LESSON 7

Leonardo da Vinci
Sketches and Inventions

Verbal Directions
LESSON OVERVIEW

Leonardo da Vinci (1452-1519) was a painter, architect, inventor and student of all things scientific. He was well-known for his sketchbook collection. Students will become observers, explorers and inventors as they take apart clocks, calculators, live flowers and fruit in order to sketch the details they discover. Students will also study their own hands and then come up with an invention of their own to sketch.

INSTRUCTIONAL OBJECTIVES

- Learn about Leonardo da Vinci.
- Learn about sketching from observation and looking closely at objects to find out how they work.
- Discuss creativity and inventions.
- Draft an idea for a new object.

SUPPLIES

- Images of da Vinci’s artwork and sketches.
- Samples of detailed sketches.
- Sketching/Drawing Paper.
- Charcoal Pencils.
- Pencils.
- Erasers.
- Rulers.
- Objects to Study.
- Black construction paper for matting artwork.

LESSON

Leonardo da Vinci (1452-1519) was an Italian painter, draftsman, sculptor, architect, and engineer. His Last Supper (1495–98) and Mona Lisa (c. 1503–19) are among the most widely popular and influential paintings of the Renaissance. His notebooks reveal a spirit of scientific inquiry and a mechanical inventiveness that were centuries ahead of their time. Da Vinci sketched prolifically, planning inventions, exploring human anatomy, drawing landscapes, and blocking out plans for paintings.
LESSON PLAN

1. Introduce students to Leonardo da Vinci. As an artist he always carried around a notebook/journal where he recorded the things he saw. Show examples of da Vinci’s sketchbooks. He was very curious and loved figuring out how things work. He learned from closely observing things he saw in life and nature and used this information to sketch inventions and new ideas. Point out the writing in the sketchbook and his inventions.
   - What is a sketch?
   - What makes da Vinci’s drawings unique?
   - Do you think these were meant to be shown or shared with the world?
   - What objects or subjects interest you?
   - What would you like to invent?

2. Pass out drawing paper, a pencil and eraser. Set up objects (taken apart to show the mechanics or with interesting details). Instruct students to look closely at these object and to focus on the detail and how things work as they draw them - to draw from what they see and not what they think. Encourage students to think about sketching versus drawing and to focus on parts instead of the whole objects. (optional: create stations for students to move around the room and look at many objects).

3.(Optional) Looking at their own hands, students can create a sketch that captures all of the details and also suggests bones, ligaments and nerves under the skin. Remind students that they are discovering and guessing what might be underneath the skin just like da Vinci who had very little hard knowledge of anatomy at the time.

4. Finally pass out a new sheet of paper for students to draft an invention. Ask students what they think the world needs. During Da Vinci’s lifetime he attempted to come up with a design for an airplane. Have students use their creativity to create a sketch for a new invention.

5. Reflect on the importance of observation for an artist and how artists can use their creativity to come up with new ideas for the world.
KEY IDEAS THAT CONNECT TO VISUAL ARTS CORE CURRICULUM:
Based on Utah State Visual Arts Core Curriculum Requirements (3rd Grade) Click on links to see more.

**Standard 3.V.CO.1:**
Develop a work of art based on observations of surroundings.

**Standard 3.V.CR.1:**
Elaborate on an imaginative idea and apply knowledge of available resources, tools, and technologies to investigate personal ideas through the art-making process.

**Standard 3.V.CR.4:**
Individually or collaboratively construct representations, diagrams, or maps of places that are part of everyday life.

STUDIO HABITS OF THE MIND:
Envision: Learning to picture mentally what cannot be directly observed and imagine possible next steps in making a piece.

ADDITIONAL REFERENCES
Click on links to learn more.

- [http://www.unmuseum.org/leosketch.htm](http://www.unmuseum.org/leosketch.htm)
- [http://www.davinciinitiative.org/free-lesson-plans.html](http://www.davinciinitiative.org/free-lesson-plans.html)
- [https://www.bl.uk/collection-items/leonardo-da-vinci-notebook](https://www.bl.uk/collection-items/leonardo-da-vinci-notebook)