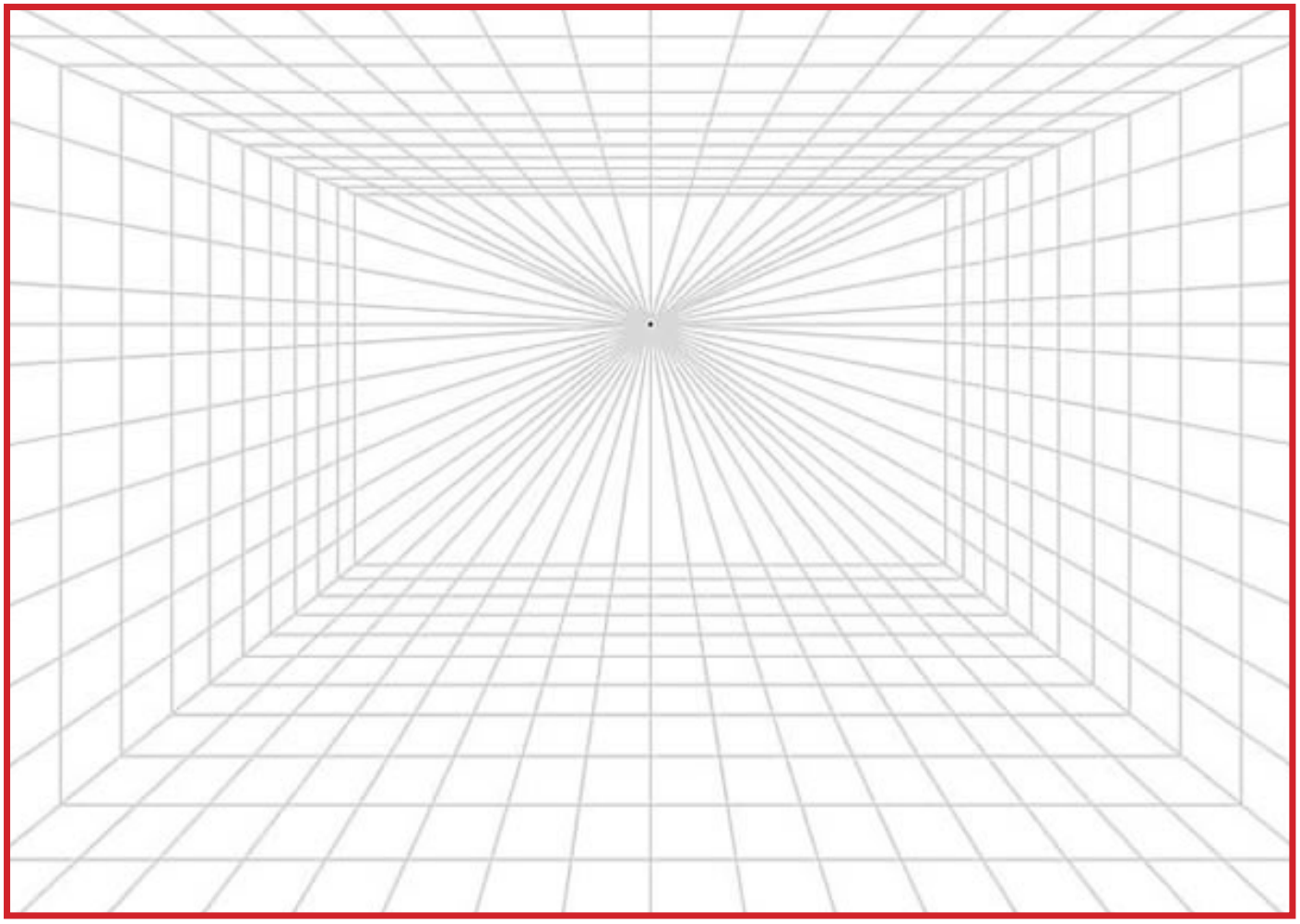
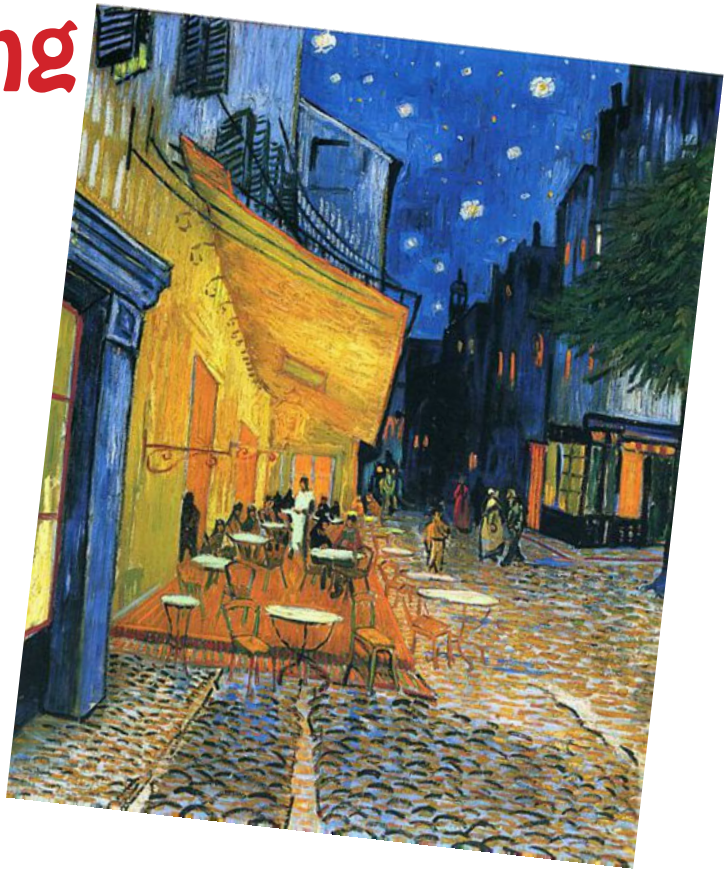


