T1 Mechanics and Materials	T1 asterisk	T1 trigonometry
T1 unit	T1 significant figures	T1 vectors
T1 forces	T1 momentum	T1 energy

T1 The mathematics of triangles – sine, cosine and tangent – used to resolve vectors and work with angles.	T1 The * symbol; in this Unit 1 exam context it flags an answer assessed for logical structure and links between points.	T1 The IAL Unit 1 topic area covering motion, forces, energy, and the behaviour of solid and fluid materials.
T1 A quantity with both magnitude and direction.	T1 The meaningful digits in a measured or rounded number, beginning with its first non-zero digit.	T1 Agreed reference quantities used to express measurements or counts.
T1 The capacity to do work or cause change.	T1 The product of mass and velocity.	T1 An interaction that can change an object's motion or shape.

T1 materials	T1 displacement	T1 distance
T1 scalar	T1 velocity	T1 speed
T1 acceleration	T1 gradient	T1 tangent

T1 The total length of a path travelled.	T1 The straight-line change in position, including direction.	T1 Substances or physical resources used to make something or carry out an activity.
T1 The distance travelled per unit time.	T1 The rate of change of displacement.	T1 A quantity described by magnitude alone, with no direction.
T1 A straight line with the curve's local direction at a point; where the derivative is finite, its gradient equals that derivative.	T1 The change in the vertical coordinate divided by the change in the horizontal coordinate.	T1 The rate of change of velocity.

T1 area	T1 parabola	T1 uniform acceleration
T1 negligible	T1 light gate	T1 systematic offset
T1 perpendicular	T1 scale diagram	T1 equilibrium

T1 Constant acceleration, the condition under which the suvat equations apply.	T1 The curve formed by points equally distant from a fixed point and a fixed straight line.	T1 The measure of a two-dimensional region, expressed in square units.
T1 A fixed error shifting every reading the same way, such as a balance that reads 0.2 g when empty.	T1 A timing sensor that detects an object interrupting a beam of light.	T1 Small enough to leave out without significantly affecting the result being considered.
T1 A state with no resultant force or resultant moment.	T1 An accurate drawing where vector lengths are drawn in a fixed ratio to their magnitudes.	T1 Meeting at a right angle of 90 degrees.

T1 projectile	T1 free-body diagram	T1 centre of gravity
T1 Newton's first law	T1 Newton's second law	T1 Newton's third law
T1 weight	T1 gravitational field strength	T1 terminal velocity

T1 The point through which an object's resultant weight acts.	T1 A diagram showing all external forces acting on a selected object.	T1 An object moving after being launched, typically modelled under gravity with air resistance neglected.
T1 When two bodies interact, each exerts a force on the other that is equal in magnitude and opposite in direction.	T1 The net force on a body equals the rate of change of its momentum; for constant mass it equals mass times acceleration.	T1 Zero resultant force means no change in motion – at rest or moving at constant velocity. Constant velocity is not "no forces".
T1 A constant falling velocity reached when weight is balanced by drag and upthrust, giving zero resultant force.	T1 The gravitational force per unit mass at a point.	T1 The gravitational force acting on an object.

T1 drag	T1 conservation of linear momentum	T1 isolated system
T1 moment of a force	T1 pivot	T1 perpendicular distance
T1 principle of moments	T1 uniform	T1 work

T1 A system that exchanges neither matter nor energy with its surroundings in thermodynamics, or experiences no net external influence in the relevant mechanical model.	T1 Total linear momentum remains constant when the resultant external force is zero, or external impulse is negligible during the interaction.	T1 A resistive force exerted by a fluid on an object moving relative to it.
T1 The shortest distance from a point to a line or plane, measured at right angles to it.	T1 A fixed point about which an object can turn.	T1 The turning effect of a force: force $\times$ perpendicular distance from the pivot, in $\mathrm{N}\cdot\mathrm{m}$.
T1 Energy transferred by a force acting through a displacement.	T1 Constant or the same throughout the relevant interval.	T1 For rotational equilibrium, total clockwise moment equals total anticlockwise moment.

