



Chemistry

Centrifuges	307	Kipps Apparatus	307	Thermometers	308
Chemicals	302	Molecular Sets	304	Vacuum Pumps	307
Classifying Materials	306	Posters & Charts	304		
Electrolysis	307	Scales	310		

Full range of Chemistry available at:

www.rapidonline.com



CHEMICALS

From Acetone to Zinc powder

Vast range of chemicals available

NOTE:

Rapid Electronics supplies this product to customers in the expectation that it will be used for legitimate purposes. However, all chemicals, whether individually or in combination with other substances, have the potential to be extremely dangerous and pose a risk to human life.

All orders for chemical products will be subject to an approval procedure. Rapid Electronics reserves the right to withhold delivery if the identity of the customer cannot be confirmed. As part of this process, customers agree to their premises being searched by criminal investigation bodies.

Rapid is compliant with the REACH regulations regarding the registration, evaluation, authorisation and restriction of dangerous chemicals in the EU. For delivery outside of the UK, please phone Customer Services on +44 (0)1206 751166.

Chemicals

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

Pack size	Order code	1+
100g	52-2601	11.88

550540



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

Bottle dimensions	Order code	1+
120 x 70 x 70mm	52-2704	258.36

550626



RVFM

Radioactive Source Chemicals



These **radioactive chemicals** can be used for studies into radiation in nuclear and atomic physics.

Type	Order code	1+
Americium 241	52-2701	750.00
Cobalt 60	52-2702	750.00
Strontium 90	52-2703	750.00

550625

RVFM

Clinical Test Strips

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

- Supplied in packs of 50

Type	Pack size	Order code	1+
Diastix	50	52-2611	6.75
Albustix	50	52-2612	9.46

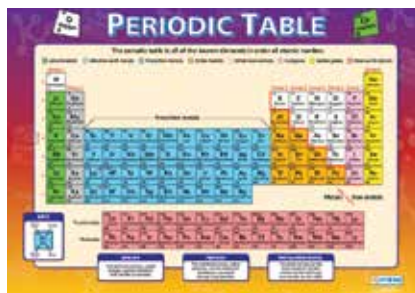
550549



Posters & Charts

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)

Type	Order code	1+
Periodic table	06-5638	3.78

019202

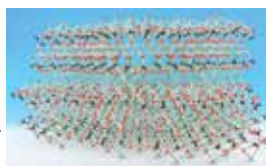
Molecular Sets



Cochranes of Oxford

Minit ProView Model Mica Kit
1550 Atoms

The skeletal model type is particularly suitable to show the nature of the solid, being uniquely transparent in depth.



You also receive full instructions and work card discussing the nature of the bonding, crystal structure, growth and physical properties

- Gives between 30/60 minutes of self tuition
- Shape: flake
- 1550 atoms
- **Cochranes type 0098**

Type	Order code	1+
Mica model kit	52-7117	170.26

526311



Cochranes of Oxford

Minit ProView Model Diamond Kit
450 Atoms

This skeletal Diamond model kit is particularly suitable for showing the nature of the solid, being effectively transparent in depth.



Detailed instructions and a work card discuss the nature of the bonding, crystal structure, growth and physical properties.

- Provides up to 60 minutes of self tuition
- Shape: Octahedron
- Atoms: 450
- **Cochranes type 0087**

Type	Order code	1+
Diamond Model Kit	52-7101	38.19

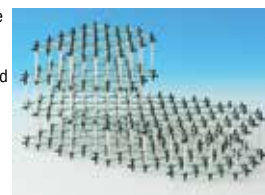
526303



Cochranes of Oxford

Minit Proview Model Graphite Kit
350 Atoms

This skeletal Graphite model is particularly suitable for showing the nature of the solid as it is effectively transparent in depth.



The Graphite model is supplied with full instructions and a work card that discusses the nature of the bonding, crystal structure, growth and physical properties.

- Provides 30 / 60 minutes of self-tuition
- Shape: 4 layers to represent flake
- Atoms: 350
- **Cochranes type 0088**

Type	Order code	1+
Graphite model	52-7103	36.07

526304



Cochranes of Oxford

Minit Proview Model Ice Kit
420 Atoms

A skeletal Ice model particularly suitable for showing the nature of the solid, being transparent in depth.



The model comes with full instructions and a work card discussing the nature of the bonding, crystal structure, growth and physical properties of ice.