Simplifying single point persective drawing



TEACH ME

SINGLE POINT PERSPECTIVE

Dictionary.com define one point perspective as:

…a mathematical system for representing three-dimensional objects and space on a two-dimensional surface by means of intersecting lines that are drawn vertically and horizontally and that radiate from one point on a horizon line…

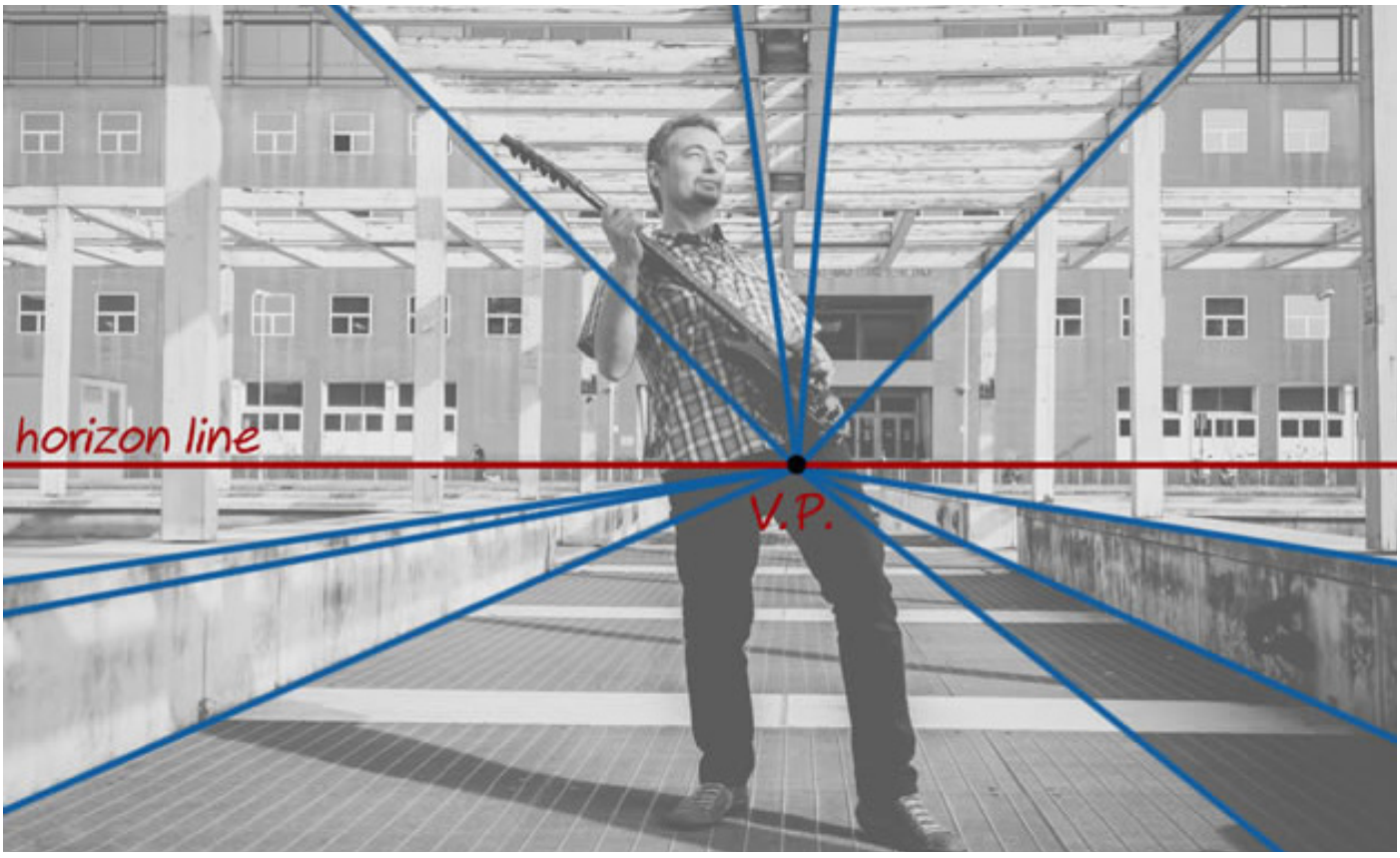
Although this definition sounds complicated, the concept is relatively simple. One point perspective is a drawing method that shows how things appear to get smaller as they get further away, converging towards a single ‘vanishing point’ on the horizon line. It is a way of drawing objects upon a flat piece of paper (or other drawing surface) so that they look three-dimensional and realistic.

