Art in the Renaissance

- Before the Renaissance, art was to glorify God. The church paid for paintings which illustrated stories from the Bible, and they weren't too bothered about making them look "realistic".
- During the Renaissance, things changed. The power of the church declined was beginning to and rich new businesspeople were offering to pay money for realistic paintings.
- So, many artists began to experiment to learn how the eye actually sees things (a science called 'optics'). In this way, they hoped to trick the eye into seeing 'real' objects on a canvas.

Task 1

Try out these experiments and discuss what they illustrate.

Outline of experiment	Findings (What happens or appears to happen?)	Deductions (Why does this happen?)
Hold your hand out at arm's length, and measure someone's head between your finger and thumb. Then repeat the process but with your finger and thumb only a few centimetres from your eye.		
Put your finger a few centimetres from your eyes. Close one eye, then the other whilst watching your finger.		
Roll an exercise book or a piece of paper into a tube. Look through it with your left eye. Then, place your right hand against the side of the tube.		
Point the index finger of each hand so they point at each other. Do this only a few centimetres away from your eyes. Let your eyes focus on the distance, then slowly move your fingers together until they touch.		

Discussion Point…

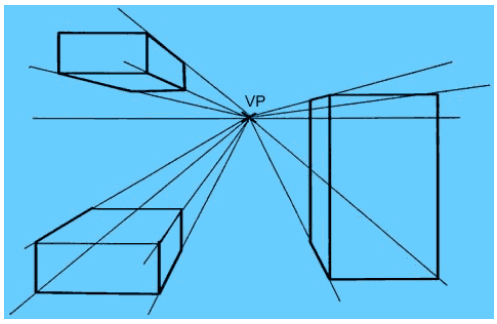
Our eyes only give us one interpretation of the world, by receiving a certain angle of view in a certain colour range. Bats see in infra-red; flies can see 180 degrees. So what does the world REALLY look like?!

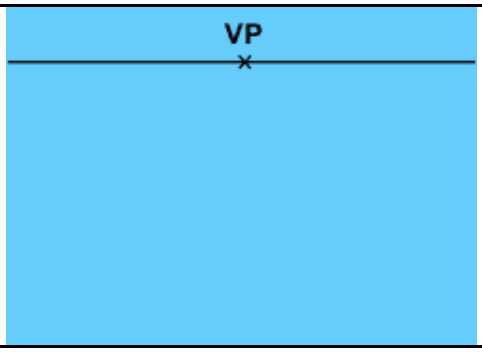
Did you know…

All colours are created in the brain after being passed along by the (flawed) eye (after all, how would you describe colour to a blind person?). So there is NO WAY that you can tell whether the colour you see as "Green" is the same as anyone else. For example: if you describe "green" as "the colour of grass" all you are really saying is that it is the colour which you see when you look at grass – which might not be the same colour seen by your neighbour…

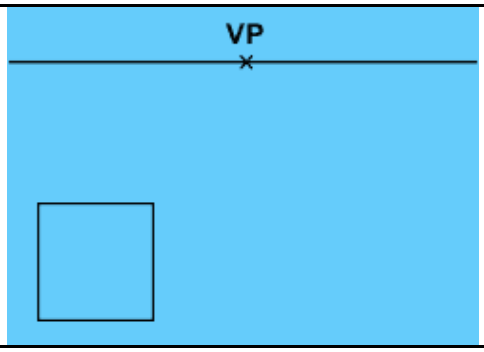
All of these experiments help to demonstrate the science of perspective, which is explained in more detail on the following page.

Constructing a box in one point perspective

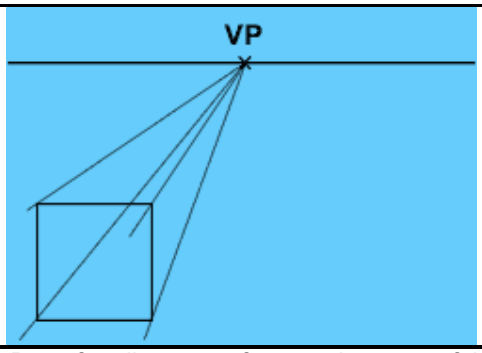




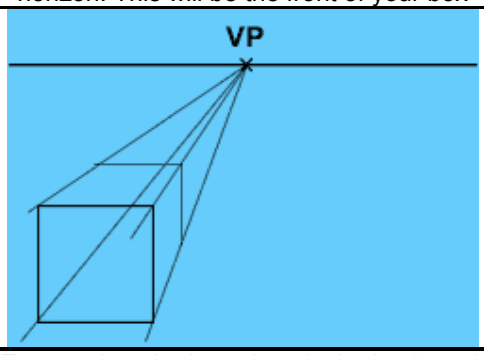
1. Draw a horizon and place a vanishing point (VP) somewhere on this line.



