

# NO STRINGS: CAROLINE BROADHEAD PERSPECTIVE AND ILLUSION

Caroline's work called 'Incomplete Image' is incredibly intricate and uses a lattice style of beading. Look carefully at the image below, where the rows are pushed together you can see the picture hidden within, and where they are pulled apart it begins to disappear. The success of this relies on exact measurements and every bead being in the exact place it needs to be.

Find out more about Caroline's work and take the virtual tour of No Strings by clicking the image



Caroline Broadhead, *Incomplete Image*

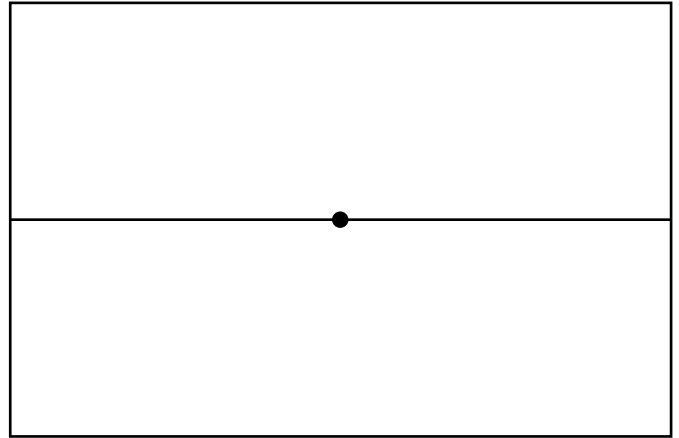
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## Perspective is a Wonderful Thing!

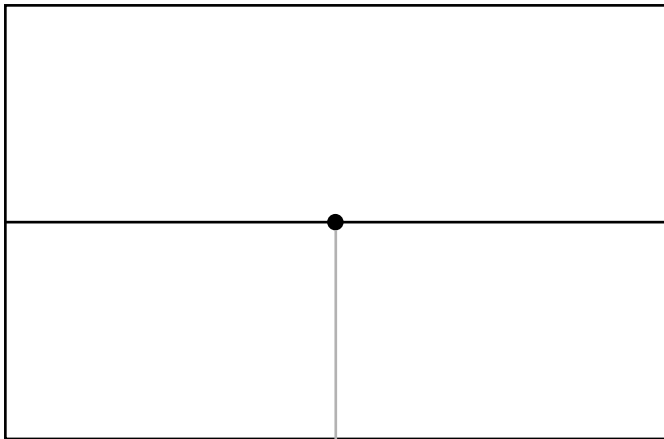
To make something look realistic, like Caroline's beaded picture, you need to understand perspective. To do this you first need to think about what is nearest to you and what is far away in the distance. Follow the steps below to do a one-point perspective drawing.



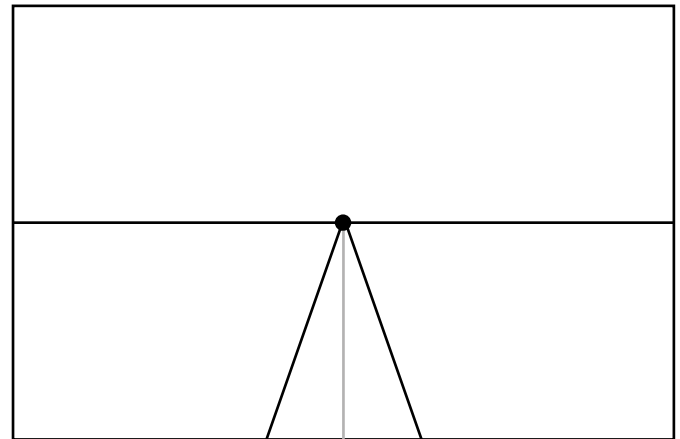
Draw a line half way across your page – this is called a horizon line



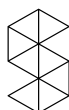
Mark a dot in the middle – this is called the vanishing point.



In pencil, draw a line straight down from the vanishing point



From your pencil line, measure two equal distances either side along the bottom of the page. Draw from the vanishing point to these marks to create two diagonal lines. You have just draw a road disappearing into the distance!