- Gives between 30 and 60 minutes of self-tuition
- Shape: extended prism to represent snowflake
- 420 atoms
- **Cochranes type 0093**

Type	Order code	1+
Ice model	52-7107	36.07

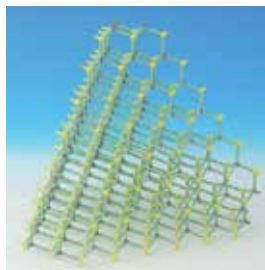
526306



Cochranes of Oxford

Minit Proview Model Zinc Blende Kit
360 Atoms

The skeletal model type is particularly suitable to show the nature of the solid, being uniquely transparent in depth.



You also receive full instructions and work card discussing the nature of the bonding, crystal structure, growth and physical properties

- Gives between 30/60 minutes of self tuition
- Shape: truncated tetrahedron
- 360 atoms
- **Cochranes type 0089**

Type	Order code	1+
Zinc Blende Model kit	52-7109	34.46

526307

Order online

Save time, and place your order at:
www.rapidonline.com
 24 hours a day

The **original** dual-scale system of molecular models

Inorganic-Organic Molecular Model Sets

Molymod Molecular Model Sets are the original dual-scale, quality system of molecular and atomic models.

Scales: Open/Ball & stick models: 2.5cm/Angstrom, Closed/semi-space filling models: 1.5cm/Angstrom

Atom-parts: range from 17 to 23mm in diameter.

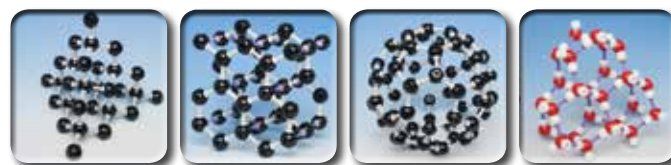
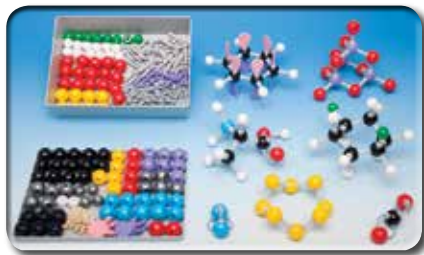
Bonds: Single bonds are represented by medium links (19mm) and multiple bonds by longer, flexible links (30mm). For compact models, bonds are represented by short links (2mm).

Valence: Represented by the number of holes: 1 hole (I), 2 holes (II), 3 holes (III), 4 holes (IV), 5 holes (V), 6 holes (VI)

- Inorganic - Organic sets
- Available as teacher and student sets
- Teacher Set contains 108 atoms: 14 Hydrogen (I, II), 20 Carbon (IV, V), 22 Oxygen (II, IV), 10 Nitrogen (III, IV), 13 Sulphur (II, IV, VI), 7 Phosphorus (III, IV, V), 8 Halogen (I, II, III, IV, V), 18 Lone pair 2D paddles (6 pink, 6 purple, 6 beige) Links: 38 Medium grey, 12 medium purple, 36 Long flexible
- Student set contains 52 atoms: 14 Hydrogen (I), 6 Carbon (IV), 7 Oxygen (II, IV), 3 Nitrogen (III, IV), 2 Sulphur (II, VI), 2 Phosphorus (III, V), 6 Halogen (I), 8 Metal (I, II, III, IV, V), 4 Brown (III, IV, V, VI), 3 Lone pair 2D paddles (beige) Links: 20 Medium grey, 5 Medium purple, 12 Long flexible

Important notice: These products are designed for educational use and are only suitable for students 12 years and over.

WARNING: CHOKING HAZARD - Small parts. Not for children under 3 years.



Crystal Structure Molecular Model Kits

A range of Molymod Molecular Model Sets showing the structure of various crystalline substances.

Scales: Open/Ball & stick models: 2.5cm/Angstrom, Closed/semi-space filling models: 1.5cm/Angstrom

Atom-parts: range from 17 to 23mm in diameter.

Bonds: Single bonds are represented by medium links (19mm) and multiple bonds by longer, flexible links (30mm). For compact models, bonds are represented by short links (2mm).