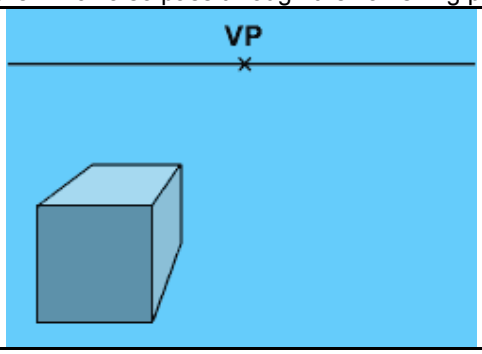
2. Draw a square somewhere beneath the horizon. This will be the front of your box



3. Draw four lines, one from each corner of the square which also pass through the vanishing point.

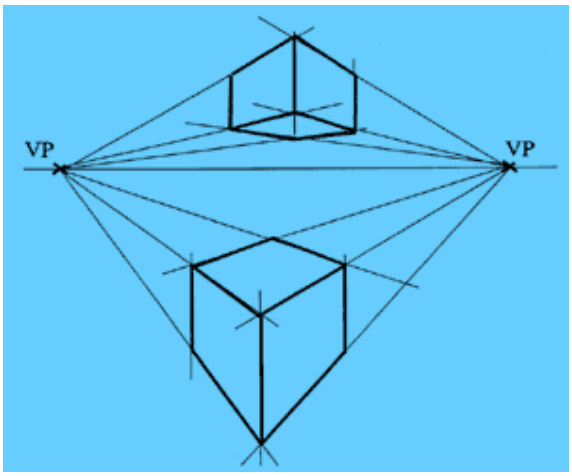


4. To complete the box, draw in the back vertical and an horizontal



The final box in all its glory!

Constructing a box in two point perspective



Two Point Perspective is a much more useful drawing system than the more simple One Point Perspective. Objects drawn in two point perspective have a more natural look.

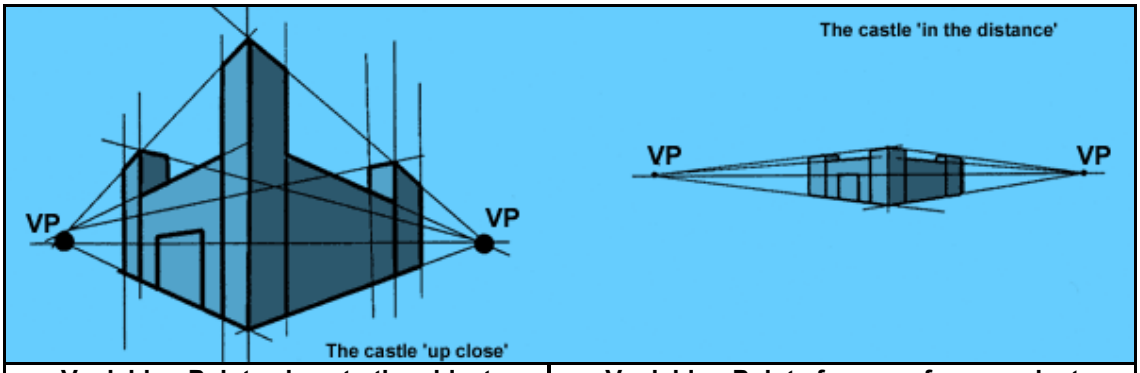
In two point perspective the sides of the object vanish to one of two vanishing points on the horizon. Vertical lines in the object have no perspective applied to them.

The illustration to the right demonstrates the how to draw a box in two point perspective.

1. Put two vanishing points at opposite ends of the horizontal line.
2. Draw in the front vertical of the box. Drawing the line below the horizontal will create a view which we are looking down on. To look at the object from below, draw the front vertical above the horizontal.
3. Draw lines from the top of the vertical which disappear back to both of the vanishing points. Repeat the process for the bottom of the line.
4. To complete both of the sides by drawing in the back verticals.

To draw the top of the box, draw lines from the back verticals to the opposite vanishing points.

By altering the proximity of the vanishing points to the object, you can make the object look big or small.



Vanishing Points close to the object	Vanishing Points far away from product