T1 kinetic energy	T1 gravitational potential energy	T1 conservation of energy
T1 power	T1 efficiency	T1 density
T1 upthrust	T1 fluid displaced	T1 Stokes' law

T1 The principle that energy cannot be created or destroyed, only transferred or transformed.	T1 Energy stored because of an object's position in a gravitational field.	T1 The energy an object has because of its motion.
T1 Mass per unit volume.	T1 The fraction of total energy or power input converted to useful output.	T1 The rate of energy transfer or work done.
T1 The slow-flow drag model $F = 6\pi\eta rv$ for a small sphere in a viscous fluid, when creeping-flow assumptions apply.	T1 The fluid pushed aside by an object; its weight gives the upthrust (Archimedes' principle).	T1 The upward buoyant force exerted by a fluid on an object immersed in it.

T1 laminar flow	T1 viscosity	T1 turbulence
T1 Hooke's law	T1 stiffness	T1 spring constant
T1 stress	T1 strain	T1 Young modulus

T1 Chaotic fluid flow with eddies, at high speed or around obstacles.	T1 A measure of a fluid's resistance to flow or to relative motion between adjacent layers.	T1 Smooth fluid motion in layers without the irregular mixing characteristic of turbulence.
T1 The force required per unit extension of a spring in its linear range.	T1 Force required per unit extension for a linear spring; stiffness k is the gradient of its force–extension graph, in N/m.	T1 The rule that extension is proportional to applied force while a spring remains within its limit of proportionality.
T1 The ratio of tensile stress to tensile strain in the region where they are proportional.	T1 The fractional change in a dimension, such as extension divided by original length.	T1 The internal force per unit cross-sectional area in a material.

T1 limit of proportionality	T1 elastic limit	T1 elastic deformation
T1 plastic deformation	T1 yield point	T1 breaking stress
T1 elastic strain energy	T1 per unit volume	T1 micrometer

T1 Deformation that fully reverses when the load is removed.	T1 The greatest stress or deformation a material can experience and still return to its original shape when unloaded.	T1 The point beyond which extension is no longer directly proportional to applied force.
T1 The stress at fracture.	T1 A point marking substantial plastic flow in a material with a distinct yield, often with little extra load.	T1 Permanent deformation that remains after the load is removed, beyond the elastic limit.
T1 A screw gauge used to measure small lengths, such as wire diameters; the school instrument here has a 0.01 mm resolution.	T1 Divided by volume; in elastic deformation, the area under the loading stress–strain graph gives stored strain energy per unit volume.	T1 Recoverable energy stored by elastic deformation; for ideal elastic loading, it equals the area under the force–extension graph.

T2 Waves	T2 amplitude	T2 Equilibrium
T2 period	T2 frequency	T2 wavelength
T2 wave speed	T2 transverse wave	T2 longitudinal wave

T2 The resting position.	T2 The maximum displacement from an equilibrium position.	T2 A disturbance or oscillation that transfers energy without a net transfer of matter over the full cycle.
T2 The distance between corresponding points on successive waves.	T2 The number of complete cycles per unit time.	T2 The time taken for one complete oscillation or cycle.
T2 A wave whose oscillations are parallel to its direction of energy transfer.	T2 A wave whose oscillations are perpendicular to its direction of energy transfer.	T2 The rate at which a wave disturbance or a point of constant phase travels through a medium.

T2 compressions	T2 rarefactions	T2 wavefront
T2 Phase	T2 Superposition	T2 Interference
T2 Coherent sources	T2 path difference	T2 standing wave

T2 A surface joining points of a wave at the same phase, represented by a line in a two-dimensional wave diagram.	T2 The stretched low-pressure regions of a longitudinal wave, between compressions.	T2 Regions of a longitudinal wave where particles are closer together and pressure or density is higher than the equilibrium value.
T2 The resulting reinforcement or cancellation.	T2 The principle that, in a linear system, the combined effect of independent contributions equals the sum of their separate effects.	T2 The position of a point in a wave's cycle; two points in phase oscillate together.
T2 A wave pattern with fixed nodes and antinodes formed by the superposition of waves travelling in opposite directions.	T2 The difference in distances travelled by two waves to a point; for sources initially in phase, whole-wavelength differences give constructive interference.	T2 Two sources with the same frequency and a constant phase relationship, needed for a stable interference pattern.

