

One Point Perspective

? What are we covering today?

Yesterday, we were introduced to using space to create depth in drawings. We learned five different ways to create the illusion of space in a drawing through overlapping, size, placement, color and value, and detail.

Today, we'll begin our look at the sixth way to create the illusion of space in a drawing and discuss linear perspective.

Linear perspective is a graphical system that uses lines to develop depth in a drawing. It relies on the use of a horizon line, a vanishing point or points and lines of perspective which recede back to the vanishing point.

When it comes to drawing, there are three forms of linear perspective commonly used. These are named based on the number of vanishing points that are used. One point perspective, two point perspective and three point perspective are all forms of linear perspective.

Today, we'll look at one point perspective - the simplest and most basic form of perspective drawing.

We'll begin by taking a basic look at how one point perspective works and then we'll create a quick sketch of a scene using one point perspective.

! Today's Mindset

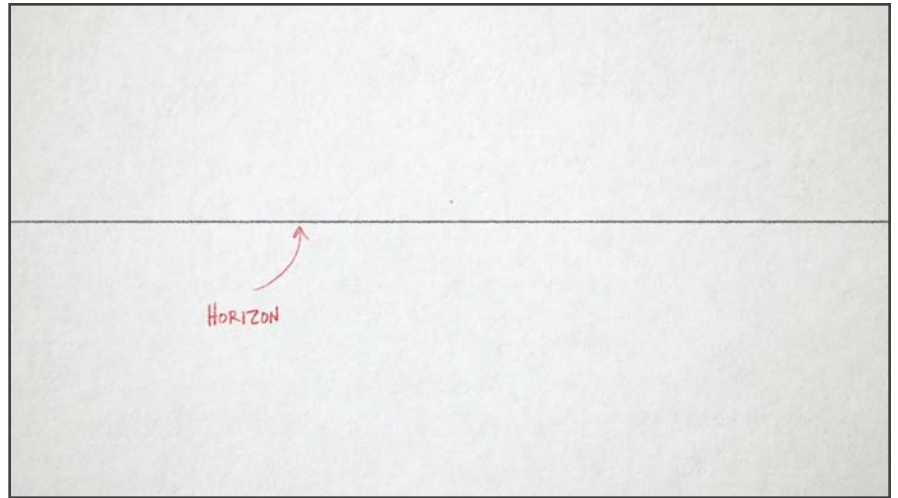
Today's mindset is...

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

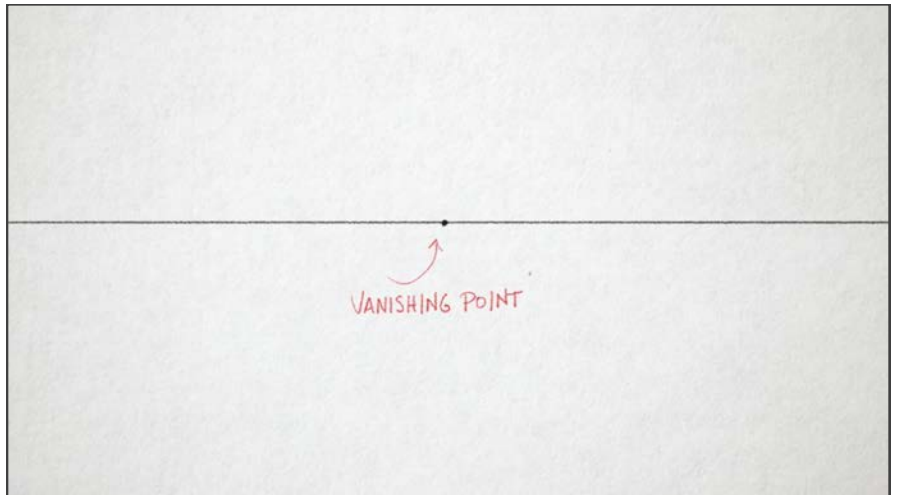
How One Point Perspective Works...

We'll need to first establish the horizon line. This line can be thought of as the line that divides the sky from the ground. More accurately, it is the level of sight of the viewer.

