Unit 2 - Hand Tools & Process

Content Area: **Arts**
Course(s): **Wood Arts Tec 1**
Time Period: **Semester 1**
Length: **4 Weeks**
Status: **Published**

Standards

1.5.2.Cr1a	Engage in individual and collaborative exploration of materials and ideas through multiple approaches, from imaginative play to brainstorming, to solve art and design problems.
1.5.2.Cr2b	Demonstrate safe procedures for using and cleaning art tools, equipment and studio spaces.
1.5.2.Pr5a	Explain the purpose of a portfolio or collection. Ask and answer questions regarding preparing artwork for presentation or preservation.
8.1.2.AP.4	Break down a task into a sequence of steps.
MA.K.G.A.3	Identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”).
8.2.2.ED.2	Collaborate to solve a simple problem, or to illustrate how to build a product using the design process.
8.2.2.ED.3	Select and use appropriate tools and materials to build a product using the design process.
8.2.2.ITH.2	Explain the purpose of a product and its value.

Essential Questions

1. What is the purpose of hand tools, what value do they have in our society, and how can they be used to draw 2-D shapes?
2. How do artists and designers safely experiment with tools to design and create imaginative solutions?
3. How can a well-curated portfolio be a valuable asset for future artistic and professional endeavors?

Enduring Understanding

1. Students will understand that hand tools are fundamental early technologies used to build and shape raw materials, with their selection and safe use directly influencing the design process and allowing for exploration.
2. Students will understand that accurate measurement and precise layout of two-dimensional designs are crucial for effectively utilizing tools to shape materials into three-dimensional products.
3. Students will understand that documenting the creation process and compiling a final portfolio are essential ways for artists and engineers to communicate their work, demonstrate ownership, and showcase their skills.

Knowledge & Skills

Design Process & Hand Tools Students Will Be Able To:

- Safely practice with hand tools and identify their purpose.
- Create a project using hand tools.
- Document a products process of creation using digital tools to make a portfolio.
- Identify simple machines and current hand tools that model their principals.
- Identify the impact of hand tools on our early society.

Tools:

- Handsaw
- Carpenters Brace
- File
- Coping Saw
- Tenon Saw
- Pull Saw
- Hand drill
- Measurement Tools
    - Squares
    - Measuring Tape
    - Scales
    - Compass

Resources

Hand tools:

- Back Saw
- Tenon Saw
- Coping Saw
- Pull Saw
- Squares
- Compass
- Drawing Templates
- Hand Drill
- Carpenters Brace
- Rulers
- Measuring Tape
- Scales and Rulers

Materials:

- Wood Blanks
- Cleaning Tools - Brushes, Brooms, Ect.
- Chromebooks

- Drawing Tools

Transfer Goals

1. Students will be able to create an portfolio to document their design process and creations that can be highlighted for future applications or art shows.

2. Students will be able to experiment with hand tools safely using proper personal protective equipment and tooling methods.

Assessments

Assessments

Modifications

Modifications