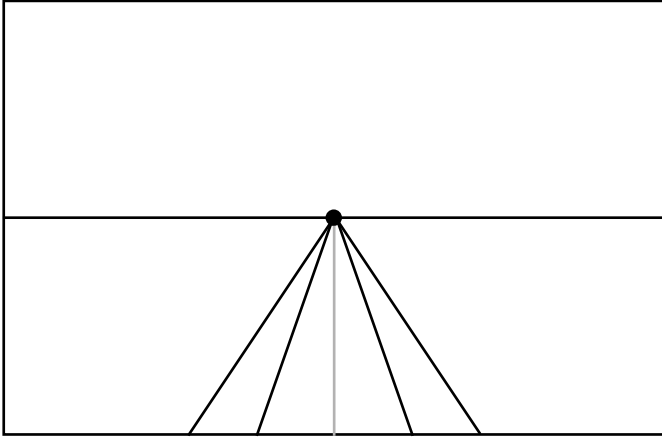
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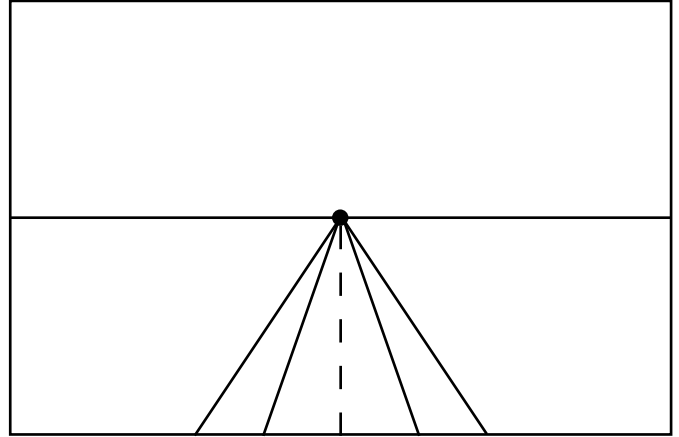
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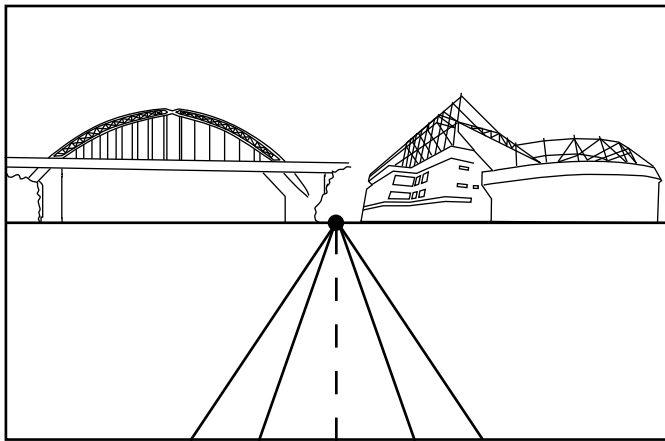
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Now draw two more diagonal lines to make the path – they need to be wider than your first two



Turn your vertical pencil line into road markings by rubbing out parts of it to create dashes



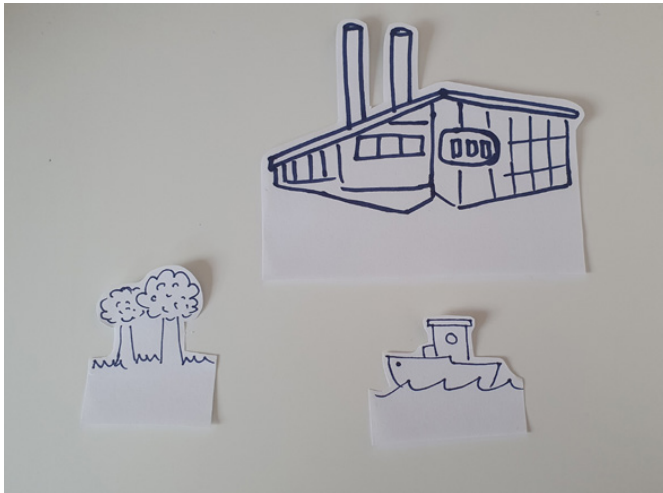
You can now add in the background by drawing on the horizon line. Imagine you are walking towards a town, some mountains or a woodland and draw what you can see in the distance. You can also add in detail on either side of things next to the road.