Drawing in one point perspective is usually appropriate when the subject is viewed ‘front-on’ (such as when looking directly at the face of a cube or the wall of building) or when looking directly down something long, like a road or railway track. It is popular drawing method with architects and illustrators, especially when drawing room interiors. To understand more about the history of perspective in art, please read our accompanying Guide to Linear Perspective (coming soon).

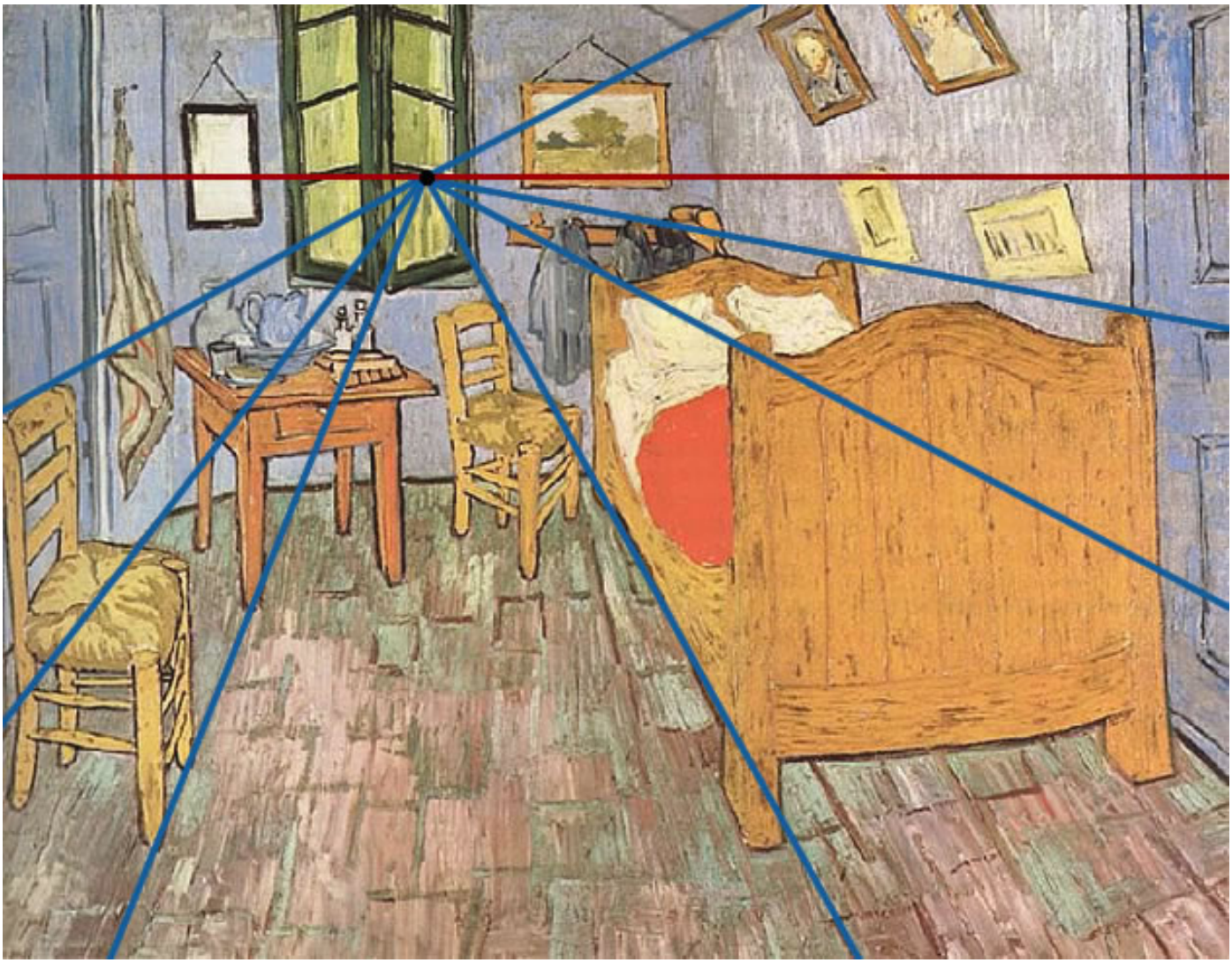
Note: If you need to draw something that is not facing you directly, but rather has a corner nearest to you, two point perspective is likely to be more appropriate.

