

GCSE Physics A (Gateway)

J249/02 Physics A P5-P8 and P9 (Foundation Tier)

Question Set 14

1*

A student does an experiment using 0.2 kg of water.

Here is some information from the experiment:

The aim is to find the energy needed to raise the temperature of the water by 20 °C.

An electrical heater is used to heat the water. The temperature of the water increases by 20 °C.

The **specific heat capacity** of water is 4200 J/kg °C.

Describe how the student should carry out the experiment, including the equipment used. In your answer calculate the change in internal energy for the water.

You may include a diagram in your answer.

[6]

Total Marks for Question Set 14: 6

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