T2 node	T2 antinode	T2 tension
T2 mass per unit length	T2 two-beam oscilloscope	T2 Intensity
T2 Refraction	T2 normal	T2 refractive index

T2 A pulling force transmitted through a stretched string, cable or similar object.	T2 A position of maximum oscillation amplitude in a standing wave.	T2 A point in a stationary wave where the displacement amplitude is zero.
T2 The power carried by a wave per unit area perpendicular to its direction of propagation.	T2 An oscilloscope displaying two signals at once, used to compare phases or time intervals.	T2 The linear density μ of a string; wave speed on it is $v = \sqrt{(T/\mu)}$.
T2 For a medium, the ratio of the speed of light in a vacuum to its phase speed in that medium.	T2 A line perpendicular to a surface at a given point.	T2 A change in wave speed on crossing a boundary that can also change direction; normal incidence can leave the direction unchanged.

T2 Total internal reflection	T2 critical angle	T2 Plane polarisation
T2 Diffraction	T2 Huygens' construction	T2 diffraction grating
T2 order	T2 de Broglie wavelength	T2 transmitted

T2 Restricting a transverse wave's oscillations to one plane, evidence that light is a transverse wave.	T2 The incidence angle in the higher-index medium for which the refracted ray travels along the boundary.	T2 Complete reflection at a boundary when light travels towards a lower refractive index at an angle greater than the critical angle.
T2 An optical component with many equally spaced slits or grooves that produces interference maxima at particular angles.	T2 The model in which every point on a wavefront acts as a source of new wavelets, explaining reflection and refraction.	T2 The spreading of waves at a gap or edge.
T2 Passed through a boundary or medium, as refracted light is transmitted into glass.	T2 The wavelength associated with a particle's momentum, equal to the Planck constant divided by that momentum.	T2 An integer identifying a particular interference or diffraction maximum relative to the central maximum.

T2 pulse-echo	T2 Photons	T2 photoelectric effect
T2 work function	T2 threshold frequency	T2 electronvolt
T2 discrete energy levels	T2 Current	T2 Potential difference

T2 The emission of electrons from a material when it absorbs electromagnetic radiation of sufficiently high frequency.	T2 Quanta of electromagnetic radiation, each carrying energy proportional to its frequency.	T2 Measuring distance by timing a reflected pulse, as in ultrasound imaging and sonar.
T2 A unit of energy equal to the energy gained by one elementary charge moving through a potential difference of one volt.	T2 The lowest light frequency that can release photoelectrons from a specified surface.	T2 The minimum energy needed to remove an electron from a material's surface.
T2 The energy transferred per unit charge between two points.	T2 The rate of charge flow.	T2 The fixed energies an electron in an atom may occupy, producing line spectra.

T2 Ohm's law	T2 Charge conservation	T2 Energy conservation
T2 Electrical power	T2 Resistivity	T2 drift velocity
T2 potential divider	T2 negative-temperature-coefficient thermistor	T2 light-dependent resistor

T2 The total energy supplied per coulomb around a complete loop equals the energy transferred per coulomb.	T2 Total electric charge is unchanged in every interaction.	T2 The rule that current is proportional to potential difference across an ohmic conductor when physical conditions such as temperature are constant.
T2 The average velocity of charge carriers due to an applied electric field.	T2 A material property relating resistance to length and cross-sectional area at a specified temperature.	T2 The rate at which an electrical system transfers or converts energy.
T2 A resistor whose resistance generally decreases as the intensity of incident light increases.	T2 A component whose resistance FALLS as its temperature rises.	T2 A circuit arrangement that uses series resistances or impedances to obtain a fraction of an applied potential difference.