In one point perspective, surfaces that face the viewer appear as their true shape, without any distortion. They are drawn using primarily horizontal and vertical lines, as illustrated by the picture above.

Surfaces that travel away from the viewer, on the other hand, converge towards a single ‘vanishing point‘. This is a point that is located directly in front of the viewer’s eyes, on a ‘horizon line’ (also known as an ‘eye level line’), as illustrated in the photo below:



It is possible to draw over photographs to identify vanishing points, horizon lines and true shapes. Studying the work of famous artists can also help you gain an understanding of one point perspective, as shown in the example by Vincent van Gogh below.

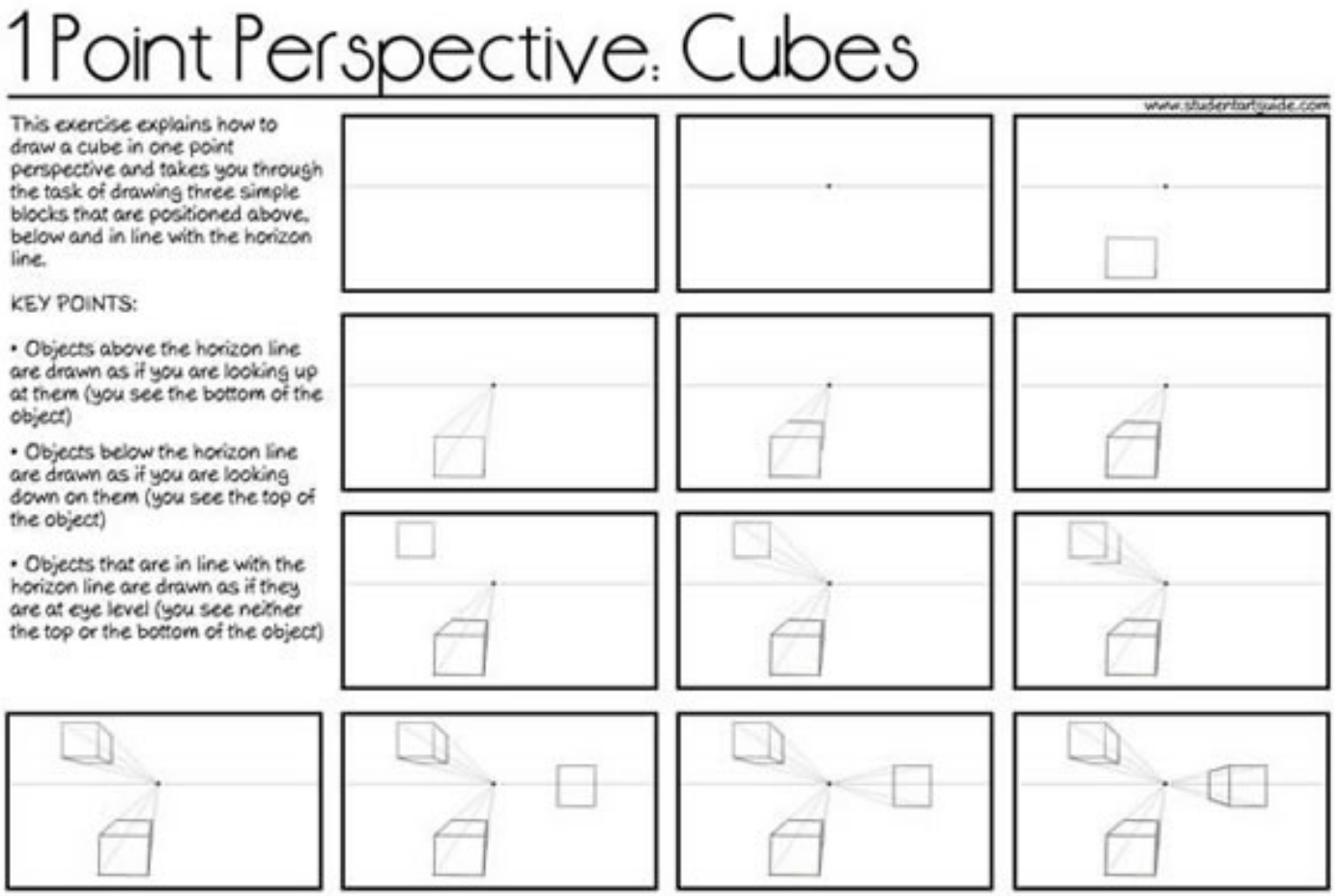


Key Points:

Surfaces that face the viewer are drawn using their true shape
Surfaces that travel away from the viewer converge towards a single vanishing point

EXERCISE: CUBES AND RECTANGULAR BLOCKS

Drawing rectangular blocks is often the first one point perspective lesson given to students. It is a simple exercise that provides a solid foundation for things to come.

