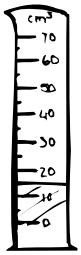
Ice pops

Jordan, Lewis, Paul and Marco were investigating which material is the best to stop their ice pops melting. In their discussion, Paul suggested that they could cover the unmelted ice pops with the materials, leave them, then measure how much liquid there was inside.

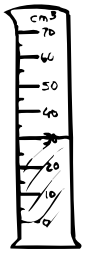
They wrapped up each ice pop with five layers of a material, left them all for 30 minutes, then removed the material and cut a hole in the bottom of each ice pop to let the liquid run out into a measuring cylinder.

Here are their results.

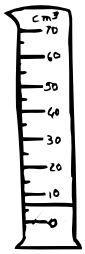


A – newspaper

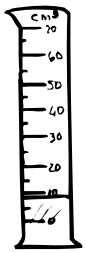
B – cling film



C – cooking foil



D – thin polystyrene



E – bubble wrap

F – tea towel

Questions

1. Fill in the children's results in this table.

Wrapping	Amount of liquid/cm³

2. Draw a bar graph to show the children's results. You could use a set of blank graph axes for this. Remember to label the axes correctly.

3. Which wrapping material produced the most liquid?

4. Which wrapping material is the best for keeping an ice pop frozen?

5. How can you tell this from the graph?

6. What name do we give to a material that stops heat passing through it?

7. What name do we give to a material that lets heat pass through it?

8. Write down two other things that the children should have done to make sure their investigation is a fair test.

9. How much liquid do you think would be formed if the children wrapped the ice pop in kitchen roll?

10. Explain your answer to Question 9.