

3.4 Investigation Keeping it cold

Equipment provided:

Various materials e.g. wool, cotton, paper, cardboard, alfoil, ice cubes, stopwatch

Question

What can you do to stop ice from melting?

Try different materials to wrap your ice in.

Which material would be best to preserve the ice?

Method

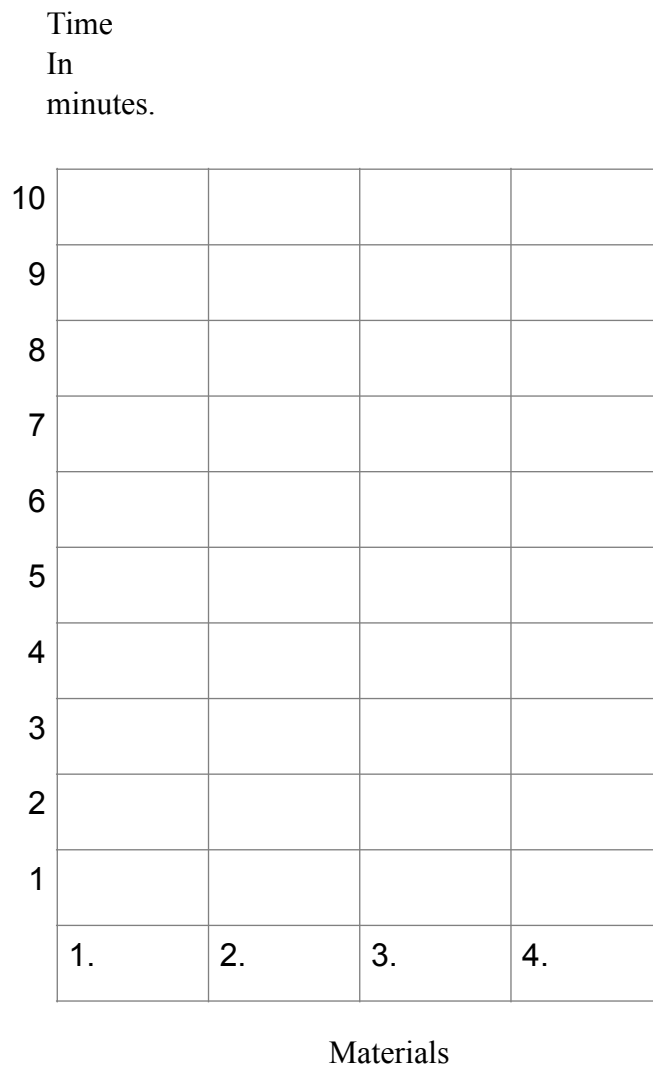
1. Put a full ice block tray in the freezer overnight.
2. Choose 4 materials that you believe would work well to keep the ice blocks cold.
3. Cut the materials so you use one layer only of each material.
4. Remove the ice blocks and wrap each block with a different material. (You have to be quick!)
5. Put the blocks on a tray and start the stopwatch to measure the time for each to melt in minutes. Use the sun if you want to speed it up.

Results

Material used	Time to melt

Graph

Draw a column graph to show the material and its melting time.



Conclusion

1. Did your results prove you were right?
2. Write the order for best to worst insulator:
3. Why do you think some materials were better than others?
4. What other things could you test to keep ice cold?