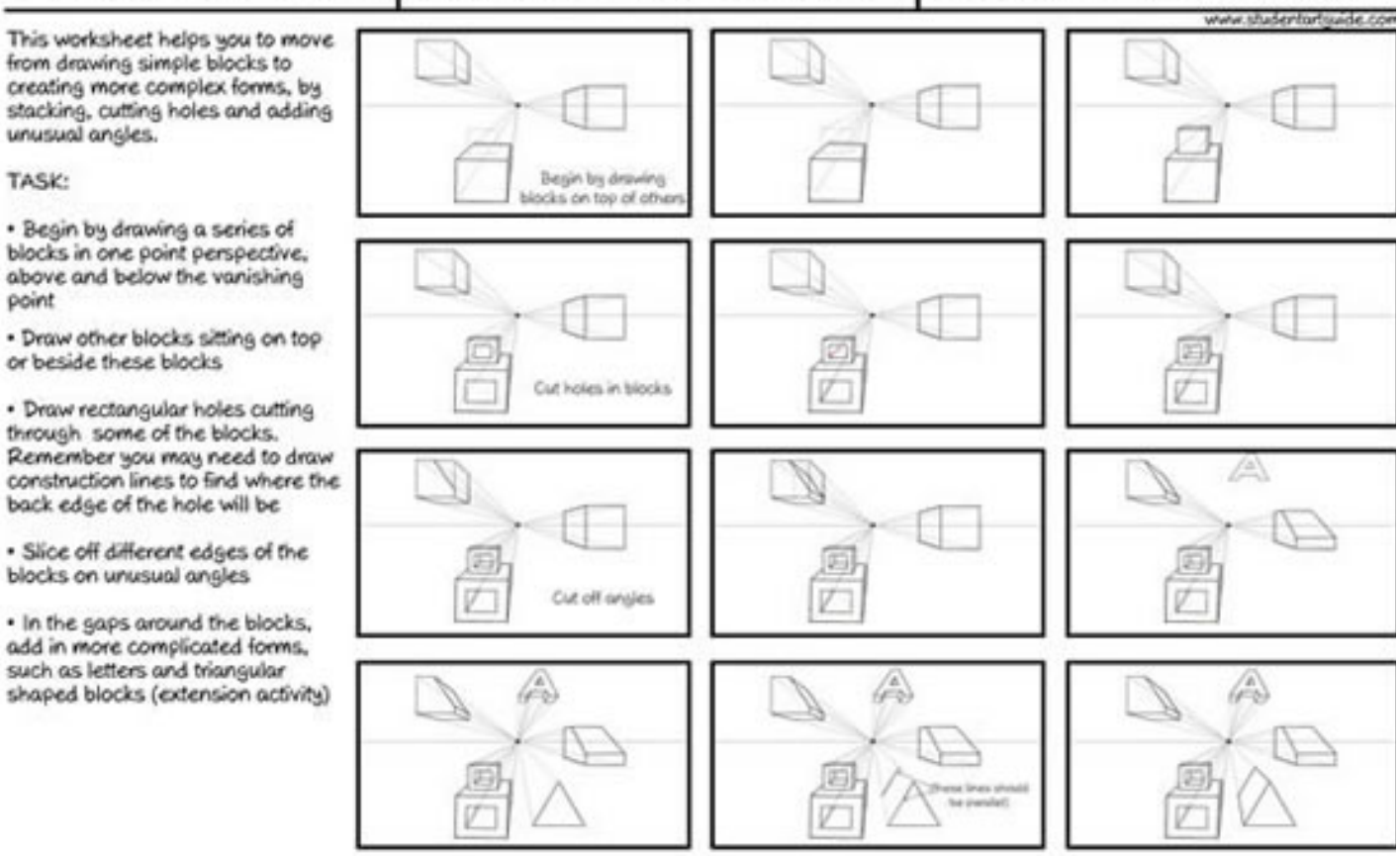


This worksheet explains how to draw a cube in one point perspective and takes you through drawing these above, below and in line with the horizon line. It introduces the importance of line weights and highlights the effect of positioning objects in relation to the horizon line.

By the completion of this exercise, you should be able to:

- Use appropriate line weights (light lines for construction lines; dark lines for outlines)
- Position a vanishing point and horizon line correctly
- Understand that:
