STUDIO FIELDNOTES / GREAT MASTERS / 6–8

Geometry Behind a Scene | Piero della Francesca

Teacher guide · 6–8 · 50–65 minutes × 3–5 sessions

Essential question

How does geometry change our sense of depth?

Why this investigation matters

Renaissance perspective is one approach to representing space

The finished work

Perspective study of a familiar room

Methods and material suggestions

horizon lines, proportion, perspective grids; choose materials suitable for your space: drawing and collage materials, paper, water-based media, or clean reclaimed objects as appropriate.

Learning targets

Students will: analyze a relevant visual or disciplinary source; experiment with horizon lines, proportion, perspective grids; create an original response; give and use evidence-based feedback; and explain one artistic choice.

Teaching progression

01 / Engage

Show the inquiry question: How does geometry change our sense of depth? Invite a noticing, a wonder, and an initial interpretation.

02 / Investigate

Study at least two credited examples associated with Piero della Francesca. Renaissance perspective is one approach to representing space Students annotate the evidence that supports their thinking.

03 / Skill Studio

Demonstrate horizon lines, proportion with a short material experiment. Students test the technique and record what changes.

04 / Generate

Produce at least two distinct visual approaches to the challenge. Compare how each communicates the idea.

05 / Plan

Choose an approach, identify materials and sketch a sequence of actions. Name one foreseeable difficulty.

06 / Produce

Create the original artwork or design: Perspective study of a familiar room. Photograph or annotate work in progress.

07 / Critique

Use evidence-based peer feedback: one element that communicates, one question, one suggested next move.

08 / Revise

Make one visible revision in response to critique or new evidence. Record before-and-after choices.

09 / Present

Display or share the result with a student-authored explanation and credits for research sources.

10 / Reflect

Return to the inquiry question and explain what the work now communicates, what changed and what could improve next time.

Standards and adaptation

NCAS Visual Arts Creating, Responding and Connecting (anchor-level alignment); match grade-specific performance standards before instruction.

Students study the artist as a source of artistic inquiry and make an original response rather than a copy.

Differentiation and access

Offer visual exemplars, tactile or large-print materials, verbal/audio explanations, partner brainstorming, alternate motor tools, and choice in subject matter. Require comparative source annotations, a documented materials test, two design alternatives, and a critique-led revision.

Teacher checks

Before: Ask students to answer: How does geometry change our sense of depth? Record a drawing, annotation or discussion response.

During: Look for purposeful use of horizon lines and a clear link between research evidence and design choices. Ask students to explain an alternative.

After: Compare first plan and revised result; collect a student statement naming one choice, one change, and the evidence that motivated it.

Source and representation care

Research original works using the cited museum or artist resources. Do not imply the supplied editorial cover graphic depicts the artist or their copyrighted artwork. Credit creators and seek permissions for reproductions. Use culturally situated examples rather than assigning a universal style to a whole group.