



# *Hyper Cube*

- Aim** To locate the positions of two different materials inside a cube using the emission of a  $\gamma$ -ray source at its centre.
- Materials** 1 sealed  $\gamma$ -ray source                      1 cube comprising 4 types of sub-cube  
1 Geiger-Müller detector
- Method** Use the activity measured by a Geiger-Müller detector outside the cube to determine the location of the paper and brass sub-cubes. Note that, in addition to paper and brass, the cube also contains aluminium and perspex sub-cubes.
- Conditions** The cube must not be disassembled or tampered with in any way.
- Time limit** 25 minutes
- Ranking** The ranking order will be determined by the time taken to correctly locate the sub-cubes, with a 5 minute penalty for each incorrect attempt.

**Team**

**Result**

**Paper      Brass**

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**Rank**