Valence: Represented by the number of holes: 1 hole (I), 2 holes (II), 3 holes (III), 4 holes (IV), 5 holes (V), 6 holes (VI)

Kits available:

- Diamond - 30 atoms
- Graphite - 45 atoms
- Ice - 26 water units

Order code
52-0476
Diamond **£12.40**

Order code
52-0477
Graphite **£15.14**

Order code
52-0479
Ice **£18.76**

Order code **52-0474**
Teacher set
108 atoms **£35.21**

Order code **52-0475**
Student set
52 atoms **£17.66**


Cochranes of Oxford



Molecular Chemistry Set (Minit Organic and Inorganic) 240 Atoms

Learn about molecular shape, stereochemistry, isomerism and bonding in organic and inorganic molecules and complex ions with this Minit Molecular set. This advanced student set comes in a convenient pocket-sized plastic container containing 240 atoms, 220 bonds and a comprehensive instruction booklet.

- Learn about molecular shape, stereochemistry, isomerism and bonding
- Organic and inorganic molecules
- Complex ions
- Advanced student set in pocket-sized plastic container
- 240 atoms, 220 bonds and instruction booklet

Order code
52-7149
240 atoms **£18.33**



Biochemistry Model Set (Orbit)

With 400 atoms and 395 bonds housed in a convenient compartmentalised box, the Orbit Biochemistry Class Set has a large enough quantity of atoms to enable you to construct multiple models for group activities. The contents allow you to cover topics commonly studied at A level (ages 17 to 18), college and university. These include amino acids; monosaccharides, glycerol, fatty acids, steroids, purines and pyrimidines, peptides, disaccharides, lipids, nucleosides, nucleotides, proteins, polysaccharides and nucleic acids. A 44 page booklet covers the above topics in detail.

- Compartmented box
- 400 atoms, 395 bonds
- Construct multiple models for group activities
- Allows you to cover topics commonly studied at A level (ages 17 to 18), college and university
- Includes amino acids; monosaccharides, glycerol, fatty acids, steroids, purines and pyrimidines, peptides, disaccharides, lipids, nucleosides, nucleotides, proteins, polysaccharides, nucleic acids
- 44 page booklet covers the above topics

Order code
52-7153
Biochemistry set **£40.31**

Orbit Organic and Inorganic Chemistry Set - 500 atoms



Order code
52-7151
500 atoms **£41.99**

Housed in a compartmentalised box with 500 atoms and 320 bonds, this Orbit Organic and Inorganic Class Set from Cochranes of Oxford enables you to construct multiple models and perform various activities. The contents allow you to cover topics commonly studied at A level (ages 17 to 18), college and university. These include saturated hydrocarbons, unsaturated hydrocarbons, cyclic hydrocarbons, functional groups in organic chemistry, benzene, polymerization, optical isomerism, simple inorganic molecules and complex ions. The set is supplied complete with a 48 page booklet covering the above topics.

- Compartmented box
- 500 atoms, 320 bonds, 48 page booklet
- Multiple models and activities
- Covers topics commonly studied at A level (ages 17 to 18), college and university
- Includes saturated hydrocarbons, unsaturated hydrocarbons, cyclic hydrocarbons, functional groups in organic chemistry, benzene, polymerization, optical isomerism, simple inorganic molecules and complex ions



Cochranes of Oxford

Minit Preview Model Wurtzite Kit 1000 Atoms

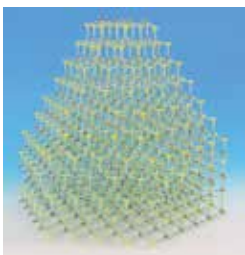
The skeletal model type is particularly suitable to show the nature of the solid, being uniquely transparent in depth.

You also receive full instructions and work card discussing the nature of the bonding, crystal structure, growth and physical properties

- Gives between 30/60 minutes of self tuition
- Shape: hexagonal prism
- 1000 atoms
- **Cochranes type 0090**

Type	Order code	1+
Wurtzite model kit	52-7111	81.12

526838



Cochranes of Oxford

Minit Preview Model Beta Quartz Kit 1400 Atoms

The skeletal model type is particularly suitable to show the nature of the solid, being uniquely transparent in depth.

You also receive full instructions and work card discussing the nature of the bonding, crystal structure, growth and physical properties

- Gives between 30/60 minutes of self tuition
- Shape: capped hexagonal prism
- 1400 atoms
- **Cochranes type 0096**

Type	Order code	1+
Beta quartz model kit	52-7113	72.02

526839



Cochranes of Oxford

Minit Preview Model Calcite Kit 540 Atoms

The skeletal model type is particularly suitable to show the nature of the solid, being uniquely transparent in depth.