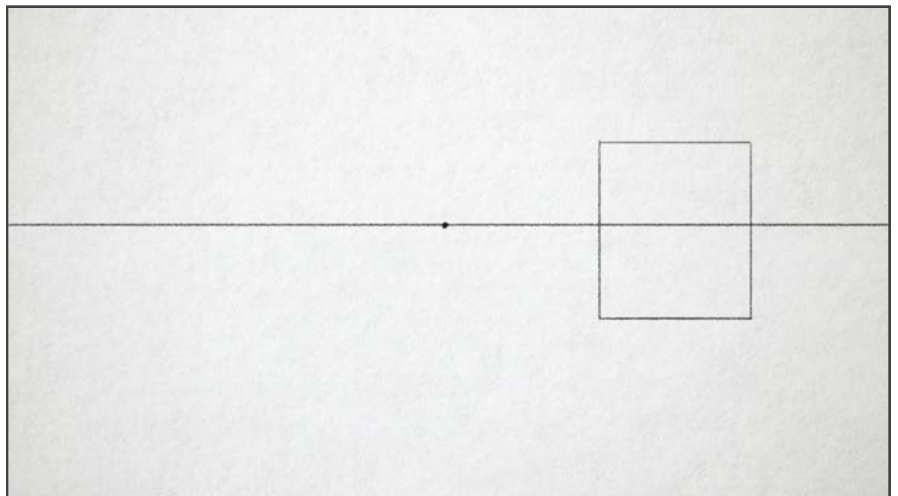
The horizon line extends forever horizontally. This means that the horizon line extends beyond the confines of the picture plane. In this example, the horizon line is found within the picture plane, but it could be placed above or below the confines of the picture plane.



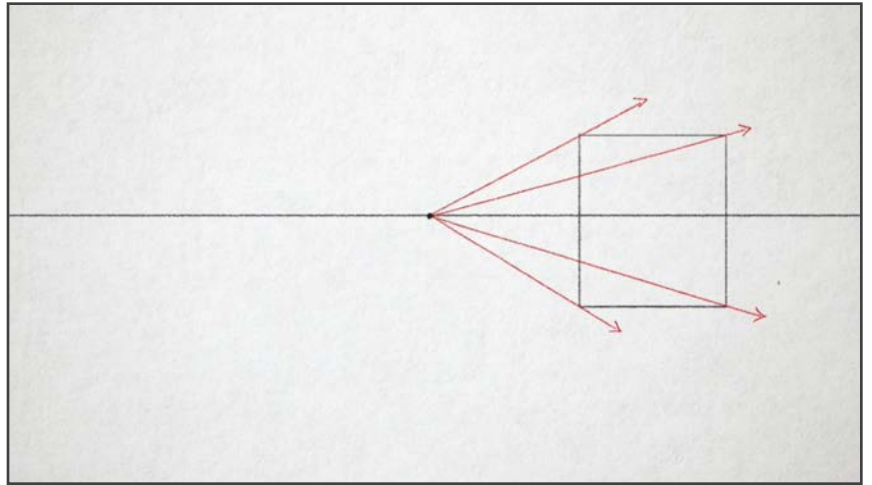
The vanishing point is a point placed on the horizon line where objects begin to disappear because of distance. With one point perspective, one vanishing point is used. It can be placed anywhere on the horizon line. In this example, it is placed near the center, but it could be found outside of the picture plane since the horizon line continues outside of the pictorial space.



