

## Two Point Perspective

### ? What are we covering today?

Yesterday, we were introduced to one of the forms of linear perspective. We explored one point perspective and saw that we can use lines to create the illusion of space in a drawing.

Today, we'll continue our look at linear perspective and explore two point perspective. We'll recognize that two point perspective is slightly different from one point perspective, but uses the same players - a horizon line, vanishing points, and lines of perspective to create an illusion.

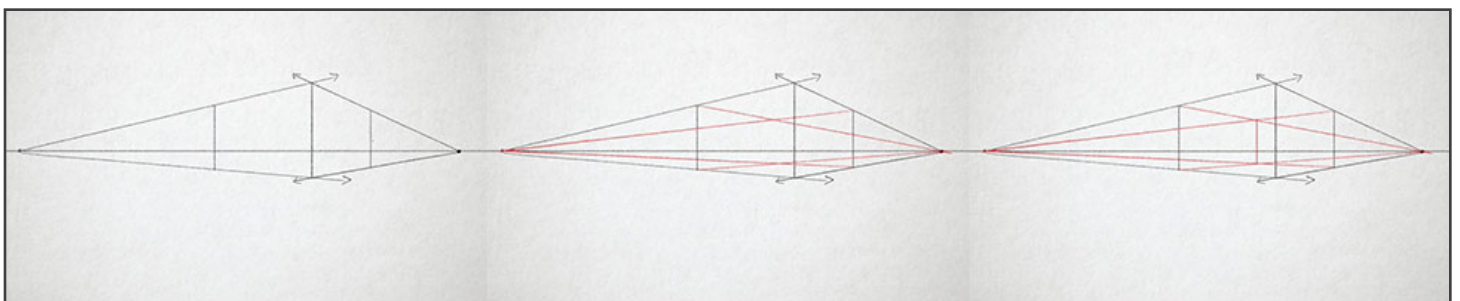
While one point perspective is great for creating a simple illusion of space in a drawing, it does have its limitations. Two point perspective is a bit more flexible and creates a more natural illusion. For this reason, two point perspective is used more often than one point perspective or three point perspective, making it the most common form of linear perspective.

As the name implies, two point perspective utilizes two vanishing points instead of just one. But just like with one point perspective, these vanishing points are placed on the horizon line. It is essential that both vanishing points be placed apart from one another with ample space left between the two.

### ! Today's Mindset

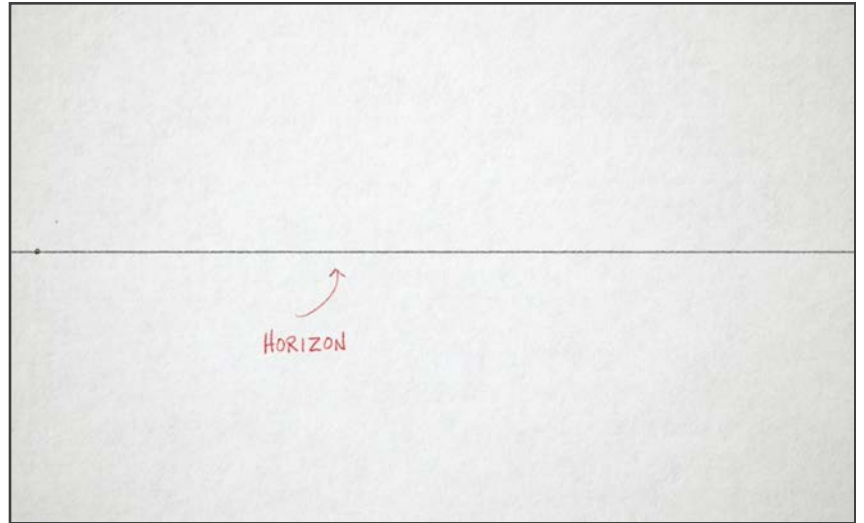
Before we explore how two point perspective works, let's have a look at today's mindset...

"Two point perspective is graphical system that uses lines and two vanishing points to create the illusion of space in a drawing."

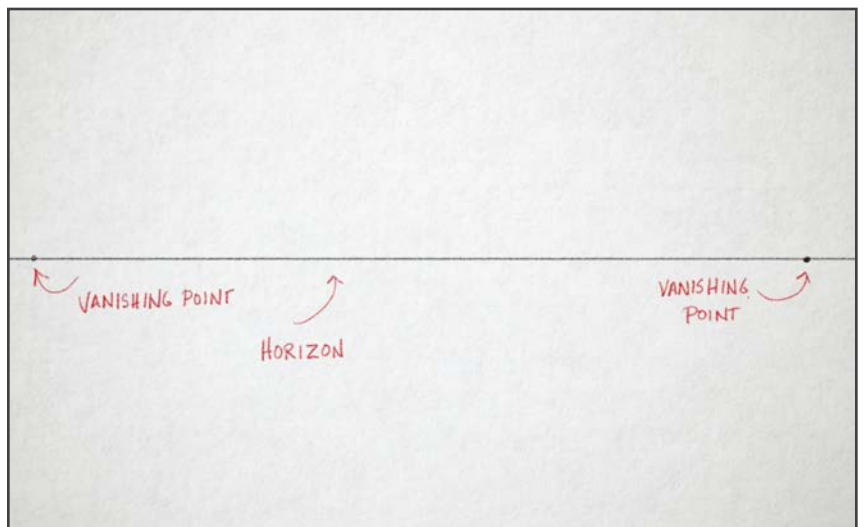


## How Two Point Perspective Works...

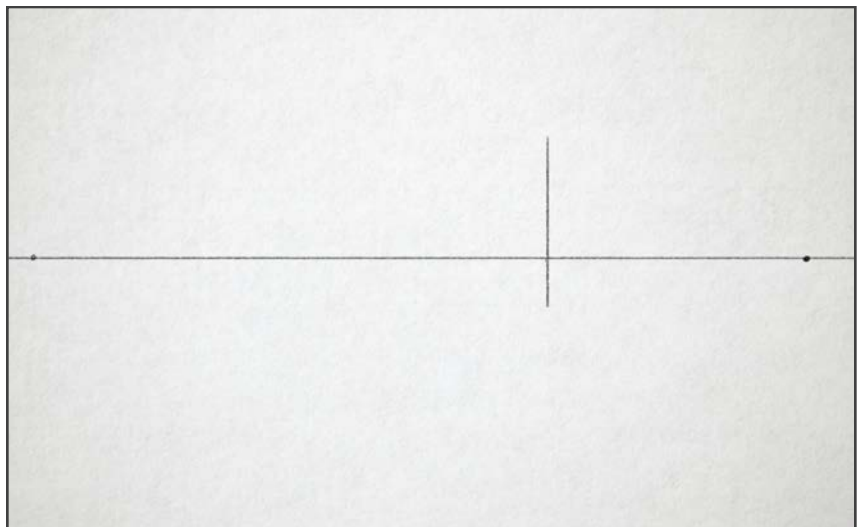
Two point perspective begins in the same way as one point perspective. We'll first establish a horizon line. Remember, the horizon line continues forever off of the picture plane. It can be placed entirely off the top of the paper or off the bottom.



