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Topic 11 Nuclear RadiationContent (Intent)Prior Learning (Topic) Topic 5 (waves)Gravitational collapse and hydrogen 'burning'Nuclear binding energy Mass deficit, $\Delta E = c^2 \Delta m$ Background radiationNature and properties of alpha, beta and gamma radiationNuclear decay equations.Radioactivity as a random process (eg dice simulation).Activity, $A = dn = -\lambda N$ $df$ Meaning of $\lambda$ , $ln2 = \lambda t_{1/2}$ Exponential decay equations $N = N_0 e^{-\lambda t}$ and $A = A_0 e^{-\lambda t}$ and the corresponding log. Equations.Processes of fission and fusion, Mechanism of fusionExtreme condition required for fusion.• CORE PRACTICAL 15: Investigate the absorption of gammHow will knowledge and skills be taught?How will vo recorded (In					
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materials. Test 11 mar	/en				
Model radioactivity with dice. Computer simulation to produce a radioactive	ven ked, graded and feedback giver				
decay curve.					

How can parents help at home?
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Check that the homework booklet 11 is completed

Helpful further reading/discussion				
Reading	Vocabulary Lists	Careers Links		
Advanced Physics for you	See front of homework			
chapter 26	booklet			