



Lesson 5: Buildings in Paintings

In this lesson, students explore one-point perspective, a method of representing space in paintings.

Support material: Information Sheet 26 “One-point Perspective”, Information Sheet 27 “One-point Perspective in Paintings”. You will also need slides of four well known paintings. Your school’s art teacher should be able to provide them.



Spotlight

One-point Perspective



Key Concepts

Creating the illusion of space

Review of work

- What characteristics/shapes are found in Romanesque, Gothic, Georgian, Neo-Classical and modern buildings?
- What shapes are common to most of these building types?
- What new terms did you learn for describing parts of buildings?
- Are there any buildings in your community which have similar characteristics?

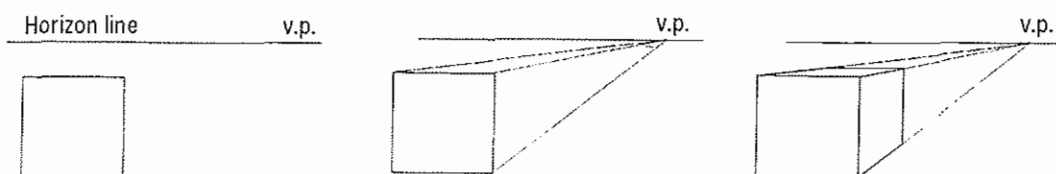
Discussion — Perspective

Note:

Some students may have studied perspective in Art classes. If so, teachers may prefer to proceed more quickly through the instruction material and involve the students in one of the Cross-Curricular exercises.

The students have explored 2-dimensional and 3-dimensional geometric shapes in architecture. Now they will look at the ways in which 3-dimensional shapes or spaces can be represented in a 2-dimensional drawing or painting.

1. Draw a square on the classroom board. Ask students to copy it and to try to represent it as a cube. Allow a few minutes for this.
2. Demonstrate how, by using perspective, the 2-dimensional shape can be made to represent a cube. Then distribute copies of Information Sheet 26 “One Point Perspective” and discuss it.





- Some things can be represented in one-point perspective. Others are best shown by two-point perspective. In this lesson, we focus on one-point perspective.
3. Project the following slides and discuss the ways in which the artists have used one-point perspective in their paintings.

Fillippo Brunelleschi (1377-1446)

“Il Duomo”, known as “The Dome” or “Santa Maria del Fiore”, in Florence

Brunelleschi is famous for two innovations. One was his great architectural achievement in constructing a dome for the cathedral in Florence. For many years, the cathedral had no dome because no one knew how to accomplish such a task. Brunelleschi studied many of Rome’s ancient buildings before presenting his idea for solving the problem. Another was his use of perspective. Though not the first ever to develop a perspective technique, Brunelleschi was the first person to use it in drawings as we use it today. Most artists of his period then used his innovation in their own work, which had a great influence on Renaissance painting.

Now let us look at how High Renaissance artists used perspective in their paintings.

Leonardo da Vinci (1452-1519)

The Last Supper (see Information Sheet 27, “One-point Perspective in Paintings”).

This famous painting is a fresco painted on the refectory wall in the monastery of Santa Maria delle Grazie in Milan. The scene takes place inside a building. *The Last Supper* is a particularly clear example of one-point perspective, as all the lines of walls and ceilings converge at Christ’s head, which acts as the vanishing point. The horizon line or eye level is directly above the heads of the apostles.

Raphael Sanzio (1483-1520)

Raphael was influenced by the work of Leonardo da Vinci and Michelangelo.

The School of Athens is another good example of one-point perspective. The scene takes place inside a building. As in *The Last Supper*, all lines converge towards the heads of the central figures, Plato and Aristotle.

The Betrothal of the Virgin depicts the engagement of Mary and Joseph. This scene takes place outside a building. The treatment of the floor tiles is similar to the recession movement of the ceiling tiles in *The Last Supper*, as they all recede to a vanishing point at eye level. The building in *The Betrothal* shows how architecture has developed during the Renaissance.

- What geometrical forms can you see? Point them out.
- How has Raphael created an illusion of depth on a 2-dimensional surface?

Map out the direction of lines with a ruler and marker. (The slide can be projected onto a sheet of paper pinned to the wall or directly onto a white classroom board.) Discuss how one-point perspective works in *The Betrothal of the Virgin*.



Activity — Drawing with one-point perspective

1. Ask students to draw an avenue of telephone poles or a row of buildings using one-point perspective.
2. Ask students to make a drawing of items in the classroom or a corridor in the school, using one-point perspective.

Homework

Students make a one-point perspective drawing of a room or a street, either real or imaginary.



Scrapbook

Students dedicate a section of their Scrapbooks to **Perspective**. They can collect images from magazines/newspapers/postcards which show the impact of perspective, or collect photocopies of paintings which use one-point perspective.

Vocabulary File

Students add new words and definitions to their files.

Cross-Curricular Connections

1. Art History and Appreciation — Investigate the work of a Renaissance architect, exploring his influences and his approach to design.
2. Art History and Appreciation — Find out more about one of the artists mentioned in this lesson or investigate a new one. Write about his life and the ways in which he was influenced. Discuss two of his most important works.
3. Local History/Technical Drawing — Find some modern buildings in your area which have been influenced by architectural ideas from the past. Make drawings and record your observations.
4. Mathematics/Classical Studies — Find out about the theories of mathematics and proportion in architecture which were used by the Greeks and Romans. Were there other periods in history when these theories were used again?
5. Biology/Aesthetics — Some people believe that the human figure can form the basis of systems of proportion for art and architecture. Start by studying the theories of Leonardo da Vinci and of the French architect Le Corbusier.