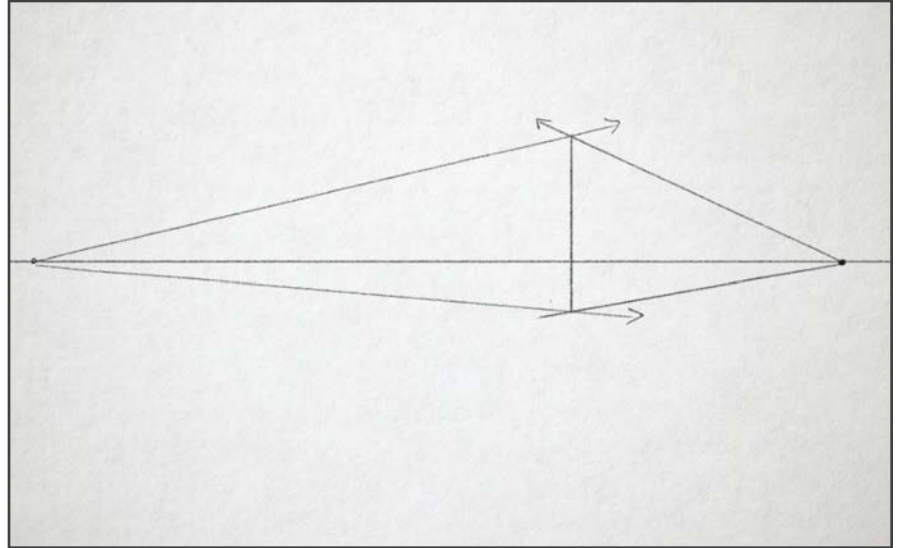
Two point perspective utilizes two vanishing points instead of just one. Both vanishing points must be placed on the horizon line. We'll place both of the vanishing points far apart from one another, leaving ample space in between. Remember, the horizon line continues on forever off the picture plane. This means that one or both of the vanishing points can be placed outside of the confines of the picture plane.



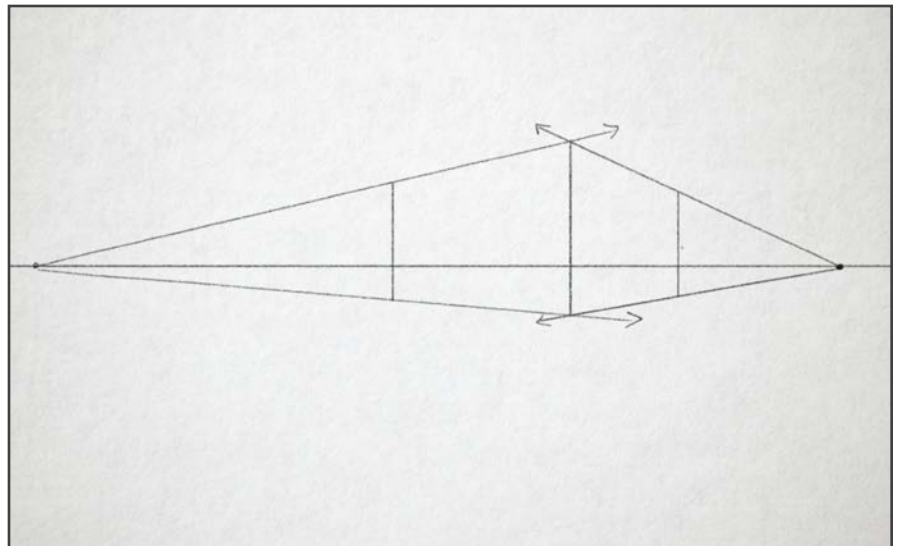
Next, we'll define the corner of the form. For our first form, we'll allow the corner to overlap the horizon line and place it somewhere in between both of the vanishing points.



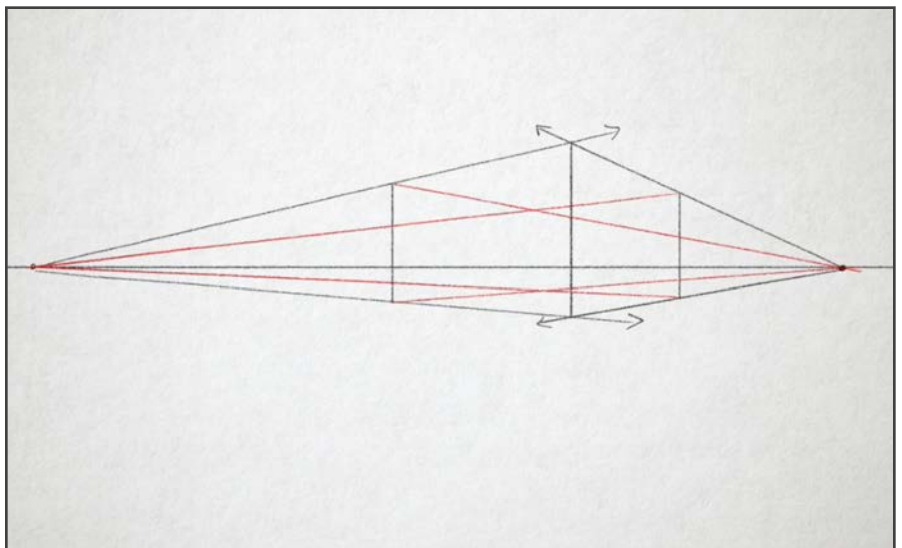
Next we'll draw two lines from each end of the corner back to each one of the vanishing points.