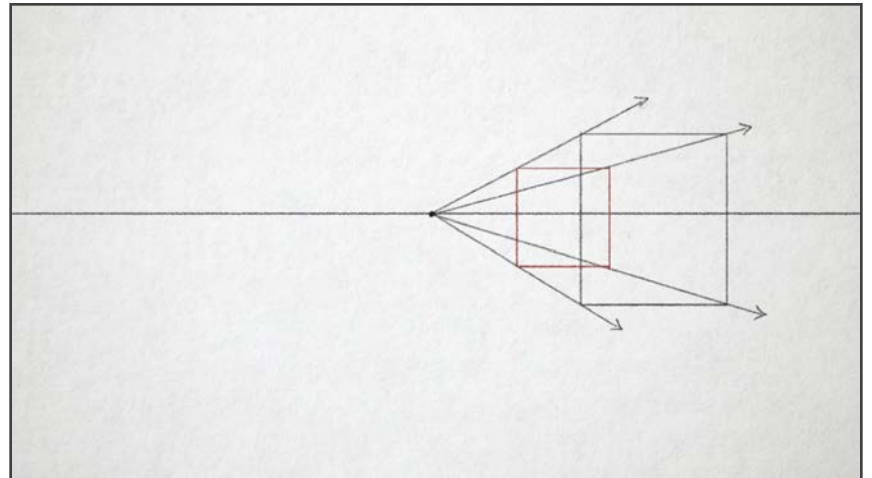
With the horizon line and the vanishing point established, we can draw the basic shape of the subject. Since we're drawing a cube, the shape is a simple rectangle.



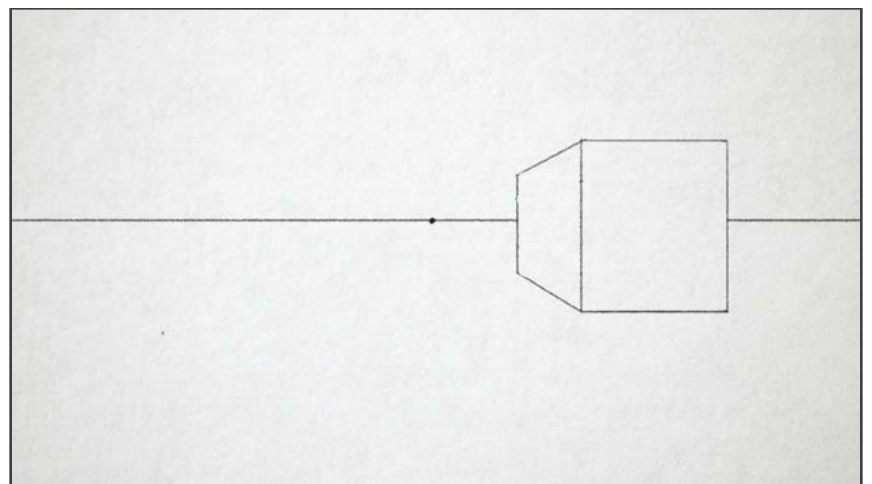
Next we'll draw four lines from the vanishing point to all four corners of the rectangle that we drew.



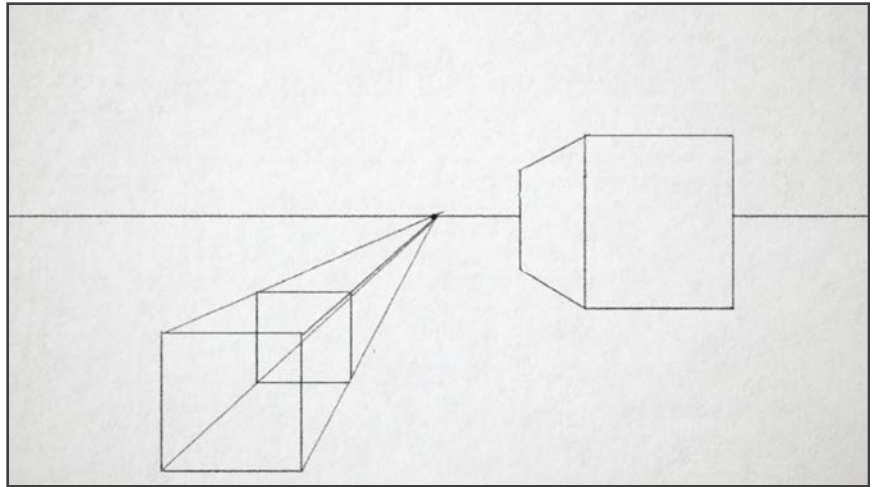
Using these lines as a guide, we'll draw a second rectangle. Each corner of the second, smaller rectangle should touch each of the four receding lines.



