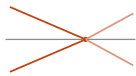


Space, Depth, and Proportion

AP Drawing • Topic 3

AP Drawing



Space, Depth, and Proportion

What we will cover

- 1 Measuring & sighting
- 2 One-point perspective
- 3 Two- & three-point
- 4 Foreshortening
- 5 Atmospheric perspective
- 6 Composition
- 7 Figure & portrait



1 Sighting

Space, Depth, and Proportion

↳ Sighting

Measuring and sighting

Sighting 目测 measures the subject with your pencil at arm's length – the **survival skill** of observational drawing.

- locked elbow, one eye closed: the pencil is a **ruler and a protractor**
- pick **one unit** (a head, a cup) and measure everything in it – **comparative measurement** 比较测量
- a **plumb line** 铅垂线 shows which landmarks sit exactly above each other

Draw the **envelope** 外形 first – the big simple shape containing the whole subject – then **divide** it.

Check angles by rotating the pencil to match an edge, then carrying that angle to the paper.

2 Perspective

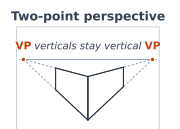
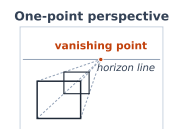
Space, Depth, and Proportion

↳ Perspective

Linear perspective – the picture as a window

The **horizon line** 视平线 is the viewer's **eye level**: we look **down** on everything below it and **up** at everything above it.

Lines parallel to the picture surface **stay true**; lines going **into** the scene converge to a **vanishing point** 灭点.



one-point (left) and two-point (right)

Perspective **plus overlap** 遮挡 is depth doubled: near edges cover far edges.

One, two, and three points

- **One-point** 一点透视 – rooms and streets **straight-on**
- **Two-point** 两点透视 – subject **turned**; left and right points
- **Three-point** 三点透视 – adds a **vertical** point (tower from below)

Keep two points **far apart** – too close creates a fisheye. Boxes scaffold everything.



One-point perspective: depth lines aim at one vanishing point

Foreshortening

Foreshortening 透视缩短 is perspective applied to a single form pointing **toward you** – lengths compress dramatically.

- a pointing arm may appear **one-third** of its true length
- draw the **apparent** shape, not the length you **know**
- **overlap** is the key signal: hand over forearm, forearm over upper arm
- think in **cross-sections** 横截面 – rings around the form

Memory lies, observation tells the **truth** – measure foreshortened lengths by sighting.

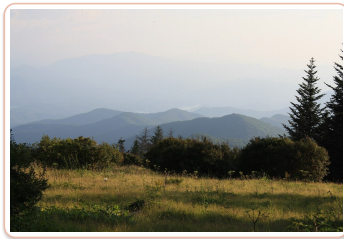
The classic practice piece: a figure lying down, drawn **feet-first**, like Mantegna's *Dead Christ*. One convincing foreshortened limb tells scorers you draw what you **see**.

Atmospheric perspective – depth without lines

Air scatters light, so contrast **fades with distance**. The far mountain is a pale, flat shape. **Foreground**: darkest darks, **sharpest** edges.

Background: a **narrow** value range, soft edges.

Save full black and white for the **foreground** – distance lives in middle greys.



Atmospheric haze: contrast and detail fade with distance

3 Composition & figure

Composition and the picture plane

Composition 构图 is a **named** drawing skill – and the **first thing** a scorer sees.

- what you **crop out** is as expressive as what you keep
- the **rule of thirds** 三分法 beats dead centre
- design the **negative space** 负空间: the empty shapes are shapes you **drew**
- keep the **figure-ground** 图底关系 relationship **readable**

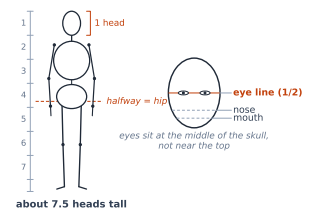
Test crops with a **viewfinder** 取景框 (or a phone) **before** committing to the page.

Change the **viewpoint** 视点: eye level is neutral – low or high angles make ordinary subjects **fresh**.

Drawing the figure and portrait

The figure combines **every** drawing skill at once: **proportion** 比例, gesture, form and likeness.

The adult figure is about **7.5 heads** tall, and the body's halfway point is near the **hip**, not the waist.



eyes sit at the halfway line of the skull

Start with gesture and the **big masses** (ribcage, pelvis, skull); features and fingers come

Worked example – checking a perspective drawing

Before you render, run this check

Every depth line must actually **aim at its vanishing point**. Lay a ruler along each one and follow it to the horizon. Perspective errors are the **easiest** mistakes for a scorer to spot – and the cheapest to fix, **before** you spend three hours shading.

Include one strong **observational space** – an interior, a stairwell, a street. It demonstrates the **space** skill **unmistakably**.

4

Recap

Topic 3 – key takeaways

1 Sight it

one unit, comparative measurement, envelope first

2 Perspective

horizon is eye level; every depth line aims at its point

3 Foreshorten

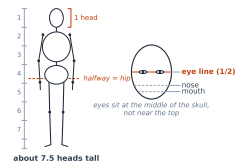
draw the apparent shape, not the length you know

4 Compose

crop like a designer; design the negative space

Check yourself

- 1 What does the horizon line represent?
- 2 Roughly how many heads tall is the adult figure?
- 3 Where do the eyes sit on the skull?
- 4 Name two ways distance changes a shape's appearance.



Answers 1. the viewer's eye level 2. about 7.5 3. at the halfway line
4. paler/cooler, softer edges, less detail