- Objects above the horizon line are drawn as if you are looking up at them (you see the bottom of the object)
- Objects below the horizon line are drawn as if you are looking down at them (you see the top of the object)
- Objects that are neither above nor below the horizon line are drawn as if you are looking directly at them (you see neither the top or the bottom of the object)

1 Point Perspective: Complex Forms



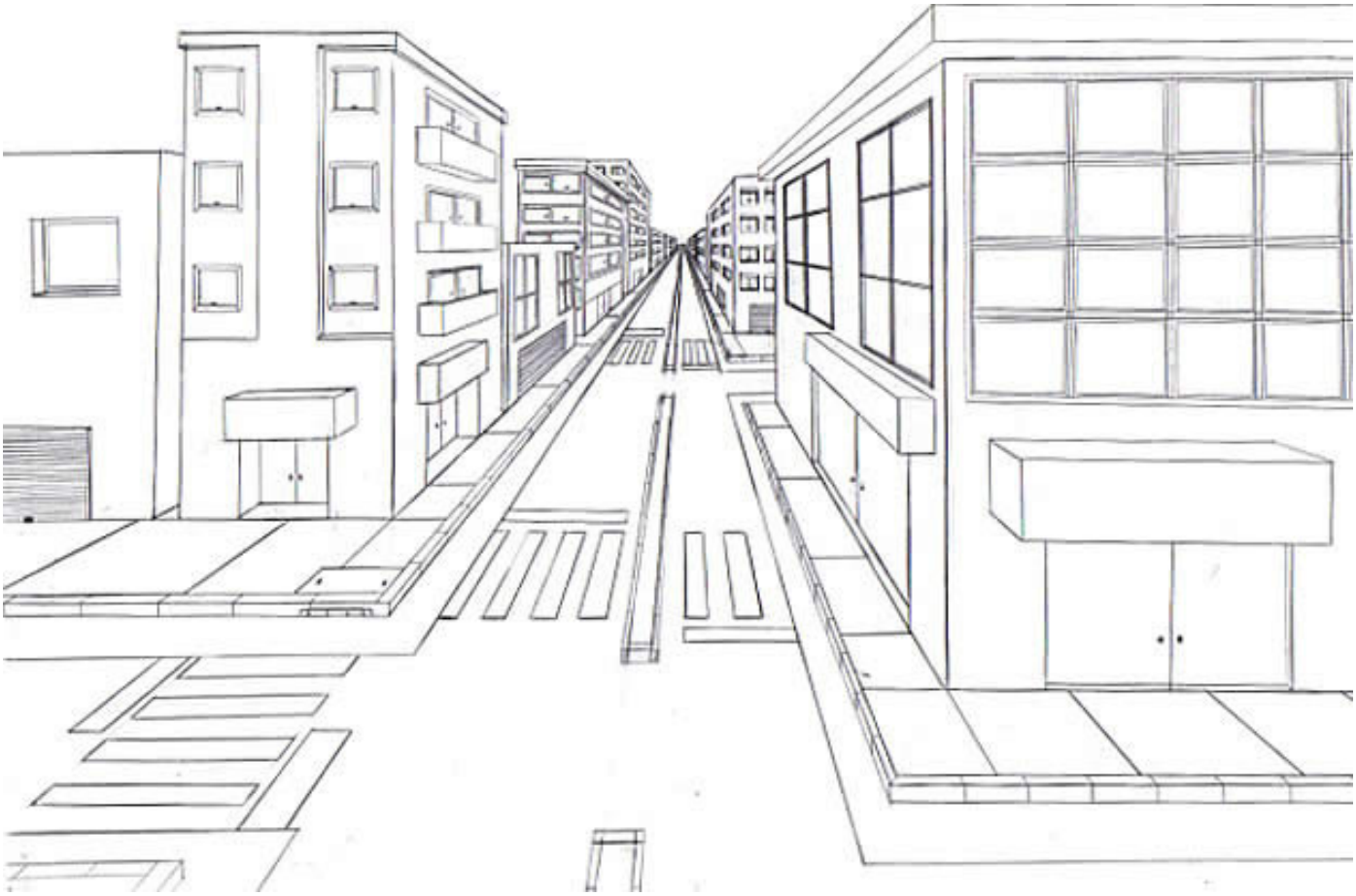
This worksheet illustrates how to stack blocks, cut away portions and add unusual angles in a one point perspective drawing, creating gradually more complex forms.

