

1. Lascells Splat the Rat

Lenz's law can be demonstrated using the standard eddy current tubes, whereby a magnet falls through a copper tube at a slower rate than an unmagnetised weight. The demonstration lends itself to a fun classroom activity based on the village fete challenge of 'Splat the Rat'. Two 'rats' are supplied, one containing strong neodymium magnets and the other just a metal weight. 1m of copper tube and a foam-covered rounders bat completes the kit. In use, the challenge for the pupil is to hit the rat as it emerges from the tube. It gives a dramatic demonstration of Lenz's law, since the magnetised rat takes approximately 5 seconds to exit the tube.

Code	Pack	Price
MAG3802	Each	£59.85

2. Magnetic Induction & Lenz's Law Kit

Pass the magnet through the coil to induce a voltage and current which lights the LED. The coil windings terminate in crocodile clips for easy attachment to the LED (supplied) or a meter (not supplied). Lenz's law is demonstrated by dropping the magnet down a copper tube. The induced current produces its own field of opposite polarity to the magnet, thus slowing its rate of descent to approximately one eighth of that experienced by the non-magnetic metal slug.

Code	Pack	Price
SEL1048	Each	£39.49

3. Induced Current Apparatus

Consists of a primary coil of insulated copper wire wound upon a cylinder with terminals, a secondary coil wound upon a cylinder into which the primary coil fits. A soft iron core fits the cylinder of the primary coil. Complete with terminals.

Code	Pack	Price
EDU095	Each	£26.80

4. Lascells BIL Coil

The BIL coil rated for 8A has the option for a singular wire, aligning with the A Level Physics required practical measuring the force on a current-carrying conductor in a magnetic field: $F = BIL$. Designed for ease of use and quick set up, the BIL coil requires only a single retort stand for suspension within a magnetic yoke, it has additional tappings for both 5 and 10 lengths of wire. The motor effect can easily be amplified, generating larger forces – this guarantees accurate, repeatable data, even with low-resolution balances. Can be used to demonstrate Ampere's law, or calculating B, magnetic flux density (magnetic field vector).

Code	Pack	Price
PHY1052	Each	£7.57

