

# Heating up and cooling down II

This task is about heat conduction.

a) In Box 3, diagram (a), put the letters A, B, and C to show the thermometer positions, so that they match the graph.

Box 1	Box 2
<p><b>Aim:</b> To measure the rate of temperature change of a material at different distances from a heat source.</p>	<p><b>Results:</b></p>
Box 3 (diagrams)	
<p><b>(a) Birds eye view</b></p>	<p><b>(b) Front view</b></p> <p><b>KEY</b></p> <ul style="list-style-type: none"> <li> Heat source</li> <li> Test material</li> <li> Thermometer</li> <li> Position of thermometer</li> </ul>

**A**

**B**

**C**

b) How long after the start of the experiment, was the heat source removed?

c) What was the temperature of C after 8 minutes?  °C

d) How long did it take for A to reach 40°C?  minutes

e) Which thermometer positions produced a temperature of at least 35° C? (*select as many as you think*)

A

B

C

f) What was the temperature **difference** between A and C at 14 minutes?  °C

g) The materials were left to cool for another hour. What would be the probable temperature of B at that time?  °C