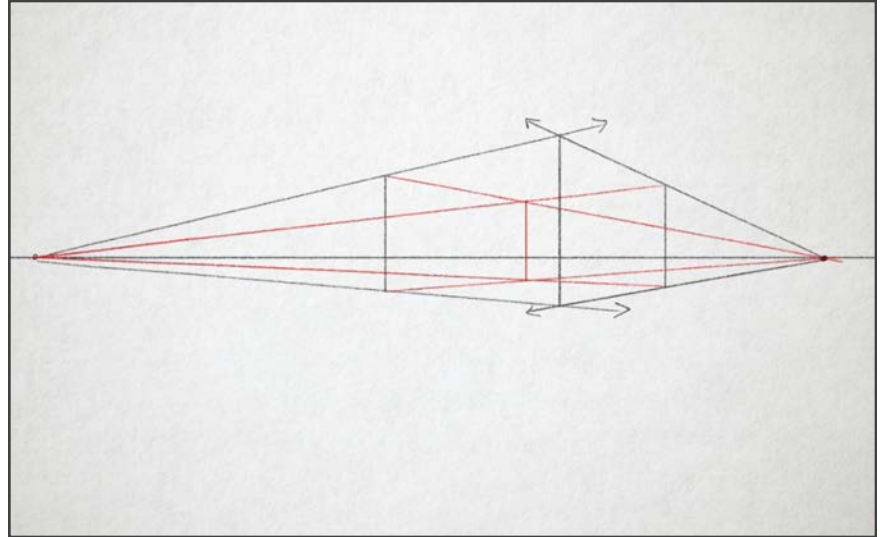
To establish the back end of our form, we'll draw two vertical lines. These lines should be perfectly vertical and parallel to the corner that we drew initially.



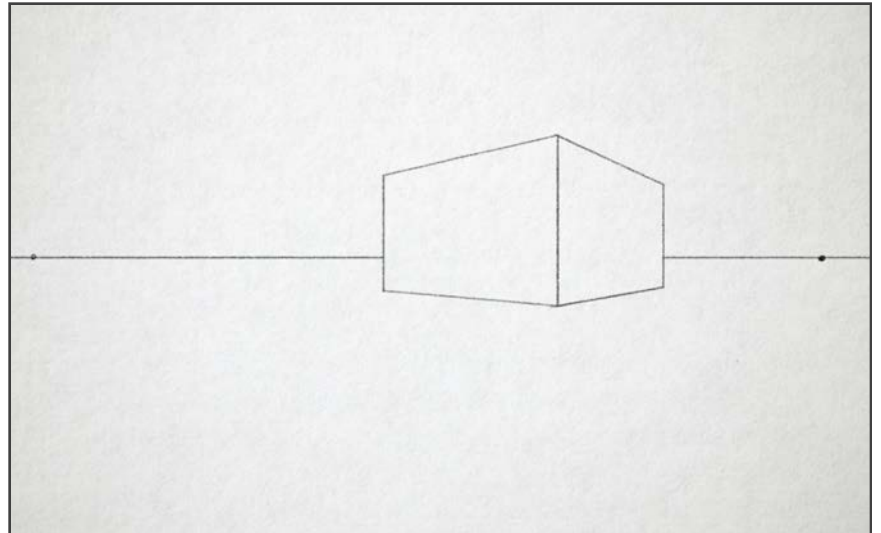
Although the next set of lines are not visible on a cube drawn from this angle, it's important to know that they are there. From each corner of the back end of our form, we'll draw two additional lines to the opposite vanishing point.



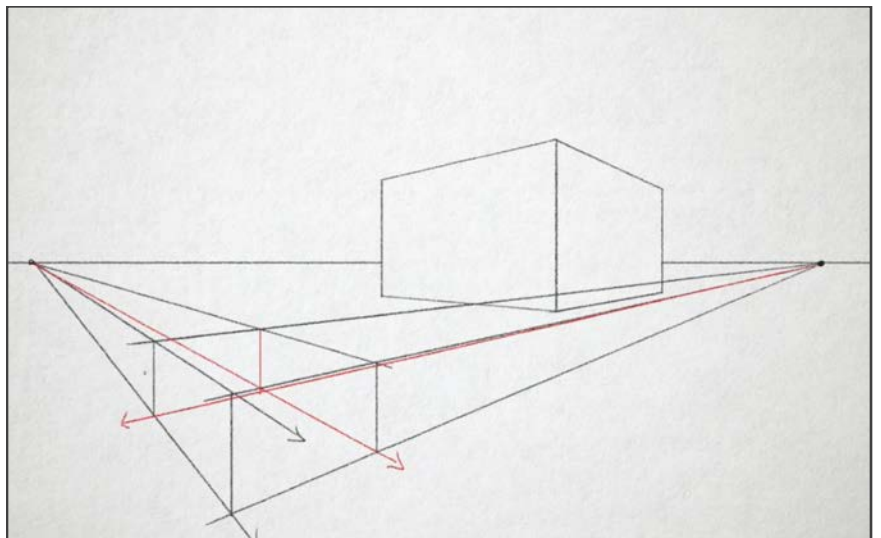
Where these lines intersect, we find the back corner of the cube. Again, from this angle, we will not see this back corner.



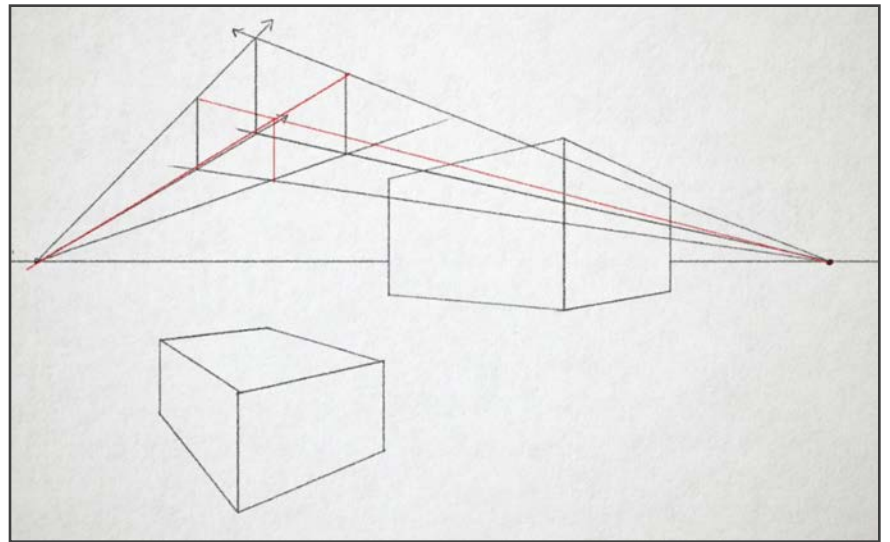
Now we can erase the lines that are no longer needed to reveal our first cube in space.



