

1) Print or copy the Scouts go Solar Diptych Sundial model on paper. For sturdiness, consider pasting it on cardboard.

- 2) Carefully cut along the outer and pointed lines, following the instructions to create the sundial's shape
- 3) To customise the sundial to your location, find your latitude using an Atlas or online resources.
- 4) Mark lines on each side of the sundial's base corresponding to your latitude and hemisphere (from 0° to 45° North or South, you draw lines
- on all four side flips, from 45° upwards there are two lines to be drawn). Extend the lines to the border of the paper.
- 5) Fold the side flips downwards by 90°. All folds are easier to realise if bend against a metal ruler.
- 6) Fold the paper upwards along the horizontal central line by 90°.
- 7) Fold the paper downwards along the lines you drew corresponding to your latitude.
- 8) Correct all folds until they have an angle of 90°.
- 9) Create small holes where all the hour lines meet at the top and bottom of the sundial.
- 10) Tie a string through those holes. The shadow cast by the string will act as the sundial's pointer and tell the time. Install the string in a way that the sundial has a 90° bend in its centre.
- 11) We suggest to glue your sundial on this paper square (printed side facing down) which serves as base. Cut the excess length after glueing. 12) For the sundial to function, find a place where the pointer (the string) casts a shadow.

(Use the square above as base (printed side facing down))



Find more information here: https://sdgs.scout.org/explore/activity-types

Please be cautious when handling sharp objects and tools !