T2 Electromotive force	T2 Internal resistance	T3 valid measurement
T3 independent variable	T3 dependent variable	T3 control variables
T3 apparatus	T3 resolution	T3 hazard

T3 A measurement that actually measures the intended quantity under controlled conditions.	T2 The effective resistance within a source of electrical energy that causes its terminal voltage to change when current flows.	T2 The energy supplied by a source per unit charge passing through it.
T3 Factors kept the same in an investigation so that the effect of the independent variable can be assessed.	T3 The measured or calculated outcome whose response to changes in another variable is studied.	T3 An input or factor whose value is chosen or varied to examine its effect on another quantity.
T3 A source of potential harm, such as a falling load or a hot surface.	T3 The smallest change in the measured quantity that an instrument or measurement system can distinguish.	T3 The equipment used to carry out an investigation or measurement.

T3 risk	T3 fundamental frequency	T3 tension
T3 pulley	T3 node	T3 linear density
T3 resonant frequency	T3 gradient	T3 calibration

T3 A pulling force transmitted through a stretched string, cable or similar object.	T3 The lowest natural mode frequency; a string fixed at both ends has one antinode in this mode.	T3 The possibility of an adverse outcome, often assessed using its likelihood and consequences.
T3 Mass per unit length, such as the mass of a string divided by its length.	T3 A point in a stationary wave where the displacement amplitude is zero.	T3 A wheel over which a rope or belt runs, used to change the direction of a force or transmit motion.
T3 Comparing and, where appropriate, adjusting a measuring instrument against a known reference.	T3 The change in the vertical coordinate divided by the change in the horizontal coordinate.	T3 A driving frequency at which a system has a response peak under its stated damping and other conditions.

T3 zero error	T3 micrometer	T3 offset
T3 drift	T3 accuracy	T3 precision
T3 repeatability	T3 reproducibility	T3 random effects

T3 An additive shift of measured readings relative to their reference values.	T3 A screw gauge used to measure small lengths, such as wire diameters; the school instrument here has a 0.01 mm resolution.	T3 An instrument reading that is nonzero when the true quantity is zero.
T3 How closely repeated measurements agree.	T3 How close a measurement is to the true value.	T3 A gradual change in an instrument's response or readings over time under otherwise comparable conditions.
T3 Unpredictable variations that make repeated results scatter; averaging can reduce their contribution to uncertainty in the mean.	T3 Agreement between results obtained when relevant conditions change, such as the operator, equipment or laboratory.	T3 Agreement between repeated results using the same method, operator and equipment under the same conditions.

T3 systematic error	T3 uncertainty	T3 Vernier calipers
T3 ratchet	T3 parallax	T3 light gate
T3 reaction-time	T3 significant figures	T3 anomalous reading

T3 An instrument with sliding jaws and a vernier scale for measuring dimensions; the school model here reads to 0.1 mm.	T3 A stated estimate of the range of values reasonably associated with a measurement, based on the method and available information.	T3 A consistent measurement bias caused by the method or instrument.
T3 A timing sensor that detects an object interrupting a beam of light.	T3 The apparent change in an object's position when viewed from different locations or angles.	T3 A micrometer mechanism that limits tightening force so measurements use a more consistent contact force.
T3 A reading far from the pattern of the others, checked and excluded only with a recorded reason.	T3 The meaningful digits in a measured or rounded number, beginning with its first non-zero digit.	T3 The delay between noticing an event and responding, such as starting or stopping a hand-held timer.

T3 half range	T3 best-fit line	T3 direct proportionality
T3 intercept	T3 resistivity	T3 dimensionless
T4 Momentum	T4 Impulse	T4 isolated system

T3 A relationship y = kx with constant k; its graph is a straight line through the origin.	T3 A line representing the overall relationship in measured data, accounting for scatter rather than joining successive points.	T3 Half the spread of repeated readings, (largest − smallest)/2, used as an uncertainty estimate.
T3 Having no physical dimension; ratios of like quantities and trigonometric values are examples.	T3 A material property relating resistance to length and cross-sectional area at a specified temperature.	T3 The coordinate at which a graph crosses a specified coordinate axis.
T4 A system that exchanges neither matter nor energy with its surroundings in thermodynamics, or experiences no net external influence in the relevant mechanical model.	T4 The change in momentum.	T4 The product of mass and velocity.