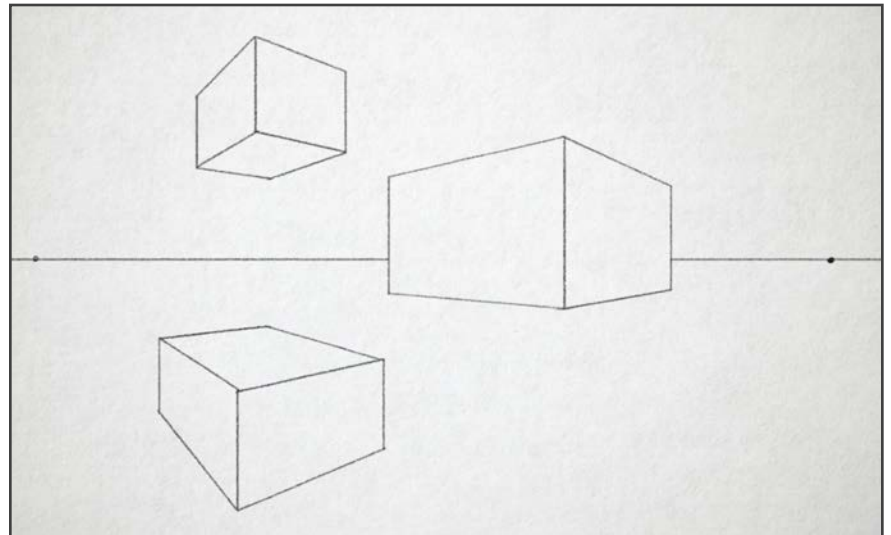
We can draw an additional cube below the horizon line using the same steps. This time however, we will see the back corner and also the top of the cube.



Another cube is added above the horizon line. The same steps are followed. This time, we can see the back edge and the bottom of the cube.



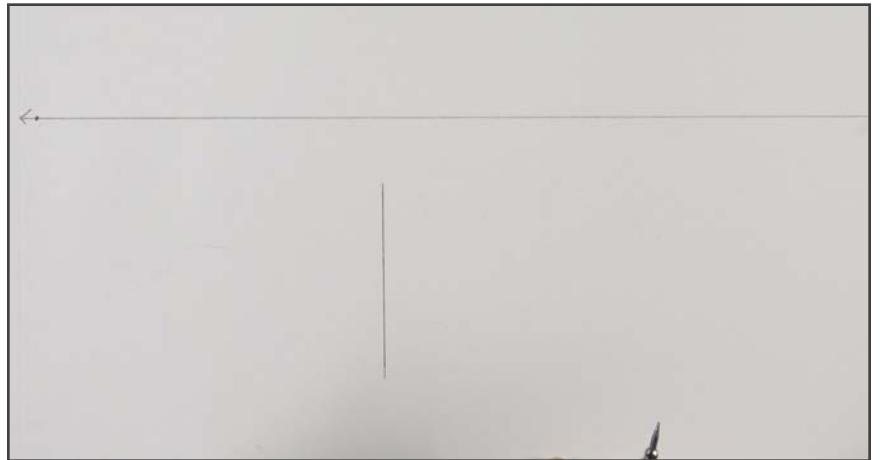
Now we can erase the lines that are no longer needed to reveal all three cubes in space.



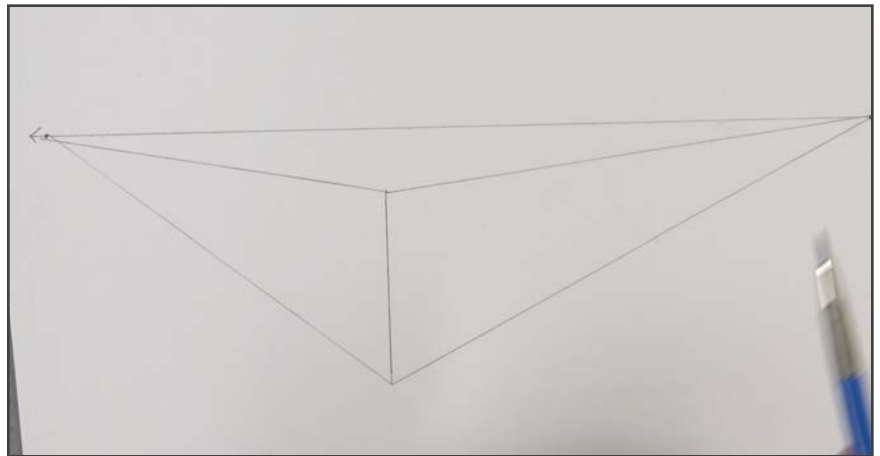
## Today's Drawing Exercise

Now that we've had a look at the basics of two point perspective, we'll put this information into practice and create a quick sketch of a street scene. We'll create a basic scene to keep the drawing exercise under one hour. However, if you wish to work slower and create a more finished drawing, you're welcome to do so.