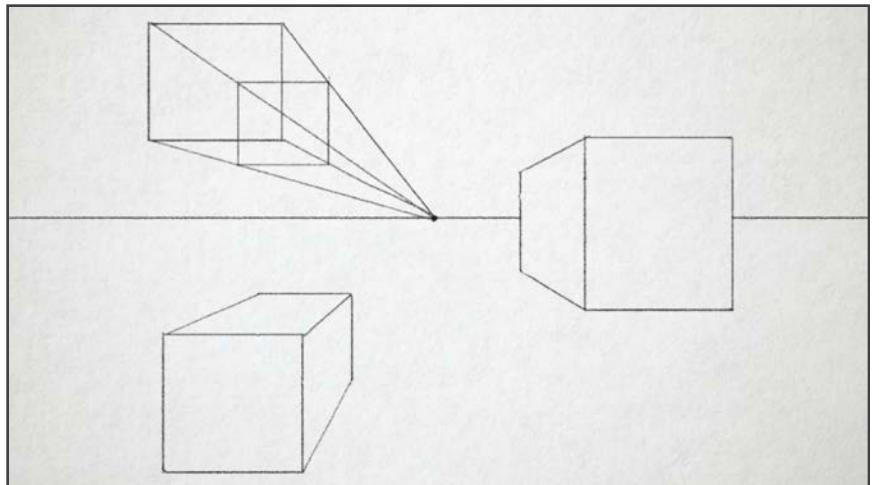
Now our cube is in place and we can erase all of the extra lines that are no longer needed.



We can draw a second cube that exists under the horizon line using the same approach.



The process remains the same for a third cube found above the horizon line. Notice that all three cubes use the same vanishing point. In most circumstances, all of the objects that you draw within a scene will use the same horizon and vanishing point.



Today's Drawing Exercise

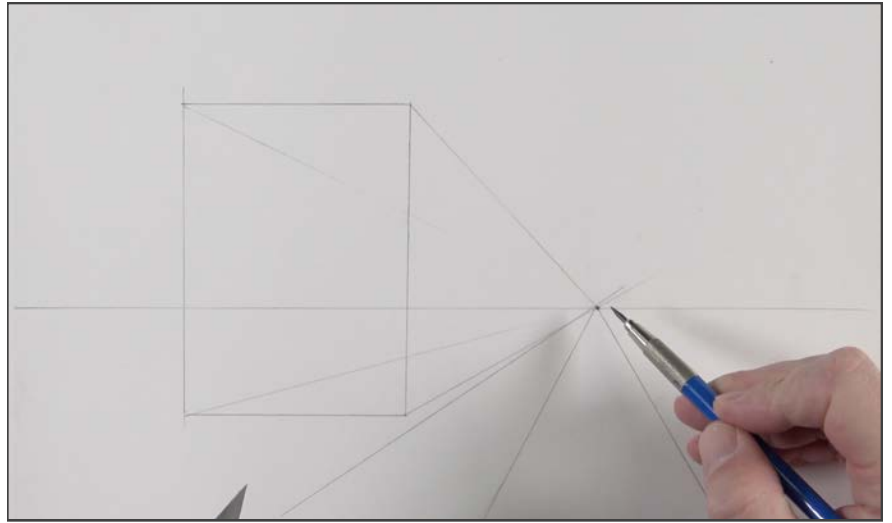
Now that we've had a look at the basics of one point perspective, we'll put this information into practice and create a quick sketch of a street scene. We'll create a basic scene to keep the drawing exercise under one hour. However, if you wish to work slower and create a more finished drawing, you're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



