

1 The table shows the main sources of energy used to provide electricity in the UK in 2008.

Energy Source	Electricity supplied (Billion kWh)
Nuclear	90
Fossil fuels	255
Renewable	15

1 (a) (i) Name one type of nuclear fuel.

[1 mark]

Uranium or plutonium [1]

1 (a) (ii) Calculate the proportion of electricity supplied by nuclear fuel for 2008.

Show your working clearly.

[2 marks]

$$90 / (90 + 255 + 15) = \text{or } 90 / 360 = [1]$$

Always show working.

$$1/4 \text{ or } 25\% \text{ or } 0.25 [2]$$

1 (a) (iii) Describe the process by which electricity is generated using fossil fuels.

Include any energy transfers involved in your answer.

[5 marks]

Fossil fuels or coal/oil/gas are burned. [1]

Heat energy from burning used to heat water. [1]

Water turns to steam. [1]

Steam turns a turbine. [1]

Turbine turns a generator to provide electricity. [1]

Avoid the word 'create' here,  
e.f. do NOT say the  
generator creates electricity.

(Total 8 marks)

End