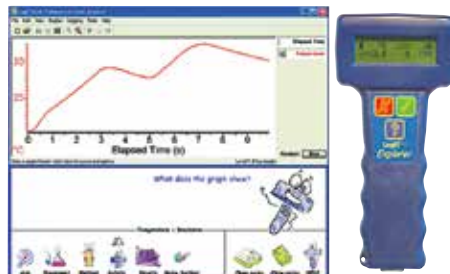
- Connect to other resistance units or circuit elements with standard 4mm leads (not included)
- Can be used with 4mm stackable plug leads, spade terminals or bared wires
- Overall dimensions: 50 x 50 x 40mm
- **Eisco PH1143 series**

Resistance	Order code	1+
1 Ohm	52-3481	£2.65
2 Ohms	52-3483	£1.62
5 Ohms	52-3486	£2.65
10 Ohms	52-3482	£2.65
50 Ohms	52-3487	£2.54
200 Ohms	52-3485	£2.54

Data Loggers

LogIT

LogIT Explorer



The **LogIT Explorer** is the complete data logging solution for primary and lower secondary education. Utilising the latest technology and design it provides the ideal link between real hands-on science and IT to enhance and develop science for young students.

The explorer has been designed to meet the requirements of the current teaching curriculum as well as allowing for future education needs. Available in single versions as well as in two five-pack versions containing extra sensors (please see technical specifications for details).

- An all-in-one solution for data logging which can be used for many different experiments
- Designed to be used by young people, with simple to use controls (e.g. green button for GO, red button for STOP), as well as familiar stereo headphone type plugs for sensors, and a lanyard eyelet for security
- 3 built-in sensors for light, temperature and sound, plus 3 ports for a range of Explorer external sensors, up to 3 sensors can be used simultaneously
- Light sensor can also be used to time and calculate the speed of moving objects as well as a motion detector
- Results can be viewed on the Explorers LCD display or stored for subsequent downloading to computer (via supplied software)
- Software for Explorer and computer fully upgradeable via a simple internet link.
- Additional sensors available
- Suitable for **Key Stages 2 & 3** (ages 7 to 14)

Powered by 4x AA batteries or by connection to a computer via USB connection.

Technical specification	
Temperature range	-10°C to +50°C
Sound level range	50dB to 100dB
Light level range	0 to 20,000 Lux
PC requirements	
Windows USB port - Win 98SE/2000/NT/XP/7/8 Mac - OS 9.2/OSX/10.4+ Linux	

Contents:
Single pack includes: Explorer datalogger with built-in sound, temperature and light sensors
Single user datalogging software CD
Computer connection cable
Fibreoptic light sensor cable
Full instructions and teacher resource book
Foam insert

USB Five pack includes: 5x USB port Explorer dataloggers
5x USB cables
5x Explorer books with 14 Explorer investigations
5x Fibreoptic light sensors
1x Explorer site licence with CD and manual
Foam insert

USB Five plus pack includes: 5x USB port Explorer dataloggers
5x USB cables
5x Explorer books with 14 Explorer investigations
5x Fibreoptic light sensors
1x LogIT Lab for Explorer site licence with CD and manual
1x Explorer temperature sensor
1x Explorer controller set with lamp, buzzer, motor and fan
1x Explorer interactive site licence CD
Foam insert

Order code
85-2661
Windows USB

£184.49

Order code
85-2659
Windows USB 5 pack

£883.73

Order code
85-2658
Windows USB 5+ pack

£953.96



Laboratory Timer and Timing Gate



A precision digital timer designed to measure the time interval between any two events with high accuracy.

The timer has four operating modes: manual, free-fall mode, timing gates mode and any other triggering start and stop.

The timer has a built-in power source for timing gates and the coil for 'g' by free fall apparatus.

- Display: LED 14mm
- Suitable for use with 'g' by free-fall equipment
- Supplied with timing gates & instruction manual
- **Eisco type LBTM**

Order code
52-3434
Timer & timing gates

£99.89

Rapid

Mini USB Dataloggers



This range of mini USB dataloggers are an indispensable tool for investigations and experiments where there is a requirement to record temperature, light level, voltage or acceleration.

The dataloggers are in the form of a USB stick, so no cables are required to retrieve data or configure the device. The sensor, memory and battery are all encapsulated on a single circuit so no additional hardware is required.

Simply plug the datalogger into your PC or laptop and configure it. Unplug it and position it where you want it to log. At the end of the logging period, plug it back into your PC or laptop to retrieve your data.

- 4 versions available: light, temperature, voltage and acceleration
- Replaceable battery - no cables required
- Battery life approx. 2 to 3 years
- Recommended temperature range -20 to +60°C
- Can be used outside or in a liquid, if protected in a self-seal bag or container
- Simple to program using the free downloadable software

Type	Order code	1+
Temperature	52-3300	£17.90
Light level	52-3301	£17.90
Voltage	52-3302	£24.90
Acceleration	52-3303	£24.90



We bring STEM to life

Chemicals

Vast range of chemicals available
from Acetone to Zinc powder

RVFM

Nutrient Agar

Nutrient **agar** is a general purpose **growth medium** suitable for use in a range of biological experiments. Use 28g powder to 1 litre deionised water. Leave for 10 minutes, swirl and sterilise for 15 minutes at 121°C. Cool to 47°C, mix well then pour into plates or petri dishes.

- Supplied in 100g packs



Order code
52-2601
100g Nutrient Agar

£12.47

RVFM

Protactinium Generator

This **Protactinium generator** is ideal for demonstrating radioactive decay. The half-life of the isotope is short enough for students to complete the decay curve within a single lesson and is perfect for use with a datalogger and GM tube sensor or a standard GM tube and counter. The generator is completely sealed in a leakproof enclosure and consists of uranyl nitrate and an organic solvent. These settle into two distinct layers but when shaken together react and produce a short term burst of Beta radiation with a half-life of about 1 minute.

- Supplied complete with MSDS
- Recommended storage period up to 8 years
- Bottle dimensions 120 x 70 x 70mm



Order code
52-2704
Protactinium generator

£271.28

RVFM

Radioactive Source Chemicals

These **radioactive chemicals** can be used for studies into radiation in nuclear and atomic physics.



Type	Order code
Americium 241	52-2701
Cobalt 60	52-2702
Strontium 90	52-2703

£787.50

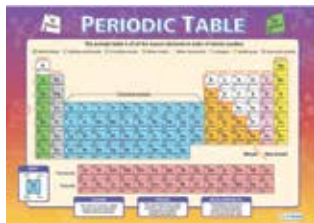
Each

daydream
EDUCATION

Periodic Table Wall Chart

This colour coded periodic table shows all of the known elements in order of their atomic number.

