

Build a sundial

Name of the object and creator	The sundial by Logopsycom				
Recommended ages	8-12 years				
Thematic areas combined (STEAM)	Sciences	Technology	Engineering	Arts	Mathematics
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Materials needed	<ul style="list-style-type: none"> • Scissor • Cardboard • A set square • A plate or a compass • 1 wooden skewer • A marker • A compass or a compass app 				
Outline of the steps	<ol style="list-style-type: none"> 1. Creation of the sundial base 2. Marking hours of sunshine 				
References	<ul style="list-style-type: none"> • 3 Ways to Make a Sundial. (2023). WikiHow. https://www.wikihow.com/Make-a-Sundial • La Fondation La main à la pâte. (s. d.). Le cadran solaire. Consulté 25 avril 2023, à l'adresse https://fondation-lamap.org/documentation-scientifique/le-cadran-solaire 				

STEP BY STEP: How to build a sundial

Step 1: Creation of the sundial base

Estimated time: 20 minutes

- Gather the materials.



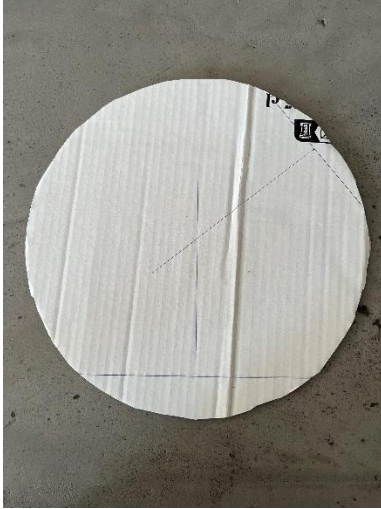
- Use a plate or compass to draw a circle on the cardboard.



- Cut out the cardboard circle and write the number 12 on the edge of the circle.



- Find the centre of the circle by drawing two lines and their medians (on the back of the cardboard).



- Draw a line from the number "12" and the centre of the circle.



- Pierce a hole in the middle with the skewer stick.



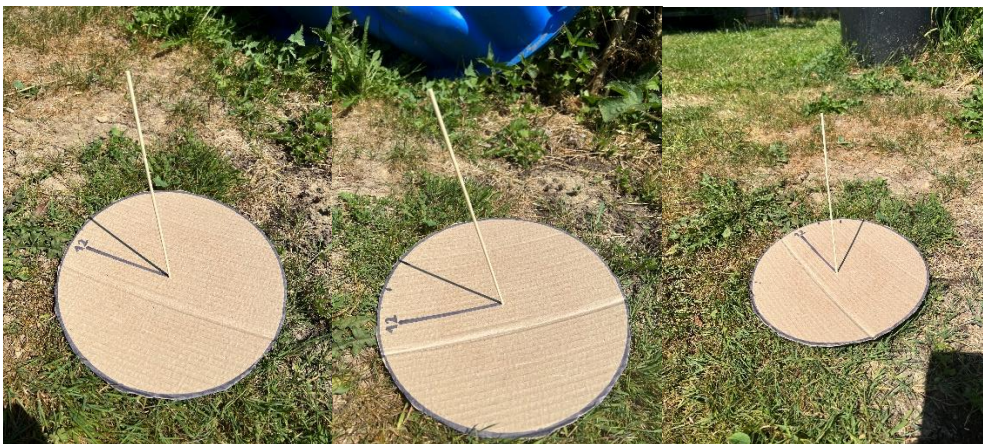
Step 2: Marking hours of sunshine

Estimated time: all day

- Go outside just before 12 noon and find somewhere that stays sunny all day. Place your sundial on a flat surface and place an object on it if it's windy.
- Put your compass on the ground and determine where North is. Tilt the skewer towards the North if you are in the Northern Hemisphere and towards the South if you are in the Southern Hemisphere.



- When it's noon, align the shadow of the wooden spike with the line you've drawn.
- Set an alarm a few minutes before each hour on the dot to go and look at your sundial and place a mark at each hour of the day.



- At the end of the day, you'll get a dial showing the hours of sunshine.

DISCLAIMER

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.



**Co-funded by
the European Union**