1. Thermodynamics Kit

The thermodynamics kit helps to teach the temperature related behaviour of mechanical systems. The kit includes experimental apparatus including metal blocks with heating elements, linear rods with heaters, Leslie cube and Joly's bulb. Also included are measuring instruments such as digital thermometers, energy meter and infrared thermometer. Supplied in Gratnells trays for ease of movement and storage. Learning objectives/ experiments:

- Heat capacity of liquids
- Heat capacity of solids
- Linear expansion of heat
- Heat absorption
- Heat radiation
- Expansion of gases – Charles' law
- Boyle's law

Code	Pack	Price
PHY1026	Each	£1247.10

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2. Calorimeters

Calorimeters with parallel sides and rolled rim, supplied without stirrer.

***PH0444 includes inner vessel (75mm x 50mm Ø) carried on cork supports, outer vessel (100mm x 75mm Ø), lid for outer vessel with central tubule for thermometer and slit for a stirrer.**

Code	Description	Dims, h x Ø, mm	Pack	Price
PH0438A	Copper	75 x 50	Each	£4.09
PH0438B	Copper	100 x 75	Each	£4.50
PH0440A	Aluminium	75 x 50	Each	£1.52
PH0440B	Aluminium	100 x 75	Each	£2.80
PH0444	Polished copper set	75 x 50 & 100 x 75*	Each	£12.82

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3. Calorimeter Set

- Joule's calorimeter set
- Precision heating element
- Custom made foam plastic heat insulation
- Spare cap included for when an experiment does not require heat
- Stirrer and stopper also included
- No thermometer included
- Outer vessel plastic 110 x 100mm
- Inner vessel aluminium 70 x 65mm
- Precision heater is 12W

It is a 1% resistance tolerance 2W resistor conveniently mounted on nickel plated brass poles by means of a transverse screw.

Code	Pack	Price
211-010	Each	£14.24

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