- 841 x 594mm
- Suitable for Key Stages 2 & 3 (ages 7 to 14)



Order code
06-5638

£3.78

Type	Quantity	Order code	1+
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Chemicals A

Acetone LR (Propanone LR) ((CH ₃) ₂ CO)	500ml	52-7400	4.54
Acetone LR (Propanone LR) ((CH ₃) ₂ CO)	1 Litre	52-7401	5.17
Acetone LR (Propanone LR) ((CH ₃) ₂ CO)	2.5 Litre	52-7402	10.74
Agar fine powder	100g	52-7403	8.15
Agar fine powder	250g	52-7404	16.42
Albumen Egg Powder	100g	52-7405	6.21
Albumen Egg Powder	250g	52-7406	15.03
Aluminium Oxide LR (Alumina) (Al ₂ O ₃)	500g	52-7407	5.47
Aluminium Powder Fine (Al)	500g	52-7408	18.69
4-Aminobenzoic Acid as Alternative	100g	52-7616	14.06
Di-Ammonium Iron (II) Sulphate 6-Water LR, (NH ₄) ₂ SO ₄ FeSO ₃ .6H ₂ O 500g	500g	52-7409	21.99
Ammonium Nitrate LR (NH ₄ NO ₃)	500g	52-7410	5.68
Amylase (Bacterial Source)	10g	52-7411	6.21
Amylase (Bacterial Source)	25g	52-7412	6.77
Amylase (Bacterial Source)	100g	52-7413	21.80

Chemicals B

Benedict's Reagent (Qualitative)	2.5l	52-7414	11.46
Benedict's Reagent (Qualitative)	500ml	52-7415	3.10
Benzoic acid	100g	52-7615	2.81
Benzyl Alcohol (Phenylmethanol)	200ml	52-7614	5.63
Bicarb indicator	500ml	52-7416	3.20
Biuret Reagent (Working) Solution	500ml	52-7417	3.40
Buffer Solution Borate pH10	500ml	52-7418	3.52
Buffer Solution Phthalate pH3	500ml	52-7419	3.52
Buffer Solution Phthalate pH4	500ml	52-7420	3.52
Buffer Solution Phthalate pH5	500ml	52-7421	3.52
Buffer Solution Phosphate pH6	500ml	52-7422	3.52
Buffer Solution Phosphate pH7	500ml	52-7423	3.52
Buffer Solution Borate pH8	500ml	52-7424	3.52
Buffer Tablets pH4 (Phthalate)	Pk of 50	52-7425	11.79
Buffer Tablets pH7 (Phosphate)	Pk of 50	52-7426	11.79
Buffer Tablets pH9.2 (Borate)	Pk of 50	52-7427	11.79
Butan-1-ol	500ml	52-7586	5.34
Butan-2-ol	500ml	52-7587	7.88
Butanal	100ml	52-7588	6.75
Butane-1,4-Diamine, (1,4-Diaminobutane), C ₄ H ₁₂ N ₂	250g	52-7618	21.93
Butanoic acid	100ml	52-7589	10.12

Chemicals C

Calcium carbide	100g	52-7590	5.63
Calcium Chloride Fused Granular Size 2.0- (CaCl ₂)	500g	52-7428	3.86
Calcium Granules (Ca)	100g	52-7429	10.22
Calcium Granules (Ca)	25g	52-7430	3.92
Calcium Sulphate LR (Plaster of Paris)	5kg	52-7431	12.29
Ceramic Fibre Wool (Mineral Wool)	500g	52-7432	6.39
Citric Acid Crystals LR (HOC(COOH)(CH ₂ COOH) ₂ .H ₂ O)	500g	52-7433	5.37
Citric Acid Crystals LR Un Nr (HOC(COOH)(CH ₂ COOH) ₂ .H ₂ O)	3kg	52-7434	15.07
Copper (II) Carbonate Basic LR (Cupric Carbonate Basic) (CuCO ₃ Cu(OH) ₂)	500g	52-7435	14.29
Copper (II) Carbonate Basic LR (Cupric Carbonate Basic) (CuCO ₃ Cu(OH) ₂)	250g	52-7436	8.85
Copper (II) Carbonate Basic LR Un Nr (Cupric Carbonate Basic) (CuCO ₃ Cu(OH) ₂)	3kg	52-7437	67.52
Copper (2) Chloride	100g	52-7617	2.81
Copper (II) Chloride 2 Water LR (Cupric Chloride)(CuCl ₂ .2H ₂ O)	250g	52-7438	8.67
Copper (II) Oxide Powder LR (Cupric Oxide) (CuO)	500g	52-7439	15.49
Copper (II) Oxide Powder LR (Cupric Oxide) (CuO)	250g	52-7440	9.50
Copper (II) Sulphate 5 Water LR (Cupric Sulphate)(CuSO ₄ .5H ₂ O)	3kg	52-7441	18.89
Copper (II) Sulphate 5 Water LR (Cupric Sulphate) (CuSO ₄ .5H ₂ O)	500g	52-7442	6.21
Copper (II) Sulphate 5 Water LR (Cupric Sulphate) (CuSO ₄ .5H ₂ O)	1kg	52-7443	8.99
Copper (II) Sulphate Anhydrous LR (Cupric Sulphate Anhydrous) (CuSO ₄)	250g	52-7444	10.42
Copper (II) Sulphate Anhydrous LR (Cupric Sulphate Anhydrous) (CuSO ₄)	500g	52-7445	18.18

Copper foil	100g	52-7619	5.16
Copper Foil 0.10mm LR (Cu)	250g	52-7446	13.73
Copper Foil 0.10mm LR (Cu)	500g	52-7447	25.90
Copper Powder Precipitated (Cu)	100g	52-7448	7.23
Copper Small Pieces (Cu)	500g	52-7449	19.10
Cresol red	5g	52-7591	4.22
Cyclohexane LR (C ₆ H ₁₂)	500ml	52-7450	6.72
Cyclohexane LR (C ₆ H ₁₂)	2.5l	52-7451	21.27
Cyclohexene LR (Tetrahydrobenzene) (C ₆ H ₁₀)	250ml	52-7452	12.90

Chemicals D

1,6-Diaminohexane 5% Aqueous Solution	250ml	52-7453	7.74
1,6-Diaminohexane LR (Hexamethylenediamine) (NH ₂ (CH ₂) ₆ NH ₂)	25g	52-7454	6.81
2,6-Dichlorophenolindophenol (D.C.P.I.P.)	1g	52-7455	5.26
2,6-Dichlorophenolindophenol (D.C.P.I.P.)	5g	52-7456	20.44
2,6-Dichlorophenolindophenol Tablets (D.C.P.I.P.)	Pk of 10	52-7457	7.23
Di(dodecanoyl)Peroxide/ Di-Lauryl Peroxide	10g	52-7592	5.34