You also receive full instructions and work card discussing the nature of the bonding, crystal structure, growth and physical properties

- Gives between 30/60 minutes of self tuition
- Shape: rhomb
- 540 atoms
- **Cochranes type 0097**

Type	Order code	1+
Calcite model kit	52-7115	30.63

526830

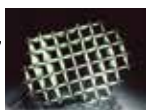


Cochranes of Oxford

Orbit Preview Model Iron Kit 180 Atoms

The skeletal model type is particularly suitable to show the nature of the solid, being uniquely transparent in depth.

You also receive full instructions and work card discussing the nature of the bonding, crystal structure, growth and physical properties



- Gives between 30/60 minutes of self tuition
- Shape: body centred cubic irregular grain shape
- 140 atoms
- **Cochranes type 0063**

Type	Order code	1+
Iron model kit	52-7119	28.64

526812



Cochranes of Oxford

Orbit Preview Model Magnesium Kit 190 Atoms

The skeletal model type is particularly suitable to show the nature of the solid, being uniquely transparent in depth.

You also receive full instructions and work card discussing the nature of the bonding, crystal structure, growth and physical properties

- Gives between 30/60 minutes of self tuition
- Shape: hexagonal close packed irregular grain
- 190 atoms
- **Cochranes type 0064**

Type	Order code	1+
Magnesium model kit	52-7121	78.51

526813



Cochranes of Oxford

Orbit Preview Model Copper Kit 180 Atoms

The skeletal model type is particularly suitable to show the nature of the solid, being uniquely transparent in depth.

You also receive full instructions and work card discussing the nature of the bonding, crystal structure, growth and physical properties

- Gives between 30/60 minutes of self tuition
- Shape: Orbit, Cubic Close Packed (Face Centred Cubic) Irregular grain
- 180 atoms
- **Cochranes type 0065**

Type	Order code	1+
Copper model kit	52-7123	78.51

526814



Classifying Materials

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.

- Sturdy storage base
- 1 sample each of: walnut, oak, maple, polypropylene, polyethylene, polyamide, acrylic, polyurethane, phenolic, polyvinylchloride (PVC), acetyl, teflon, aluminium, brass and copper
- Samples are stamped with a letter code for easy identification
- Instructions included

Type	Order code	1+
Density ID set	06-2164	21.72

538889



eisco

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.

- 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**

Type	Order code	1+
Materials set	52-3346	106.19

565535

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

Type	Order code	1+
Mole set	06-2161	15.02

534077



RVFM

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 – see Technical Details
- Ideal for experiments to demonstrate magnetic properties and classifications of metals

- Strip size: 50 x 25mm
- Supplied as a set of 12 strips

Technical specification

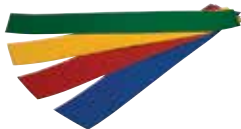
Letter	Metal	Letter	Metal
A	Aluminium	G	Galvanized iron
B	Brass	H	Stainless steel - non-magnetic
C	Copper	I	Stainless steel - magnetic
D	Bronze	J	Zinc
E	Nickel	K	Chrome
F	Mild steel	L	Lead

Type	Order code	1+
Metal strip set	06-0595	8.48



Magnetic Rubber Sheets

These magnetic rubber sheets can be used for a variety of different applications.



- Easy to cut with scissors into different shapes and designs
- Will stick to any magnetic metal surface
- Has a write-on, wipe-off surface for use with dry-wipe marker pens
- Supplied in packs of 4 assorted colours: red, yellow, blue and green
- Sheet size: 300 x 50 x 0.6mm

Type	Order code	1+
Magnetic rubber sheets	06-0594	3.10

Centrifuges

RVFM

Hand Powered Centrifuge with 4 Buckets

A rugged hand-driven centrifuge consisting of die-cast metal parts and a steel pinion and worm drive. The centrifuge has 4 buckets that take 15ml glass or plastic tubes.



- Integral screw clamp for fixing to a bench
- Can be easily dismantled for storage
- Plated metal head
- Scratch-resistant epoxy coated body
- Includes 4x buckets to take 15ml centrifuge glass or plastic tubes
- Buckets rotate 32 times for each turn of the handle

Type	Order code	1+
Hand centrifuge	06-6900	23.63

Vacuum Pumps

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

Pump rate	Order code	1+
16cc per stroke	52-2680	125.00

Kipp's Apparatus

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

Type	Order code	1+
500ml	52-1494	20.97

Electrolysis

isco

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
- **Isco type CH0740B**

Stand sold separately.