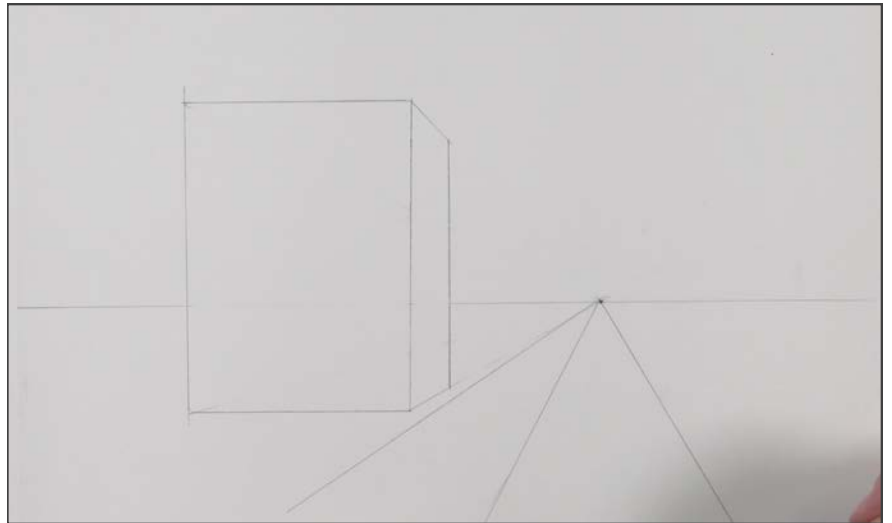
We'll begin by first establishing the horizon line as well as the vanishing point.

With these in place, we'll draw a few lines back to the vanishing point to indicate a road and sidewalk.

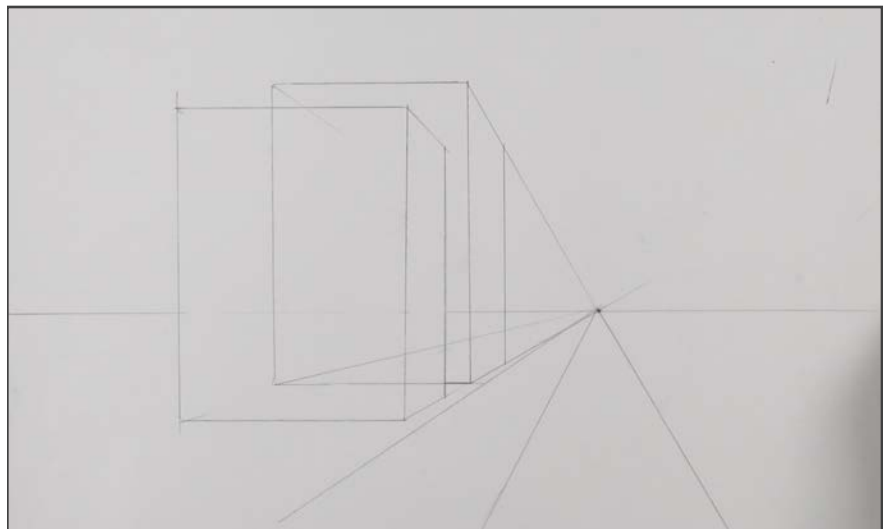
We'll draw the rectangular shape for our first building with lines from all four corners back to the vanishing point.



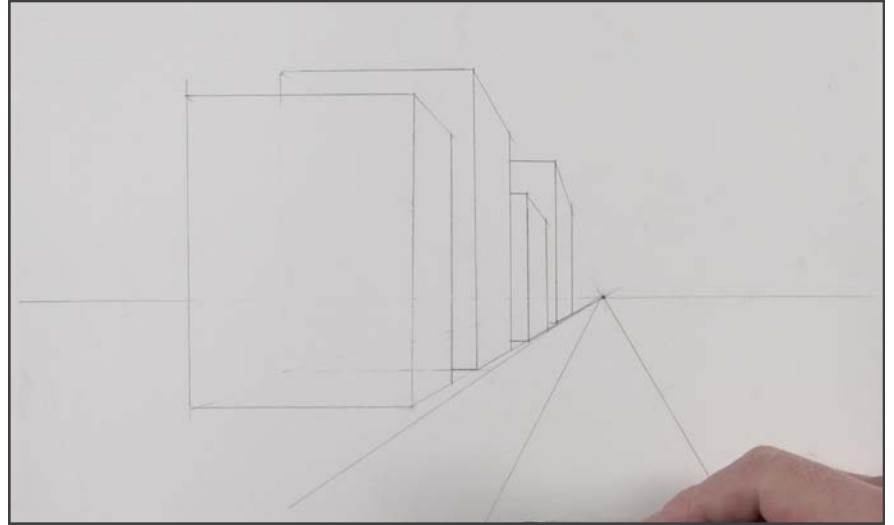
After adding a vertical line for the back end of the building, we can erase the lines that are no longer needed. Now we have our first form in place. We'll add details in a moment, after we have all of the forms in place.



