

T1 friction	T1 scalar	T1 vector
T1 momentum	T1 terminal velocity	T1 centre of mass
T1 moment	T2 work	T2 power

T1 A quantity with both magnitude and direction.	T1 A quantity described by magnitude alone, with no direction.	T1 A force that opposes relative motion between contacting surfaces.
T1 The point representing an object's or system's mass-weighted average position.	T1 Constant velocity reached when the resultant force becomes zero; in the simple falling-object model, upward drag balances downward weight.	T1 The product of mass and velocity.
T2 The rate of energy transfer or work done.	T2 Energy transferred by a force acting through a displacement.	T1 The turning effect of a force about a pivot.

T2 dissipation	T2 efficiency	T3 transverse wave
T3 longitudinal wave	T3 refraction	T3 diffraction
T3 ultrasound	T4 specific heat capacity	T4 latent heat of vaporisation

T3 A wave whose oscillations are perpendicular to its direction of energy transfer.	T2 The fraction of total energy or power input converted to useful output.	T2 The spreading of energy into less useful stores, usually thermal stores of the surroundings; energy remains conserved.
T3 The spreading or redistribution of waves as they pass an edge or aperture.	T3 A change in a wave's direction when it crosses a boundary at an angle and its speed changes.	T3 A wave whose oscillations are parallel to its direction of energy transfer.
T4 Energy transferred during a liquid-to-gas change without a temperature rise; the specific latent heat L is the energy needed per kilogram, so $E = mL$.	T4 The energy needed to raise the temperature of one kilogram of a substance by one kelvin or one degree Celsius.	T3 Sound with a frequency above the upper limit of normal human hearing, conventionally above 20 kilohertz.

T4 latent heat of fusion	T4 conduction	T4 convection
T4 evaporation	T5 solenoid	T5 electromagnet
T6 generator effect	T6 transformer	T6 earthing

T4	T4	T4
Heat transfer through the bulk movement of a fluid.	Transfer of thermal energy through a material by interactions between particles, with mobile electrons also contributing in metals, without bulk flow of the material.	Energy transferred during a solid-to-liquid change without a temperature rise; the specific latent heat L is the energy needed per kilogram, so $E = mL$.
T5	T5	T4
A magnet produced by an electric current, often using a coil around an iron core.	A coil of wire that produces a magnetic field when an electric current flows through it.	The escape of particles from the surface of a liquid into its vapour without the whole liquid boiling.
T6	T6	T6
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.	A device that changes alternating potential difference using electromagnetic induction between coils.	Production of an induced emf by changing magnetic flux linkage, through suitable conductor motion or a changing field; current flows if a conducting path is available.

T6 fuse	T6 left-hand rule	T7 half-life
T7 contamination	T7 irradiation	T7 fission
T7 fusion	T8 red-shift	T8 Big Bang

T7 The time for the number of undecayed nuclei in a radioactive sample to halve.	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 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.
T7 The splitting of a heavy atomic nucleus into lighter nuclei, releasing energy and often additional neutrons.	T7 Exposure to ionising radiation from a source; irradiation itself does not mean radioactive material has been transferred to the exposed object or person.	T7 The unwanted presence of radioactive material on a surface or inside an object or person; it can remain a radiation source until removed, cleared or decayed.
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.	T7 The joining of light nuclei into heavier ones, releasing energy in stars.

T8

cosmic microwave
background

T8

Microwave radiation observed
throughout space that is a
remnant of the early hot
universe.