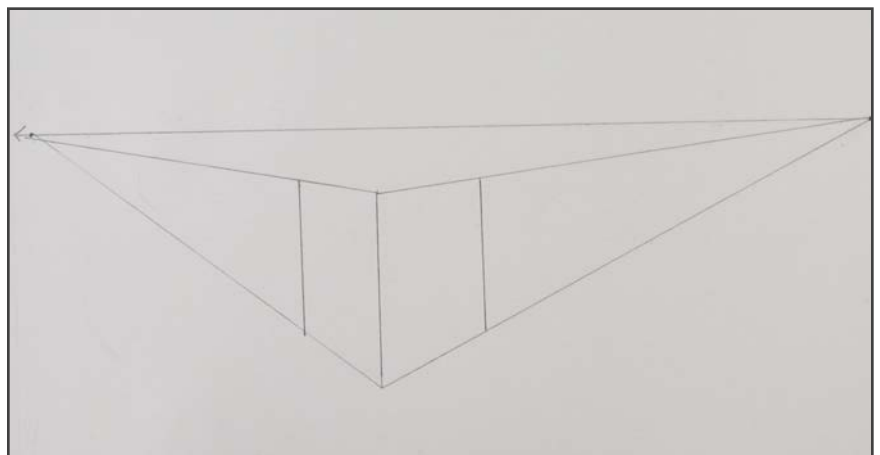
Now we'll create a simple street scene. We'll start by drawing our first basic form. We'll first establish the horizon line, place two vanishing points apart from one another, and draw the corner in between.



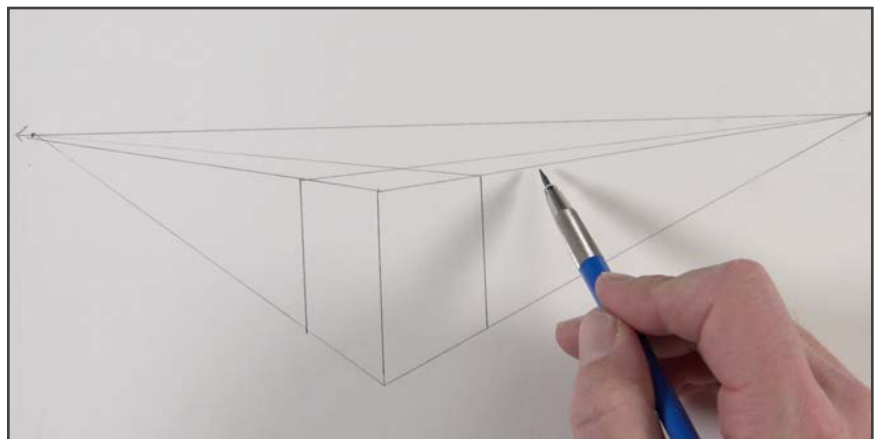
From each end of the corner, we'll draw two lines on each side back to each of the vanishing points.



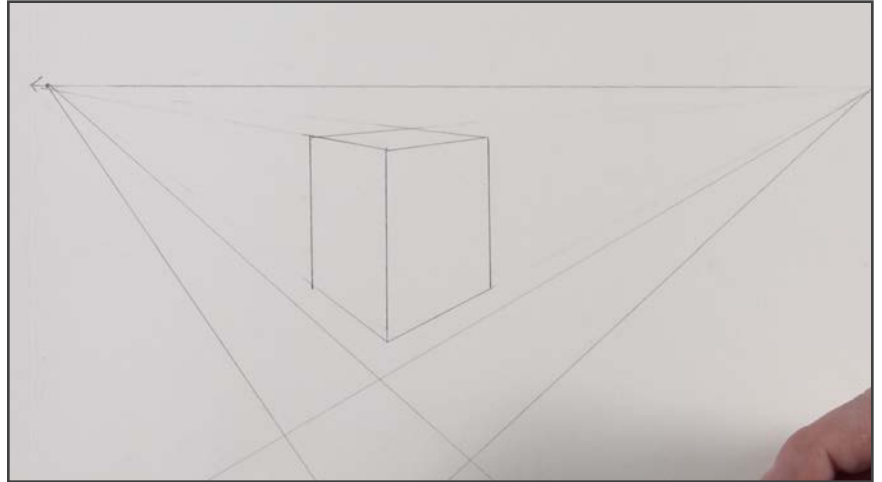
With two vertical lines, we'll establish the back end of our first form. Remember, these lines should be perfectly vertical and parallel to the corner.



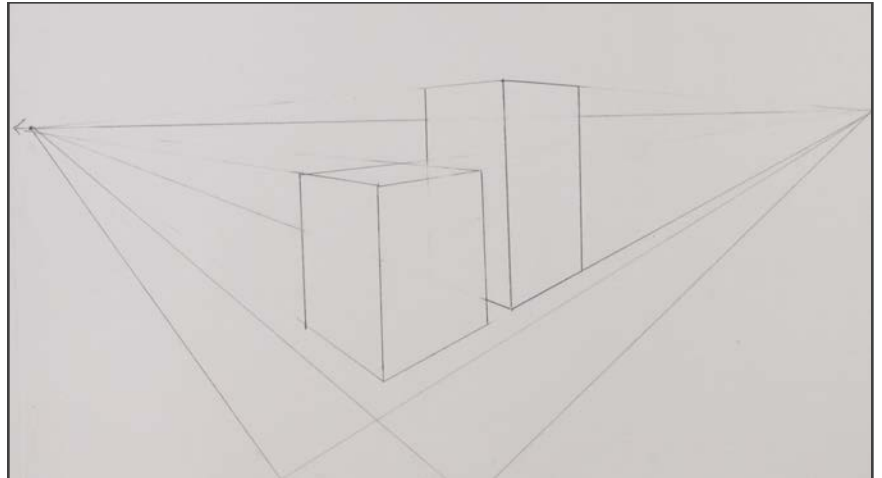
We'll establish the top of the form by drawing lines from each of the back corners over to the opposite vanishing point. Where these lines intersect, we find the back corner of the form.



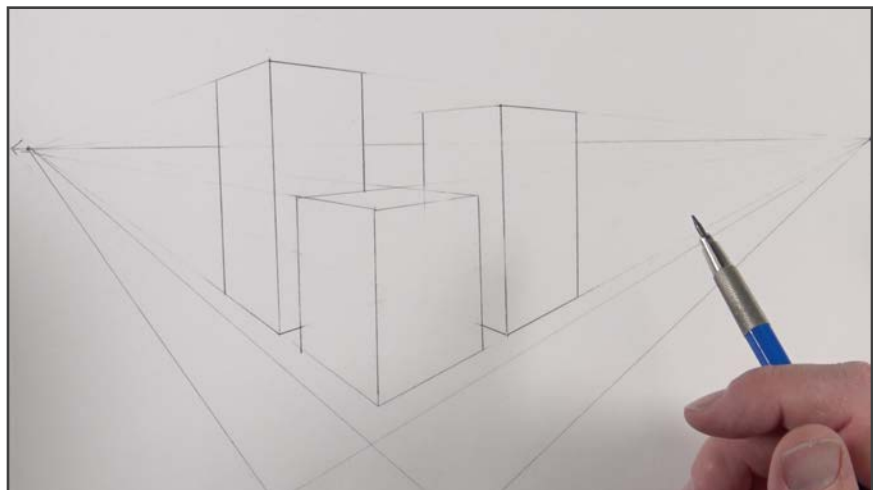
We'll add a couple of roads by drawing two lines back to each of the vanishing points, allowing both sets of lines to intersect in front of our first form.



