BCS model of superconductivity	quantum-mechanical effect where two electrons pair up and pass unimpeded by the lattice
black body	an idealised body which absorbs all radiation that falls on it according to Planck's law; it is also a perfect radiator of energy
black body radiation	emitted by a black body that obeys Planck's law
bragg diffraction	the diffraction of x-rays from crystals; British physicist Sir William Henry Bragg (1862-1942) and his son William Lawrence Bragg (1890-1971) applied X-ray diffraction to the study of crystals; called X-ray crystallography
cathode	the electron-emitting electrode in an electron tube

cathode ray oscilloscope (CRO)	an electronic device used to view electrical signals, e.g. waveforms
cathode rays	particles that travel from the negative electrode (cathode) of an electric discharge tube; experiments show that cathode rays are electrons; the nature of cathode rays - wave or particle - was long debated
cathode ray tubes	the manipulation of charged particles by electric and magnetic fields; a cathode ray tube (CRT) has an electron gun, a deflecting system and a florescent screen, which are used in oscilloscopes and TVs
conduction	the process of charge moving through a medium; conduction in metals results from the drift of a large number of electrons through the lattice
cooper pair	where two electrons pair up and travel unimpeded through the crystal lattice of a superconductor

crystal lattice	the structure of crystals e.g. metals
de Broglie, Louis	the French physicist who proposed that matter has wave characteristics
diffraction	the spreading of a wave into the geometrical shadow of an object
discharge tube	an evacuated glass tube containing electrodes and used to investigate the effect of passing electricity through gases at low pressures
doping	the process of adding atoms of group V or group III elements to semiconductor material such as silicon or germanium, which results in a change in the conductivity

drift velocity	the speed of electrons moving through a conductor; depends on the density of electrons, the cross-sectional area and the charge
electric current	the flow of charge, which is carried by electrons in metal conductors and both holes and electrons in semi-conductors
electric field	the area of influence surrounding a charge
electromagnetic waves	waves produced by charges oscillating in conductors e.g. radio antennae
electrons	negatively charged subatomic particle found in all neutral atoms