

## HOW TO BUILD A SUN DIAL

- 1 Creating the base:**  
Draw and cut out a rectangular or circular shape onto a large piece of cardboard.
- 2 Creating the gnomon:**  
Draw and cut out a right-angle triangle.
- 3** Using a protractor (if you don't have one visit [www.ginifab.com/feeds/angle\\_measurement/](http://www.ginifab.com/feeds/angle_measurement/)), adjust the angle of the gnomon (triangle) to create one edge at an angle of 51 degrees.
- 4** Attach a long stick to the edge of the gnomon (triangle) so that the stick is also angled at 51 degrees.
- 5** Stick the gnomon to the centre of the cardboard base.

## HOW TO USE YOUR SUN DIAL

- 1** Take your sun dial outside at 12 o'clock (midday).
- 2** Using a compass find north and rotate the base around until the gnomon is pointing towards north.
- 3** Use a marker pen to draw on the base where the tip of the shadow is on the base. This will record where 12 o'clock is.
- 4** Each hour, on the hour, observe where the shadow has moved to and place a marking point onto your base.
- 5** If you can, keep the sundial in the same position so that on the following day you can add the time intervals for before 12 o'clock (midday).