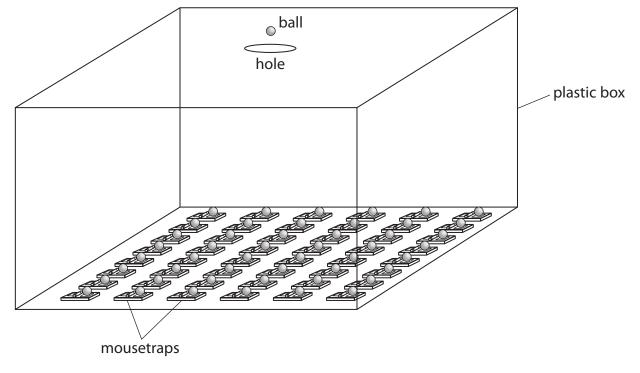
3 The diagram shows a model of a chain reaction in a nuclear fission reactor.

A ball falls through the hole and hits a mousetrap.

This mousetrap then releases another ball.

Each released ball hits a different mousetrap.



- (a) Each mousetrap represents a uranium-235 nucleus.
 - (i) Name the particle represented by the balls.

(ii) Describe what is meant by the term **nuclear fission**.

(2)

(1)



(iii	(iii) Describe what is meant by the term chain reaction .					
(b) Th	e walls of a real nu	uclear reactor a	re not made of pl	astic.		
Give a suitable material for the walls of a real nuclear reactor.						(1)
(c) Use words from the box to complete the sentences about the moderator and control rods in a nuclear reactor. (4)						
	absorb	ionise	neutralise	reflect	slow	
	boron	granite	graphite	paper	uranium	
The moderator in a nuclear reactor can be made of						
The moderator is designed toneutrons.						
The contro	ol rods in a nuclea	r reactor can b	e made of		······•••	
The control rods are designed to				neutrons.		
(Total for Q				Total for Ques	tion 3 = 10 m	arks)