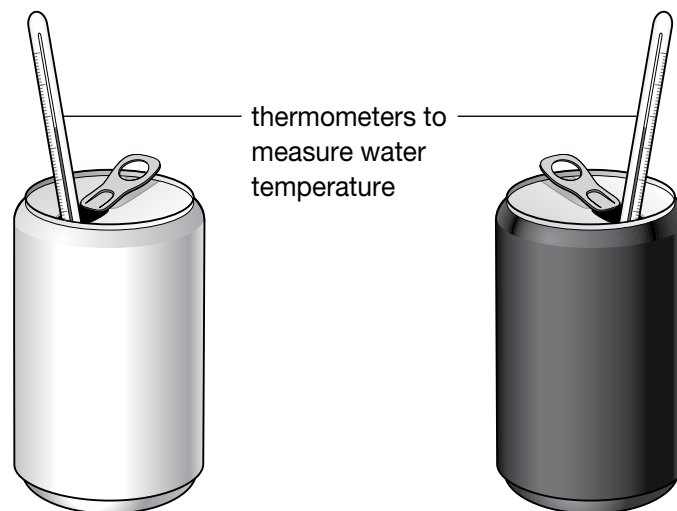


04

Jamila wants to investigate how changing the colour of a material affects the amount of infrared radiation radiated by the surface.

She has two identical soft drink cans. She paints one white and the other black.

Figure 5

She pours a small volume of water into the white can and uses a stopwatch and thermometer to record how the temperature changes with time. She obtains the results given in **Table 2**.

Table 2

Time (minutes)	Temperature (°C)		
	1st reading	2nd reading	Mean
0	60	60	
2	47	43	
4	37	35	
6	31	29	
8	24	26	
10	22	23	
12	22	21	
14	20	21	

04.1

Calculate the mean temperature for each reading and use an appropriate number of significant figures. Write your answers in the table.

[3 marks]