

Subject	Year	Term
Physics	13	2
Topic		
Particle Physics topic 8		
Content (Intent)		
<b>Prior Learning (Topic) Topic 2 (mechanics), GCSE atomic Physics (10P4)</b>		
Structure of the atom Rutherford scattering experiments High energy scattering experiments.		
Creation and annihilation of matter and antimatter particles $\Delta E = c^2 \Delta m$ Non-SI units of MeV and GeV (energy) and MeV/c <sup>2</sup> , GeV/c <sup>2</sup> (mass) Principles of cloud, bubble & spark chambers, ionisation detectors. The standard model Particle collisions: interpretation with conservation laws		
How will knowledge and skills be taught? (Implementation)	How will your understanding be assessed & recorded (Impact)	
Computer simulation of Rutherford's experiment. Use bubble chamber images and a variety of interactions to illustrate particle collisions.	Homework Booklet 8 marked and written feedback given Test 8 marked, graded and feedback given	
How can parents help at home?		
Check that the homework booklet 8 is completed		
Helpful further reading/discussion		
<b>Reading</b> <b>Advanced Physics for you chapters 27</b>	<b>Vocabulary Lists</b> <i>See front of homework booklet</i>	<b>Careers Links</b>