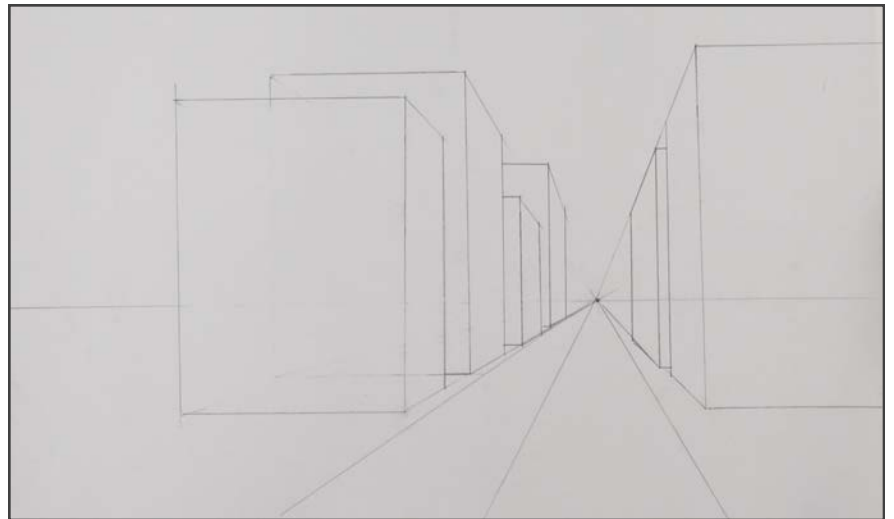
We'll now add another rectangular form behind our first using the same steps. We're careful to keep the bottom portion of our second building from extending below the first.



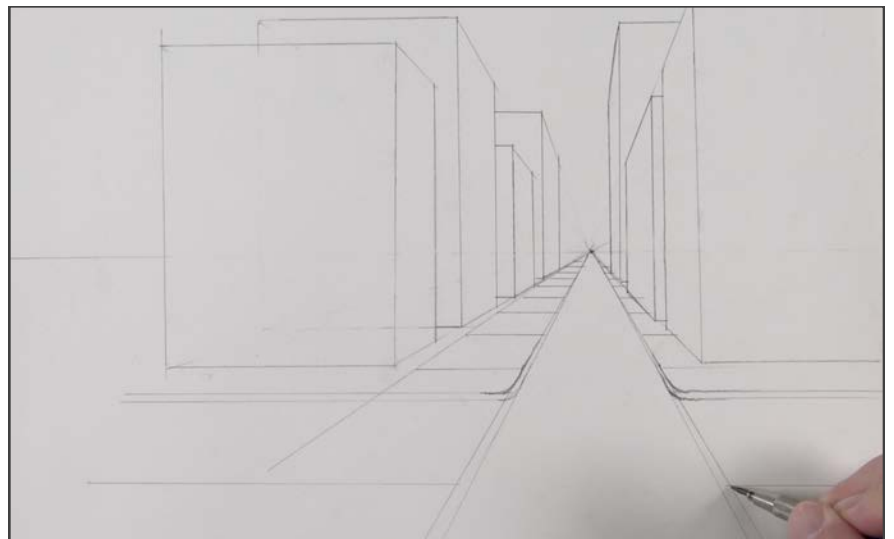
We'll keep adding buildings, progressively working our way back to the vanishing point. Each time, we'll follow the same steps, using the same vanishing point.



