

# Weather for Schools

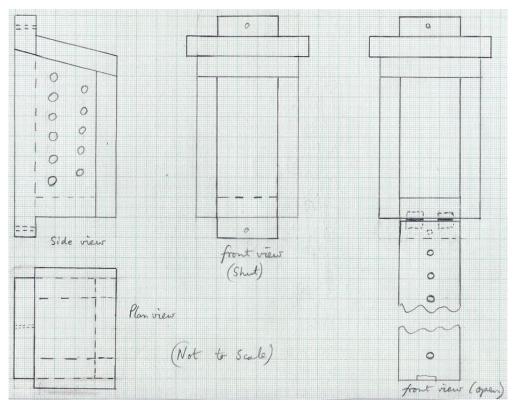
# Building a Wooden Weather Station for a Digital Thermometer

This design is simply a guide. It is intended to be made by adults taking sensible safety precautions. The user is responsible for his/her own wellbeing and safety.



This easy-to-make weather station is intended for use with a digital thermometer. These can measure current, maximum and minimum temperatures. Some also have the facility to plug in an external thermometer which could be used to measure the grass temperature. There are some that can measure the humidity of the air to give another important weather reading. The dimensions used in this example are only a guide; adjust them if your thermometer is a different size.

The weather station provides for circulation of air whilst stopping most rain and wind. The whole should be painted white to reflect sunlight. The whole should be mounted on the north facing side of a post so that the bottom of the thermometer is 125cm from floor level.



## **Materials**

- 1 x plank of smooth planed wood 210cm x
  9.4cm x 1.8cm
- 9 x screws No8 x 1 ¼ inch
- 2 x small brass hinges
- Magnetic or other catch
- Paint (primer, undercoat and gloss)

### **Tools**

Sandpaper

Saw

Drill

Drill bit

Hole cutter 16mm

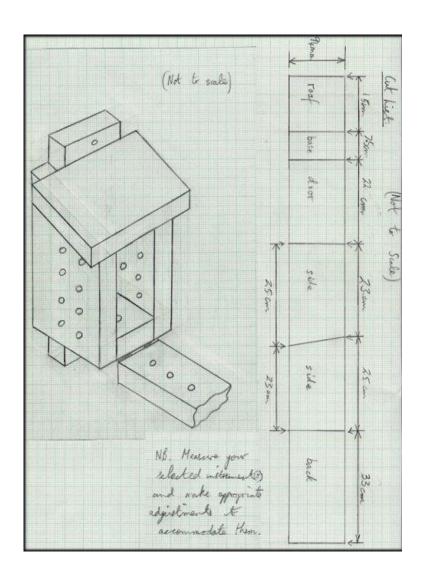
Countersinking tool

Screwdriver

Paint brush



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### Method

- 1. Mark the wood, cut and sand the pieces. Note that the sides are intended to slope at the top, so that the roof is sloping.
- 2. Rule a line 3cm from the bottom end of the back.
- 3. Fix the long edges of the sides to the back, aligned above the 3cm line (2 screws, drill and countersink)
- 4. Fix the base aligned above the 3cm line (one screw each side and one at the back).
- 5. Attach the roof, making sure it touches the back.
- 6. Drill mounting holes at the top and bottom of the back.
- 7. Drill 16mm ventilation holes in sides, front and base. These are at 5cm intervals. Avoid screws.
- - (final coat white gloss).
- 9. Mount door
- 10. Attach catch.