Type	Order code	1+
Hoffmans apparatus	52-3343	56.14
Support stand	52-3437	11.74

isco

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
- **Isco type PH0941B**

Note: battery, power supply and battery jar are not included.

Type	Order code	1+
Brownlee's apparatus	52-3604	35.70

RVFM

Aluminium Sheet

Aluminium sheet is an essential basic material for the Design & Technology and Science classroom or workshop.



- Aluminium sheets 0.9mm thick (±0.1mm tolerance)
- Size 500 x 500mm

Thickness	Order code	1+
0.9mm	06-0736	8.65

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

These economical 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	4.63
A3	06-0754	6.40

RVFM

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	9.17
500mm x 90m	06-0922	14.98

Thermometers



Rainbow Dial Thermometer

White 300mm diameter rainbow dial thermometer with black temperature scale.

- Moulded in a plastic window for safety
- Suitable for outside and patio use
- Ideal for primary school use
- Suitable for **Key Stages 1 & 2** (ages 5 to 11)



Type	Order code	1+
Rainbow dial	85-2651	10.15



Forehead Thermometer

This mercury free forehead thermometer takes body temperature on contact and reading within seconds.

- Simple to use
- Re-useable
- Reads from 35°C-40°C (95°F-104°F)
- Comes complete with a plastic storage box and full instructions



Type	Order code	1+
Forehead thermometer	85-2643	1.49



Forehead Thermometers

Slim forehead thermometers from TickiT marked with half degrees on the Celsius scale and the Fahrenheit equivalents. Suitable for



use in the classroom as part of a human biology lesson or as part of a medical kit.

- Length 90mm
- Supplied in **pack of 10**

Type	Order code	1+
Pack of 10	06-9949	8.53

RVFM

Laboratory Thermometers

These **laboratory thermometers** have an environmentally-friendly blue filling and offer an ideal alternative to mercury-filled thermometers. Suitable for use in the laboratory or classroom.

- Available with a choice of 2 scales

Temperature range	Order code	1+
-10 to 300C	52-2586	5.12
-10 to 110C	52-2587	2.72



General Purpose Glass Thermometers

A 305mm, general-purpose glass thermometer with red spirit filling.

- Scaling from -10°C to +110°C in 1°C steps
- Can measure both the freezing and the boiling points of water, etc.
- Fitted with hanging hook/anti roll device
- Calibration is correct when immersed 76mm into liquid

Type	Order code	1+
305mm thermometer	87-4308	3.70



Breaksafe Thermometer

This breaksafe safety coated thermometer is encapsulated in PVC to contain any glass or filling material in event of breakage.

- Available in a range of -10 +110°C
- Clear permanent markings
- Green filled
- Partial immersion
- Length 200mm

Type	Order code	1+
Breaksafe thermometer	85-2655	5.69



Green Fill Laboratory Thermometers

These green fill laboratory thermometers are a safe alternative to traditional mercury filling.

- Moulded glass triangular top to prevent rolling
- Available in 150mm, 200mm and 300mm lengths
- 150mm thermometer is available in total immersion and the 200mm and 300mm thermometers are available in partial immersion
- Temperature range -10 to +110°C
- Clear permanent markings

Type	Order code	1+
150mm	85-2652	1.45
200mm	85-2653	1.50
300mm	85-2654	1.55



Uncalibrated Mercury-Free Laboratory Thermometer

This green fill, mercury-free uncalibrated thermometer is suitable for laboratory use. Students can calibrate the thermometer themselves, by conducting experiments, for example, by establishing the melting point of ice and the boiling point of water.

- Moulded glass non-roll device to help prevent breakage
- Mercury free
- Uncalibrated to meet the National Curriculum requirements for student calibration
- Temperature range -10 to +110°C
- 300mm length

Type	Order code	1+
Uncalibrated thermometer	85-2642	0.99



Lo-Tox Thermometer 305mm -20°C to +110°C

Thermometer containing Lo-Tox - an organic filling specially chosen to achieve a wide temperature span and provide the lowest practical levels of hazard, making this an ideal substitute for a mercury thermometer.

- Range: -20°C to +110°C
- 305mm long
- 76mm immersion
- 1 division per degree
- Supplied **singly**

Type	Order code	1+
-20 to +110°C	87-4336	3.40



Mercury Free Max Min Thermometer

A traditional style maximum/minimum thermometer.

- Environmentally friendly filling
- Ideal substitute to mercury models



Type	Order code	1+
Max./min.	87-4322	8.95



Maximum/Minimum Thermometer

A quick-setting mercury-free maximum/minimum thermometer scaled from -30°C to +50°C and -20°F to +120°F.

