### **Perspective Drawing Skills Packet**

#### Source:

#### http://www.studentartguide.com/articles/one-pointperspective-drawing

This article contains everything an Art student needs to know about drawing in one point perspective. It includes step-by-step tutorials, lesson plans, handouts, videos and free downloadable worksheets. The material is suitable for middle and high school students, as well as any other person who wishes to learn how to draw using single point perspective. It is written for those with no prior experience with perspective, beginning with basic concepts, before working towards more complex three-dimensional forms.



#### One point perspective: definition

<u>Dictionary.com</u> 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.

### Rules of perspective: true shapes, vanishing points and horizon lines:

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 diagram below:



In this one point perspective photo, surfaces facing the viewer are undistorted and show their true shape. For example, we see the side of the bath, window and facing surfaces as ordinary squares and rectangles. Their sides are parallel with the edges of the photograph.

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:



All receding edges of the buildings in this one point perspective photo angle towards the single vanishing point. The position of the vanishing point tells us that the photographer was crouching down, with his eye level lowered.

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. by Vincent van Gogh below.



'Bedroom in arles' by Vincent van Gogh – identifying perspective lines

#### **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

#### **Recommended Equipment:**

- Drawing Pencil
- Blank paper and/or the printed worksheets

A ruler and compass can be useful while learning to draw in one point perspective, however some art students find that these exercises are best completed freehand, with dimensions and proportions gauged by eye. This is so that the skills are easily transferrable to an observational drawing.

#### Draw these exercises in your sketchbook or on white sketch paper and keep it in your folder once trying them on the provided paper.

#### **EXERCISE 1: 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)

*This information is demonstrated in the video tutorial:* <u>https://youtu.be/zrLBNYA\_KNE</u>



#### Exercise 2: stacking, holes and angles

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.

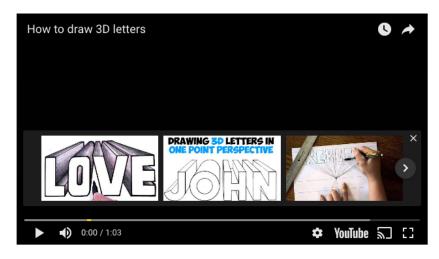
The following video helps to explain how to draw one point perspective drawing step-by-step:

https://youtu.be/LLLT7X55hm0



#### **Exercise 3: perspective block letters**

Drawing block lettering in one point perspective is a relatively straightforward task, suitable for a homework activity. *The following video demonstrates how to do this:* <u>https://youtu.be/P4fhqc6DdBE</u>



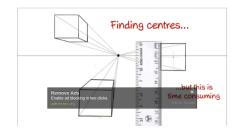
#### Exercise 4: finding centers and equal spaces

This video explains how to equally divide items in one point perspective, allowing you to draw fence posts, lamp posts, and equally spaced windows or buildings.

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

- Find the centre of any rectangular surface using the 'corner to corner' method (this works even on surfaces that are receding towards the vanishing point)
- Divide the surface of any rectangular block into any number of equal parts
- Draw tiles on a floor in one point perspective
- Draw repeating elements, such as fence posts, receding into the distance

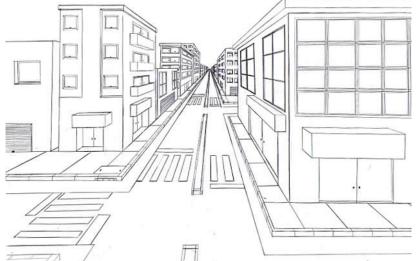
*This is explained in the following video tutorial: <u>https://youtu.be/L-Iy-</u><u>TgfyFo</u>* 



#### Exercise 5: one point perspective cityscape

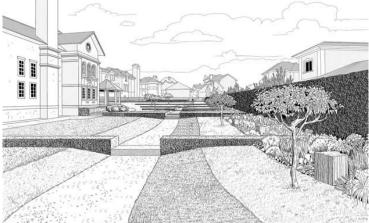
Drawing a road and surrounding cityscape (either imagined or observed from real life) is a great follow-up activity to the previous exercises. A one point perspective street scene typically combines repetitive manmade elements with stacked, cut and angular forms. This exercise can be as challenging or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

One point perspective city scene by Lichtgestalt00:

