Subject: Physics **Form 10 (double lesson)**

	Minimum requirements What must the pupils be able to do?	**Additional study** What should the pupils learn in addition to the minimum requirements?	**Networking** Methods catalogue/media curriculum: Method is particularly well suited for... projects/topic days/boarding school
1st Half-year	**Mechanics** After a short repetition of the mechanics learned in Form 7, the pupils learn - about the resolution of forces (vector addition) - to describe uniform and accelerated movements in diagrams and using formulae - to understand pulse variations - to describe a circular movement (centripetal force, angular momentum) - to calculate kinetic energy The pupils realise the significance of the laws of conservation in physics: - Principle of conservation of energy in mechanics - Conservation of momentum - Conservation of angular momentum (qualitative) The pupils discuss the historical development of world pictures.	Practical with lanes ***Fahrbahnen***: Draw ***vt*** diagrams with the respective error calculation (error percentage, error bars and error analysis) The pupils describe elastic and inelastic impacts.	In NWT: Historical development of models and world pictures

2nd Half-year	**Nuclear physics** The pupils learn about the following contents - model of the atomic structure - α, β and γ radiation and decay - how a Geiger Müller counter works - effect of ionised radiation - nuclear fission **Entropy** The pupils learn about - the absolute temperature - the ideal gas law - thermal engines - the meaning of entropy - energy devaluation and entropy	The pupils learn about a Stirling engine.	