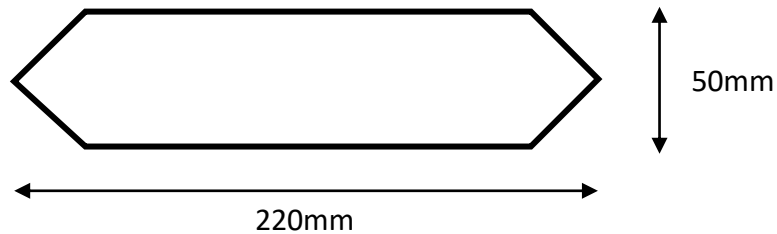


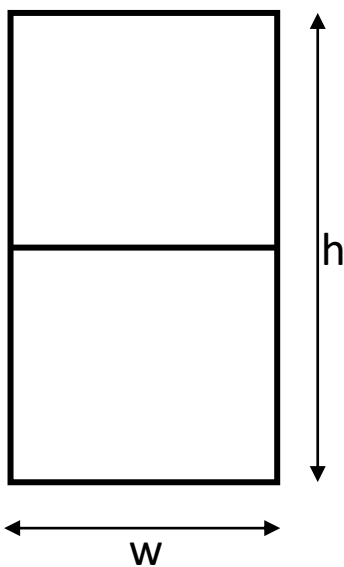
# How to make your Tidal Countdown Window Lantern

You can make your window lantern any way you like, but we have found this to be the simplest way.

1. The countdown clock is made of two digits, side by side, each digit made up of seven lozenges, so knowing the size of the window you want to use and bearing in mind your overall design, cut one lozenge out of a stiff material. The angle for the points ideally needs to be 45 degrees. We think a good ratio of length ( point-to-point) to width is around 5-to-1. The example we will use here is a lozenge measuring 220mm point-to-point by 50mm wide.



2. You can now work out the size of the digits you will make, and the size of the two boxes you should draw to help you make the clock, which will look like this:



The height will be two times the lozenge length, plus 40mm.

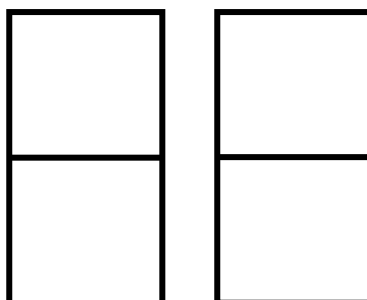
In our example, that's :  $h = 2 \times 220 + 40 = 480\text{mm}$

The width will be the lozenge length, plus 20mm.

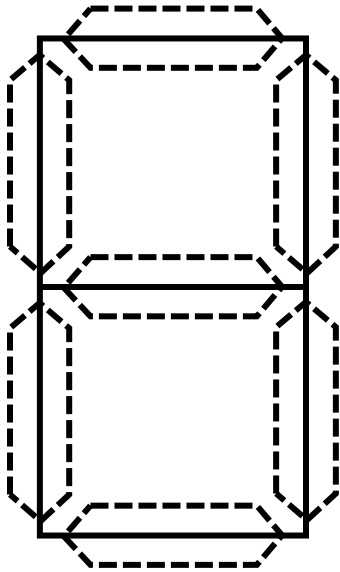
In our example, that's :  $w = 220 + 20 = 240\text{mm}$ .

These lines are the guidelines you will use to draw your lozenges using the original one you made ( it's really helpful later if they are all the same size )

3. As with the Moonshine window lanterns, cardboard is the perfect material for this. Once you have found the cardboard you wish to use and cut it to the size of your chosen window, you can draw the two boxes side by side where you need the digits to go, like this. Be careful with placement, as your clock digits will be slightly larger than these boxes when you are finished.



4. It is time to draw your clock digits. **Using the original lozenge**, place it centrally on each line as shown below and draw around it. The points at the ends will help you line them up perfectly.



You will see that the clock digits are larger than the box you drew by exactly half the width of one lozenge all round, which is one lozenge width overall.

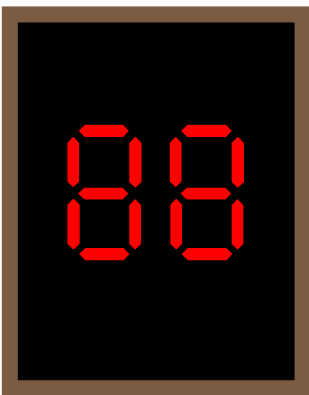
So in our example, the box we drew was 480mm x 240mm.

The digit height is thus :  $480\text{mm} + 50\text{mm} = 530\text{mm}$

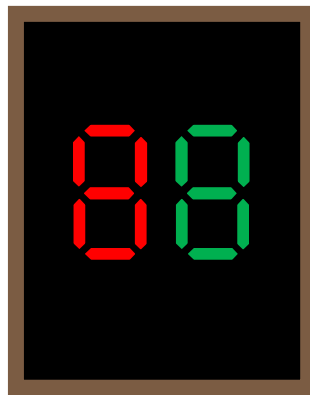
And so the digit width is :  $240\text{mm} + 50\text{mm} = 290\text{mm}$

5. Now for the tricky bit. You need to cut out all seven of the lozenge shapes you have drawn in each digit of the clock, and **remember to keep the lozenges you have cut out** – you will be needing them to make the clock work! This task is much better with a box knife or Stanley knife than with scissors if we are to have 14 identical lozenges left over, so grab a ruler and take care.

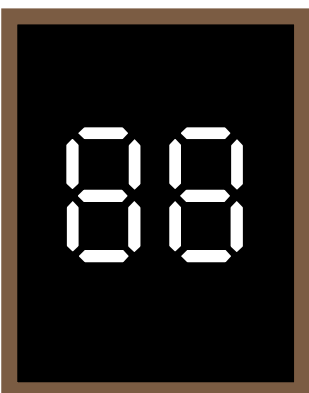
6. That's the hard part done! Now you simply have to finish making the window lantern you have designed using coloured tissue paper, or cellophane, or whatever you have decided upon. Some illustrative examples are shown below, depending on your level of ambition and patience.



Classic LED wristwatch



Christmas LED wristwatch



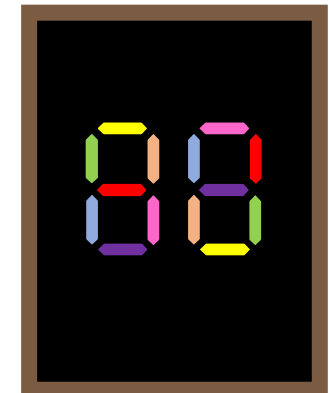
Classic LCD wristwatch



Unicorn SMILEYTIMER



It's the tidal countdown



Unicorn LED wristwatch