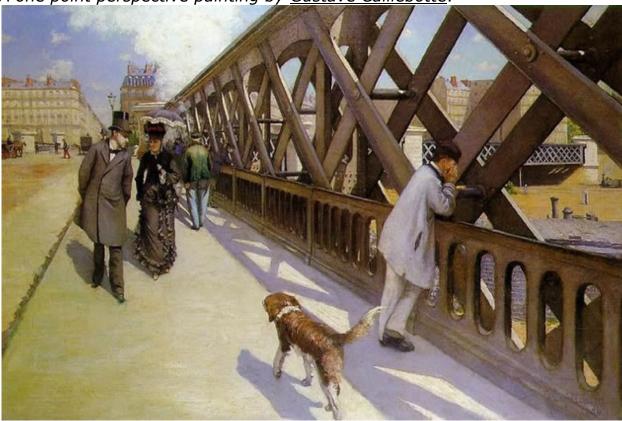


This is a good example of how to draw a road in perspective, with basic rectangular blocks modified to create a city scene.

A suburban scene by Karina Barabanova:



This one point perspective drawing depicts a meticulous landscaped area, surrounded by houses. The details and textures of the shrubbery and trees provide a great contrast with the precise, linear forms of the buildings. Note also the use of atmospheric perspective – lines lighter in the distance and darker in the foreground, helping to create the illusion of depth and space.



A one point perspective painting by Gustave Caillebotte:

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

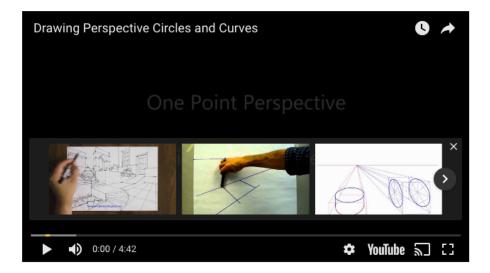
#### Exercise 6: circles and curves

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.

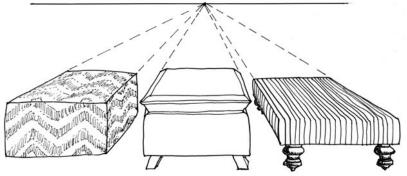
By the completion of this exercise, you should be able to:

- 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

*These concepts are explained in the following video:* <u>https://youtu.be/EDejHLAKhYU</u>



*A one point perspective drawing by <u>Stephanie Sipp</u>, professor at <i>Florida State College of Jacksonville, Interior Design department:* 



Stephanie Sipp has produced many stunning perspective illustrations. In this example, we see that details and curved edges have been added to simple rectangular block forms to create one point perspective furniture. Notice how the pattern also conforms to the rules of perspective.



A perspective landscape by Vincent van Gogh:

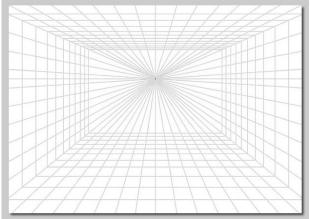
Landscapes and perspective scenery abide by the same rules of perspective. In this ink landscape by Vincent van Gogh, the trunk heights disappear towards the vanishing point on the horizon.

A drawing by high school student *Estherlicious*:

This O Level Art final piece was awarded an 'A' grade. The positioning of the curving forms used throughout the car interior demonstrates a sound understanding of perspective.

#### Exercise 7: one point perspective room

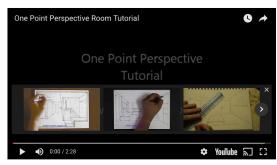
The most common perspective drawing lesson is a one point perspective room. Interiors combine a multitude of skills and can be made as challenging or involved as required. Perspective flooring allows you to practise dividing surfaces into equal spaces, while the questions of how to draw a window in perspective; furniture / desks / beds; or adjoining corridors etc provide a challenge regardless of your ability level. To gain ideas about how you might approach drawing interiors in perspective, we have included a range of examples below, including bedrooms, living rooms, kitchens and hallways. Drawing a room in one point perspective can be great practise for those who wish to later pursue interior design, architecture or for those who are studying Design Technology at high school.



The illustration above shows a **<u>one point perspective grid</u>** (this may be downloaded and printed for classroom use) which may be drawn on directly or traced over, using a lightbox.

To understand how to draw a room in one point perspective, please view our step-by-step video. Please note that this video is not captioned, as it is hoped that the challenging aspects of this exercise are explained earlier in this guide:

https://youtu.be/00FPHdLy3Nk





sequence of drawings shows how complex furniture in the living room were 'crated' (drawn inside boxes) before details and curves were added in.

