

Chapter 29 – Nuclear Energy

Learning Grid

Nuclear Energy	Questions	Answers
	What is binding energy?	
	Explain what is meant by mass defect.	
	State the three conservations that take place in a nuclear reaction.	
	What is nuclear fission?	
	Explain what a chain reaction is and why it might be desired in nuclear fission.	
	A nuclear reactor contains control rods and moderators. Explain what their function is in a reactor.	
	Explain what is meant by nuclear fusion.	

Nuclear Energy	Questions	Answers
	Sketch the diagram for Cockcroft and Walton's particle accelerator.	
	What was the significance of their experiment?	
	Explain the significance of the neutrino and why it was difficult to verify its existence.	
	Who proposed the existence of antimatter?	
	State the six flavours of quark.	
	Give the structure for a proton and a neutron.	