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1. Alpha Scattering Demonstration

For demonstrating Rutherford scattering by means of a gravitational analogue of inverse square law repulsion.

The apparatus comprises a spun aluminium hill, 280mm Ø x 60mm high, a 12.5mm and 19mm x 2 steel ball and a wooden launching ramp. The shape has been determined by varying its height above the base line by an amount based upon the reciprocal of the radius.

Launching ramp, 300 x 48 x 105mm high, with a guide groove down its curved front face, and index marks at 40, 60, 80 and 100mm above the base to give a variety of known launching heights.

Code	Pack	Price
PY1328	Each	£42.93

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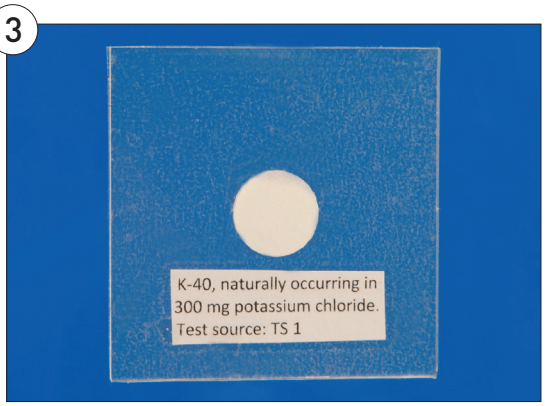
2. Ratemeter

The SEP Geiger counter is a robust, portable and compact unit capable of detecting alpha, beta and gamma radiation and recording events on a resettable digital counter. It has an integral Geiger-Müller (GM) tube which is maintained at high voltage by a small electronic inverter. Events register as audible clicks as well as a visible count on a small LCD display. The unit is powered by a single alkaline PP3 battery and is available at around half the cost of instruments with similar functionality.

Please allow up to four weeks for delivery of this product.

Code	Pack	Price
SEGEI003	Each	£355.00

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3. GM Tube Test Source

Test source K-40, naturally occurring in 300mg potassium chloride.

Code	Pack	Price
EL10481	Each	£52.52

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4. Geiger-Müller Tube

The Mullard ZP1481 GM tube. This is a halogen quenched metal tube with a thin end window, for detecting alpha, beta and gamma radiation, and recommended as a general purpose tube for use with general school radioactive sources. A plastic cap is fitted over the vents for protection.

Features & specifications:

- Sensitive to alpha, beta and gamma radiation
- Threshold voltage. (max.) 370V
- Plateau length (min.) 100V
- Operating temperature -55 to +74°C
- Dead time 100Î¼S anode/cathode capacitance 3.5pF
- Sensitivity for 1mR/L radium 1650 counts per minute
- Window thickness 2.5mg per square cm
- Dimensions overall 76 x 26mm Ø

Code	Pack	Price
261-007	Each	£575.61