#### A one point perspective interior by Amani Cagatin:

A one point perspective bedroom by <u>Cheryl Teh Veen</u> <u>Chea</u> of One Academy:



students begin drawing an interior by launching in with furniture and windows. It is important to remember that you can manipulate the shape of the room itself. In this example an open closet and a raised floor area to create a visually interesting interior, before the other elements are added. Note the attention to detail in this drawing, with feature wallpaper, shoes and clothes added as finishing touches.



A one point perspective kitchen by <u>Dana Bailey</u>:

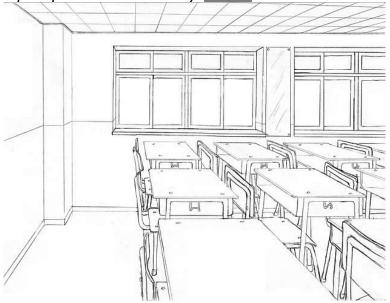
Drawing a kitchen in perspective is another great idea. Kitchens contain a wide variety of forms and often have interesting reflective surfaces. This example contains carefully staged still life items to help complete the scene.

A one point perspective hallway by <u>Jake Mutch</u>, completed while studying Fundamental Arts at Holland College:



Drawing familiar environments, with the ability to work from observation, is often beneficial. You might choose to draw the hallway outside your classroom – with lockers and rubbish bins, as in the example above, or other internal spaces around your school.

A perspective interior by <u>S.Kim</u>:



This classroom setting has a great level of detail – note the intricate seats and desks. The horizon line is positioned at the expected level for human eyes, with the vanishing point to the left of the image, suggesting that this might be what someone sees if they stand in the doorway of the room (note that the vanishing point doesn't need to be directly in the centre of the page – this is a common misconception)



These worksheets accompany One Point Perspective Drawing: The Ultimate Guide

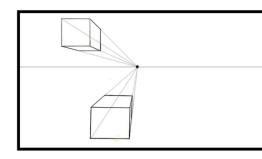


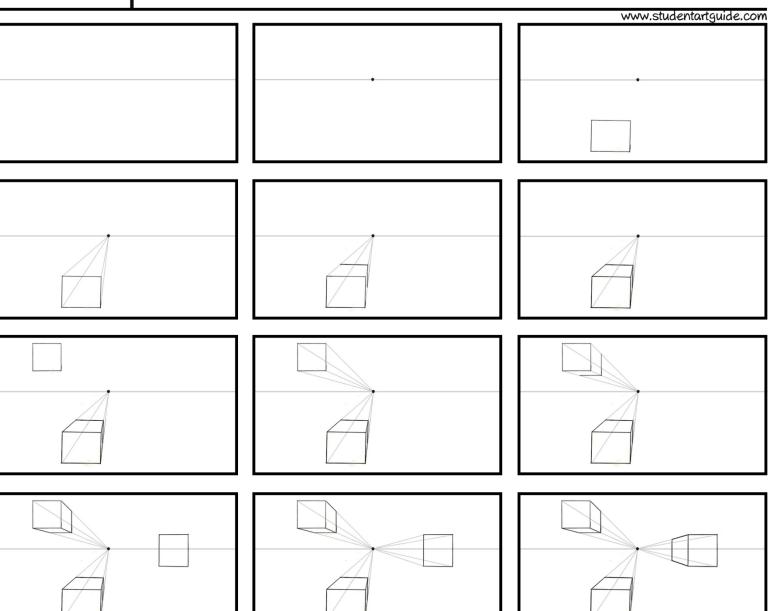
## One Point Perspective Cubes

This exercise explains how to draw a cube in one point perspective and takes you through the task of drawing three simple blocks that are positioned above, below and in line with the horizon line.

**KEY POINTS:** 

- 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 on them (you see the top of the object)
- Objects that are in line with the horizon line are drawn as if they are at eye level (you see neither the top or the bottom of the object)





# 1 Point Perspective: Complex Forms

This worksheet helps you to move from drawing simple blocks to creating more complex forms, by stacking, cutting holes and adding unusual angles.

TASK:

- Begin by drawing a series of blocks in one point perspective, above and below the vanishing point
- Draw other blocks sitting on top or beside these blocks
- Draw rectangular holes cutting through some of the blocks. Remember you may need to draw construction lines to find where the back edge of the hole will be
- Slice off different edges of the blocks on unusual angles
- In the gaps around the blocks, add in more complicated forms, such as letters and triangular shaped blocks (extension activity)