Chemicals E

Eosin y 24050/Acid Red 87	87.25g	52-7593	13.49
Ethanol Absolute 99/100% (Ethyl alcohol) (C ₂ H ₅ OH)	500ml	52-7458	46.46
Ethanol Absolute 99/100% (Ethyl alcohol) (C ₂ H ₅ OH)	100ml	52-7459	12.80

Chemicals F

Fehling's Solution No 1	500ml	52-7460	4.13
Fehling's Solution No 2	500ml	52-7461	5.68
D (-) Fructose (D-Laevulose) (C ₆ H ₁₂ O ₆)	100g	52-7462	3.61

Chemicals G

D (+) Galactose Anhydrous LR (C ₆ H ₁₂ O ₆)	25g	52-7463	9.81
D-Glucose Anhydrous LR (Dextrose) (C ₆ H ₁₂ O ₆)	500g	52-7464	5.37
D-Glucose Monohydrate LR (Dextrose) (C ₆ H ₁₂ O ₆)	500g	52-7465	4.03
Glycerol (Glycerine) LR (Propane-1,2,3-Triol) (HOCH ₂ CH(OH)CH ₂ OH)	500ml	52-7466	9.28
Glycerol (Glycerine) LR (Propane-1,2,3-Triol) (HOCH ₂ CH(OH)CH ₂ OH)	2.5l	52-7467	25.81

Chemicals H

Hydrochloric Acid 0.1M (0.1N) Standard Solution (HCl)	2.5l	52-7468	8.05
Hydrochloric Acid 1M (N) Standard Solution (HCl)	1l	52-7469	5.06
Hydrochloric Acid 1M (N) Standard Solution (HCl)	2.5l	52-7470	9.91
Hydrochloric Acid 2M (2N) Standard Solution (HCl)	1l	52-7471	5.06
Hydrochloric Acid 2M (2N) Standard Solution (HCl)	2.5l	52-7472	8.47
Hydrochloric Acid 36% AR (HCl)	1l	52-7473	6.21
Hydrochloric Acid 36% LR (HCl)	1l	52-7474	5.63
Hydrochloric Acid 36% LR (HCl)	2.5l	52-7475	10.42
Hydrogen Peroxide 100 Volume (H ₂ O ₂)	500ml	52-7476	4.59
Hydrogen Peroxide 100 Volume (H ₂ O ₂)	1l	52-7477	5.68
Hydrogen Peroxide 100 Volume (H ₂ O ₂)	2l	52-7478	11.54
Hydrogen Peroxide 20 Volume (H ₂ O ₂)	2l	52-7479	7.43

Chemicals I

Iodine Resublimed LR (I ₂)	100g	52-7480	15.49
Iodine Solution with 1% Potassium Iodide	500ml	52-7481	4.96
1-Iodobutane LR (Butyl Iodide) (CH ₃ (CH ₂) ₃ I)	25ml	52-7482	13.42
Iron (II) Sulphate 7-Water LR (Ferrous Sulphate) (FeSO ₄ .7H ₂ O)	500g	52-7483	11.01
Iron (3) Nitrate	250g	52-7620	6.20
Iron (III) Nitrate 9 - Water LR (Ferric Nitrate) (Fe(NO ₃) ₃ .9H ₂ O)	500g	52-7484	10.89
Iron (III) Oxide Calcined LR (Ferric Oxide) (Fe ₂ O ₃)	500g	52-7485	5.06
Iron-Filings Coarse (Fe)	500g	52-7487	3.61
Iron-Filings Coarse (Fe)	3kg	52-7488	10.32
Iron Filings Fine (Fe)	500g	52-7486	3.61
Iron-Filings Fine (Fe)	3kg	52-7489	10.32
Iron-Powder, Reduced By Hydrogen (Fe)	500g	52-7490	16.11
Isoamyl (Isopentyl) Alcohol	200ml	52-7613	4.39

Chemicals L

L-Ascorbic Acid (Vitamin C) (C ₆ H ₈ O ₆)	100g	52-7491	5.63
Lead Carbonate	250g	52-7596	10.02
Lead (2) Nitrate	250g	52-7621	9.89
Lead (II) Nitrate LR (Pb(NO ₃) ₂)	500g	52-7492	13.52
Lead Foil LR 0.5mm (Pb)	500g	52-7493	9.40
Lime Water (Calcium Hydroxide Solution)	2.5l	52-7494	6.72
Lipase	10g	52-7495	7.43
Lipase	25g	52-7496	14.77
Lithium Chloride Anhydrous LR (LiCl)	100g	52-7497	8.87
Lithium Metal in Liquid Paraffin (Li)	10g	52-7498	15.49
Luminol (3-Aminophthalhydrazide) (NH ₂ C ₆ H ₃ .CO.NH.NH.CO)	1g	52-7499	10.53

Chemicals M

Magnesium Powder (Mg)	100g	52-7500	7.74
Magnesium Powder (Mg)	500g	52-7501	27.05
Magnesium Ribbon LR (Mg)	25g	52-7502	4.23
Magnesium Sulphate 7-Water LR (MgSO ₄ .7H ₂ O)	1kg	52-7503	4.85
Maltose LR (C ₁₂ H ₂₂ O ₁₁ .H ₂ O)	100g	52-7504	11.56
Manganese (IV) Oxide, Precipitated LR (MnO ₂)	250g	52-7505	8.25
Manganese (IV) Oxide - Powder (Manganese Dioxide) (MnO ₂)	500g	52-7506	13.93
Marble Chips 4-6mm (CaCO ₃)	3kg	52-7507	7.23
Marble Chips Medium - Large (CaCO ₃)	3kg	52-7508	7.23
Methanol	100ml	52-7622	1.63
Methanoic Acid	250ml	52-7597	3.10
Methanol LR (Methyl alcohol) (CH ₃ OH)	500ml	52-7509	3.31
Methylated Spirit Industrial 98/99% W/W (C ₂ H ₅ OH & CH ₃ OH)	2.5l	52-7510	8.47
Methylated Spirit Mineralised (Blue) (C ₂ H ₅ OH & CH ₃ OH)	2.5l	52-7511	8.46
2-Methylpropan-1-ol (Isobutyl alcohol)	100ml	52-7585	2.48
Methyl Salicylate (Oil of Wintergreen)	100ml	52-7598	4.71