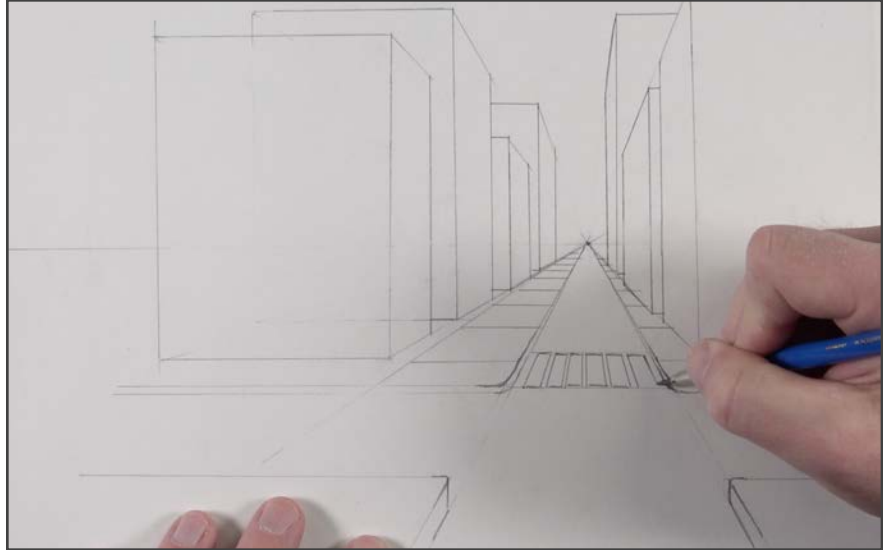
We'll now add a few buildings on the right side of the road. There's no need to add a new vanishing point. We'll keep using the same vanishing point for these buildings as well.



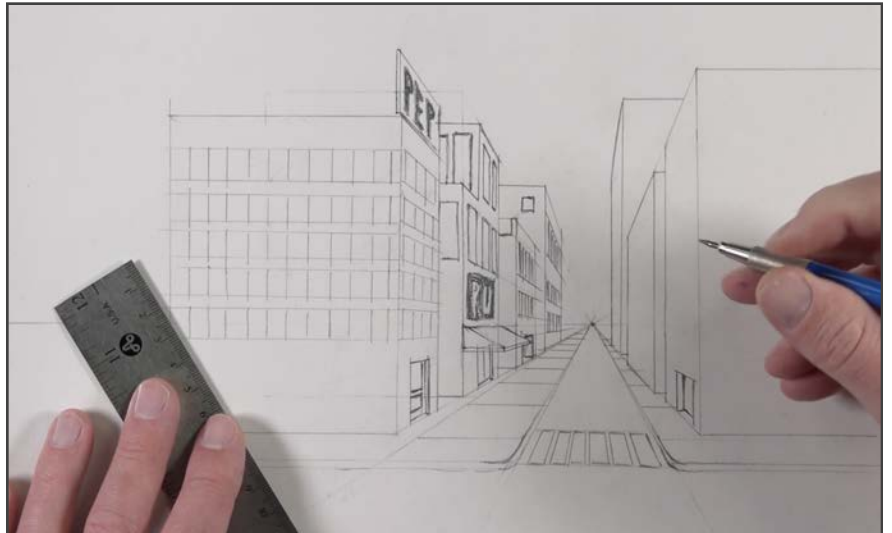
We can easily add a curb for our sidewalk by adding a couple of lines that recede back to the vanishing point. Cracks in the sidewalk are added by drawing horizontal lines that get closer together as they extend back in space.



Adding a crosswalk is easy. We'll simply draw two horizontal lines to establish the boundaries, followed by lines that extend back to the vanishing point.