T4 elastic collision	T4 inelastic collision	T4 non-relativistic particle
T4 radian	T4 Angular velocity	T4 tangential speed
T4 centripetal force	T4 electric field	T4 Electric field strength

T4 A particle moving much slower than light, for which ordinary kinetic formulas apply.	T4 A collision in which the total kinetic energy of the colliding objects is not conserved.	T4 A collision in which total kinetic energy and momentum are conserved.
T4 The speed along the circular path, $v = r\omega$.	T4 The rate of change of angular displacement, with a direction associated with the axis of rotation.	T4 The angle subtended at a circle's centre by an arc equal in length to its radius.
T4 The electric force per unit positive charge at a point.	T4 A region in which an electric charge experiences an electric force.	T4 The resultant force towards the centre of a circular path.

T4 Electric potential	T4 equipotential	T4 capacitor
T4 Capacitance	T4 time constant	T4 Magnetic flux density
T4 Fleming's left-hand rule	T4 Magnetic flux	T4 Flux linkage

T4 A component that stores separated electric charge and energy in an electric field.	T4 A surface or set of points that all have the same electric or gravitational potential.	T4 Electric potential energy per unit positive charge at a point, relative to a chosen reference.
T4 The magnetic field quantity B, in tesla; a straight wire of length l carrying current I in a uniform field experiences force F = BIl sin θ.	T4 The characteristic time for an exponential process to change by a factor of e; in decay, the quantity falls to one over e of its starting value.	T4 Stored electric charge per unit potential difference between conductors.
T4 The sum of magnetic flux through a coil's turns; it is NΦ when each of N turns links the same flux, and its change induces an emf.	T4 A measure of the magnetic field passing through a surface, accounting for field strength, area and orientation.	T4 The motor rule: thumb force, first finger field, second finger current, all at right angles.

T4 Electromagnetic induction	T4 Faraday's law	T4 Lenz's law
T4 proton number	T4 nucleon number	T4 Thermionic emission
T4 linear accelerator	T4 cyclotron	T4 quark–lepton model

T4 An induced current or electromotive force acts in a direction that opposes the change in magnetic flux that produces it.	T4 The induced electromotive force equals the negative rate of change of magnetic flux linkage.	T4 The production of an electromotive force when magnetic flux linkage changes.
T4 The release of electrons from a heated material.	T4 The total number of protons and neutrons in an atomic nucleus.	T4 The number of protons in an atomic nucleus, which identifies its element.
T4 The model in which matter is built from quarks and leptons, with force carried by exchange particles.	T4 A device accelerating particles in a spiral using a magnetic field and an alternating electric field.	T4 A device accelerating particles in a straight line through repeated electric-field kicks.

T4 baryon	T4 meson	T4 lepton
T4 antiparticle	T4 Mass–energy equivalence	T4 pair production
T4 annihilation	T5 Internal energy	T5 Specific heat capacity

T4 Fundamental particles that do not participate in the strong interaction, including electrons and neutrinos.	T4 Hadrons described in the basic quark model as a quark paired with an antiquark.	T4 A particle made of three quarks, such as the proton or neutron.
T4 Creation of a particle–antiparticle pair, for example from a photon in an interaction that conserves momentum; at least their combined rest energy is required.	T4 Einstein's $E = mc^2$: mass can be converted to energy and back.	T4 A particle with the same mass as its corresponding particle and opposite values of applicable quantum numbers such as electric charge.
T5 The energy needed to raise the temperature of one kilogram of a substance by one kelvin or one degree Celsius.	T5 The total energy in the random motion and interactions of molecules: random kinetic energy plus intermolecular potential energy.	T4 A particle and its antiparticle transforming into other particles; electron–positron annihilation can produce photons carrying their total initial energy.

T5 Specific latent heat	T5 thermistor	T5 potential divider
T5 Absolute zero	T5 Absolute temperature	T5 ideal gas
T5 mean square speed	T5 root mean square speed	T5 mass deficit

T5 A circuit arrangement that uses series resistances or impedances to obtain a fraction of an applied potential difference.	T5 A resistor whose resistance changes strongly with temperature, commonly decreasing as temperature rises.	T5 The energy per kilogram needed to change state without a temperature change, in J/kg.
T5 A model of a gas with point particles that exert no intermolecular forces except during perfectly elastic collisions.	T5 Temperature in kelvin measured from absolute zero: $T/K = \theta/°C + 273.15$.	T5 The lowest temperature on the thermodynamic temperature scale, equal to zero kelvin.
T5 The difference between the total rest mass of separate free nucleons and the smaller rest mass of their bound nucleus; binding energy equals this difference times c^2.	T5 The square root of the mean square speed, $\sqrt{(\langle c^2 \rangle)}$, a typical particle speed.	T5 The average of the squared speeds of gas particles, written $\langle c^2 \rangle$.