Chemicals N

N-Hexane LR (Lq 1l) (CH ₃ (CH ₂) ₄ CH ₃)	100ml	52-7512	3.92
N-Hexane LR (Lq 1l) (CH ₃ (CH ₂) ₄ CH ₃)	500ml	52-7513	12.39

Chemicals O

Octan-1-ol	250ml	52-7599	10.12
Oil Crude Synthetic (CLEAPSE formulation)	500ml	52-7514	10.32
Orcein Acetic	100ml	52-7600	9.00

Chemicals P

Phenol Red Indicator	5g	52-7601	4.78
Phenolphthalein 1% Solution	500ml	52-7515	4.75
Phenolphthalein 1% Solution	100ml	52-7516	2.48
Phenylethene (Styrene)	250ml	52-7602	7.59
Phenyl Salicylate LR (Salol / Phenyl-2-Hydroxybenzoate) (C ₆ H ₄ (OH)COOC ₆ H ₅)	250g	52-7517	18.80
Phosphoric acid	250ml	52-7603	4.39
Polyvinyl Alcohol (Ethenol) (CH ₂ CHOH) _n	250ml	52-7518	11.47
Potassium Bromide LR (KBr)	500g	52-7519	15.91
Potassium Carbonate Anhydrous LR (K ₂ CO ₃)	500g	52-7520	8.67
Potassium Chlorate	100g	52-7623	4.39
Potassium Chlorate (V) LR (KClO ₃)	500g	52-7521	23.49
Potassium Chloride LR (KCl)	500g	52-7522	6.39
Potassium Dihydrogen Phosphate	250g	52-7624	3.27
Potassium Dihydrogen Phosphate (V) LR (KH ₂ PO ₄)	500g	52-7523	7.23
Potassium Iodide LR (KI)	100g	52-7524	11.46
Potassium Iodide LR (KI)	500g	52-7525	47.49
Potassium Manganate (VII) LR (Potassium permanganate) (KMnO ₄)	500g	52-7526	8.15

Potassium Manganate (VII) LR (Potassium permanganate) (KMnO ₄)	1kg	52-7527	13.73
Potassium Nitrate	250g	52-7625	2.81
Potassium Nitrate LR (KNO ₃)	500g	52-7528	5.47
Propan-2-ol LR (Lq 1L) (iso-Propyl alcohol) ((CH ₃) ₂ CHOH)	500ml	52-7529	4.96
Propan-2-ol LR (Lq 1L) (iso-Propyl alcohol) ((CH ₃) ₂ CHOH)	2.5l	52-7530	13.42
Propan-1-ol LR (1L) (n-Propyl alcohol) (CH ₃ CH ₂ CH ₂ OH)	500ml	52-7531	5.79
Propan-1-ol LR (Lq 1L) (n-Propyl alcohol) (CH ₃ CH ₂ CH ₂ OH)	2.5l	52-7532	16.52
Propanoic Acid	250ml	52-7626	4.67
Propionaldehyde	100ml	52-7604	7.02
Propionic Acid LR (Propanoic acid) (CH ₃ CH ₂ COOH)	500ml	52-7533	9.70

Chemicals S

Salicylic Acid LR (2-Hydroxybenzoic acid) (C ₆ H ₄ OHCOOH)	100g	52-7534	5.74
Salicylic Acid LR (2-Hydroxybenzoic acid) (C ₆ H ₄ OHCOOH)	500g	52-7535	20.02
Acid Washed Sand	1kg	52-7536	4.75
Schiff's Aldehyde Testing Reagent	500ml	52-7605	8.60
Sebacoyl Chloride 5% in Cyclohexane (C ₁₀ H ₁₆ Cl ₂ O ₂)	100ml	52-7537	8.25
Silicone Grease	50g	52-7606	11.19
Silver Nitrate LR (AgNO ₃)	25g	52-7538	37.16
Silver Nitrate LR (AgNO ₃)	100g	52-7539	139.37
Sodium Acetate 3-Water LR (Sodium Ethanoate) (CH ₃ COONa.3H ₂ O)	500g	52-7540	6.21
Sodium Alginate	25g	52-7541	4.34
Sodium Carbonate Anhydrous LR (Na ₂ CO ₃)	500g	52-7542	3.10
Sodium Carbonate Anhydrous LR (Na ₂ CO ₃)	1kg	52-7543	4.54
Sodium Carbonate Anhydrous LR (Na ₂ CO ₃)	3kg	52-7544	8.99
Sodium Chloride LR (NaCl)	500g	52-7545	2.59
Sodium Chloride LR (NaCl)	1kg	52-7546	3.52
Sodium Chloride LR (NaCl)	3kg	52-7547	4.85
Sodium Chloride Native Rock Salt (NaCl)	1kg	52-7548	3.61
Sodium Hydrogen Carbonate LR (Sodium bicarbonate) (NaHCO ₃)	500g	52-7549	3.10
Sodium Hydrogen Carbonate LR (Sodium bicarbonate) (NaHCO ₃)	1kg	52-7550	4.23
Sodium Hydrogen Carbonate LR (Sodium bicarbonate) (NaHCO ₃)	3kg	52-7551	8.87
Di-Sodium Hydrogen Phosphate (V)-12-Water, (Na ₂ HPO ₄ .12H ₂ O)	500g	52-7552	11.77
Sodium Hydroxide 0.1M (0.1N) Standard Solution (NaOH)	2.5l	52-7553	7.63
Sodium Hydroxide 1.0M (1N) (NaOH)	2.5l	52-7554	9.28
Sodium Hydroxide 2M (2N) Standard Solution (NaOH)	2.5l	52-7555	9.91
Sodium Hydroxide Pearl 98-100% LR (NaOH)	500g	52-7556	5.17
Sodium Hydroxide Pellets LR (NaOH)	500g	52-7557	6.39
Sodium Hydroxide Pellets LR (NaOH)	1kg	52-7558	10.02
Sodium Hypochlorite Solution	250ml	52-7627	2.03
Sodium Hypochlorite Sol 10-14% (NaClO)	500ml	52-7559	4.96
Sodium Hypochlorite Sol 10-14% (NaClO)	1l	52-7560	5.74
Sodium Hypochlorite Sol 10-14% (NaClO)	2.5l	52-7561	11.47
Sodium Iodide LR (NaI)	100g	52-7562	10.84
Sodium Metabisulphite	250g	52-7607	2.03
Sodium Molybdate	50g	52-7608	25.31
Sodium Tauroglycocholate (Bile Salts)	25g	52-7563	12.50
Di-Sodium Tetraborate 10-Water LR (Borax) (Na ₂ B ₄ O ₇ .10H ₂ O)	500g	52-7564	5.06
Sodium Thiosulphate 5-Water LR (Na ₂ S ₂ O ₃ .5H ₂ O)	3kg	52-7565	11.05
Sodium Thiosulphate 5-Water LR (Na ₂ S ₂ O ₃ .5H ₂ O)	500g	52-7566	3.92
Starch Soluble LR	500g	52-7567	5.79
Sucrose LR (Cane sugar) (C ₁₂ H ₂₂ O ₁₁)	500g	52-7568	3.92
Sulphuric Acid 1M Standard Solution (H ₂ SO ₄)	1l	52-7569	5.58
Sulphuric Acid 2M Standard Solution (H ₂ SO ₄)	1l	52-7570	5.79
Sulphuric Acid 98% LR (H ₂ SO ₄)	1l	52-7571	7.85
Sulphuric Acid 98% LR (H ₂ SO ₄)	2.5l	52-7572	16.94