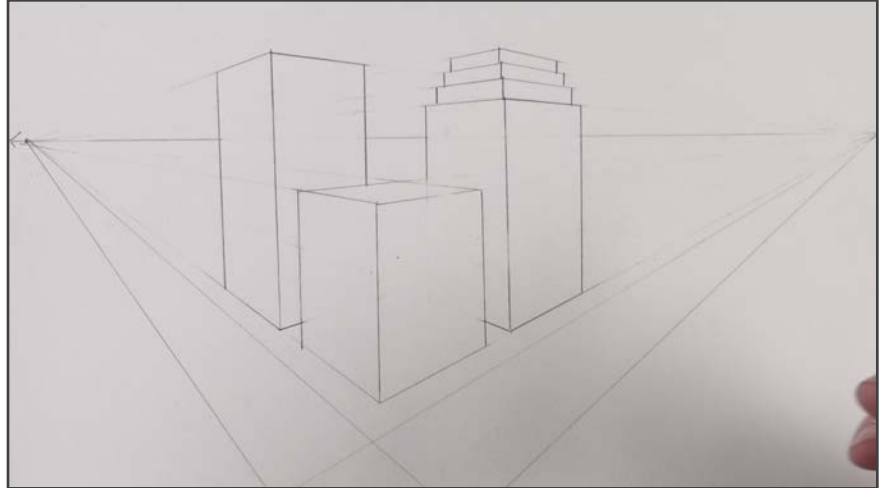
Following the same steps as we did with our first form, we'll add a second one. We're careful to make sure that our second form does not extend below our first.



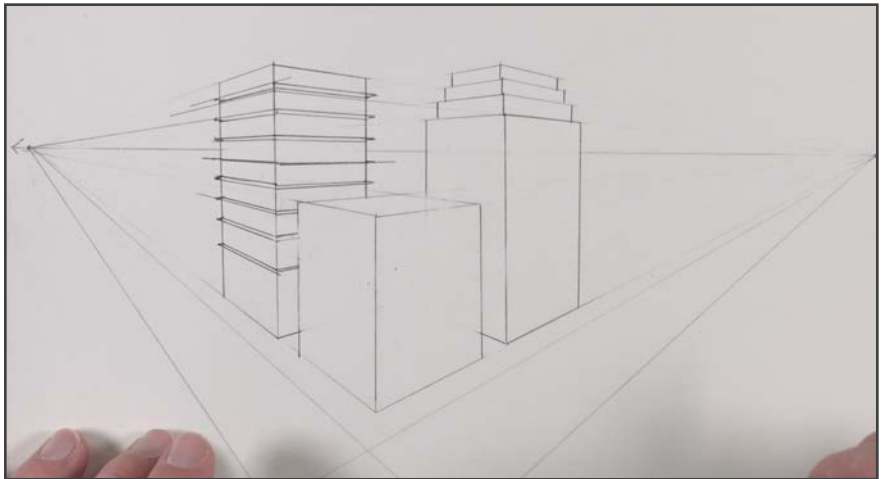
A third form is added on the left side, behind our first. The steps remain the same, using the same two vanishing points for all of the forms.



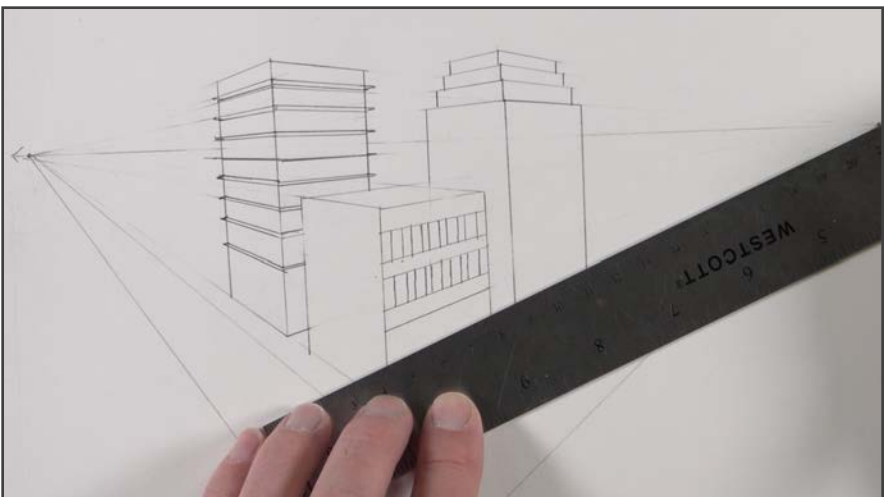
We can add an architectural element on one of the buildings by stacking additional forms on top. This process is just like drawing the forms for the buildings.



We'll add another architectural element to another building. We'll simply use both vanishing points to determine the angle of the lines that should be added.

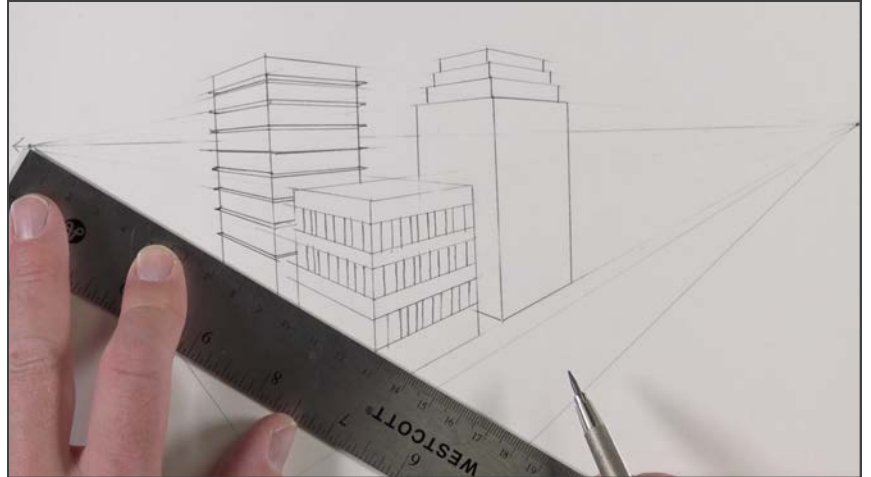


We'll add a few rows of windows on our first building. On the right side of the corner, we'll use the right vanishing point to establish the angled lines. For each window edge, vertical lines are used. Be sure that these lines are vertical and are parallel to the corner.