- Push-button reset feature removes danger of damage during re-setting and the need for a separate magnet, which can become lost
- Moulded case with white scale
- Dimensions: 217 x 57mm

Type	Order code	1+
Max / min thermometer	87-4302	9.34



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.

- Kerosene filled
- Range -40° to +50°C (-40° to +120°F)
- Length: 380mm



Length	Order code	1+
380mm	06-9963	3.88

563492

Brannan

Window Thermometer

65mm diameter window thermometer with blue and red temperature scale.

- Temperature given in °C and °F
- Reads the outside temperature from indoors
- The transparent design of the thermometer allows the temperature to be viewed from inside the classroom
- Nominal range -20°C to +50°C



Type	Order code	1+
Window thermometer 65mm	85-2650	2.95

073003

Brannan

Stainless Steel Dial Fridge/Freezer Thermometer

Stainless steel 50mm dial fridge/freezer thermometer with black temperature scale indicating recommended zones.

- Bimetallic dial thermometer with zones on scale
- Hangs or stands
- Temperature given in °C only
- Size: 85 x 65 x 12mm



Type	Order code	1+
Dial fridge/freezer therm.	85-2646	3.20

072997

Brannan

Horizontal Fridge/Freezer Thermometer

Horizontal fridge/freezer thermometer with blue temperature scales indicating recommended zones.

- Moulded in white plastic with hanging clip and stand
- Provides temperatures in °C only
- Size: 130 x 40 x 22mm



Type	Order code	1+
Fridge/freezer thermometer	85-2644	2.30

072995

Brannan

65mm Dial Fridge/Freezer Thermometer

White 65mm dial fridge/freezer thermometer with blue and red temperature scale indicating recommended zones.

- Plastic bimetal dial thermometer with zones
- Temperatures given in °C only
- Size: 85 x 65 x 12mm



Type	Order code	1+
Dial thermometer 65mm	85-2645	2.70

072996

Brannan

33/404/0 Clip-on Pipe Thermometer 0 to +120°C

This thermometer from Brannan is ideal for fixing onto a pipe so that the temperature can be regulated - for instance, on a radiator pipe. It comes supplied with a fixing spring and is manufactured in a plastic case with a push-in acrylic window, displaying temperature ranges of 0 to +120°C and +30 to 250°F.

- Easy to adjust
- Suitable for pipe diameter: 20 to 50 mm
- Dial dimensions:
 - With bezel: 66mm diameter x 30mm
 - Without bezel: 62mm diameter x 29mm
- Manufacturer's part **33/404/0**



Type	Order code	1+
Pipe thermometer	85-2656	9.45

563019

VOLTCRAFT

LCD Digital Thermometer and Clock

The Voltcraft LCD digital thermometer and clock has an extended temperature range up to 110°C for many ranges for temperature monitoring.



There are two limit values that can be pre-adjusted, and when this value is reached, a switch output and an alarm output are activated.

Also available is a replacement NTC temperature probe that features a -10°C to +110°C range and 3m lead.

- Temperature range -10°C to +110°C
- Accuracy: ±1°C
- Measurement rate: 1 or 10 secs
- Temperature resolution: 0.1°C
- Digit height: 13mm
- Operating voltage: 1x AA batteries
- Dimensions: 68(W) x 35(H) x 24(D)mm

Please Note: Requires 1x AA battery (not supplied).

Technical specification		
Order code	51-5169	
Accuracy	± 1°C	
Digit height	13mm	
Dimensions W x H x D	68 x 35 x 24mm	
Measurement range - temperature	-10°C to +110°C	
Measurement rate	1 or 10 secs	
Operating voltage	1x AA battery	
Temperature resolution	0.1°C	

Type	Order code	1+
Digital Thermometer	51-5169	11.84
Temperature probe	52-0919	4.98

529180

VOLTCRAFT

Penetration thermometer

The Voltcraft DET3R is a penetration thermometer that is ideal for measurements in the food industry, butcheries, food testing laboratories and for health inspectors. Having a waterproof casing makes it suitable for use in liquids. The simple and quick execution of zero balance in ice water ensures higher accuracy for longer period.

- Min/ Max Hold Memory with dynamic update
- C/F switch
- T90 Measure time approx. 8 seconds
- Auto-switch-off
- Continuous measurement function
- Measuring range -40°C to +250°C
- Waterproof as per the IPx7 standard
- High accuracy by simple calibration in ice water
- Supplied with Voltcraft DET3R penetration thermometer, protection cap with clip, 1x LR1 battery and user manual.



