

Name: \_\_\_\_\_ Date: \_\_\_\_\_

# Keeping warm



Use coordinates and scales to interpret information in time graphs

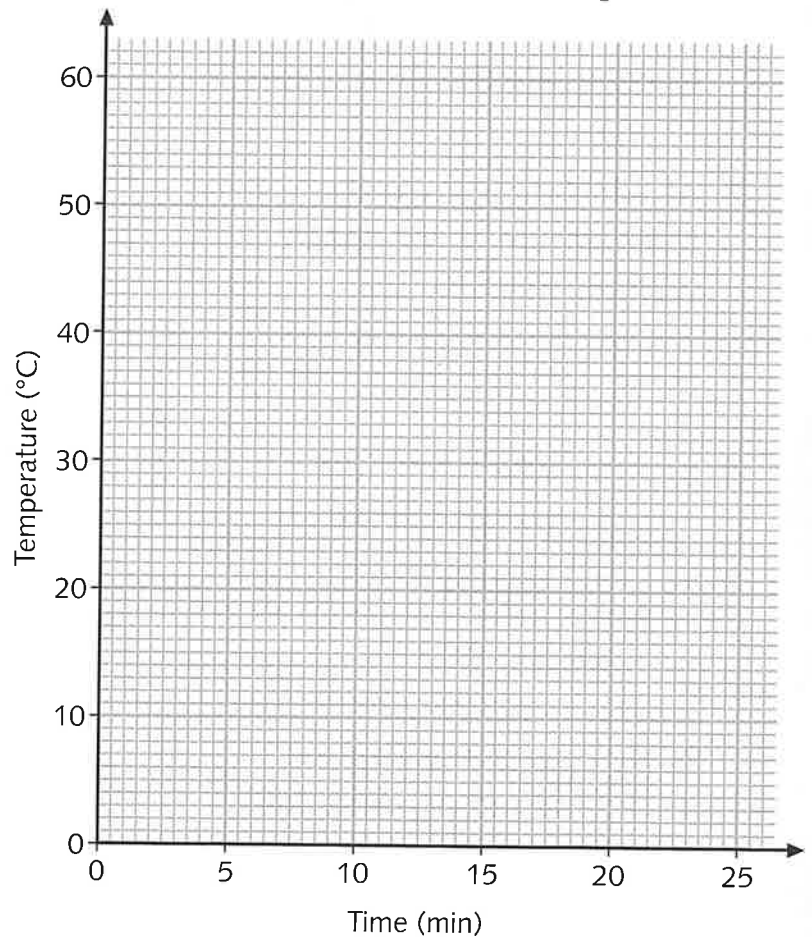
Some Year 5 children investigated which type of sleeping bag would keep you warmer – feather-filled or synthetic-filled. Every five minutes, they measured the temperature of a hot water bottle that they had placed inside each sleeping bag. The table shows their results.

### You will need:

- ruler
- red pencil
- blue pencil

Time (min)	Temperature (°C)	
	Feather	Synthetic
0	60	60
5	55	52
10	50	44
15	46	38
20	42	32
25	37	27

Temperature readings



- 1 Use the data in the table to complete the time graph. Draw the line for feather in red and draw the line for synthetic in blue.

- 2 Estimate the difference in temperature between the two hot water bottles at:
- a  $12\frac{1}{2}$  min       b  $17\frac{1}{2}$  min       c  $22\frac{1}{2}$  min

- 3 Which sleeping bag filling is the better choice? \_\_\_\_\_

Write a statement on the back of this sheet justifying your reasoning.