Chemicals T

Trypsin, From Beef Pancreas	10g	52-7573	15.49
Trypsin, From Beef Pancreas	25g	52-7574	31.78

Chemicals U

Universal Indicator Ph 1-14	500ml	52-7575	10.84
Universal Indicator Ph 4-11	500ml	52-7576	5.47
Universal Indicator Ph 4-11	100ml	52-7577	3.10

Chemicals V

Vanadium Pentoxide (Vanadium V Oxide)	50g	52-7609	11.81
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Chemicals W

Water Deionised (H ₂ O)	25l	52-7578	24.10
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Chemicals Y

Yeast Dried Active 500g	500g	52-7579	9.28
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Chemicals Z

Zinc Bromide	100g	52-7610	17.94
Zinc Chloride	200g	52-7612	2.92
Zinc Foil (Zn)	250g	52-7580	12.39
Zinc Granulated LR (Zn)	500g	52-7581	16.31
Zinc Oxide	250g	52-7611	4.27
Zinc Nitrate (Zn(NO ₃) ₂ .6H ₂ O)	250g	52-7582	10.02
Zinc Sulphate (ZnSO ₄ .7H ₂ O)	500g	52-7583	13.01
Zinc-Powder LR (Zn)	500g	52-7584	15.58

Subject to surcharge

NOTE:

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Structure Kit – 45 Atoms

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26 Water Units

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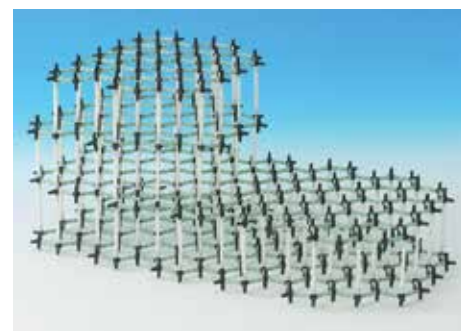
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420 Atoms

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Minit Proview Model Graphite Kit

Order code **52-7103**
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Vacuum Pumps



Order code
52-2680
Hand vacuum pump

£131.25

RVFM

Hand Vacuum Pump

This portable, hand operated **vacuum pump** will create and hold a vacuum up to approximately 170mm bar/625 mm Hg.

- Made from high impact polystyrene
- Nozzle accepts 6mm bore tubing
- Complete with vacuum gauge and release valve
- Pumping rate: 16cc per stroke

Kipp's Apparatus

Order code
52-1494
Kipp's apparatus

£22.02

RVFM

Kipp's Apparatus

A 3-chamber Kipp's Apparatus set made of unbreakable polyethylene.

- Top has thistle funnel and bulb structure through which dilute acid can be poured
- Acid reacts with a metal sulphide in the base
- H₂S gas collects in the middle dome where it can be released via a PTFE stop cock
- Lower chamber has outlet with cap for cleaning
- High density polyethylene (HDPE) construction
- 500ml capacity



Electrolysis

eisco
Trade & Education & Leisure

Hoffman's Complete Electrolysis Apparatus

Hoffman's apparatus is used for demonstrating the decomposition of water, determination of chemical composition by electrolysis and has applications in the evaluation of the electrochemical equivalent of hydrogen.

The glass unit has two connected limbs, each of approximately 50ml capacity (graduated 2 to 50ml), integral reservoir tube and funnel-shaped bulb, with a PTFE stopcock at the top of each limb.

- Supplied with 2 carbon and 2 platinum electrodes
- Requires a 12V DC power supply
- Must be set up vertically using a clamp and stand (sold separately)
- Chemicals required: water, molar sodium, or potassium sulphate or sulphuric acid
- **Eisco type CH0740B**

Stand sold separately.

Order code
52-3343
Hoffmans apparatus

£57.78

Order code
52-3337
Support stand

£12.49



Brownlee Water Electrolysis Apparatus

Brownlee's Water Electrolysis Apparatus is used to demonstrate that electrically conductive liquids can be decomposed and resolved into their constituent elements by means of a unidirectional electric current. The gaseous components formed by this method can be trapped and their relative volumes estimated.

The apparatus consists of a support which rests on a 1 litre beaker or jar and has two clips that each hold an inverted test tube. Platinum electrodes are positioned under the inverted test tubes and are attached to insulated connecting rods which are attached to binding posts mounted on the support. When the beaker is filled with a water-based solution and a direct current is passed between the electrodes, gases will begin to collect in the inverted test tubes.

Requires a 1 litre beaker or jar, 6V battery or 10V DC power supply (not included)

Includes:

- 1x apparatus
- 2x corks
- 2x inverted test tubes
- Includes full instruction manual
- **Eisco type PH0941B**

Order code
52-3604
£36.21



RVFM

Brass Sheets



Economical brass sheets, ideal for cutting, shaping and bending.

- Superb rich brass finish
- 0.1mm thick sheets

Type	Order code	1+
A4	06-0744	£3.90
A3	06-0746	£6.40

RVFM

Copper Sheets



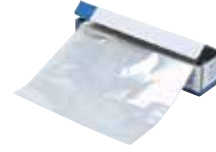
0.1mm thick copper sheets are perfect for embossing, bending and cutting.

- Basic Design & Technology and Science resource

Type	Order code	1+
A4	06-0752	£4.86
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Aluminium Foil



Food grade Aluminium Foil ideal for cookery as well as experiments with metal.