T5 binding energy	T5 unified atomic mass unit	T5 Nuclear fusion
T5 Nuclear fission	T5 Alpha radiation	T5 Beta radiation
T5 Gamma radiation	T5 nuclear equations	T5 Background radiation

T5 The joining of light atomic nuclei to form a heavier nucleus, releasing energy.	T5 One twelfth of the mass of a carbon-12 atom, 1 u $\approx 1.66 \times 10^{-27}$ kg.	T5 The energy required to separate a nucleus completely into its free constituent protons and neutrons.
T5 Fast electrons or positrons emitted in beta decay; beta-minus decay changes a neutron into a proton, emitting an electron and an antineutrino.	T5 Helium nuclei emitted by unstable nuclei; strongly ionising but stopped by paper or skin.	T5 The splitting of a heavy atomic nucleus into smaller nuclei, usually releasing energy and neutrons.
T5 Ionising radiation present in the surroundings from natural and artificial sources.	T5 Decay equations balancing mass number and charge on both sides, such as α or β decay.	T5 High-energy electromagnetic waves from an excited or decaying nucleus; highly penetrating and weakly ionising.

T5 Radioactive decay	T5 Activity	T5 becquerels
T5 decay constant	T5 half-life	T5 Simple harmonic motion
T5 free oscillation	T5 forced oscillation	T5 Natural frequency

T5 The SI unit of activity: 1 Bq = one decay per second.	T5 The number of decays per second of a radioactive source, in becquerels.	T5 The spontaneous, random change of an unstable nucleus with the emission of radiation.
T5 Oscillation in which acceleration is proportional to displacement from equilibrium and directed towards equilibrium.	T5 The time for the expected undecayed population or the source activity to halve.	T5 The decay probability per unit time for an undecayed nucleus, in the small-time limit; λ has unit s^{-1} and activity $A = \lambda N$.
T5 The frequency of free oscillation for the system under the stated conditions.	T5 Oscillation driven by a continuing external periodic force.	T5 Oscillation at the natural frequency with no driving force after the initial input.

T5 Resonance	T5 Damping	T5 Plastic deformation
T5 gravitational field	T5 Gravitational field strength	T5 Gravitational potential
T5 black body	T5 Luminosity	T5 Intensity

T5 Permanent deformation that remains after the load is removed, beyond the elastic limit.	T5 The reduction of oscillation amplitude caused by energy transfer out of the oscillating system.	T5 A large oscillation response when periodic driving transfers energy efficiently near a natural frequency; damping affects the peak.
T5 Potential energy per unit mass at a point in a gravitational field, relative to a specified reference.	T5 The gravitational force per unit mass at a point.	T5 A region in which a mass experiences gravitational force, described locally by force per unit mass.
T5 The power carried by a wave per unit area perpendicular to its direction of propagation.	T5 The total energy a star or other source emits as radiation per unit time.	T5 An ideal object that absorbs all radiation falling on it and emits a characteristic spectrum set only by its temperature.

T5 Trigonometric parallax	T5 parsec	T5 standard candle
T5 Hertzsprung–Russell diagram	T5 main sequence	T5 Red giants
T5 White dwarfs	T5 Doppler effect	T5 Redshift

T5 An object of known luminosity.	T5 The distance at which one astronomical unit subtends one arcsecond; 1 pc ≈ 3.26 light years.	T5 Measuring a nearby star's distance from its apparent shift as the Earth orbits the Sun.
T5 Large cool luminous stars in a late stage, above the main sequence on the H–R diagram.	T5 The band on the H–R diagram occupied by stars sustained by hydrogen fusion in their cores.	T5 The plot of stars by luminosity against surface temperature, revealing the main sequence, giants and white dwarfs.
T5 A shift of observed spectral features towards longer wavelengths.	T5 A change in observed wave frequency caused by relative motion between a source and an observer.	T5 A dense, hot stellar remnant supported by electron degeneracy pressure, with no sustained core fusion.