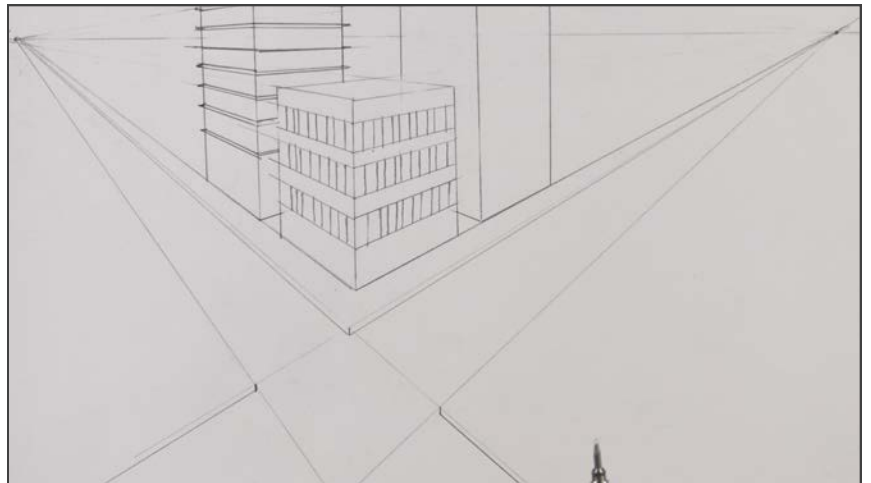




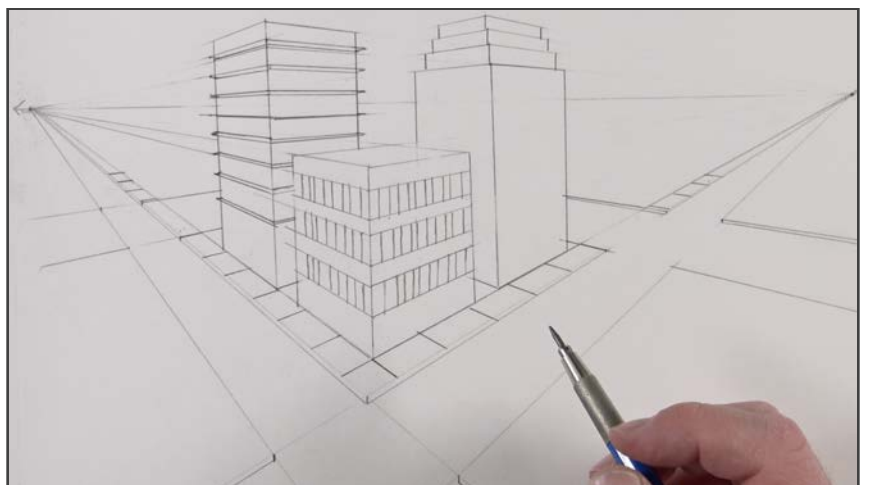
We'll add a few rows of windows to the left side of our first building. Since the windows are on the left side of the building, we'll use the left vanishing point to draw the boundaries, followed by vertical lines for each window edge.



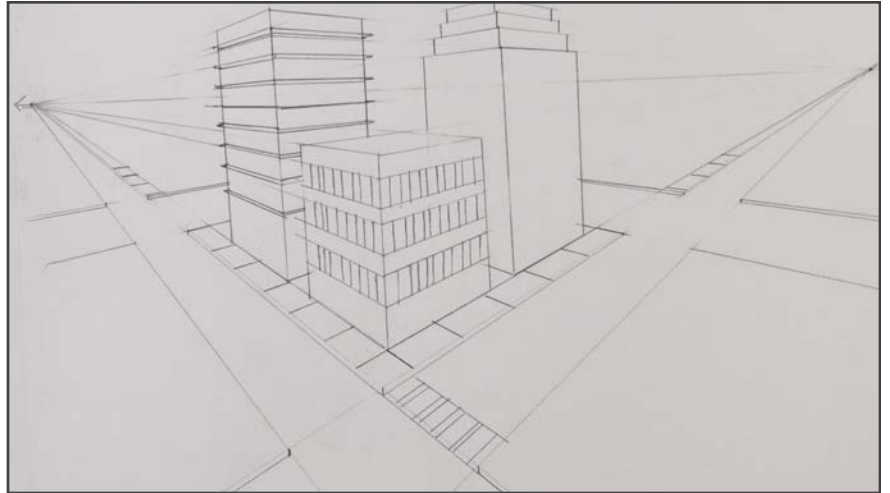
We'll add a couple of additional lines for a sidewalk and add some dimension to it with a curb. A vertical line is used to establish the corner of the sidewalk curb with lines that recede from its bottom to each of the vanishing points.



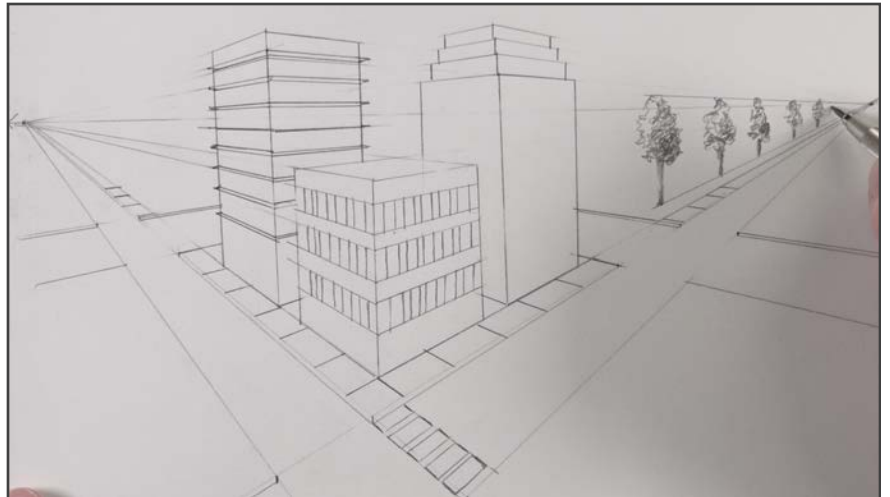
Cracks are added to the sidewalk by drawing lines to the opposite vanishing point. These lines should be drawn closer together as they recede back in space.