Protection cap with clip, 1x LR1 battery, user manual.

Technical specification		
Order code	51-5210	
Sensor type	Penetration sensor	
Temperature range	-40°C to +250°C	
Resolution	0.1°C	
Basic accuracy	±0.5°C	
Sensor length	105 mm	
Dimensions L x W	218 x 25mm	
Power supply	1x LR44	
Weight	34g	

Type	Order code	1+
Voltcraft DET3R	51-5210	19.54

525201

VOLTCRAFT

Infrared Thermometer

The Voltcraft IR-110-1S mini infrared thermometer is intended for non-contact measuring of temperatures of -33°C to +110°C. The IR-110-1S can also be used as a clock or a stopwatch. It is not suitable for industrial or medical use. The product is powered by a CR2032 battery.

- Small, convenient and accurate
- The ideal companion with a wide variety of optional features
- Min/ Max function
- Automatic power off after 15 seconds
- Duration measuring activated
- Integrated clock
- Stopwatch
- Display of the room temperature
- Switchable between C and F
- Optics 1:1
- Measuring range -30°C to +110°C
- Integrated stopwatch



Lithium battery (CR2032), Manual.

Please Note: Use only in a dry indoor environment.

Please Note: It is not suitable for industrial or medical use.

Technical specification		
Order code	51-5190	
Accuracy	±2.5°C or 2.5%	
Dimensions W x H x D	33 x 73 x 14mm	
Emissivity	0.95 fix	
Measurement range - temperature	-33°C to +110°C	
Optics	1/1	
Pick-up time	<1 secs	
Power supply	Lithium Battery CR2032	
Operating temperature	0°C to +50°C	
Battery life	40 hours in continuous operation.	
Temperature resolution	0.2°C	
Weight	25g	

Type	Order code	1+
Voltcraft IR 110-1S	51-5190	15.60

525201

Scales

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



Technical specification

Kern No.	EMB 200-2	EMB 2200-0	EMB 5.2K5
Readout	0.01g	1g	5g
Weigh range	200g	2,200g	5,200g
Stabilisation	2 to 3 secs	2 to 3 secs	2 to 3 secs
Auto-off (batt)	After 3 mins	After 3 mins	After 3 mins
Operating temp.	0°C to +40°C	0°C to +40°C	0°C to +40°C
Battery supply	1x 9V	2x AA	2x AA
Mains adaptor	85-1681	85-1681	85-1681
Dimensions (mm)	170(W) x 240(D) x 39(H)	170(W) x 240(D) x 39(H)	170(W) x 240(D) x 39(H)
Weight approx.	600g	600g	600g
Order code	85-2356	85-2358	85-2359

Kern No.	EMB 500-1	EMB 5.2K1
Readout	0.1	1
Weigh range	500g	5200
Stabilisation	2 to 3 secs	2 to 3 secs
Auto-off (batt)	After 3 mins	After 3 mins
Operating temp.	+5°C to +35°C	+5°C to +35°C
Battery supply	1x 9V	1x 9V
Mains adaptor	85-1681	85-1681
Dimensions (mm)	170(W) x 240(D) x 38(H)	170(W) x 240(D) x 38(H)
Weight approx.	0.5kg	0.5kg
Order code	85-3436	85-3437

Type	Order code	1+
EMB 200-2 Scales	85-2356	109.38
EMB 2200-0 Scales	85-2358	49.88
EMB 5.2K5 Scales	85-2359	48.13
EMB 500-1 Scales	85-3436	48.13
EMB 5.2K1 Scales	85-3437	52.50

- Crafted by the oldest and most respected German precision scales company
- Easy to use, fast response
- All the features your laboratory needs
- Durable precision electronic scales for laboratory and industrial use

Technical specification

Kern part No.	PCB 100-3	PCB 6000-1	PCB 10000-1
Readout	0.001g	0.1g	0.1g
Weighing range	100g	6kg	10kg
Battery supply	9V; Block	9V; Block	9V; Block
Auto-Off	After 3 mins	After 3 mins	After 3 mins
Operating temp.	+5°C to +35°C	+5°C to +35°C	+5°C to +35°C
Dimensions (W x D x H)	163 x 245 x 79mm	340 x 200 x 140mm	163 x 245 x 79mm
Weight approx.	1.1kg	2.0kg	2.0kg
Order code	85-3441	85-3448	85-3450

Type	Order code	1+
PCB 100-3	85-3441	225.25
PCB 6000-1	85-3448	204.00
PCB 10000-1	85-3450	208.25

KERN

Cost Effective Analytical Balance ABS 804N, ABS 1204N, ABS 2204N

These scales are an ideal precision balance for educational institutions. They are low cost and very high performance. The design yields the most accurate suspension system offered by any manufacturer. The scales also offer a brand new, revolutionary weighing technology with a patent pending that no other balance manufacturer can match.



