

Make your own light meter



Did you know that light can damage objects? Light can fade, crack and make objects turn brittle or change colour. Paper, painted objects, stuffed animals, wood, and leather can all be damaged by light.

Museums use light meters to make sure light levels aren't high enough to cause damage. You can make your own light meter, just follow these instructions:

A cereal box or similar	Greaseproof paper cut into 12 strips 3cm wide and the following lengths:		
Black pen	22cm	17cm	13cm
Scissors	20cm	16cm	12cm
Sellotape	19cm	15cm	11cm
Glue	18cm	14cm	10cm



To make:

Sellotape the open end of the box closed.

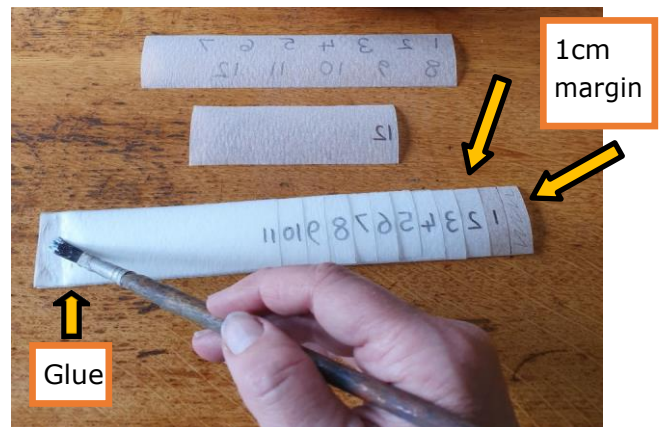
Cut a rectangular hole 20cm x 4cm in one side of the box and another hole 2cm x 2cm in the centre of the opposite side.



Glue the greaseproof paper strips together at one end, one on top of the other. Longest first and shortest last.

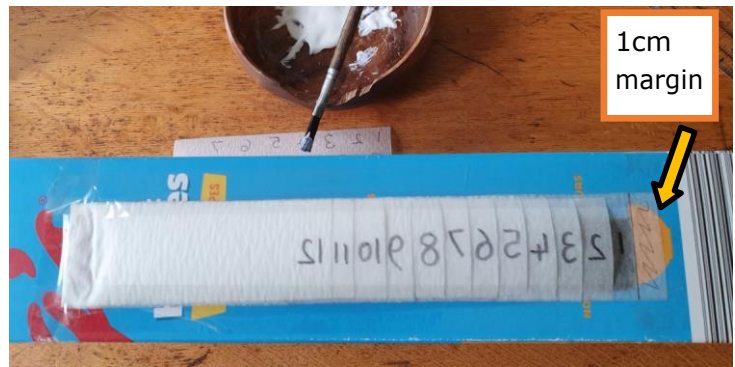
Using the black pen, write a number on the end of each strip, in the middle of the 1cm margin. Leave a margin of 1cm on the end of the longest strip.

The numbers need to be written back to front! If this is tricky, write the numbers 1 to 12 on a spare piece of greaseproof paper and then turn it over and copy those.



Tape your numbered paper strips over the large rectangular hole in the side of the box.

Make sure the numbers are not covered up by the sides of the hole. This is where the 1 cm margin at the end of the longest strip helps.



The light meter is now ready to use!

Look through the small hole to view the numbers. What is the highest number you can view clearly?

Is there a difference in light levels in different rooms, in different areas of a room, or at different times of the day?

Where could objects be displayed so they can be seen **and** protected?