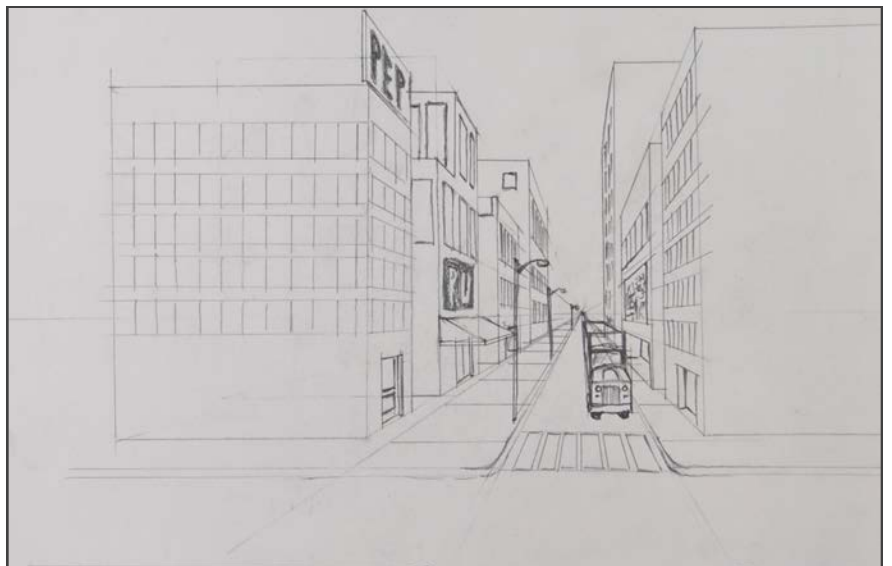
We can add as many details as we like. Windows, doors, and signs on the sides of the buildings are added by using lines that go back to the vanishing point. The vertical edge of each window or door is simply a vertical line.



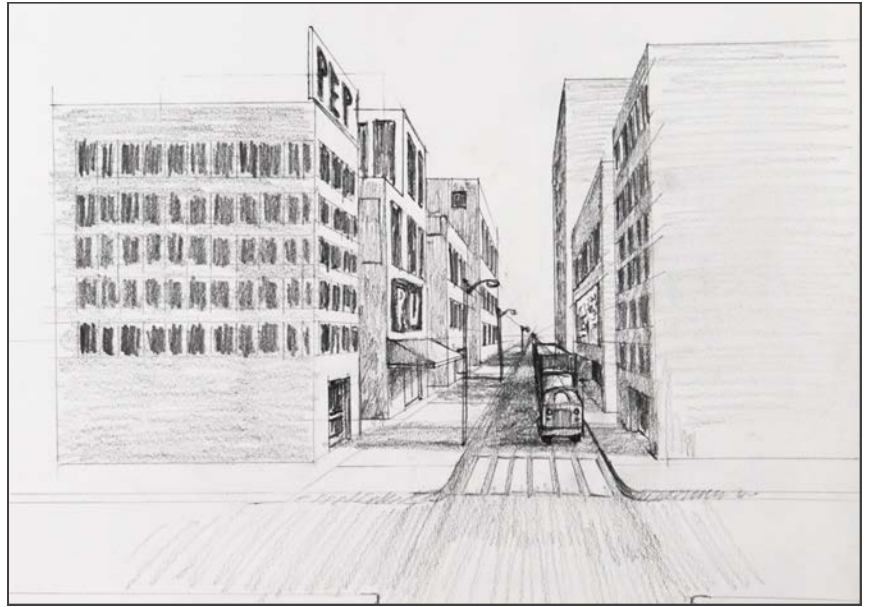
For windows that face the viewer, simple rectangles are drawn. We'll only use the vanishing point for details that are visible on the sides of the buildings.

A truck is added by first drawing a rectangular form, just as we did with buildings. We can add the details using the box as a guide.

A series of street lights are drawn, using receding lines back to the vanishing point as a guide for their height.



With a bit of shading, our scene makes more sense. Using one point perspective, we've created a believable street scene that has depth - completely from our imagination.



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

Tomorrow, we'll continue our look at using linear perspective and explore the more versatile form of two point perspective.