T5 Hubble's law	T5 Hubble constant	T5 Hubble time
T5 Dark matter	T6 damped pendulum	T6 logarithms
T6 decay constant (damping)	T6 valid measurement	T6 linearisation

T5 The expansion timescale $1/H_0$; treating it as the age of the Universe requires assumptions about the expansion history.	T5 The present-day expansion rate of the universe, relating a distant galaxy's recession speed to its distance in the Hubble-Lemaitre law.	T5 For sufficiently nearby galaxies in the general cosmic expansion, recession speed is approximately proportional to distance.
T6 The exponent to which a specified base must be raised to produce a given positive number.	T6 A pendulum whose oscillation amplitude decreases because energy is transferred away from its motion.	T5 Matter inferred from gravitational effects that visible matter alone cannot explain, such as galaxy rotation; it is not directly detected through emitted light.
T6 Replotting data with transformed axes (for example log y against x) so a model becomes a straight line.	T6 A measurement that actually measures the intended quantity under controlled conditions.	T6 The positive parameter λ in $A = A_0 \exp(-\lambda n)$; it equals minus the gradient of $\ln(A/Aref)$ against oscillation count n.

T6 gradient	T6 log graph	T6 best-fit line
T6 extrapolate	T6 intercept	T6 ammeter
T6 voltmeter	T6 polarity	T6 data logger

T6 A line representing the overall relationship in measured data, accounting for scatter rather than joining successive points.	T6 A graph using logarithms of one or both quantities; suitable semilog axes linearise an exponential law, while log–log axes linearise a power law.	T6 The change in the vertical coordinate divided by the change in the horizontal coordinate.
T6 An instrument connected in series to measure electric current.	T6 The coordinate at which a graph crosses a specified coordinate axis.	T6 To extend a fitted trend beyond the measured range; the prediction depends on the model remaining valid there.
T6 A device recording sensor readings automatically at set intervals.	T6 The distinction between positive and negative terminals or connections, important for components such as electrolytic capacitors.	T6 An instrument connected across two points to measure their potential difference.

T6 parallax	T6 resolution	T6 precision
T6 timing marker	T6 orientation	T6 random variation
T6 zero error	T6 systematic error	T6 micrometer

T6 How closely repeated measurements agree.	T6 The smallest change in the measured quantity that an instrument or measurement system can distinguish.	T6 The apparent change in an object's position when viewed from different locations or angles.
T6 Unpredictable differences between repeated results; averaging can reduce their contribution to uncertainty in the mean.	T6 The direction in which an object is positioned, such as the different directions used to measure a cylinder's diameter.	T6 A clear visual or electrical mark used to start and stop a timing measurement consistently.
T6 A screw gauge used to measure small lengths, such as wire diameters; the school instrument here has a 0.01 mm resolution.	T6 A consistent measurement bias caused by the method or instrument.	T6 An instrument reading that is nonzero when the true quantity is zero.

T6 percentage uncertainty	T6 significant figures	T6 compounded uncertainties
T6 range	T6 mean	T6 absolute uncertainty
T6 large triangle	T6 control variables	

T6 Uncertainties combined through a calculation; the school maximum-uncertainty method here adds percentage uncertainties for products and quotients.	T6 The meaningful digits in a measured or rounded number, beginning with its first non-zero digit.	T6 Absolute uncertainty divided by the magnitude of the measured value, multiplied by one hundred.
T6 An uncertainty quoted in the same unit as the measured quantity, such as ±1 mm for a length.	T6 The sum of a set of values divided by the number of values.	T6 The largest value in a data set minus the smallest value.
	T6 Factors kept the same in an investigation so that the effect of the independent variable can be assessed.	T6 A triangle spanning a large part of a best-fit straight line, used to reduce fractional uncertainty in a calculated gradient.