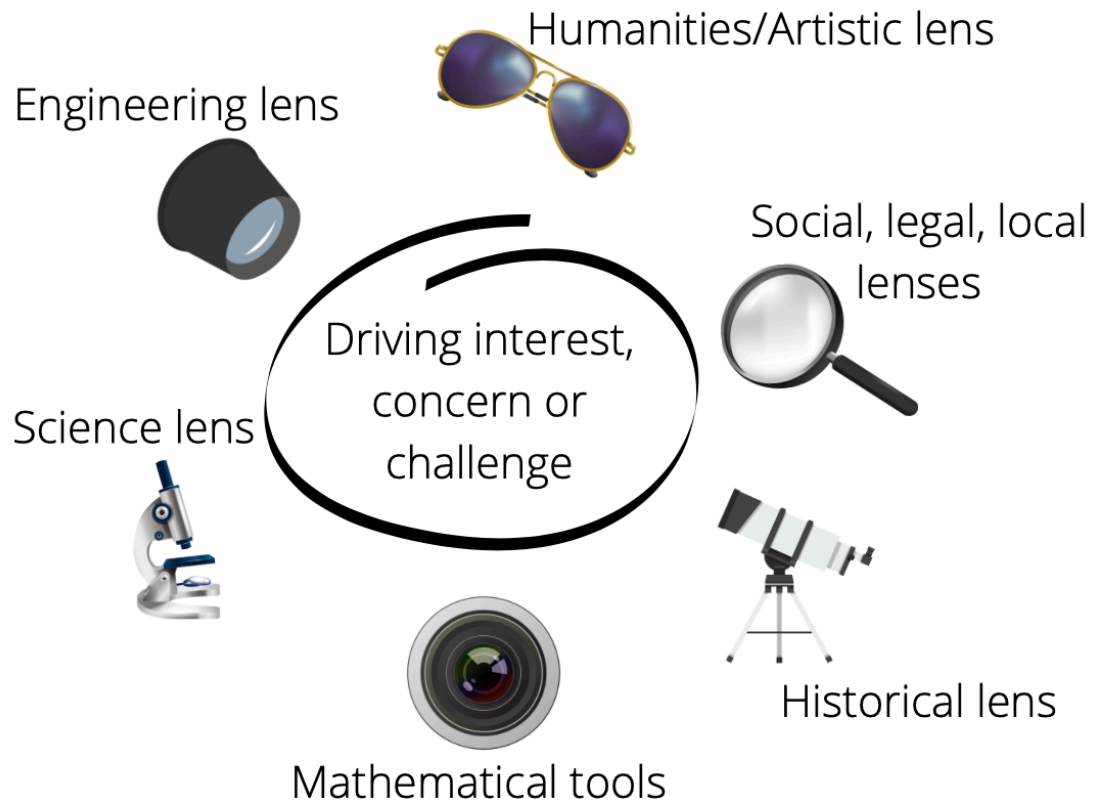


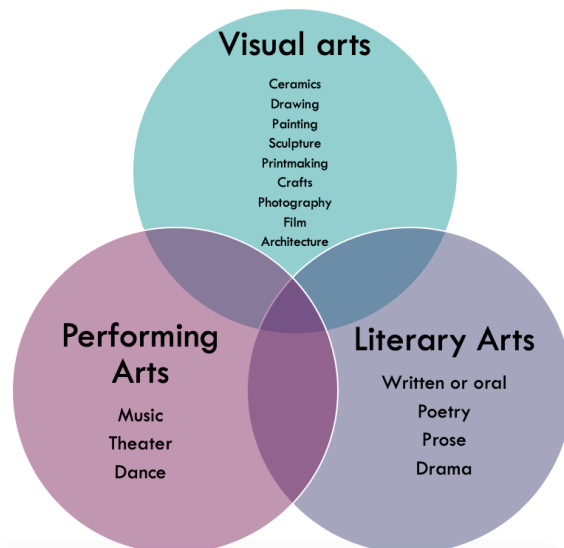
Use Art Pieces, Processes, and Movements to integrated STEAM

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The eduKatey Perspectives Approach for finding STEAM connections:



1. Art pieces and making art pieces



Brainstormers:

- “How does this art piece work?”
- “What allows this art piece to be how it is/look like it does?”
- “What do I need to know in order to make something like this?”

[Link to Jordan Pasqualin’s Electric Art Project](#)



2. Art processes. Making art, validating authenticity, restoring art, photographing art.

Ideas:

- Low-tech methods: Lost wax, Plaster, Armature, Carving, Sizing a canvas, Rubber stamps and wax seals
- Industrial methods: Welding, laser cutter, CNC, 3D printer, casting metal in a forge
- Restoration: cleaners, solvents, paints, resins, and chemicals! Link to bad [restoration](#). Chemistry is Life has a [great resource](#) on art preservation.
- Ceramics and pottery
- Paint and Pigments (Using paint to teach stoichiometry and solutions from chemistry teacher Allison McMahon. [Link](#) to Allison’s unit folder, shared with permission.) <https://tinyurl.com/y76esyfp>
- Printmaking, lithography, etching, silk screening
- Filmmaking and photography: Emulsions, Exposure times and shutter speeds, Camera lenses, Depth of field, Cyanotypes, Frame rates and formats, Cellulose storage, Charge-coupled device (CCDs), Digital storage formats
- Tool: [Jordan’s storyboard template](#), storyboard with a science/math content emphasis.
- Need more inspiration? Check out the list of artworks by media from [wikiart.com](#)

Brainstormers:

- “How does this art process work?”
- “What technologies allow this art process to work? When were they discovered?”
- “What do I need to know and use in order to make something like this?”

3. Art movements. Historical perspectives

Ideas:

- Compare and contrast STEM disciplines’ ways of knowing and artistic ways of knowing (Nature of Science, Nature of engineering, Nature of Mathematics, aesthetics, historical influences.)
- Art movements as representations of contemporary STEM knowledge and discoveries.
- Students/groups present their conclusions in the style of a relevant art movement or for a contemporary stakeholder.

Brainstormers:

- “How does this art movement work, i.e., show unity and project a message?”
- “How have artists been influenced by their world including by their understanding of technology, science, and mathematics?”
- “What do I need to know in order to make something like this?”