Can you tell what city features in our drawing?

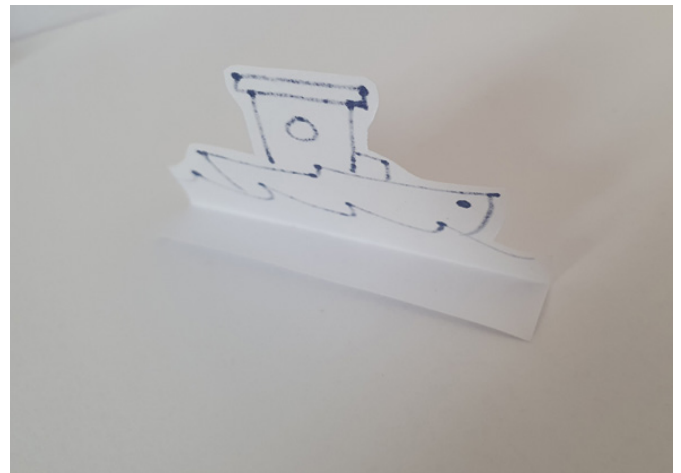
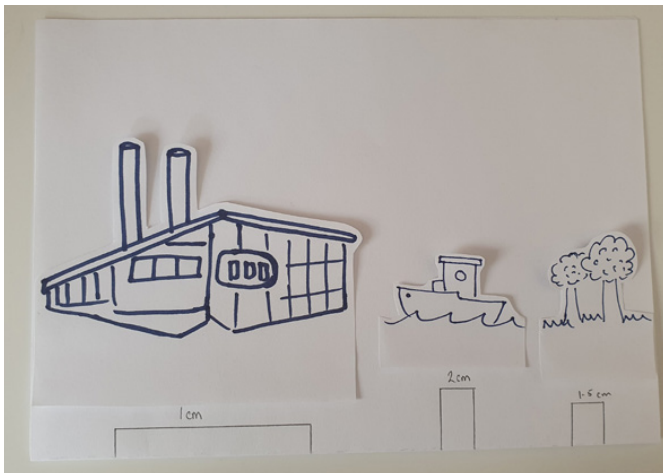
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## Pop-Up Pictures

Create your own 3-dimensional scene like this one of National Glass Centre... it can be of whatever you like, just remember how perspective works and choose buildings and scenery and decide where they will go before you start.



Draw your buildings and scenery and cut them out separately.

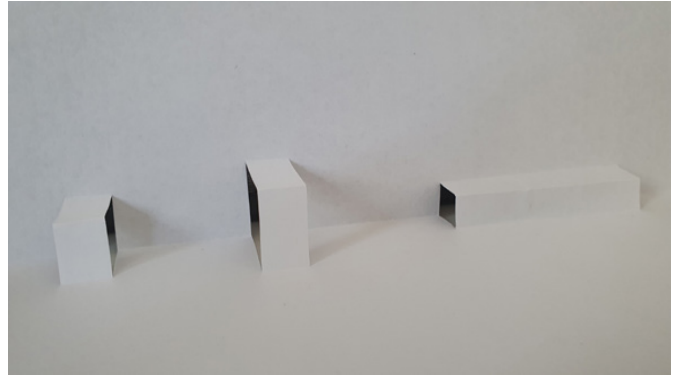


Fold a fresh piece of paper in half and mark out along the fold where the objects will go, make marks smaller than the actual width of the pieces. Decide what is going to be nearest and what is in the distance. The nearest things need to have the longest tabs, the farthest away need the shortest ones. You can also attach items at the very front by folding a tab that will be stuck separately.

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Make short cuts from the fold to the top of the measured line and fold up and back the other way.



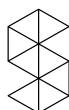
Open out the page and fold the tabs so they stand forward inside



Your drawings will be stuck to these on the vertical side – line them up to make sure they fit.



Colour in the individual drawings and complete the scenery. Finally stick your pieces to the tabs and your pop-up scene is complete! You can also make it into a card by covering it with another piece of folded paper and decorating the outside.



