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L.Q. Can I investigate thermal conductors and insulators?

HPL: Octavia x Esmerelda

We will be testing: tin foil, cling film, cotton wool, fabric and a paper towel.

I predict that the tin foil will be the best material for my lunch box because it is a good conductor of the heat.

Independent variable: the material will change

Dependent variable: how much the ice cube will melt

Controlled variable: the temperature, the time, the amount of material & the size of the ice cube.



## Investigating Materials

Carry out your investigation and record your results in the table below.

| Material    | Starting state / temperature of contents | Temperature/state of contents after 5 minutes | Temperature/state of contents after 10 minutes |
|-------------|--|---|--|
| tin foil    | frozen                                   | frozen  | beginning to melt                              |
| cling film  | frozen                                   | beginning to melt                             | partly melting                                 |
| cotton wool | frozen                                   | frozen  | slightly                                       |