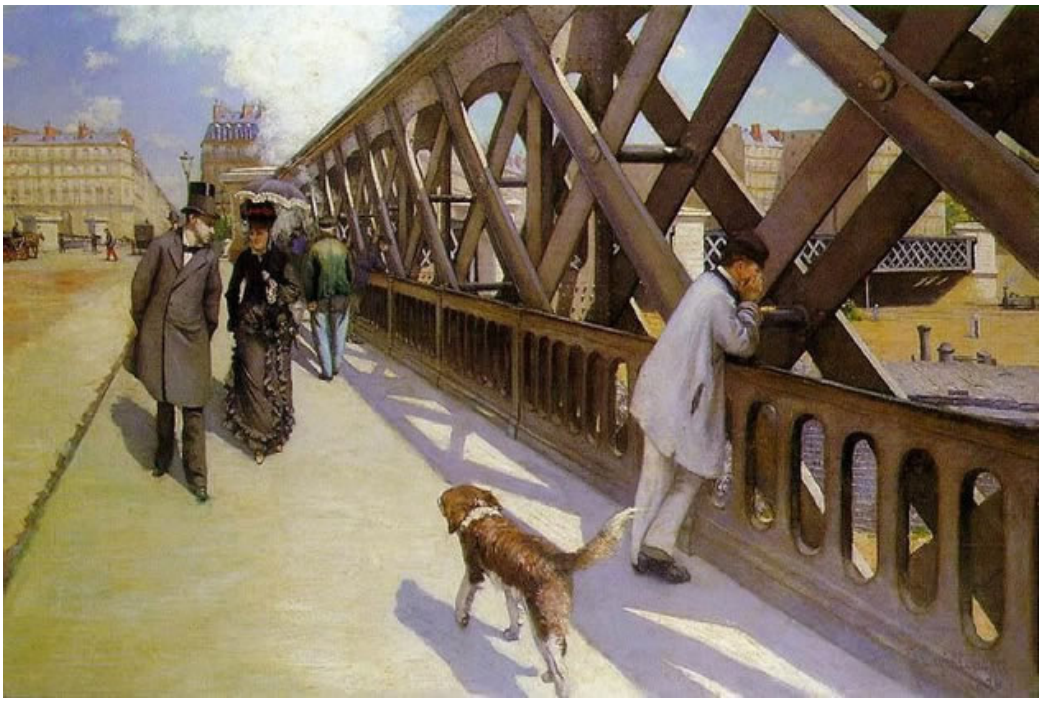
By the completion of this exercise, you should be able to:

- Draw stacked blocks of different sizes
- Draw blocks that have holes cut out of them, projecting construction lines to find the back edge of the cut area
- Slice pieces off blocks and/or add unusual angles
- Once you feel confident with drawing these items, you may wish to add more challenging forms, such as letters and/or triangular shaped prisms.