- Available on 75 and 90m rolls

Type	Order code	1+
450mm x 75m	06-0921	£8.98
500mm x 90m	06-0922	£14.98

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Charles Law Apparatus

This apparatus from Eisco has been designed to demonstrate **Charles's Law** that in a gas under constant pressure, the volume is proportional to the absolute temperature. The apparatus includes a U-shaped glass 15mm in diameter with one plain limb 220mm long, one 120mm graduated limb terminating in a 37mm diameter bulb with a third limb, jointed at right angles to the other two. A short length of rubber tubing with two pinch clips on a length of glass tubing is mounted at the end of one limb with a rubber bung.

- Supplied with 1000ml capacity tall form beaker and stirrer
- All glass parts made from borosilicate glass
- Manufacturer's part **PH0422**

Order code
52-4091
£26.45



Thermometers & Balances

RVFM

Laboratory Thermometers

- Range -10 to +300°C
- Length 305mm
- Immersion: partial (76mm)

Order code
52-2586
-10 to 300°C

£5.38



Brannan

General Purpose Glass Thermometers

A 305mm, general-purpose glass thermometer with red spirit filling.

Order code
87-4308
-10 to 110°C

£3.70



Brannan

Breaksafe Thermometer

This breaksafe safety coated thermometer is encapsulated in PVC to contain any glass or filling material in event of breakage.

Order code
85-2655
-10 to 110°C

£5.69



Brannan

Green Fill Laboratory Thermometers

These green fill laboratory thermometers are a safe alternative to traditional mercury filling.

Type	Order code	1+
150mm	85-2652	£1.45
200mm	85-2653	£1.50
300mm	85-2654	£1.55



Rapid

Classroom Thermometer

This oversized thermometer features a large, accurate 30cm glass magnifying tube, giving the current temperature in both **Centigrade** and **Fahrenheit**. Ideal for use in the classroom or outside.

Order code
06-9963
-40 to 50°C

£4.07



Brannan

Rainbow Dial Thermometer



Order code
85-2651
Dial thermometer

£10.15

VOLTCRAFT

LCD Digital Thermometer and Clock



Order code
51-5169
Digital thermometer

£14.31

Order code
51-0919
Probe for 51-5169

£5.11

VOLTCRAFT

IR 110-1S Infrared Thermometer



Order code
51-5190
Infrared thermometer

£16.00

VOLTCRAFT

DET3R Penetration thermometer



Order code
51-5210
Penetration thermometer

£20.04

Order code
85-2366
5ml - Qty 250

£2.78

medline
Scientific Limited

White Diamond Square Weighing Dishes



They are biologically inert, contaminant-free and are resistant to diluted acids, aqueous solutions, alcohols and bases.

Order code
85-2349
30ml - Qty 500

£8.89

Order code
52-7245
Disc scale

£11.49

SALTER

Electronic Disc Kitchen Scale



For full details on all of these products and to see our full range of **Thermometers** and **Balances** visit www.rapidonline.com



KERN

School Scales

These scales are ideal for general purpose weighing in laboratory environments through to quality control applications.

- Only two function keys
- Very easy to use
- Large 16mm LCD display
- Adjustment program CAL
- Battery powered (supplied) or by optional AC/DC power adaptor
- Impact resistant ABS case with non-slip rubber feet
- Splash-proof membrane keypad

Order code
85-2359
School scales from only
£48.13



KERN

444-35N Precision Balance 400g

This is the ideal entry-level model for all laboratory technicians.

- Excellent value for money in this performance class
- Many multiple functions are at users disposal
- Can be used for parts counting and also for weighing different mixtures
- Data transfer to printer or PC function
- Four function keys
- Protective working cover as standard
- Includes test weight, **DKD** approved
- Supplied with an AC/DC mains power adaptor

Order code
85-2361
Precision balance

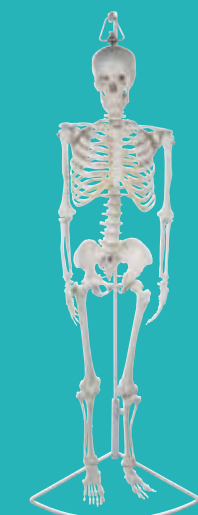
£288.75

Human Anatomy

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Trust | Deliver | Learn

Human Skeletons

A range of human skeleton models permitting detailed observation of the structure of the human body.



Order code **52-3517**
510mm skeleton

£80.71



Order code **52-3516**
Life size skeleton

£178.78

Order code **52-3516**
450mm skeleton

£30.60



Learning Resources

Double Sided Magnetic Human Body



Order code **06-8962**
Magnetic human body

£16.99

This double-sided Magnetic Human Body, from Learning Resources, gives you twice the learning potential with an illustration of the human skeleton on one side and the organs and muscle groups on the other. The 17 pieces combine to create a body more than 90cm tall.

Ideal for use either for a whole class demonstration or with small groups.

- Set of 17 magnetic pieces
- Activity guide included
- Suitable for ages 5+
- Manufacturer's part **LER 6044**

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Enlarged Dental Care Models

These enlarged teeth models are ideal for demonstrating dental care.

Order code **52-3504**
333x150x50mm

£20.42

Order code **52-3503**
530x170x70mm

£21.44



Order code **52-3506**
Brain model

£38.86

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Human Brain Model, 4 Parts

A high quality, four-piece, hand-painted model, showing fine details of human brain anatomy.



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300x Life-Size Human Skin Model

This 300 times life-size model represents a comprehensive cross-section through human skin. It shows details of the three layers, sebaceous and sweat glands, hair follicles, erector muscles, arteries, nerves, veins and more.



Order code **52-3509**
Skin model

£25.94

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Human Eye Model 3D

This high quality seven-piece, hand-painted model shows fine details of the human eye.

Order code **52-3381**
3D eye model

£15.07



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Five-Part Human Ear Model

Four-times life-size, hand painted human ear model with five removable parts: the petrous portion of the temporal bone section of the auditory canal, labyrinth, tympanic membrane with malleus and incus.



Order code **52-3511**
Human ear model

£44.95

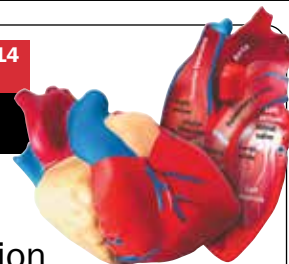
Order code **52-6014**
Heart model

£10.23

Learning Resources

Cross Section Foam Human Heart Model

This human heart model separates to create a cross-section view for hands-on classroom demonstrations.



Order code **06-9946**
Pumping heart model

£13.64

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Pumping Heart Model

This model clearly demonstrates how the heart pumps blood around the human body.



Order code **52-3507**
7-piece heart model

£39.95

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Human Heart Model

This hand-painted heart model is mounted on a supporting base and separates into seven parts.



