

# Making a Sundial

## You will need:

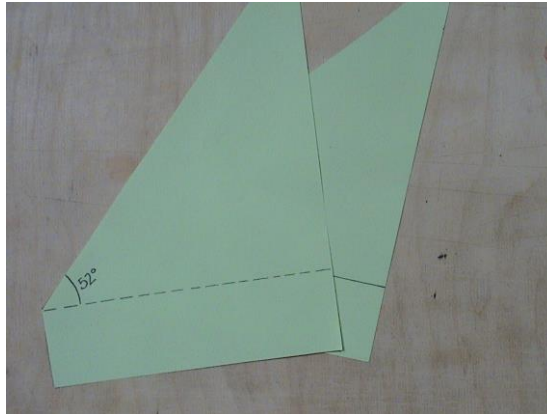
thick cardboard  
ruler  
compass

flat piece of wood  
pen  
protractor

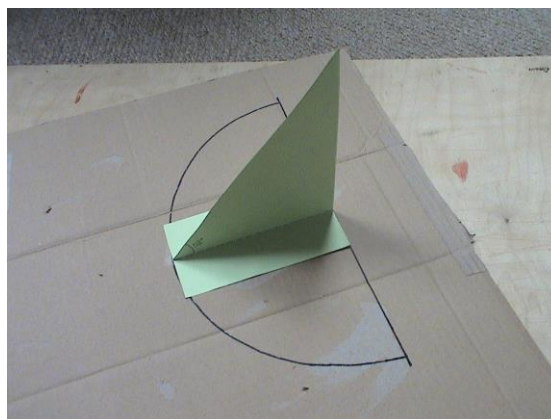
scissors  
glue or sticky tape

## What you do:

1. Draw the outlines of two marker shapes on to the cardboard and cut them out (52 degree triangles with an extra inch along the base for folding back and sticking).

