

### 3.5P Project “Make a Cool House”

**Aim:** To Design, build and test a model house that stays cool in summer.

**Equipment:**

Cardboard box, various materials for lining, knife or scissors for cutting, tape, thermometer or temperature sensor.

**Construction:**

Must weigh less than 500g and be less than 50cm square

Use only self-designed materials

Not include any electrical or mechanical devices or liquids.



**Assessment**

This will be based on:

1. Results of temperature tests done inside the house compared to outside when the house is In the sun
2. Your Report on methods to keep it cool.

**Method**

1. Decide the type of House you want e.g. low set, 2 story, # of windows, ventilation.
2. Decide on materials of the house and how it will cool or warm the house.
3. Explain to your teacher your ideas (you can draw, speak or show)
4. Once you have teacher’s approval, construct your house!
5. Measure the temperature to see if it works well by testing it in the sun over a period of time of 10 minutes.
6. Final test – record the stable temperature inside and outside.

**Results**

Did it work well?

What did you change?

What other things would you like to try?