

**8** Concrete on top of buildings can be used to heat water.

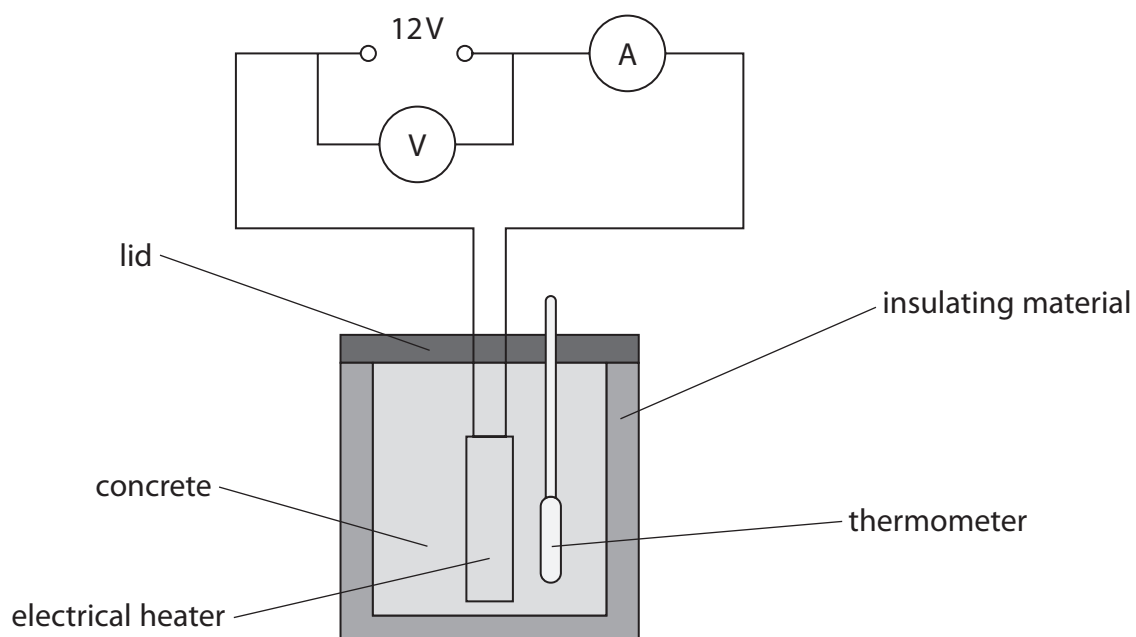
The photograph shows a concrete and water heating system being built into the roof of a house.



(Source: © ejhgndrn/Shutterstock)

(a) A scientist wants to determine the specific heat capacity of concrete.

The diagram shows some of the equipment they could use.



Describe a suitable method to find the specific heat capacity of concrete.

(5)

- (b) Explain the advantage of the concrete having a high specific heat capacity when it is used to heat water in the heating system.

(2)

**(Total for Question 8 = 7 marks)**

**TOTAL FOR PAPER = 70 MARKS**

