

Drawing Temperature and Pressure Contours

Lines of equal temperature – temperature contours, are called *isotherms*.

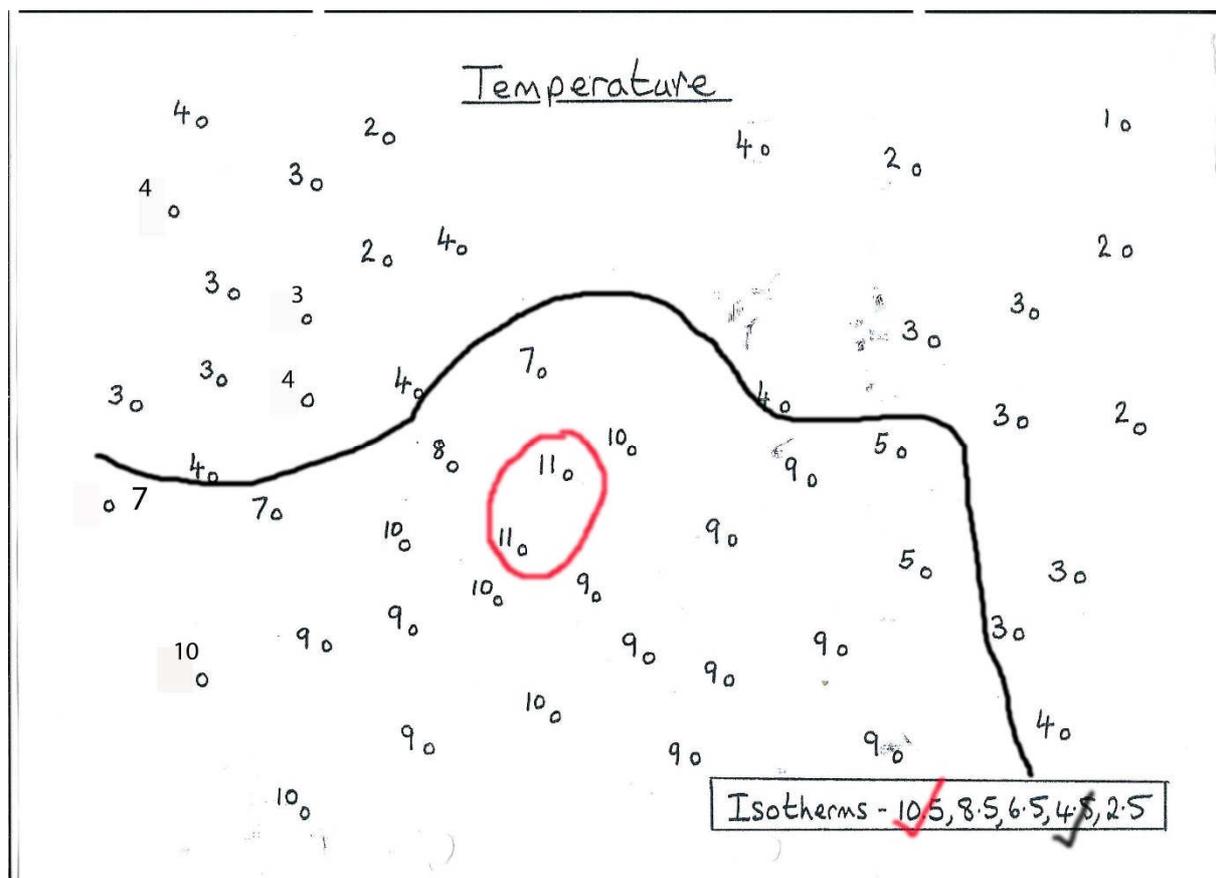
In this exercise, the task is to draw the 8.5°C, 6.5°C and 2.5°C isotherms. The 10.5°C and 4.5°C isotherms have already been drawn to help.

Start with the 8.5°C isotherm. This is the line which has everything warmer than 8.5°C on one side of it, and everything colder than 8.5°C on the other side. You could use a coloured pencil to colour in the dots for everywhere that is warmer than 8.5°C. Your isotherm is then the line which separates your coloured dots from the uncoloured ones.

Next, try the 2.5°C isotherm. For this, you could use a different colour to shade the dots for everywhere that is colder than 2.5°C.

Lastly, draw the 6.5°C isotherm. This will be very close to the 4.5°C isotherm in places, so be careful! To help with this, you could use a 3rd colour to shade the places where the temperature is 7 or 8°C, and a 4th colour to shade the places where the temperature is 5 or 6°C. Your line will divide the two.

Remember, contours can never touch or cross each other (it can't be 8.5°C and 6.5°C at the same place!). The line should start and finish at an edge of the page.



These two maps both correspond to the same weather situation. Can you work out what is going on?

Clues:

- Where is the pressure lowest?
- How is the wind direction changing across the map?
- In general, where is the temperature lower and where is it higher?
- Where is the temperature changing most rapidly? Remember that a front is where cold and warm air meets. You can use the wind information on the second map to see where the cold air is pushing into the warm air (a cold front) or whether the warm air is pushing into cold air (a warm front).

