T1 acceleration	T1 vector	T1 resultant force
T1 friction	T1 terminal velocity	T1 elastic behaviour
T1 Hooke law	T1 momentum	T1 moment

T1 The single force equivalent to all the forces acting together.	T1 A quantity with both magnitude and direction.	T1 The rate of change of velocity.
T1 Recovery of the original shape after a deforming load is removed; elastic behaviour does not by itself require force to be proportional to extension.	T1 Constant velocity reached when the resultant force becomes zero; in the simple falling-object model, upward drag balances downward weight.	T1 A force that opposes relative motion between contacting surfaces.
T1 The turning effect of a force about a pivot.	T1 The product of mass and velocity.	T1 Hooke's law: force = k × extension, for a spring up to its limit of proportionality.

T1 centre of gravity	T2 alternating current	T2 direct current
T2 earthing	T2 fuse	T2 circuit breaker
T2 series	T2 parallel	T2 I-V characteristics

T2 Current flowing in one direction only, as supplied by a battery.	T2 Current that repeatedly reverses direction, as supplied by the mains.	T1 The point through which an object's resultant weight acts.
T2 A switch that opens automatically to cut off current when a fault is detected, and can be reset.	T2 A protective device whose element heats and melts to break the circuit under excessive current; its operating time depends on the size and duration of that current.	T2 Connecting an exposed metal case to a protective earth path so a live-to-case fault can operate a fuse or circuit breaker and reduce electric-shock risk.
T2 A graph of current against potential difference for a component; an ohmic resistor gives a straight line through the origin while its temperature and other conditions are fixed.	T2 An electrical arrangement in which components are connected across the same two points and have the same potential difference.	T2 An arrangement in which components lie along a single electrical path.

T2 insulator	T3 transverse wave	T3 longitudinal wave
T3 amplitude	T3 wavelength	T3 frequency
T3 Doppler effect	T3 refraction	T3 total internal reflection

T3 A wave whose oscillations are parallel to its direction of energy transfer.	T3 A wave whose oscillations are perpendicular to its direction of energy transfer.	T2 A material in which electric charge does not move readily under ordinary conditions.
T3 The number of complete cycles per unit time.	T3 The distance between corresponding points on successive waves.	T3 The maximum displacement from an equilibrium position.
T3 Complete reflection at a boundary when light travels from a higher to a lower refractive index and its incidence angle, measured from the normal, exceeds the critical angle.	T3 A change in wave speed when crossing between media, often accompanied by a change in direction.	T3 A change in observed wave frequency caused by relative motion between a source and an observer.

T3 critical angle	T4 conduction	T4 convection
T4 radiation	T4 efficiency	T4 Sankey diagram
T5 specific heat capacity	T5 absolute zero	T6 field line

T4 Heat transfer through the bulk movement of a fluid.	T4 Transfer of thermal energy through a material by interactions between particles, with mobile electrons also contributing in metals, without bulk flow of the material.	T3 The incidence angle in the higher-index medium for which the refracted ray travels along the boundary.
T4 An energy-flow diagram with arrow widths proportional to the amounts transferred.	T4 The fraction of total energy or power input converted to useful output.	T4 Transfer of energy by electromagnetic waves; thermal radiation can cross a vacuum, and warm objects emit infrared radiation.
T6 A line showing the direction of the force on a north pole; closer lines mean a stronger field.	T5 The lowest temperature on the thermodynamic temperature scale, equal to zero kelvin.	T5 The energy needed to raise the temperature of one kilogram of a substance by one kelvin or one degree Celsius.

T6 solenoid	T6 left-hand rule	T6 induce
T6 uniform field	T7 activity	T7 half-life
T7 fission	T7 fusion	T7 moderator

T6 To produce an emf by changing magnetic flux linkage, a current if a conducting path is available, or magnetisation by applying a magnetic field.	T6 Fleming's motor rule: first finger gives magnetic field, second finger conventional current and thumb force, with the three directions at right angles.	T6 A coil of wire that produces a magnetic field when an electric current flows through it.
T7 The time for the expected number of undecayed nuclei, or the activity of an isotope, to halve.	T7 The number of decays per second of a radioactive source, in becquerels.	T6 A field with the same magnitude and direction throughout a chosen region; the central gap between broad, flat opposite poles is an approximate example when edge effects are small.
T7 Material such as graphite that slows neutrons in a thermal fission reactor, making them more likely to cause further fissions in fuel such as uranium-235.	T7 The joining of light nuclei into heavier ones, releasing energy in stars.	T7 The splitting of a heavy atomic nucleus into lighter nuclei, releasing energy and often additional neutrons.

T7 control rod	T8 universe	T8 galaxy
T8 red-shift	T8 Big Bang	

T8 A huge group of stars held together by gravity; our Sun is in the Milky Way galaxy.	T8 Everything that exists: all of space, time, matter and energy.	T7 Rods lowered into a reactor to absorb neutrons and control the fission rate.
	T8 The model in which the universe evolved from an early hot, dense state and has expanded and cooled over time.	T8 A shift of spectral features to longer observed wavelengths; the large-scale distance–redshift pattern of galaxies supports cosmic expansion, which stretches light travelling through space.