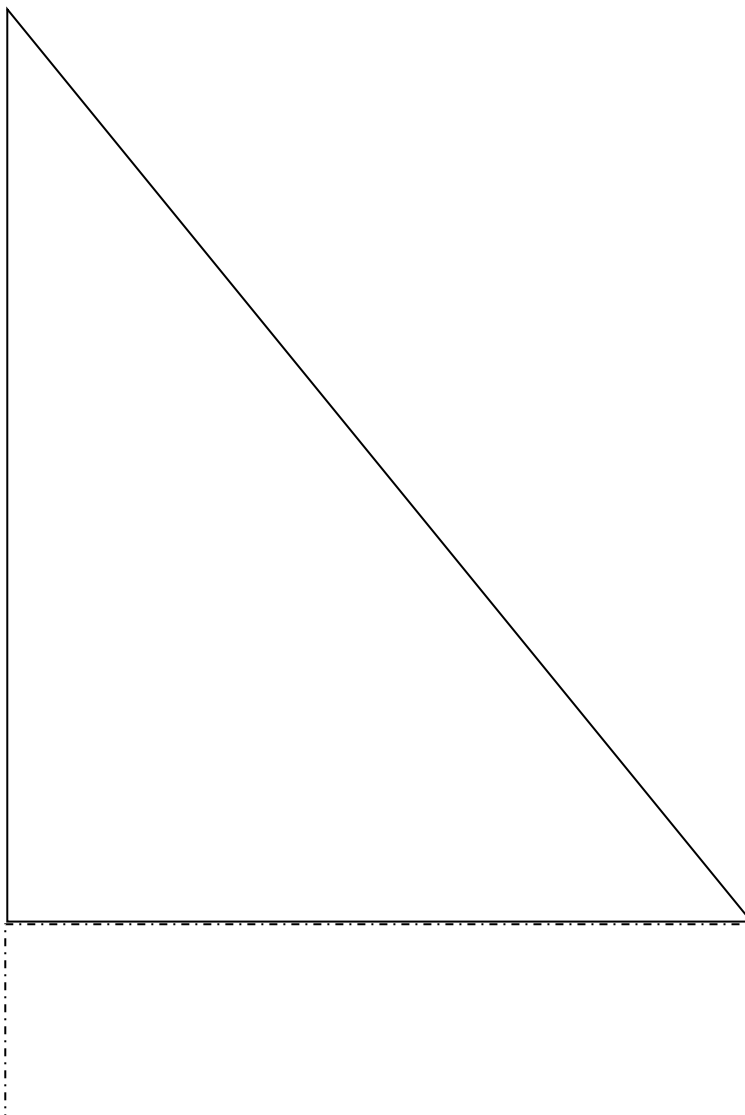


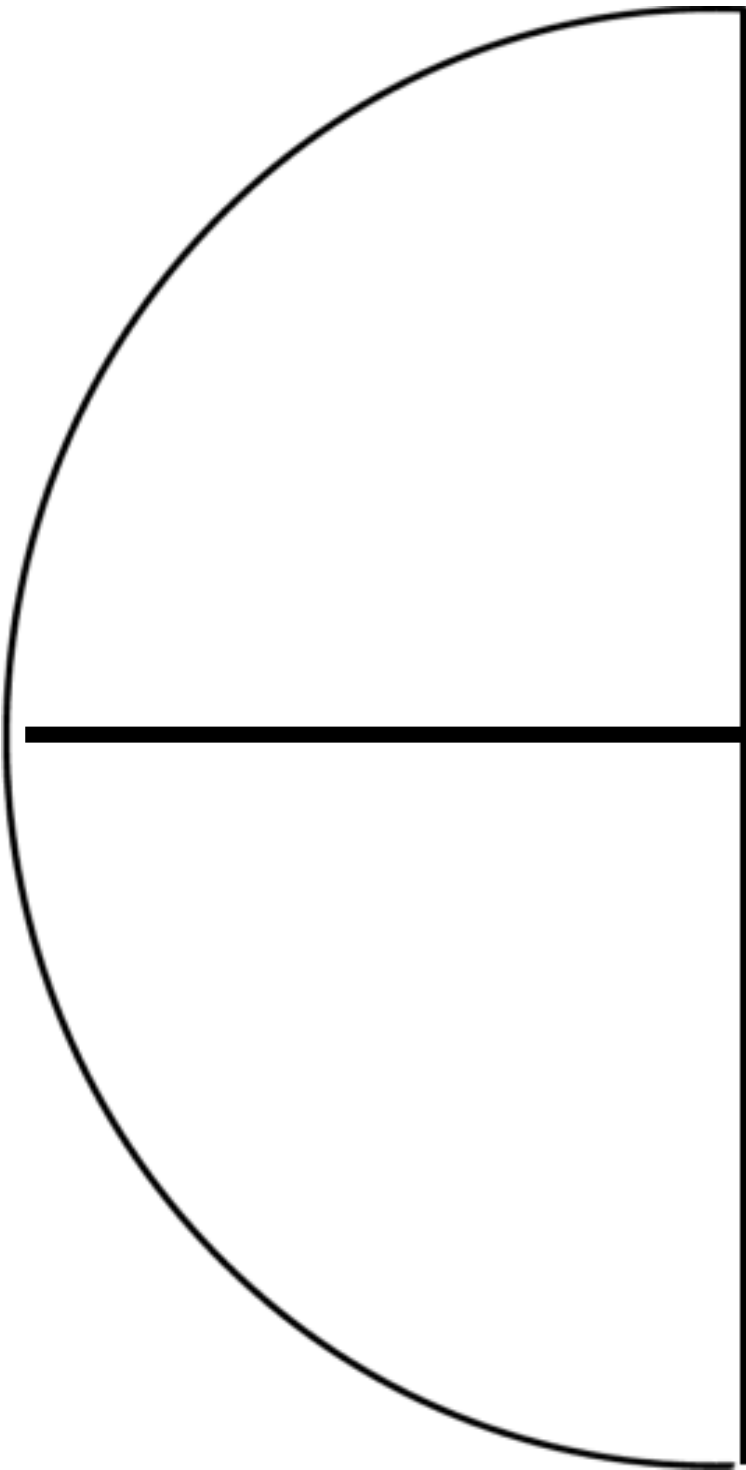
2. Score a line 1 inch in from the base of the triangle (long side) and fold back along the line.
3. Stick the two shapes back to back, leaving the inch section sticking out on both sides (these will be used to glue the marker down on to the wood and to give it stability).
4. Draw a half circle on a piece of wood (same radius as length of marker).
5. Stick the marker down the middle of the semicircle, leaving a quarter circle on each side.



- Using a compass, point the marker towards the south and position the sundial on a flat surface.
- Mark the position of the shadow cast by the sun on the semicircle every hour, on the hour.

Enlarge and Photocopy to make marker template:





# Make a Simple Sundial

You will need:

- Plasticine
- Two rulers
- Sun



Take a ruler and make it stand on its edge using pasticine feet!



Place another ruler next to it. Make sure that 0 cm is closest to the upright ruler.



Watch as the sun creates a shadow on flat ruler. Record the length of the shadow.



Note as the shadow shortens and lengthens during the day.


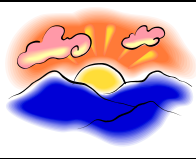


There you have it, a portable sun dial.

# UK Daylight Hours



This table shows the average number of daylight hours per month.

Month	Hours		
January	8	08:05	16:00
February	9	07:39	16:47
March	11	06:46	17:38
April	13	06:36	19:31
May	15	05:32	20:21
June	16	04:48	21:06
July	16.5	04:46	21:20
August	16	05:23	20:49
September	14	06:11	19:48
October	11	06:59	18:39
November	10	06:52	16:34
December	8	07:42	15:55

Sunrise and Sunset times based London on the 1<sup>st</sup> of each month.