Order code **52-3431**
Lungs, heart & larynx

£57.16

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Human Lungs Model with Heart and Larynx



Order code **52-2628**
Lung model demo kit

£63.37

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Lung Model Demo Kit

This comprehensive kit includes all the necessary parts required to make a lung model demonstration.



Order code **52-3389**
Digestive system

£28.17

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Digestive System



Order code **52-3513**
Urinary organs

£25.49

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**Urinary Organs
– Kidney with
Bladder Model**



Order code **52-3390**
Kidney/adrenal model

£19.45

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**Kidney and
Adrenal Gland
Model**



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Respiration Equipment

These kits from **Eisco** can be used as part of a biology syllabus to look at the **respiratory system**.

NEW

Order code **52-4210**
Respiration apparatus

£14.45



Order code **52-4211**
Respirometer kit with stand and clamps

£74.94



Order code **52-4212**
Simple respirometer kit

£23.78



Dissection

Rapid

— 40 YEARS —
1979-2019



Order code **06-7036**

£16.85

RVFM

20-piece Dissecting Set

A 20-piece set of commonly used dissection instruments.

- Stainless steel
- Velvet-lined rexine pouch bag

Technical specification

Qty	Instrument	Qty	Instrument	Qty	Instrument
2	Scissors	1	Razor	1	Chain and hook
2	Forceps	1	Watch glass	1	Blow pipe
4	Needles	1	Magnifying glass	1	Plastic handled needle
1	Scalpel	1	Glass slide	1	Dropper glass
1	BP handle with blade	1	Cover slip	1	Brush

Order code **06-6064**

£0.18

RVFM

Plastic Tweezers

Economical, plastic tweezers, ideal for science and as an assembly aid for small components.

- Serrated tips
- Locating lugs hold tips straight when closed
- Made from recyclable ABS plastic
- Length approx. 110mm



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**Stainless Steel
Dissecting
Needles**

A pack of five stainless steel dissecting needles.

- Straight style
- Length 95mm
- Supplied in packs of 5
- Eisco type BI0166A

Order code **52-3450**

£2.75



Swann-Morton®

These products are covered by the Offensive Weapons Act 1996. To purchase and accept delivery of this product, you must be over the age of 18.

0933 No.3 Scalpel Handle



A Swann-Morton 3G S/S stainless steel surgical scalpel handle for Swann-Morton fitment No. 3 blades.

- Suitable for fine, detailed work
- Graduated measure
- Supplied singly
- Swann-Morton type 3G S/S, 0933

Type	Order code	1+	10+	25+
Scalpel handle	86-1260	£2.79	£2.49	£2.39

Scalpel Blades

Carbon-steel blades suitable for a wide range of Swann-Morton scalpel handles.

- Suitable for Swann-Morton 3, 3L, 3 Graduated, 5B, 7, 9, B3 and B3L handles
- Supplied in packs of 5



Type	Order code	1+	20+	40+
No.10 blade	86-1265	£0.718	£0.614	£0.51
No.10A blade	86-1270	£0.69	£0.59	£0.49
No.11 blade	86-1275	£0.69	£0.59	£0.49

1801 Disposable Scalpel



A low-cost, disposable scalpel.

- Complete with surgical quality No. 25A universal blade
- Supplied with blade protection cover

Type	Order code	1+	10+	25+
Disposable scalpel	86-1285	£0.647	£0.581	£0.515

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**Dissecting
Scissors**

A range of stainless steel dissecting scissors available with various blade styles.

- Stainless steel construction

Style	Order code	1+
Straight	52-3357	£1.38
Blunt	52-3358	£1.48
Curved	52-3359	£1.48



RVFM

**Large Aluminium
Dissecting Dish**

Order code **06-9082**

£10.11



- Rectangular with rounded corners and flanged edges
- Dimensions: 355 x 255 x 60mm

Science Bundles: Save up to 30% off list price on classpack bundles
www.rapidonline.com/science-bundles



Bug Collection Tongs

Order code
52-3100
Price each

£2.28

Order code
52-3100
Pack of 5

£10.39



Insect Pooter

Order code
52-3097
Price each

£2.08

Order code
52-3098
Pack of 5

£9.67

The Environment



Bug Viewers

Order code
52-0851
Price each

£1.92



Bug Pots with Magnifying Lids

- Size 44 x 50mm dia.
- 2.5x magnification
- 5mm squares on base for sizing bugs



Order code
52-1618
Pack of 10

£8.07



Small Pond Nets

Order code
06-9950
Pack of 5

£5.38



White Pond Trays

Order code **06-9923**
Large
420 x 312 x 92mm

£2.93



Order code **06-9924**
Small
342 x 251 x 51mm

£1.93



Plastic Aquarium

Order code **06-9951**
10L
300 x 200 x 200mm

£8.14



Bargain Buckets

Order code **06-9925**
Set of 8
D: 175; H: 160mm

£8.53



Science Habitat Centre

The centre creates a variety of exciting environments within the classroom, from an all herb garden, butterfly/insect house or even a mini pond. The versatile design provides open and easy access, while the bottom tub comes with two different plugs, one with ventilation holes and one for use with water.

- Versatile - herbs, insects or pond!
- 70 x 52.5 x 52.5cm
- Manufacturer's part **C1147**

Suitable age: 3+ years

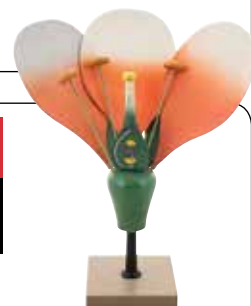
Order code **52-3388**
Flower model

£27.92



Typical Flower Model

A large-sized model of a typical, idealised flower. The model is ideal for the detailed study of plants and as an introduction to reproduction, including angiosperm pollination and fertilization.



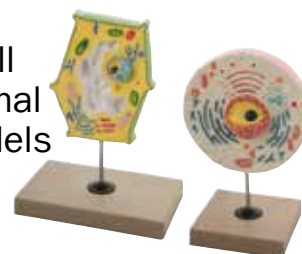
Plant Cell and Animal Cell Models Set

These typical plant and animal cell models are ideal for comparison and contrasting between the two.

- Plant cell is 152mm high and 125mm wide
- Animal cell is 152mm in diameter
- Supplied as a pair
- Eisco type **BM0050**

Order code **52-3392**
Flower model

£39.89



Order online

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Potometer

A potometer is an apparatus used to measure the rate of water loss, or transpiration, from a plant. The rate of transpiration is determined by measuring the drop in water level in a graduated tube over a period of time. The drop in water level is caused by the plant absorbing water to replace an equal volume of water lost by transpiration.