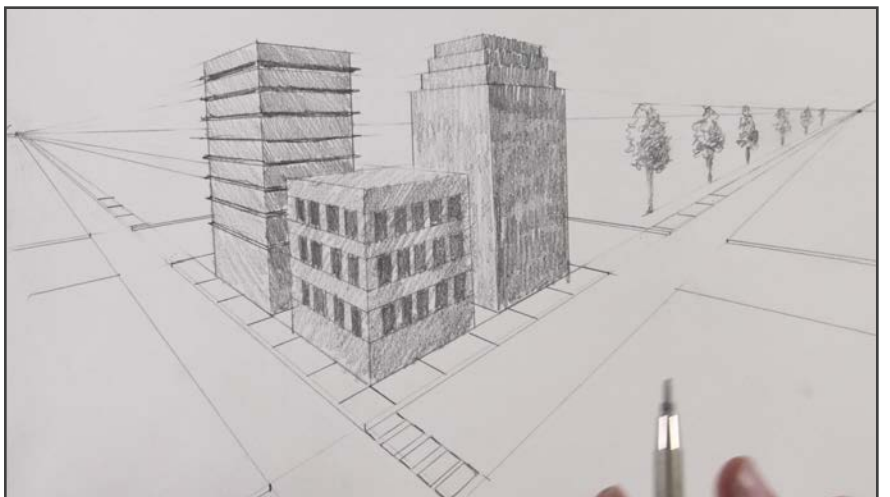
A crosswalk is added where the roads intersect. These lines are handled in the same manner as the cracks in the sidewalk. The top and bottom edges are defined using the vanishing point on the left, while the boundaries of each stripe are defined using the vanishing point on the right.



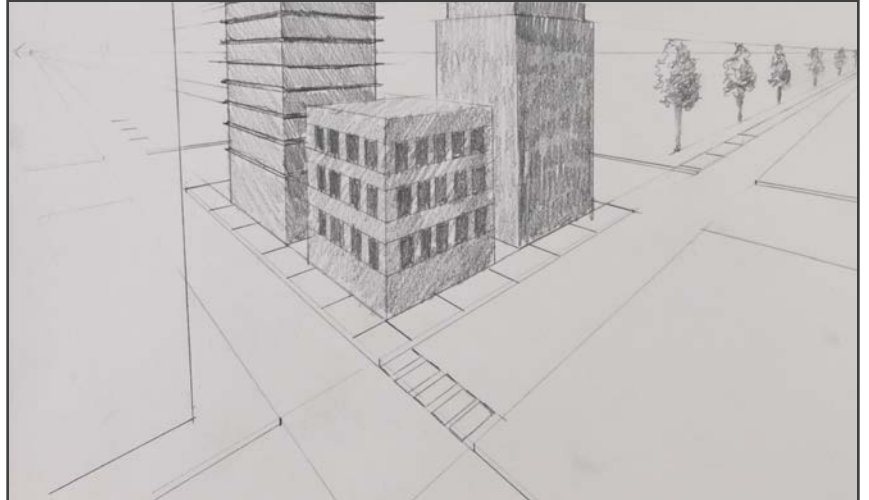
We can add a row of trees of equal height extending back in space. Using the right vanishing point, we'll draw a line for the top edge and another for the bottom edge. Using these lines as a guide, we can fill in the shapes for the trees.



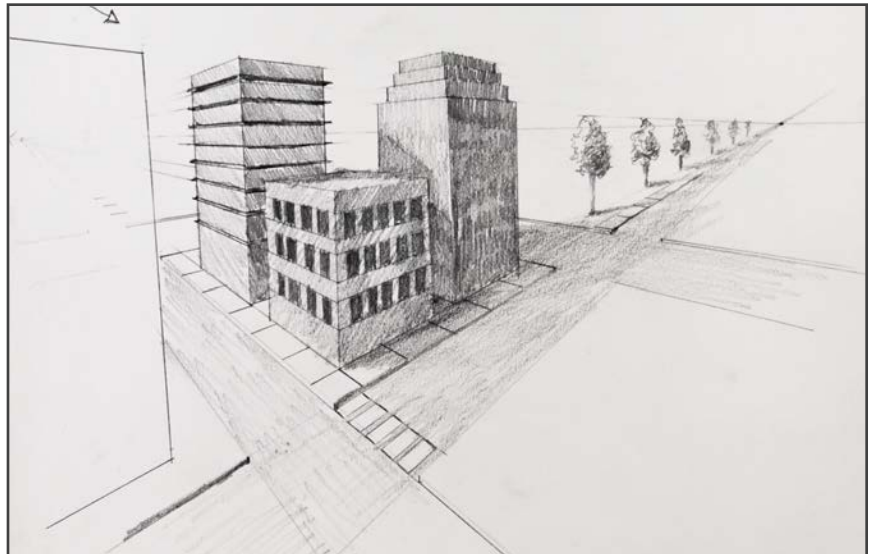
We'll add a bit of shading to the buildings, assuming that the light source originates from the upper left hand corner.



We'll add a building across the street from our first. In this case, we draw the corner, but instead of drawing lines from the corner to the vanishing points, we draw them extending to the left from the right vanishing point only. Since this building is opaque, we'll then erase all of the marks within its boundaries.



We'll add a bit more shading and tone, including cast shadows behind the buildings and row of trees. Now our two point perspective sketching exercise is complete.



Today we learned that two point perspective is a graphical system that uses lines to develop depth in a drawing. We learned that two point perspective uses two vanishing points to create this illusion.

Tomorrow, we'll continue our look at using linear perspective and explore the lesser used, but more dynamic form of three point perspective.