Exercise: one point perspective cityscape

Drawing a road and surrounding cityscape (either imagined or observed from real life) is a great follow-up activity to the previous exercises. A one point perspective street scene typically combines repetitive manmade elements with stacked, cut and angular forms. This exercise can be as challenging or minimal as desired, allowing able students to move ahead and produce detailed, elaborate drawings. Drawing a road and surrounding cityscape (either imagined or observed from real life) is a great follow-up activity to the previous exercises. A one point perspective street scene typically combines repetitive manmade elements with stacked, cut and angular forms. This exercise can be as challenging or minimal as desired, allowing able students to move ahead and produce detailed, elaborate drawings.





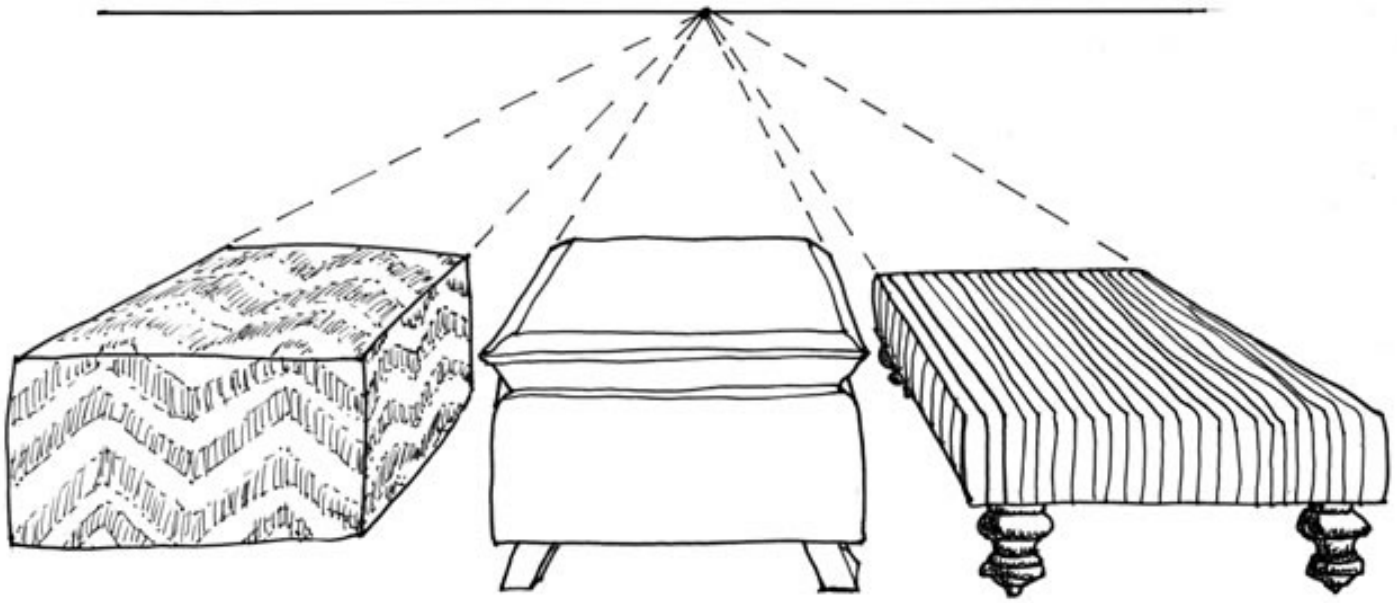
This cityscape by French painter, Gustave Caillebotte, was completed in 1876. The bridge structure clearly shows how repeating equal spaces have been achieved.

Exercise 6: circles and curves

The most challenging aspect of perspective is drawing curving or circular forms. These are typically sketched freehand, inside squares or rectangles to help get proportions correct.

By the completion of this exercise, you should be able to:

- Use the technique of 'crating' – drawing complex forms inside rectangular boxes
- Draw circles, cylinders and cones in one point perspective, from a range of different angles
- Use straight lines (guidelines) to aid the drawing of irregular curves, such as the curving forms of rivers or trees in a one point perspective landscape
- Understand that:
- Circles or curving forms that face the viewer are drawn using their true shape
- Circles that recede towards the vanishing point appear distorted, appearing smaller as they get further away



Landscapes and perspective scenery abide by the same rules of perspective. In this ink landscape by Vincent van Gogh, the trunk heights disappear towards the vanishing point on the horizon.

Try drawing a room interior in single point perspective.