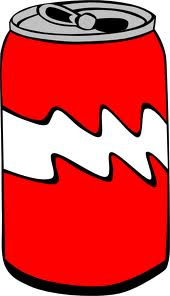
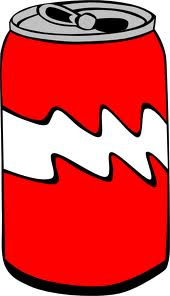
**Design Sketch**

How your design will slow thermal energy transfers.



**Thermal Energy Transfer**

How thermal energy was transferred to the can.



**Name: Hour:**

**Improvements** - Rough Draft

Think about how you would improve your design. Take ideas that you have from your testing, along with what you learned by observing others, to write a paragraph explaining at least two changes you would make and the reasoning behind them. This should be written in paragraph format that includes many details.

|  |
| --- |
|  |

**Data Chart**

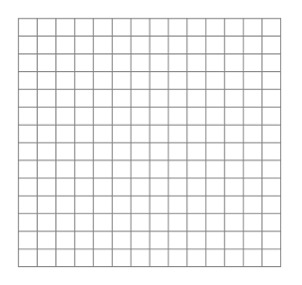
|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Time | 0 min. | 5 min. | 10 min. | 15 min. | 20 min. | 25 min. | 30 min. |
| Experimental Can Temperature (°C) |  |  |  |  |  |  |  |
| Control Can  Temperature (°C) |  |  |  |  |  |  |  |

**Change in Temperature**

Experimental Can: \_\_\_\_\_\_\_ °C

Control Can: \_\_\_\_\_\_\_ °C

**Graph**



Cold Can Challenge

Display Checklist

* Title and names of all group members
* Design Sketch
  + Include all material used and why you used them to slow thermal energy transfers
  + Include words such as insulator, conductor, absorb, and reflect
* Data Chart and Graph
  + Data recorded
  + Title for graph
  + X and Y axis labeled
  + Appropriate scale for each axis
  + Line graph for experimental can and control can
* Thermal Energy Transfer - Explanation and drawing of how the thermal energy was transferred to the can
  + Include radiation, conduction, and convection in your explanation
  + Include areas of the box that transferred heat through radiation, conduction, or convection
* Improvements - Changes for the future to improve your design – added after presentations

**Improvements** by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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