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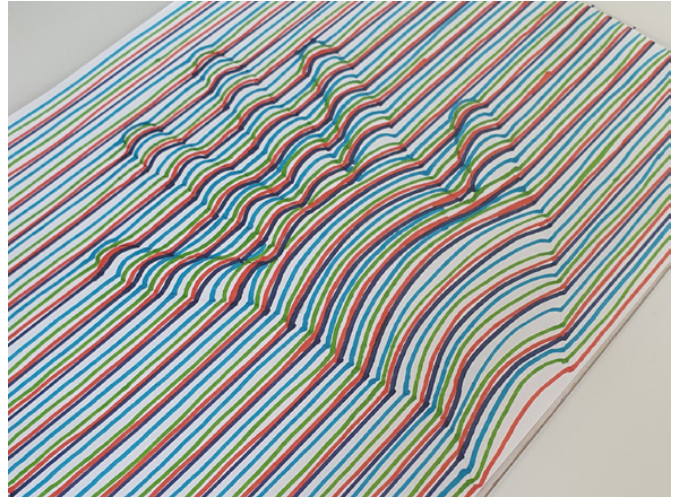




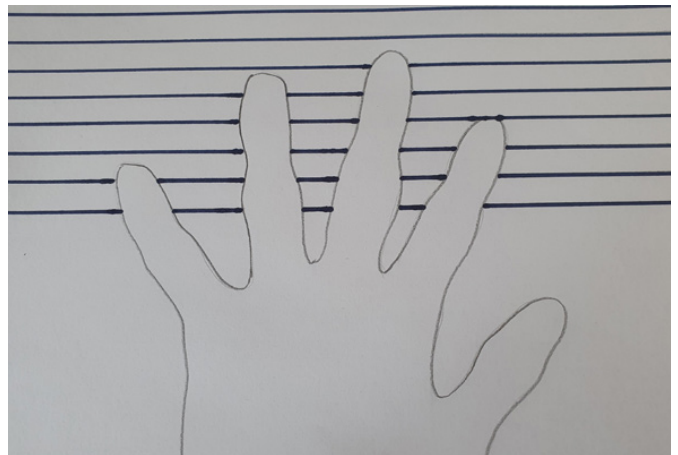
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## A Trick of the Eye...

Using drawing to make something that is 2 dimensional look like it is 3 dimensional is a real skill and takes a lot of practice. (We did some other 2D and 3D drawing activities in our online resource 'Faranak Sohi and Pop Art which is still available on our website). Caroline patiently works out where each of the thousands of beads needs to be in order for the finished image to look realistic. This next activity will challenge you to use lines to make a 3D drawing. With this optical illusion, you can make your hand appear 3D just by following these simple steps...



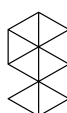
Draw round your hand lightly in pencil, we had to do ours heavily so you can see it in the photo but it will be easier if you do it with less pressure than we did!



Draw horizontal pencil lines across the whole page, but not through the hand outline. We did ours 1cm apart. Go over them in pen.



To make the hand look 3D you need to draw individual arches to join up the pen lines where there are gaps. Do these in pencil first, some might take a few goes to get right. Once you're happy with them, go over them in the same pen that you used for the horizontal lines.



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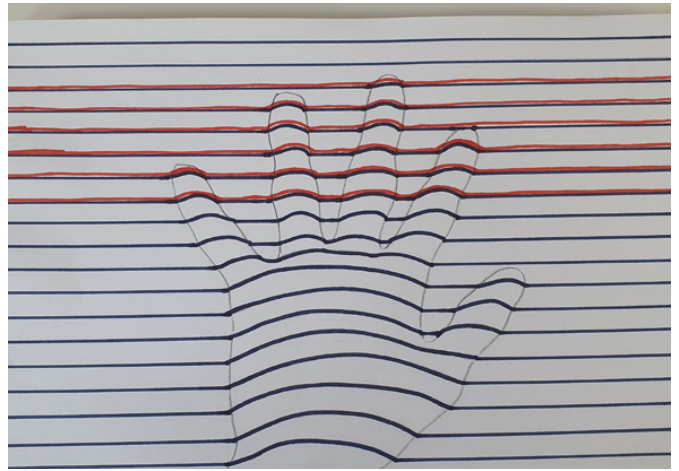