- First class standard and ideal for small budgets
- Metal housing robust and sturdy
- Identification number
- 4 numeric positions
- 2 button programming method
- Large LCD display
- Crafted by the oldest and most respected German precision scales company
- Accurate and reliable weighing
- Easy to use, fast response
- All the features your laboratory needs
- Durable precision electronic scales for laboratory and industrial use
- Capacity display
- Ascending bar graph displays the remaining available weighing range

Technical specification

Model:	ABS 80-4N	ABS 120-4N	ABS 220-4N
Order code:	85-3425	85-3426	85-3427
Readout (d):	0.1mg	0.1mg	0.1mg
Weighing range (Max):	83g	120g	220g
Recommended adjusting weight:	50g (E2)	100g (E2)	200g (E2)
Reproducibility:	0.1mg	0.1mg	0.1mg
Linearity:	±0.2mg	±0.2mg	±0.2mg
Weighing units:	ct, dwt, g, gn, lb, mg, mo, oz, ozt	ct, dwt, g, gn, lb, mg, mo, oz, ozt	ct, dwt, g, gn, lb, mg, mo, oz, ozt
Response time:	3 seconds	3 seconds	3 seconds
Operating temperature:	+10°C to +30°C	+10°C to +30°C	+10°C to +30°C
Electric power supply:	12V DC	12V DC	12V DC
Weighing plate:	80(dia)mm	80(dia)mm	80(dia)mm
Case:	225(W) x 315(D) x 330(H)mm	225(W) x 315(D) x 330(H)mm	225(W) x 315(D) x 330(H)mm
Weight net:	7kg	7kg	7kg

Type	Order code	1+
ABS 80-4N	85-3425	816.00
ABS 120-4N	85-3426	867.00
ABS 220-4N	85-3427	909.50

KERN

440-35N 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

Technical specification

Kern part No.	440-35N
Readout	0.01g
Weighing range	400g
Stabilisation time	3 seconds
Auto-off function (batt. mode)	After 3 minutes
Operating temperature	+10°C to +40°C
Dimensions	165(W) x 230(D) x 80(H) mm
Weight approx.	1kg
Order code	85-2361

Type	Order code	1+
440 35N Scales	85-2361	268.75

medline

White Diamond Square Weighing Dishes

These Medline 'White Diamond' weighing dishes are made of white, translucent polystyrene and are easily bent into pouring spouts for non-spill transfer of liquids. They are biologically inert, contaminant-free and are resistant to diluted acids, aqueous solutions, alcohols and bases.



- Suitable for microwave
- Will withstand temperatures from -10 to +80°C
- Not antistatic
- 5ml size are supplied in packs of 250
- 30ml size are supplied in packs of 500
- Medline types 1911103 (5ml) and 1911104 (30ml)

Technical specification

Nominal capacity	Dimensions	Weight
5ml	41 x 41 x 8mm	0.34g
30ml	89 x 89 x 25mm	1.07g

Type	Order code	1+
5ml (250)	85-2366	2.78
30ml (500)	85-2349	8.89

RVFM

150mm Stainless Steel Spoon

MOQ 5+

£0.135

Order code 52-2175

www.rapidonline.com



KERN

Precision Balances

The Kern PCB series is an economical alternative to premium priced balances. PCB precision scales are affordable, accurate and easy to use for all of your basic weighing needs. They are great in academic, educational and school environments.



This range of Laboratory scales and balances covers both spectrums of the requirements of the modern laboratory, whether you are in a pharmaceutical company, quality control laboratory, a university, college or school.

- Pre-tare function for manual subtraction of a known container weight
- Backlit LCD display with digit height 15mm
- Data transfer, for example to a printer or PC
- Battery operation possible; block battery (9V).
- Auto-Off function after 3 min without a change of load to preserve the batteries
- Protective working cover
- Simple adding function
- Accurate and reliable weighing
- Large LCD display