- Ideal for laboratory and field use - only one glass component, the capillary tube
- Overall dimensions 195 x 150 x 75mm
- Capillary tube 100x 1mm
- Supplied with instruction manual

Order code **52-3492**
Potometer

£15.99

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Ganongs Potometer

A potometer is an apparatus used to measure the rate of water loss, or transpiration, from a plant. In the Ganong's potometer, the rate of transpiration is determined by measuring the position of an air bubble in a graduated tube over a period of time. The change in position is caused by the plant absorbing water to replace an equal volume of water lost by transpiration.

- Height to top of reservoir 170mm
- Diameter of reservoir 20mm
- Length, overall 320mm
- Base 80 x 20mm
- Capillary bore 1 mm

Order code **52-3493**
Ganong's potometer

£22.87



Recycling, Energy & Weather



INVICTA
Established for over 40 years

Biodegradability Kit

A new and innovative environmental science kit for teachers and pupils to conduct experiments.

- Demonstrates materials bio-degrading in compounds and liquids
- Observe the amount and rate of degrading over time, in differing materials and liquids
- Pupils should be encouraged to bring their own materials to conduct experiments

Order code **06-8252**
Biodegradability kit

£53.99

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Established for over 40 years

Upright Weather Station



Inexpensive, yet complete weather station, with all components attached to a central pole.

- Wind speed
- Rainfall
- Sun dial
- Wind direction
- Temperature
- 116cm high

Order code **52-0368**
Weather station

£29.99

techno
LINE

EA 3010 Digital Hand-Held Anemometer

A hand-held anemometer with a digital display that can measure wind speeds from light air to violent storm. The meter can also measure wind chill factor and temperature.

- Simple and straightforward operation
- Measures wind speed in km/h, mph, m/s or knots
- Wind display to Beaufort on bar graph wind scale
- Temperature display in °C or °F
- LCD backlighting
- Auto power off
- Splashproof
- Neck strap
- Battery included



Order code **60-7418**
Wind gauge

£30.76

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Established for over 40 years

Renewable Energy Kit



Enable Teachers to demonstrate the generation of electricity using Wind, Solar and Water power.

- This portable unit comes in an easy to assemble kit format and includes four interchangeable dials to demonstrate the power being generated - meter, moving cogs, flashing lights and a siren

Order code **52-0376**
Renewable energy kit

£69.45



Brannan

Rain Gauge

200mm rainfall measure graduated in both mm and inches.

Order code **52-0038**

£3.75



INVICTA
Established for over 40 years

Rain Gauge

An inexpensive and accurate rain gauge, graduated in millimetres.

Order code **52-1604**

£5.74



INVICTA
Established for over 40 years

Anemometer

This unique design gives a direct reading of wind speed, without the need to count revolutions. The low and high calibrations register ms-1 and the Beaufort scale.

- Clever indication on handle
- May be hand-held or permanently fixed
- Complete with product guide.
- Size 28 x 19cm

Order code **52-1580**
Anemometer

£15.06

VEX IQ is a programmable robotics platform designed to transform STEM learning for young students and their teachers. IQ is ideally suited to students from Key Stage 2 and 3 (ages 8 - 14) but can also be used well beyond Key Stage 3. The intuitive, tool-less platform allows students to have robots up and running in no time, whilst also allowing for complex designs as the student's skills grow.

VEX IQ is ideal for use in the classroom and can also be used in the VEX IQ Challenge.

Visit www.rapidonline.com/VEXIQ to find out more.



SUPER KIT

EVERYTHING YOU NEED IN ONE BOX

VEX IQ Super kit does more than just get you started. It contains everything you need to build a programmable robot including batteries, chargers, cables and a stackable storage bin to keep it all in. Perfect for classroom or competition use.



SUPER KIT

✓ Best for VEX IQ Challenge

£269.99

Order code 70-7891

Each of the Super kits include:

- 4x Smart Motors
- 1x Robot Brain
- 1x Controller
- 1x Rechargeable robot battery
- 1x Battery charger
- 2x Bumper switches
- Sensors: 2x Touch LEDs
1x Colour sensor
1x Distance sensor
1x Gyro sensor
2x Bumper sensor
- Structural and mechanical parts to build any of the Hero Bots
- All connecting cables
- Stackable storage bin
- Unlimited access to free programming software

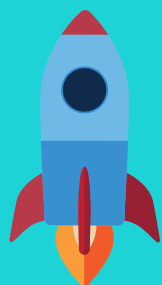




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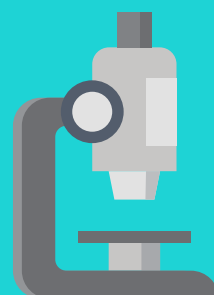


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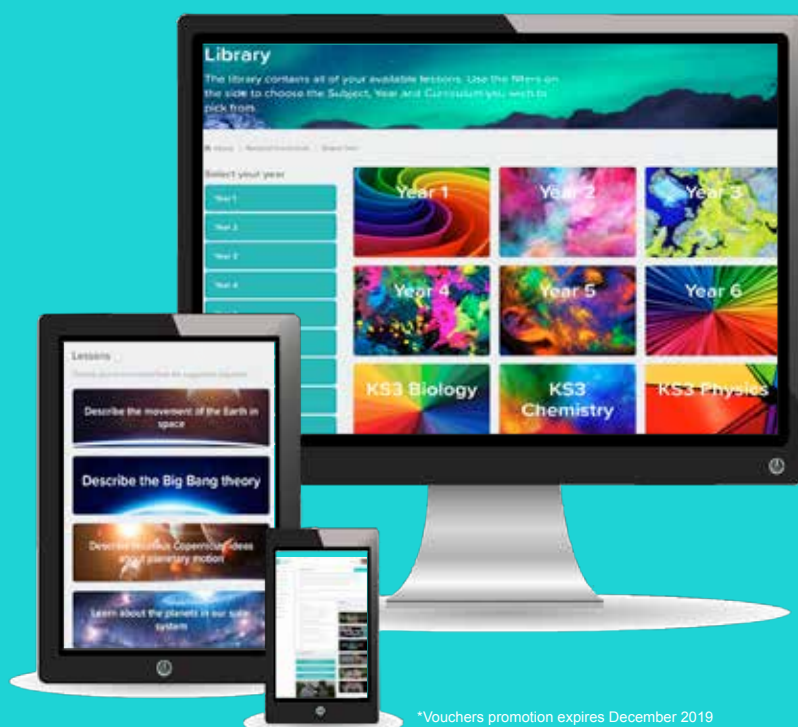


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