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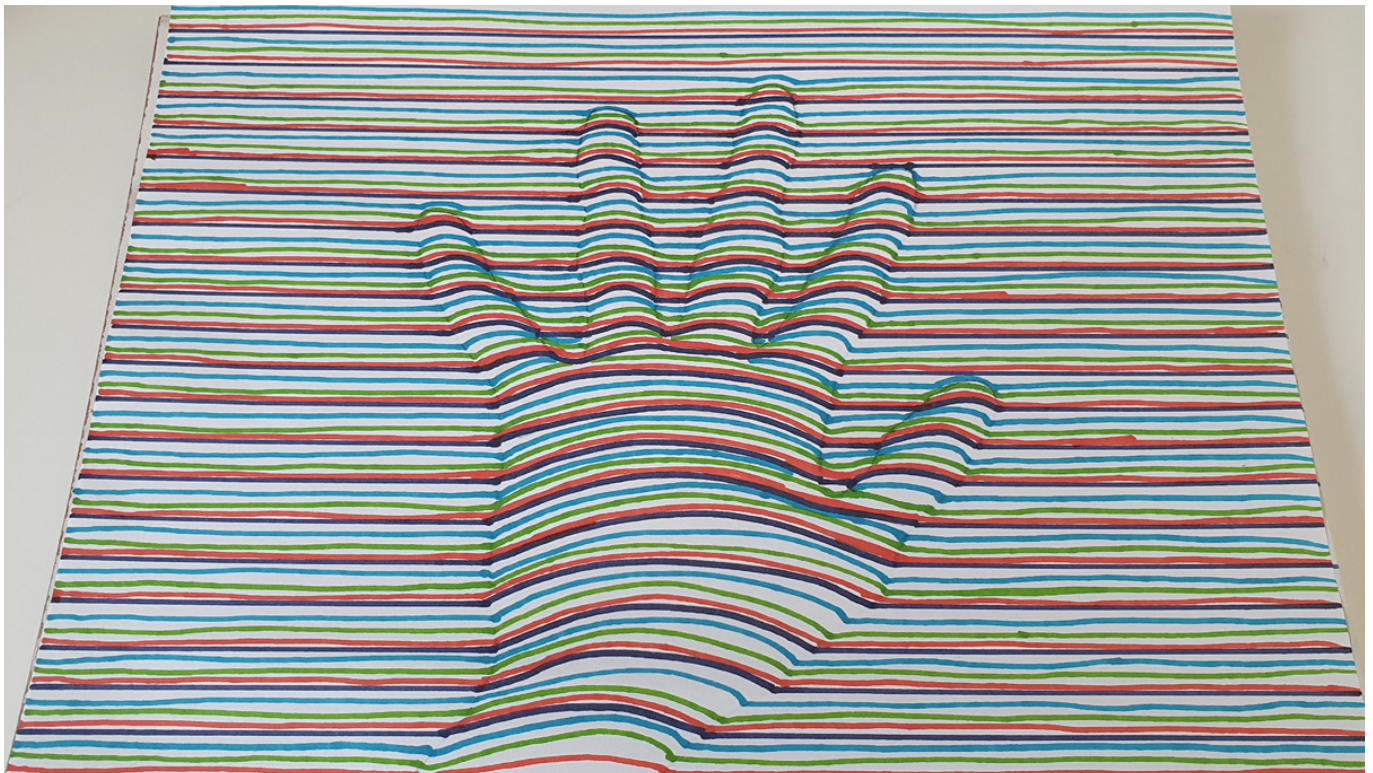


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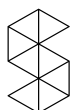
Once you're happy with them, go over them in the same pen that you used for the horizontal lines.



Lastly you need to add in lines that follow the ones already there, filling the space between as much as you can. You can do this in the same colour or different ones, it is up to you. Follow the lines carefully going along the straight part and over the humped lines each time – it takes a while but it's worth doing it slowly!



Stand back from your drawing and look at it from different angles, does it leap off the page? What other things could you draw in this way? Experiment and see how they turn out!



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