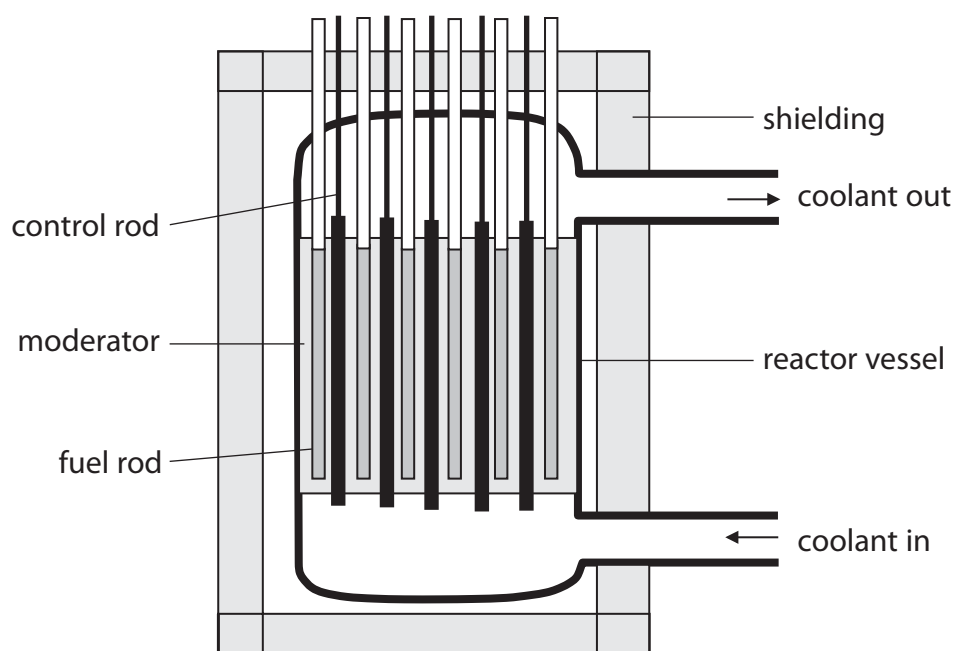


2 The diagram shows the main parts of a nuclear reactor.



(a) Draw a line linking each part of the reactor with its main function.

The first one has been done for you.

(2)

part of reactor		main function
control rod	● ————— ●	controls the rate of fission
coolant	●	● absorbs dangerous radiation
fuel rod	●	● contains uranium for fission
shielding	●	● removes energy from the reactor



(b) State the type of energy released in a fission reaction.

(1)

(c) Explain the role of the moderator in a fission reaction.

(2)

(d) Explain, in terms of neutrons, what is meant by controlled nuclear fission.

(3)

**(Total for Question 2 = 8 marks)**

